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Overview: The Challenge of Reaching Scale

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The challenges of global development can be counted in millions, if not billions: 2 million preventable infant deaths a year from pneumonia and diarrhea, 61 million children out of school, 850 million malnourished people, a billion people living in city slums, 1.3 billion people without access to electricity, 1.5 billion people living in conflict-affected states, 2.5 billion people without access to formal financial services. Meeting these challenges hinges on finding sustainable solutions that can have a transformational impact on the lives of millions of the world's poorest people.

Developed countries have, by definition, solved these problems.[1] These countries are identifiable by both their superior level of income and the institutions through which their societies and politics are organized, which enable their living standards to be sustained. Over the last half century, a handful of countries have succeeded in making the transition from developing to developed, and the hope is that many more will do so in the next.

However, such transitions are extremely hard to pull off. Using past performance as a guide, it would take nearly 6,000 years for the poorest countries to reach the level of income currently enjoyed by the United States of America.[2]

1. This is not to imply that developed countries are entirely harmonious societies; no country is without its unique socioeconomic problems and political failings. The point, rather, is that the challenges of development represent a unique kind of problem.

2. Pritchett, Woolcock, and Andrews (2010).

Similarly, improvement in the capacity of poor countries to deliver basic public services to their citizens is proceeding at a glacial pace. Extremely optimistic estimates, using the performance of the fastest-improving countries as a yardstick for what is possible, suggest that the waiting time to eradicate extreme poverty and deprivation should still be measured in generations. For instance, were Haiti to somehow adopt the rate of progress in government quality of the twenty fastest-improving countries in the world, it would be another twenty-six years before it reached the current standard of Malawi.

To speed up this process for today's poor countries would require a recipe for development—something that after years of looking has not yet been found, and maybe never will be. Countless studies have been undertaken examining what countries such as Japan and Korea did to advance so quickly. But it is quite another thing to translate these studies into a meaningful plan for today's poor countries. This explains much of the skepticism around foreign aid. If the role of aid is to encourage countries to grow faster and to accelerate up the development ladder, then it is easy to conclude that the mission has been a failure and is probably futile.

There is an alternative and more hopeful view. It submits that there is much that can be done to address global development challenges without altogether altering the trajectories of poor countries. A number of targeted solutions have been found that can solve specific challenges: vaccines and water treatment to prevent child death; conditional cash transfers to nudge parents to encourage school attendance; micronutrient supplements and the promotion of breastfeeding to vanquish malnourishment. These solutions can permit poor countries today to overcome many of the deprivations associated with their low levels of income and to improve the lives of their people.

To succeed, however, these solutions need to be scaled up to reach poor people everywhere. Herein lies the problem.

Reaching Scale

There are certainly examples of scale being reached in a developing country context. Mexico rolled out its Oportunidades program, a conditional cash transfer scheme, to all of its regions, reaching around one-quarter of the entire population with cash incentives designed to improve health and educational attainment among poor families.[3] Brazil dramatically reduced poverty with its Bolsa Família program, which today reaches 12 million families.[4] Indonesia's Kecamatan Development Program provides grants to half of all villages in the country for small infrastructure projects chosen by the community. Oral rehydration

3. Levy (2006).
4. Duffy (2010).

therapy, introduced by UNICEF, has almost halved deaths from diarrhea, cholera, and related diseases. Long-lasting insecticide-treated bed nets have dramatically reduced malaria. China has initiated vast poverty reduction programs, including those affecting millions of poor farmers of the Loess Plateau.

Yet these examples are the exception as opposed to the rule. Many development solutions create more of a whimper than a wave. This is surprising when one considers that scaling up is at the core of the development model that donor agencies purport to follow. They regularly develop pilot projects with the supposed intention of replicating or expanding successes, or handing them over to developing country governments to do the same. But only a small share makes it beyond a pilot phase. This is why donors are more likely to report one-time, localized success stories than examples of transformative wide-reaching progress.

Even when a dedicated effort is made to transition from pilot to program, scale is rarely achieved. The use of fuel-efficient cooking stoves in India, for example, has proceeded very slowly. Ten years after their introduction through the National Improved Stoves Program, improved stoves accounted for less than 7 percent of all stoves in use.[5]

We believe this deserves a full inquiry. Remarkably little is understood about how to design scalable projects, the impediments to reaching scale, and the most appropriate pathways for getting there. Despite its centrality to development, scaling up is rarely studied in its own right and has undergone little scrutiny.[6] Scaling up has been treated as something that occurs spontaneously and organically when successful development interventions are identified rather than as a challenge in and of itself.

This book is about increasing the number of people who are assisted through development programs so they can be counted in the hundreds of millions and in a time frame that is measured in decades rather than centuries. It asks what could be done to improve living conditions in poor countries in a way that is financially affordable and technically feasible. It is the contention of this book that scaling up is mission critical if extreme poverty is to be vanquished in our lifetime.[7]

Already, the idea of accelerating poverty reduction is taking root among development practitioners. This is evidenced by the Millennium Development Goals (MDGs), which are expressed in terms of the pursuit of results at scale, reflecting the desire to transform lives and to bring about far-reaching, sustainable change. In 2011 the international development community congregated in Busan, Korea, at the High Level Forum on Aid Effectiveness, to discuss

5. World Bank (2011).

6. One exception is the study by Hartmann and Linn (2008).

7. The phrase *mission critical* is borrowed from the International Fund for Agricultural Development, which provides a rare example of an aid agency that has made scaling up an integral and explicit part of its modus operandi.

how approaches to development need to change if accelerated results are to be achieved. The outcome document for the meeting concludes, "We recognize that progress has been uneven and neither fast nor far-reaching enough. . . . We reaffirm our commitment to scale up development cooperation . . . scaling up our support of development results . . . scaling up the use of triangular approaches to development cooperation . . . and scaling up of efforts in support of development goals."[8] Easier said than done.

But perhaps such pledges are not so unrealistic. What if scaling up was being held back by some well-defined obstacles, which could be overcome through a dedicated effort? This claim has become associated with two schools of thought.

The first can be caricatured as a West Coast "Silicon Valley" perspective. It puts its emphasis on finding innovative technological solutions to development challenges through scientific advances and visionary entrepreneurship. From this perspective, the reason that scaling up rarely occurs in developing countries is the dearth of scalable opportunities. If scientists, engineers, and innovators focused on the problems of poor people, as opposed to those of the rich, new opportunities could be discovered. New vaccines and off-grid lighting solutions are examples of what can be achieved when innovators turn their attention to development problems.

The second camp is associated with what we call the East Coast "Kendall Square" perspective, named for the location of MIT's Abdul Latif Jameel Poverty Action Lab. Researchers there have organized a massive effort to compile compelling statistical evidence of what development interventions work best, based on randomized trials. Their aim is to equip policymakers with sufficient information to determine how resources can be efficiently allocated: in other words, what interventions should be taken to scale and what interventions should be discarded. A good example of the former is the Kenya National School-Based Deworming Program, which has treated millions of school children at modest cost, thereby substantially improving attendance rates and learning outcomes throughout the country. Public backing for the program followed the publication of an impact evaluation that demonstrated the intervention's unequivocal success when attempted on a small scale.[9]

This book argues that the challenges to scaling up are more complex and more numerous than either a lack of appropriate technology or a lack of evidence of what works. Without understating the importance of both technological innovation and rigorous evaluation for development and scaling up, we believe that neither can be viewed as the binding constraint for the failure of many existing successful interventions to reach scale.

8. Busan Partnership for Effective Development Cooperation (2011, p. 2ff).
9. Miguel and Kremer (2004).

Instead, the challenge of scaling up development impact cannot be reduced to a single constraint but is better approached as a process challenge. The business model—the specific combination and design of product, distribution, supply chain, financing, pricing, payment, and sales—is often far more important in determining success than a specific technology or piece of evidence. It is attention to the details of implementation at a large scale that makes the difference between successful and unsuccessful scaling up.

This poses a challenge for the development community. Donors have traditionally resolved implementation problems by breaking up projects into small and "doable" efforts, which they can supervise from abroad. Many governments of poor countries, meanwhile, have limited capacity for scaling interventions competently. The private sector has enjoyed more success when interventions have been proven to have a commercial return—witness the explosion of microfinance through the private sector—but is rarely involved in development activities affecting poor people.

Given this reality, it is useful to try and learn systematically how to scale up development impact by analyzing examples of success and failure. Each of the essays in this book documents one or more contemporary case studies or syntheses of cases, which together provide a body of evidence on the challenges, opportunities, risks, and rewards of pursuing a scaling agenda. Cases of scaling up by the private sector and by the public sector are included. They reveal some hard truths. Scaling up is difficult to plan because it involves transformational change. Tools like cost-benefit analysis, the workhorse for analyzing development projects, are not helpful because scaling up often involves changing cost curves, altering beneficiary behavior, and an endogenous policy environment. Business models to implement scaled solutions cannot be taken off the shelf or easily replicated from one context to another—what is called external validity—but need to be designed and fine-tuned for scale over many years.

There are high risks to trying to reach scale, with more failures than successes. That is typical of most innovations, as entrepreneurs can attest. According to one estimate, it takes an average of fifty-eight new product ideas to deliver one that is viable.[10] This is enough to scare off bureaucrats, whether in donor agencies or governments, whose expected rates of success are set impossibly high. (For instance, the World Bank aims for a project success rate of 85 percent.) Their strategy has been to seek modest impacts across many small interventions, rather than attempting to scale their best investments. By contrast, corporations are usually willing to take on risks, as huge returns from a few successes can compensate for the financial losses of failures, so long as the latter are truncated efficiently. But the same calculus doesn't apply when corporations operate in

10. Mullins and Komisar (2009).

the development sphere. There, the returns to a successful scaled-up intervention may be large in terms of development impact but are typically small in terms of profits. The financial returns, therefore, do not compensate for the costs incurred in failed pilots.

In each of the cases in this book, we show that the scaling-up challenge can be divided into two. There is the challenge of financing scaled-up interventions, because poor people cannot afford to pay full cost for many services. These costs can be especially high when new markets or products, like solar power, are being introduced. The second challenge is managing delivery to large numbers of beneficiaries. The logistics, training, recruitment, and systems needed to deliver goods and services efficiently to poor people spread out throughout a country are incredibly complex and depend on a strong customer-oriented design. Very few actors—whether governments, donors, nonprofits, charities, or corporations—have the management ability to operate efficiently at scale. Large corporations are most adept at handling this challenge, but development activities are not at the top of their priorities. In every case, scaling up requires sustained commitment from top leadership, something that can be hard to achieve in most environments.

Scaling Definitions

In this book, we are particularly interested in the range of interventions that can transform the lives of poor people. Transformation may entail providing them with goods and services to which they otherwise have no access, such as education, health, finance, and energy, or involving them directly in the design or implementation of development projects, making them partners and providers as well as potential beneficiaries. For example, when poor farmers are linked into commercial agricultural value chains, they can achieve unprecedented improvements in income. Or when children are enrolled in schools that teach them literacy and numeracy skills to a minimum standard, their lifetime earnings opportunities are expanded hugely. When lives are saved through medical attention at birth, and illnesses avoided by reducing indoor air pollution or improving nutrition, the development benefits are startling.

In other words, we define scaling-up development impact in terms of not just reaching large numbers of poor people but doing so with interventions that transform their lives. These interventions often lead to behavioral changes in poor households that trigger further innovations and development: poor families invest more in their children when they are more likely to survive; they save more when they see opportunities for further income advancement; they work more when they are not sick; their children go on to higher education when they excel at the basics.

What constitutes scale can differ according to circumstances. Scale may be defined in terms of the level at which objectives are set: for instance, a mayor's pledge to a city, a government's national development strategy, or the global MDGs. We do not limit ourselves to a rigid definition of scale here, but the case studies are principally oriented to experiences where the goal is transformational impact at the country level. With this definition, we exclude the activities of many small social enterprises and nonprofit organizations, which can have enormous transformational impact on the lives of those they reach but do not have the resources or capacity to implement national programs. However, we do include so-called franchise models, where many of these entities replicate a similar business model and thereby achieve scale in aggregate. In other words, we do not restrict ourselves to scaling up through a single program or organization. Sometimes, a successful business model leads to imitation and replication, and that becomes the process for reaching scale. That has been true for the microfinance and the mobile phone industries, for example.

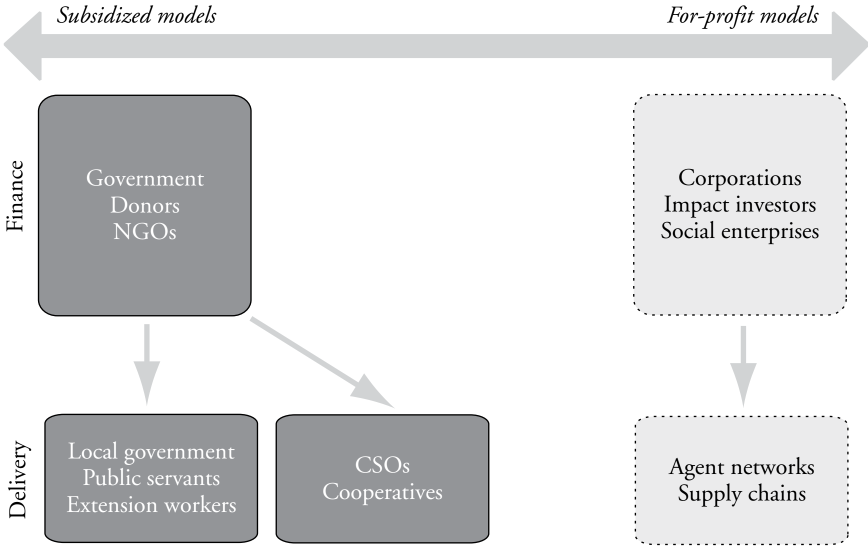
Although our interest is in understanding how to transform the lives of poor people, we do not focus only on scaling up interventions that reach the poorest of the poor. For the most part, poor people are not a well-defined, static group. Poor families may have good years, when they would be classified as near poor, and bad years, when they fall back into poverty. But if they benefit from a scaled-up intervention when they are just above the poverty threshold, they are far less likely to fall back into poverty at a later stage. Hence the impact on poverty reduction over time can be just as large by including the near poor in the target group compared to interventions that target only extremely poor populations. While the precise target group varies from organization to organization, most of the examples presented here are aimed at those individuals spending less than 4 dollars a day.

Scaling Up Today

Scaling up is an inherently complex process involving the management and organization of vast numbers of dollars and people: dollars, to cover the cost of establishing and running large-scale operations; and people, to manage those operations, serve as intermediaries in the delivery of interventions, and to interface with low-income beneficiaries. In other words, any attempt at getting to scale hinges on establishing a business model—the nexus of finance and delivery—that can support a scaled-up operation.

Figure 1-1 provides a stylized schematic of how this works in practice today. Development interventions are arranged according to whether they require subsidies or can be made profitable. Typically, when subsidies are needed,

Figure 1-1. *Scaling-Up Models: The Status Quo*



government, aid donors, or large international NGOs take the lead. Examples range from vaccine programs to national employment guarantee schemes. When profits are feasible, it is the private business sector that undertakes scaling up. In the last decade, small sachet shampoos, community water, and biomass stoves have demonstrated market potential when poor households are viewed as a specific customer segment, while contract farming models show the commercial viability of viewing poor communities as low-cost producers.[11] Whether scaling up is financed through subsidies or on a commercial basis determines whether interventions are ultimately delivered through the public or private sector.

Subsidy Models

The financial challenge of scaling up subsidized interventions is straightforward enough: subsidies cost money. Even with the benefit of scale economies, total costs typically increase with the number of beneficiaries, so the availability of resources can determine the degree of scale that is ultimately achieved. Sustaining subsidized interventions at scale requires a long-term commitment, far beyond the duration of the domestic political cycle or a donor's strategy for a country. While governments, international NGOs (INGOs), and donors command large budgets, the number of interventions they can feasibly scale remains finite.

11. Prahalad (2004).

Take, for instance, the treatment of people living with HIV/AIDS in the developing world, which is considered to be one of the most comprehensive and successful examples of a subsidized model of scaling up in the development field. In 2011, 8 million individuals received antiretroviral therapy, at a cost of $16.8 billion: $8.6 billion collectively spent by developing country governments and $8.2 billion spent by the donor community.[12] The latter represents a sizable share of all foreign aid (6 percent). The goal of universal provision for all 34 million people living with HIV/AIDS—a number that is rising by 2.5 million a year—demands additional resources, despite a steep reduction in per person costs. Recent cost estimates for meeting global demand by 2015 indicate the need for an additional $7 billion of annual spending.[13] Critics question whether such large expenditure on HIV/AIDS crowds out spending on other diseases that can save lives at a lower cost.[14]

To be viable, a business model that relies on subsidies has to be narrowly focused on a specific issue. If the range of activities is too broad, resources must be thinly spread, and scale becomes unachievable. That forces a trade-off: scaling up can require taking a narrow approach, potentially limiting development impact, while the alternative of broadening the range of activities to encompass the multisectoral interventions that are often required for sustained development impact can make scaling up unaffordable. The United Nations' Millennium Villages project has been criticized for exactly these reasons. Its critics argue that it is too broad and expensive to be scalable.[15] On the other hand, when global education resources were channeled in a focused way for building new schools to meet the enrollment targets of the MDGs, school quality and learning outcomes fell in some countries, causing a backlash against such programs.[16] These examples show how difficult it can be to find the right balance between scaling up to reach more people—a public good imperative—and providing the range of services that truly achieves a transformational impact in beneficiaries' lives.

Subsidized models also have difficulty organizing efficient delivery. As an intervention's scale increases, so do logistical demands. Systems need to be developed to monitor effective implementation and to manage personnel. Even in the most easily mechanized activities, distribution models require the identification of reliable individuals and the development of their skills to perform different roles. With large numbers of people involved in a scaled-up operation, there is a premium on effective recruitment, training, and managing churn. The

12. Figures represent total HIV/AIDS spending, not just expenditure on antiretroviral therapy.
13. UNAIDS (2012).
14. For instance, see World Bank (2012).
15. Quote by Bunker Roy in Bishop and Green (2010).
16. Lewin (2008); Kenny (2010).

relationships between individuals along the distribution channel must be managed so as to provide the right incentives and to promote accountability and productivity.

Subsidized models rely on implementing organizations to provide these systems and manage personnel. Governments tend to work through ministries, subnational government, state-owned enterprises, and extension networks, whereas INGOs typically partner with local civil society organizations (CSOs) or cooperatives. These implementing organizations provide the networks for reaching poor populations, extending down to the level of individual villages and communities.

The difficulties of achieving scale with these delivery systems are well known. Government ministries and local authorities often lack the capability for effective administration, including financial management, procurement, and service delivery, and despite their public service mandate, struggle to foster a customer-service orientation and adopt a customer-driven design.

Few countries have meritocratic-based civil services that reward employees for the efficiency and effectiveness of their performance. Hiring is as likely to be based on patronage as on merit. In developing countries, government information and payroll systems, structured learning, willingness to innovate and experiment to fine-tune delivery, and training programs for employees are notoriously poor. Corruption, absenteeism, and theft can be widespread. In India and Uganda, for example, teacher absenteeism in public schools still reaches over 25 percent.[17]

When programs are administered by local CSOs, results tend to be better, but few of these organizations have national reach. Indeed, in some cases their effectiveness is a consequence of their small size, and their organizational systems are not capable of expansion. A franchise model, involving multiple CSOs, may provide a path to scale but can imply higher transaction costs and greater variability in quality.

Donor agencies are acutely aware of these weaknesses and have oscillated between establishing their own delivery systems and working through government or CSO delivery channels. Over the last decade, donors have made commitments to working through government in recognition that long-term sustainable development depends on countries being in control and having viable institutions of their own, consistent with the principle of ownership. Despite this rhetoric, donors have made less progress in practice. Less than half of all aid is channeled through government systems, and less than half employs programmatic approaches, which pool government and donor efforts around government-led plans.

17. Devarajan (2010).

Box 1-1. *Lessons from BRAC*

Over the course of forty years, BRAC has evolved from an organization dedicated to relief and rehabilitation in the wake of Bangladesh's independence to the world's largest development NGO. Its presence in Asia, Africa, and the Caribbean benefits an estimated 126 million people. BRAC's growth reflects a strong focus on bringing successful interventions to scale, which it has achieved in a variety of areas, including income generation, health, education, agriculture, food security, water, and sanitation.

BRAC's visionary founder, Fazle Hasan Abed, identifies a number of factors to which the organization's success in scaling up can be attributed.[a] First, BRAC has the goal of achieving scale engendered in all its activities from the outset. This vision informs its choice and pursuit of business models. Second, BRAC adopts a well-trodden pathway in getting to scale: demonstrating the *effectiveness* of a given intervention, then achieving *efficiency* by lowering cost, and finally *expanding* to reach large numbers of beneficiaries. This sequence is crucial in giving BRAC the confidence to invest in the right interventions. Third, BRAC puts an emphasis on strong internal systems to support operations at scale. These include a focus on human resources, management, monitoring, performance metrics, financial accounting, and delivery.

a. Abed (2012).

Large donor investments have focused on boosting governments' capacity to deliver and on improving government systems, from public financial management to procurement to sector policy, planning, and evaluation. But achieving progress in these areas has proven to be much harder than expected. Civil service reform and public capacity building are among the least well performing and most challenging of all development cooperation efforts.[18]

Taken together, the obstacles to financing sustained large-scale subsidies and building efficient and effective delivery systems are daunting. Developing country governments have no choice but to muddle through and to provide interventions at scale to the extent and to a standard that fiscal and capacity constraints allow. Scale, in a literal sense, is often achieved, but poor quality of delivery and an inappropriate level of focus constrains impact. Few NGOs have the resources and interest in sustaining large-scale subsidized interventions, although there are some notable exceptions (box 1-1).

What about donors? Their best chance for achieving scale is to play a catalytic role, with a focus typically on supporting government or NGO efforts. In practice, however, donors have often favored more modest interventions,

18. UK DFID (2008).

diversifying their investments widely and avoiding working through others where this weakens their ability to account for money spent. Interventions are favored that can generate immediate results, with little consideration given to the fact that development impact rarely unfolds in a linear and monotonic fashion.[19] This is reflected in the characteristics commonly associated with today's aid investments, characteristics that emerge from the peculiar set of factors that shape donor choices (box 1-2). Incentives such as short termism and an extreme aversion to institutional risk inform aid allocations and modalities and permeate agency culture.

For-Profit Models

It used to be thought that subsidized models presented the most, and possibly only, viable way of delivering development solutions at scale to poor people. But this idea was challenged with the 2004 publication of C. K. Prahalad's *The Fortune at the Bottom of the Pyramid*. Prahalad argues that there exist significant, untapped profitable opportunities in low-income—or base of the pyramid (BoP)—markets, which can be seized if businesses adjust for the circumstances, preferences, and behavior of low-income customers.

This concept offers a radical, alternative route to scaling up development impact. Whereas subsidized models depend on government planning to spur the transition to scale, for-profit models harness market forces and the universal motivation to make profits. (In fact, Prahalad argues that being profitable in low-income markets relies more on turnover than margins, providing a further spur to the achievement of scale.) Private corporations replace governments, donors, and INGOs as the investors behind these ventures. Corporations are joined by a growing cadre of social enterprises committed to using market-based solutions to address development goals. Meanwhile, private networks of agents and supply chains provide a delivery route to beneficiaries.

For-profit models of scaling up face an immediate problem: achieving a financially attractive rate of return. Margins at the base of the pyramid are very low—some 3 to 10 percent, compared to an opportunity cost of capital for most multinationals of 20 percent or more.[20] Further, the upfront costs of penetrating or sometimes creating those markets are high. In the first instance, funding is needed to finance research and development, to design and refine consumer products, to test consumer interest among low-income households, and to identify ways to lower unit costs. If this stage is successful, additional investments can be required to lay the groundwork for expansion. This may include building a business infrastructure, institutions, or skills, where the enabling environment

19. Woolcock, Szreter, and Rao (2011).
20. Kubzansky (2010).

Box 1-2. *Aid Characteristics*

An analysis of aid interventions reveals three salient characteristics.

First, they are typically very *small.* In 2010, $133.5 billion was spent on foreign aid by the OECD Development Assistance Committee (DAC) countries and multilateral agencies on 19,186 projects.[a] This was broken up further into 139,832 activities, giving a mean activity size of approximately $1 million. Half of these activities had a value of under $50,000. Given that there can be no rigorous definition of a *project* or an *activity*—essentially, there are no limits on the degree to which interventions are bundled together—these figures can give only a rough indication of the degree of atomization within the official aid system. Nevertheless, official data point to a steady fall in the average size of activities over time. It seems fair to assume that the typical aid intervention is dwarfed in size by the development challenge (or challenges) it is intended to address.

Second, interventions tend to have a *short* duration. Those same 19,186 projects had a mean length of 613 days from start to expected completion, with half occurring within a single year. Given such a fast rate of turnover, less than one in ten of the 19,186 projects in 2010 will still be running in 2014.[b] Again, this seems at odds with the type of problems facing the world's poor, problems that are often deeply rooted and persistent. While it is possible that a series of short interventions may succeed at overturning persistent challenges, it is hard to marry this approach to the challenge of achieving structural improvements in developing economies, such as institution building and developing skills.

Third, interventions are largely *discrete,* in the sense that they are disconnected from each other both within and across time. This is partly a result of fragmentation; with hundreds of actors delivering hundreds of brief, small-scale interventions, coordination is hard to pull off. However, the problem runs deeper than this. Interventions are supposed to serve a common, focused agenda as defined by national development strategies. But in reality, strategy documents perform the opposite role: defining objectives in the broadest possible terms and providing justification for interventions regardless of how tenuous and superficial their link is to others.

Interventions that are mostly small, short, and discrete can still have a positive impact on the world's poor, albeit one that is below the aid system's potential.[c]

a. There is no standardized way of measuring a project size. We adopt the methodology used by Birdsall and Kharas (2010) in which activities reported to DAC's creditor reporting system database are collapsed into a single project if they have the same donor name, agency name, recipient name, project title, and expected start date. Small projects (those with less than $250,000 in funding) are excluded, as they often represent line-item adjustments to existing projects rather than new projects. For a detailed account of this methodology, see www.cgdev.org/userfiles/quoda/QuODA%20Second%20Edition%20Report.pdf.

b. Calculations based on those projects of known duration.

c. Linn (2011).

is otherwise deficient, and generating demand for products through marketing and educational campaigns.

A key feature of for-profit models is that they take considerable time to reach scale, and firms must be willing to absorb losses over this trial period. For some products, low-income consumers are already active purchasers even when these markets are informal, expensive, and unregulated. For these market-entry and "pull" products, the time to reach a scaled-up sales volume for better or cheaper products is two to five years. But it can be considerably longer when poor people are being introduced to new market-creation and "push" products, even if buying these has a major social benefit. In these cases, time is required to build beneficiaries' trust of a new product or to induce behavioral change. BoP markets like microfinance and contract farming are still maturing after thirty and fifty years, respectively.

The time and money spent on nurturing the market for push products are a public good. They benefit not only the first mover, who incurs the expense, but also all other potential suppliers. For that reason, individual companies are often unwilling to take on the burden themselves, preferring to wait until another firm covers the initial costs.

For-profit actors are well suited to building efficient delivery systems at scale. Private companies have a strong pedigree in product-testing and customer-oriented design. They are free to hire and fire and to experiment with different delivery models. Building networks of agents or supply chains to reach poor beneficiaries is still a challenge, but these can often piggyback onto existing structures. For example, MicroEnsure, a company that seeks to provide a safety net to reduce economic setbacks for those living on less than 4 dollars a day, uses the customer network of existing microfinance enterprises for selling its products.

Of all private sector actors, large, multinational (or at least national-scale) companies are best placed to build the systems required for scale. They have experience with logistics, personnel, information technology, and other back-office functions. But they also have alternative priorities. For now, the BoP space is dominated by social enterprises with hybrid profit and development motives. These enterprises are small and thus have a hard time developing the institutional wherewithal for large-scale delivery.

Thus for all the enthusiasm that for-profit models have generated, there have been disappointingly few examples of their interventions reaching scale. In some cases, market fragmentation or poor market linkages have inhibited growth by forcing prices too high for large numbers of low-income customers to afford. More often, ventures have never even gotten off the ground, as the fixed costs incurred in early discovery and pilot phases, or in creating a new market, cannot be met. Potential financiers are put off by the anticipation of high-risk, low-return, and long-term investments. Patient capital for development does not exist as an asset class. Social enterprises have shown glimmers of promise but remain too small in number and size to make a difference. Some view the failure of for-profit models as a saving grace, protecting poor consumers from exploitation at the hands of powerful corporations, which they cannot hope to hold to account.

Revolutions in Finance, Delivery, and Partnerships

Until now, the number of scaling-up success stories is relatively small, reflecting the limitations of existing business models.

First, financial resources for development are not being effectively utilized. Public and NGO resources are thinly spread across the many challenges that confront poor people and lack a sufficient degree of focus. Donor resources, in particular, have struggled to perform a catalytic role. Significant additional resources for scaling up could be unleashed through private finance, but this has been constrained by the large up-front costs and low rates of return incurred in identifying and developing scalable commercial opportunities.

Second, systems for managing delivery at scale in developing countries have been found wanting. While succeeding at turning delivery at a small scale into an art, donors and NGOs have struggled to master the complexities of developing large-scale delivery operations that are sustainable, cost effective, and customer oriented. Government implementation capabilities are often especially weak and are undermined by inadequate information and communication technology and by poor internal incentive and accountability mechanisms. Private sector know-how in this area has yet to be successfully harnessed to serve the world's poor people. More fundamentally, many poor people remain hard to reach, and the high transaction costs incurred in connecting to them drive up the price of subsidy models and reduce the scope for identifying commercially feasible for-profit models. However, these structural factors are starting to shift, creating a sense of excitement about the possibilities for scaling up in the near future.

Among the drivers of change are the evolving roles of actors in the development community. A wave of successful entrepreneurs is entering the world of philanthropy, seeking to apply to social problems the calculated risk taking, discipline, and drive for scalable solutions that served them well in their for-profit ventures.[21] In addition, there has been a dramatic expansion in the number and range of social enterprises in advanced and developing countries, blurring the lines between traditional categories of profit and nonprofit actors. The official donor community has also expanded to include members from emerging

21. Worthington and Pipa (2011); Bishop and Green (2010).

economies who exhibit different ways of working. Traditional donors, meanwhile, are looking to leverage increasingly scarce aid dollars into greater value for money. Finally, developing country governments wish to translate greater domestic resources into stronger leadership and more effective service delivery.

Another driver is technological progress. A cluster of new technologies—identification, communication, payment, digitalization, and data processing—are being combined in ways that could alter how global efforts to tackle poverty are forged. For instance, mobile money promises to strengthen consumers' participation in markets and thus expand the scope for market-based service delivery. Improved targeting technology and real-time data collection and analysis can improve management capacity and strengthen systems for large-scale interventions. And the dramatic expansion of mass media has introduced transparency to all development efforts, which has given fresh confidence that partners with different agendas but shared goals can come together and be accountable to civil society at large.

As the case studies in this volume attest, these dynamics are generating innovative approaches to scaling up. They are still too few to yield a complete science of execution, but they offer tantalizing examples of how scaled-up development impact may soon become the norm rather than the exception.

We have organized the case studies into three groups, indicating the ways in which business models for scaling up are changing: finance, delivery, and partnerships.

Finance for Scale

The flows of official development assistance from OECD countries fell in 2011 for the first time since 1997, and projections of future aid levels up to 2015 indicate continued risks to the downside, resulting from the poor economic outlook in most donor countries. This prompted Oxfam to warn of "hundreds of thousands of poor people [going] without life-saving medicines and many more children [missing] out on school."[22] Given this backdrop, now seems a strange time to make the argument that the prospects for resources for scaling up are strong.

However, to focus exclusively on the value of official flows is to miss the forest for the trees. Aid flows have never been sufficient to meet all development challenges. In fact, they equate to only 30 cents a day, per poor person, after excluding aid devoted to extraneous issues beyond development programs and projects.

Instead, aid flows have to be looked at in the context of all resources available for development, both domestic and international. The significance of these additional resources has increased in recent years. Despite rising aid volumes over the past decade, average aid dependence in low-income countries has

22. Oxfam (2012).

fallen sharply, with the number of governments relying on aid for at least 30 percent of their public expenditure falling from forty-two to thirty.[23] This is the result both of faster economic growth in the developing world and a dramatic expansion in government capacity to collect taxes. As a share of total international capital flows to developing countries, aid has fallen from 70 percent in the 1960s to 13 percent today, due to the takeoff in trade, remittances, equity, and foreign direct investment.

Of course, numbers alone cannot tell the whole story. Understanding the prospects of finance for scale requires an assessment not only of the size of resources but also of how resources are being applied: whether sufficient attention is given to the objective of scale, whether investments have an appropriate degree of focus, and whether specific resources succeed at crowding in others to support scalable programs.

One of the largest potential new sources of finance for development comes from the private corporate sector. This is distinct from the corporate social responsibility of charitable contributions, which large firms have long been making. Rather, it concerns the direct engagement of major corporations in development through their core business strategies. As economic growth in the advanced countries has slowed, multinational corporations are looking to developing countries for the bulk of their own growth. That has shifted the priority of development from an afterthought to a central priority of major business leaders.

Private financing offers the potential for significant expansion in capital flows to poor countries. The OECD's Development Assistance Committee reports $330 billion in such flows destined for low- and middle-income countries. This is mostly direct foreign investment and bank loans that are not directly related to development, although in many cases, such as infrastructure investments in telecommunications, toll roads, and power plants, the profit motive of the private sector is well aligned with the development motive of creating the enabling environment for growth and poverty reduction.

There are, however, the new phenomena of inclusive business and impact investing that promise to align incentives between private capital and the achievement of social impact more closely and in many more fields. Inclusive business is defined as a profitable core business activity that tangibly expands opportunities for the poor and disadvantaged as producers, employees, or consumers in formal markets and commercial value chains. Impact investments are investments made in companies, organizations, and funds with the intention of generating measurable social and environmental impact alongside financial return. While it is difficult to estimate the amount of money flowing into such efforts, the Global Impact Investing Network (GIIN) estimates that $50 billion

23. ActionAid (2011).

has already been mobilized for impact investing (although largely in advanced countries) and that $9 billion in new commitments are expected in 2013 by respondents to their survey.[24] A recent J. P. Morgan report suggests that impact investing could emerge as an asset class with committed funds of $400 billion to $1 trillion within ten years, just counting five sectors: housing, rural water delivery, maternal health, primary education, and financial services.[25]

Can these new funds and business models make a material difference in developing countries? Mike Kubzansky explores the potential for private capital to contribute to scaling up development impact (chapter 2). He challenges the assumption that a single entity offers the best route to scale in all circumstances, whether through a multinational corporation or a social enterprise. He posits two alternative routes to scale using the for-profit model. One route is to replicate a proven business model through hundreds of small and medium enterprises, as has happened with microfinance and contract farming. The key to exploiting this route is the demonstration of effectiveness in transforming poor people's lives. The second route is to leverage existing informal providers, who are legion in developing countries, by organizing them, providing them with technical assistance, and improving and upgrading their services. This latter route is similar to a franchise model, and while examples are few, they indicate the potential for success. The Greenstar network in Pakistan, for example, a franchise of small clinics, has been shown to provide better quality health services, to poorer clients, at lower unit cost than either government health clinics or private for-profit clinics.

Kubzansky highlights the dearth of funding for early-stage investments to get good ideas off the ground and to test new business models before they can be taken to a growth and expansion phase. But he also points to constraints on the amount of grants for technical assistance, training, and the establishment of networks that franchising requires. If these gaps can be filled, Kubzansky believes that for-profit scaling up could take off. His suggestion: donors and philanthropists interested in scaling up should try to identify and fill key financing gaps in conjunction with for-profit businesses and social enterprises in new hybrid arrangements.

This leads to the question of whether donors can alter the way they work to achieve scaled-up development impact. Laurence Chandy (chapter 3) reviews the past decade of rising aid flows to explore how agencies made use of additional resources. He argues that growing aid budgets generate competing pressures within donor governments. In combination, these pressures produce an ambiguous effect in terms of whether donors strive for scale.

24. Stabile (2010); Saltuk and others (2013).
25. J. P. Morgan (2010).

Chandy shows that to understand the success of subsidized models requires much more than a simple assessment of the volume of resources committed. He submits that few donors have an approach to aid management that is conducive for scaling up as it is classically conceived, whereby good ideas emerge from the field, are rigorously evaluated, and are ultimately propagated with support from donor headquarters. For other donors, the best opportunity for achieving scale is to choose development problems that lend themselves to more mechanized solutions, where the challenge consists mainly in overcoming logistic and resource constraints rather than institutional strengthening and sustainability challenges, and the drive for scale can come from the top. This suggests that donors could be much more effective in achieving scale if they were matched to particular development challenges based on their expertise. A division of labor, based on the operational models of different donors, offers the chance of greater impact without any growth in global aid budgets.

To be viable, a business model that relies on subsidies has to be narrowly focused on a specific issue. David Gartner and Homi Kharas (chapter 4) look at the efforts to scale up resources and impact through vertical funds: specialized aid agencies that adopt a strong focus by providing a critical mass of expertise, identifying results in measurable ways, and mobilizing highly targeted financial support. These organizations have been controversial among development practitioners because, while they scale up impact and results in one area, they may inadvertently dilute resources going into other areas.[26] If vertical funds are truly efficient, however, then the net impact on development by operating through vertical funds could potentially be larger.

Gartner and Kharas find that there is considerable variation in the practices of vertical funds. Some are highly successful, with considerable impact, while others have made less of a difference. They attribute this to the governance arrangements of the funds. Those with more independence, greater beneficiary involvement, and clear performance-based metrics do better in terms of impact, resource mobilization, and learning. These, they submit, are all attributes necessary for scaling up. The authors conclude that a vertical fund approach can lead to scaled-up impact, but only if management, governance, and implementation practices are properly designed.

Together, these three chapters demonstrate that resources for scale could be dramatically enhanced over the near future, by both unlocking pools of private finance for development and altering the way in which donor resources are utilized to derive greater impact.

26. Isenman and Shakow (2010).

Delivery at Scale

Earlier in this chapter we define delivery as being a problem about managing people. Delivery is what makes getting to scale not merely difficult but complex. Securing finance for scale may be extremely hard to achieve, but there is normally a clear vision from the outset as to what the end goal should look like. By contrast, successful delivery at scale is more an art than a science. This is especially apparent when operating at the base of the pyramid, where the last mile of delivery involves not merely a transaction but also obtaining beneficiaries' trust and understanding and often changing their behavior. A strong customer-oriented design can be of critical importance in shaping products, prices, distribution, marketing, and sales, which together create a viable business model.

The chapters in this section touch on many aspects of delivery: strategic, institutional, and administrative. It is no surprise that they put forward no silver bullet solutions. However, recent experimentation and learning from implementers justify optimism and indicate opportunities for progress in many areas.

Johannes Linn (chapter 5) examines incentives and accountability within and between governments and aid agencies as they grapple with scaling up. He frames the transition to scale as a classic principal-agent problem, where success hinges on the alignment of stakeholders' interests. In theory, he argues, all parties should share the goal of expanding the reach of successful public goods and services. Yet a collection of government and market failures results in a wedge being driven between parties. Moreover, the longer the chain of accountability between development planners and ultimate beneficiaries, the greater the likelihood that interests will diverge and that scaling up will not be pursued, or will fail.

Linn identifies a variety of instruments that can be deployed to better align incentives around the objectives of scaling up. These include ways to amplify the voice of beneficiaries, to unite donors and recipient governments behind shared strategies and approaches, and to introduce market mechanisms that induce competition around the achievement of specified goals. He views experimentation as a valuable path to innovation and improvement. However, Linn's greatest interest is in opening the black box of government and donor agencies to shed light on internal institutional incentives. He argues that too often "internal management practices do not provide for effective incentives and accountability between top management and the front-line staff." Fixing these—to pinpoint aspects that discourage scaling up—requires top-to-bottom reviews of institutions to assess their corporate missions, strategies, operational policies, processes, and instrumentalities, and human resource and budget management. Linn makes the case that this more systematic approach to scaling up can identify small reforms that result in significantly improved institutional performance.

Chris West (chapter 6) is enthusiastic about the application of private sector know-how for delivering development solutions at scale. He calls this "business DNA," which he defines as an understanding of how "to develop and execute viable models to deliver products or services to customers in ways that they value." West's enthusiasm is informed by a decade of experience with the Shell Foundation, an angel investor committed to catalyzing scalable development solutions through supporting social enterprises. When the foundation focused narrowly on providing short-term grants, 80 percent of those enterprises failed to achieve any evidence of scalability. However, when grants were incorporated into long-term partnerships and coupled with hands-on business skills support and the identification of market linkages, the foundation's results turned around dramatically.

Through a collection of case studies, West highlights the wide variety of business skills required for scaling up social enterprises. The foundation supports its clients in project management competencies, such as developing operating systems and setting milestones, as well as in more specialized areas, such as product marketing and market analysis. In addition, by using its own network of partners, the foundation has been able to pair its clients with investors, sources of business, route-to-market partners, and others with close links to local communities. This testifies to the complexity of mastering delivery at scale, but it also highlights that typical efforts to support social enterprises are not sufficiently focused on building these critical skill sets. Greater attention to these weaknesses could help unleash the potential of social enterprises, which have traditionally been written off as unscalable.

The story of M-PESA, the mobile money service in Kenya, presents one of the most celebrated cases of scaled-up development impact and is quite possibly the quickest the world has seen. M-PESA offers a commercially viable business model for serving poor customers where traditional banking falls short. M-PESA overcomes the constraint of access by substituting mobile phone ownership and networks of agents for physical banks; and it allows small-value transfers and minimal fees by encouraging a shift away from cash to electronic money in which simple movements of money incur virtually no transaction costs. The adoption of mobile money by 73 percent of adults in Kenya—where 67 percent of the population lives below 2 dollars a day—suggests that it should be possible to conceive of a world where virtually all poor people are "banked."

Pauline Vaughan, Wolfgang Fengler, and Michael Joseph (chapter 7) provide a unique insiders' view on how M-PESA triumphed. They identify many contributing factors concerning the company's approach to management, design, and delivery. Robust internal processes, the setting of targets, and visionary leadership are all identified as important components of success, in which the objective of reaching scale was fully reflected. However, arguably the most ingenious aspect of the business model is the approach to reaching customers through the formation, training, and retention of a cadre of M-PESA agents.

M-PESA recognized from the outset that its success would critically depend on its agents. Agents would be the most visible element of the company and would have to earn the trust of potential customers to bring about the behavioral change required in the adoption of a new product. Rather than creating agents from scratch, M-PESA identified existing networks of competent operatives in the Kenyan economy, which they could readily employ. These included their own airtime dealers (sellers of prepaid mobile phone credit), the fuel retailer Caltex, Group 4 Securicor courier services, supermarket chains and other retailers, dry cleaners, and the Pesa Point ATM network. By the end of 2011 the number of agent outlets exceeded 35,000, or 1 for every 700 adult Kenyans. Regular interactions between M-PESA and its agents provided an opportunity for training (to ensure a high quality of service), information gathering (to identify possible improvements to the service), and instilling loyalty (to retain agents and avoid rehiring costs). From a scaling-up perspective, the virtue of this approach was to ensure that delivery could expand swiftly while transaction costs are kept low.

Inspirational though the story of M-PESA is, its consequences for scaling up go much further. The possibility of introducing poor people the world over into the banking system provides a route for engaging them in other and new BoP markets. In Kenya today, over 500 organizations use M-PESA to pay bills and conduct transactions, including utilities, medical saving plans, crop insurance for smallholder farmers, and teacher payment programs (as an alternative to standard school fees). Of course, so long as poor people remain poor, their purchasing power in these markets will be limited. However, mobile banking services provide a means for governments, donors, and charities to give money directly to poor populations and allow them to buy the goods and services they seek, rather than attempting to supply these themselves. When poor people have access to funds, markets for goods and services spring up spontaneously. That has been the experience with schools in slums, rural water supply, health clinics, and a range of other products. Scaling up is most likely to take off by increasing the purchasing power of poor people rather than by organizing the delivery of specific goods and services.

Mobile money is one of a number of new technologies that can expand the scope for scaling up (box 1-3). The internet provides another fast track for reaching vast numbers of customers at low cost. This is demonstrated in one of two highly successful case studies examined by Hiroshi Kato and Akio Hosono (chapter 8) in which the private sector plays a leading role. The authors describe how the Micro Finance International Corporation (MFIC), a social enterprise, Box 1-3. *Technological Innovations for Delivery*

The creative application of modern technologies can push out the possibility frontier of future development efforts by enabling better targeting, real-time data collection and analysis, and responsiveness to beneficiary feedback.

Around half a billion people in the developing world have had their biometric identification recorded in a government database using fingerprinting, or iris or facial recognition, a number that is currently rising at an astounding 25 percent a year. As biometric identification expands, so does the possibility of more accurate programs to assist poor and vulnerable communities. Spatial identification and mapping can also enhance the targeting of programs. These technologies are increasingly being deployed to ensure equitable distribution across geographical areas and in supporting coordination across donors and NGOs. Most recently, they have proven valuable in responding to crises such as the monitoring of violence in Nairobi and the search for missing earthquake victims in Haiti, both organized by the NGO Ushahidi.

Modern technologies allow data to be collected and analyzed in real time (or with drastically reduced lags), with greater reliability, at less cost, and in larger quantities. Cell phone surveys allow data collection to be conducted remotely in conflict-affected environments and to bypass weak institutions, which are often the underlying cause of low-quality data. Electronic platforms that manage finances create an auditable trail, typically running from the issuing agency all the way to ultimate beneficiaries. This trail can then be analyzed, helping to evaluate interventions and make them more effective.

Over the past decade, there has been growing interest in social accountability mechanisms, which strengthen citizens' ability to monitor and demand accountability from service providers and funders. Technologies can be employed to facilitate ex ante consultation of beneficiaries and support ex post consultation, to strengthen the feedback loop from beneficiaries to service providers and aid agencies.

New media are transforming the way that citizens can hold governments and other development actors accountable for their efforts. Advocacy efforts can now be organized at speed and at low cost. Pressure for greater transparency has encouraged governments to simplify processes: Kenya's Revenue Authority has placed customs, excises, and value-added taxes on an electronic portal, and Tanzania's mobile payments system permits taxes to be filed without citizens having to visit a government office. The accountability promoted by media access and scrutiny in developing countries extends to all development resources, not just aid, and to all development actors, not just governments. Donors, NGOs, and private corporations are subject to the same standards to promote development or at least avoid harm.

established a low-cost online facility to enable rapid and low-cost remittance transfers for "unbanked" migrant workers. The facility is supported by a new payment platform called Arias, which employs COBIS (core banking system) technology. This technology is associated with fast-speed intrabank transactions, as opposed to the more cumbersome traditional SWIFT technology. Recipients receive remittances via local microfinance branches that partner with MFIC. In 2010, MFIC and KDDI, one of the largest telecommunication companies in Japan, announced a new partnership to jointly promote a global remittance and payment platform for telecommunications carriers. This will allow users to make remittance payments using prepaid international telephone cards and prepaid mobile phones.

In their second case study, Kato and Hosono tell the story of the development and propagation of the Olyset net, a long-lasting insecticidal net created by the company Sumitomo Chemical to support the fight against malaria. Over the past decade, the Olyset net has been rapidly disseminated in sub-Saharan Africa, as a result of a unique approach to production and delivery supported by a diverse group of partners. The manufacture of the Olyset net has been transferred to A to Z Textile Mills in Tanzania under a joint venture with Sumitomo Chemical, resulting in the elimination of shipping costs. Delivery is handled by a combination of local government, NGOs, and commercial retailers, depending on the terms of sale.

Partnerships for Scale

The Global Partnership for Effective Development Cooperation, which emerged from the Fourth High Level Forum on Aid Effectiveness, acknowledges the critical role of partnerships in supporting development and seeks to forge closer cooperation between the traditional development community, emerging economy donors, civil society, and corporations. Partnerships can expand the scope for achieving scale in two related ways: first, by pooling the resources and expertise of different parties to enable larger and more ambitious programs and goals; and second, by recognizing the strengths and weaknesses of different parties and effecting an appropriate division of labor.

It is this latter rationale that provides the motivation for the partnerships explored in this section of the book. The case studies promote alternative allocations of roles for tackling the twin challenges of finance and delivery from the organizational arrangements assumed by standard subsidized and for-profit models.

For all their promise, the case studies show that partnerships are much easier to conceive than to agree on, operate, and sustain. Working in partnership can involve large transactions costs, and when these exceed the benefits to individual parties of working with others, they will choose to go it alone. Another problem is overcoming the cultural differences associated with different institutions.

Goals, time horizons, decisionmaking, risk tolerances, and commitments vary enormously from one party to another and can feed mistrust. This is especially apparent in public-private partnerships (PPPs), which have been experimented with for over fifty years. In spite of their long history, until recently only a few examples have delivered impact at scale. These constraints are important to keep in mind when assessing the feasibility of various partnership approaches.

One partnership structure that received significant acknowledgment at the Fourth High Level Forum on Aid Effectiveness was South-South cooperation, in which developing countries share know-how on solving common challenges. While this practice is growing fast, it typically involves only small, one-off projects, so the scope for scaled-up impact is limited. Akio Hosono (chapter 9) suggests that a slight modification of this type of partnership can radically alter the prospects for achieving scale. He advocates for what is called triangular cooperation, in which a traditional donor facilitates a South-South exchange. The role of the traditional donor is twofold: to complement knowledge exchange with assistance for capacity and institutional development; and to propagate South-South cooperation across countries by organizing, institutionalizing, and programming the replication of effective interventions.

Hosono's argument is backed by a number of case studies drawn from the Japan International Cooperation Agency's (JICA's) long-standing focus on capacity development and its creation of centers of excellence in developing countries. He draws an analogy between establishing these centers and the concept of training the trainers, in which a center provides a vehicle for reaching beneficiaries far beyond the number that JICA could feasibly reach directly. JICA views itself as a catalyst in enabling Southern partners to become donors and providing them with the institutions to assist others. Hosono uses the Brazilian Agricultural Research Corporation (Embrapa) as an example of an organization that reached global standards of excellence, thanks in part to collaboration with Japanese researchers, and that is now transferring this know-how to transform tropical agriculture in Mozambique. Japan complements these efforts with related investments in Mozambique to support the development of its agricultural export markets.

An honest assessment of the role of partnerships in getting to scale requires an understanding of the responsibilities and scope of different parties. Tessa Bold, Mwangi Kimenyi, Germano Mwabu, Alice Ng'ang'a, and Justin Sandefur (chapter 10) describe a fascinating experiment in Kenya to test the government's ability to implement and scale up an NGO intervention of proven effectiveness: a contract teacher program. The government was unable to replicate the success achieved by World Vision when it took responsibility for selecting, paying, and monitoring contract teachers. Since the government is the dominant actor in Kenya's education sector and the only party capable of scaling up education policies, this collaboration between the NGO and government failed to produce a truly scalable model.

The authors draw sharp conclusions from their work. While it is tempting to devise and study pilots as a way of understanding what might work at scale, the act of scaling up can pose political economy obstacles that a small pilot does not encounter. During the implementation of the contract teacher program, the government faced resistance from the teachers' union and committed to hiring all contract teachers into the regular civil service at the end of their contracts—a factor the authors cite as a possible cause of the intervention's failure. This case study is a reminder that scalable models are not just large, replicated pilots but often have their own unique characteristics. However, the experiment is one of the first to show how controlled trials can be used to inform a scaling-up operation, using similar techniques to those used to evaluate pilot interventions.

Shunichiro Honda and Hiroshi Kato (chapter 11) provide an account of the scaling up of another popular education reform, this time in Niger. Encouraged by experiences elsewhere, the Niger government mandated each primary school to establish a school management committee composed of the principal, a teacher, and representatives from parent-teacher and school mother associations. These committees were given extensive autonomy to manage community funds, monitor the performance of teachers, and procure supplies and basic infrastructure in a way that responded to local needs.

At the core of this program was a partnership between a weak government, donors, and civil society. Niger is one of the poorest countries in the world, and the government's strong focus on poverty reduction over the past decade could not make up for its very limited capacity. Sharing responsibility for school oversight with civil society, twinned with low-cost interventions to raise capacity, offered a way of leveraging community strength to improve education across the country quickly and to sustain improvements. Honda and Kato demonstrate that the program also displayed a high degree of cooperation among official and nongovernment donors as part of a sectorwide approach. This included joint evaluations of alternative models of school management, joint selection of the preferred model, and joint support for implementation.

Jane Nelson (chapter 12) documents the evolution of PPPs into new sectors and structures and asks what potential these have for driving scaled-up impact where traditional models fall short. She identifies four sectors where PPPs are demonstrating particular promise: health, nutrition, sustainable agriculture, and mining and energy. In these sectors, PPPs take on many forms, from project-based partnerships to country-based alliances and global multistakeholder platforms. She argues that effective scaling up often involves close linkages among these PPPs, providing a bridge between global resources, policymakers and decisionmakers, and local beneficiaries and knowledge.

Nelson offers some powerful recommendations for enabling PPPs to better support the scaling-up agenda. Among these is the establishment of large-scale replication funds that employ competitive bids (like today's challenge funds) and combine financial resources with technical advice, brokerage, and government policy dialogue. She also advocates the creation of joint investment networks for science and technology to identify breakthrough technologies and mobilize financing, research, development, and delivery through multistakeholder platforms.

A New Framework for Scaling Up

The emergence of new approaches for tackling development problems calls into question traditional ways of conceptualizing the scaling-up challenge. The dichotomy of public-led and private-led efforts to reach scale makes less sense in an ecosystem containing hybrid actors and hybrid partnerships. We suggested earlier that development interventions are normally arranged according to whether they require subsidies or can be made profitable, but what happens if both are true at once? Almost all cases of successful scaling up, including those where the private sector led the charge, have involved some soft money.

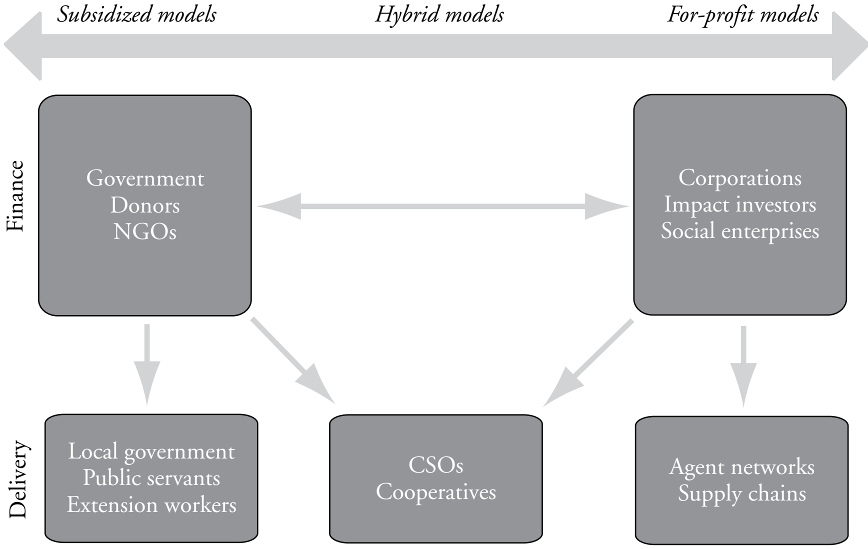
We submit that a large number of scalable development solutions occupy the middle ground on the spectrum between subsidized and for-profit models. Delivering these solutions requires the promotion of new hybrid models.

Hybrid models would combine the development efforts of a government, donor, foundation, or INGO with the efforts of a private corporation under a joint venture, drawing on the financial strengths of the nonprofit sector and its accountability to citizens and on the management and delivery strengths of the private sector. These ventures offer most promise in those instances where the fixed costs associated with creating a new product or product market prohibit a commercial intervention from moving forward but where variable costs could feasibly be recovered through market-based delivery once scale economies are achieved.

Finance from the nonprofit actor would provide a temporary subsidy to support the intervention during the early stages of scaling up, to cover costs such as research and development, market testing, piloting and evaluations, and marketing and education campaigns. These costs may not be recoverable in a commercial sense but would have the potential to generate large social returns and serve the development objectives pursued by government, donors, or INGOs.

Another aspect of hybrid models is a clearer division of labor between those responsible for the finance aspects of scaling up and those responsible for the delivery aspects. Subsidized and for-profit models have usually paired up financing institutions and implementing organizations along traditional lines:

Figure 1-2. *A New Framework for Scaling Up*



government with government, NGOs with NGOs, corporations with other private actors. Under hybrid models, partnerships would be determined by best fit for the particular challenge. Witness, for instance, the growing interest of pharmaceutical and agribusiness companies in partnering with and training health-care professionals and agricultural extension officers. This would drastically expand the possibilities for scaling up and lead to significant efficiency gains (figure 1-2).

M-PESA is an example of a hybrid model designed to solve a social problem: a technology developed with financial support from both the multinational corporation, Vodafone, and a challenge fund operated by the UK's Department for International Development; piloting conducted in collaboration with a microfinance institution, Faulu, to deepen understanding of the customer; exemplary customer-driven design, management, and execution, including the formation of a network of trusted agents by M-PESA; new public regulations to ensure no abuse of monopoly power despite a network covering most poor communities; and a further round of innovations by NGOs and social enterprises in response to the changed circumstances of "banked" poor people.

The role of the Kenyan government in this case is especially notable. Not only did it look to safeguard the rights and interests of users through consumer protection and market oversight, it also provided a supportive public policy and regulatory environment in which M-PESA could emerge and ultimately flourish. It should be noted that, at the time M-PESA was piloted, no regulations existed for e-money initiatives or for the involvement of mobile phone operators in any kind of financial transactions. The willingness of the government to allow regulation to follow innovation is an integral part of M-PESA's success story. This reinforces our belief that scaling up is fundamentally a process challenge. That process can entail not only identifying the right business model but policy reform and policy innovation. In a case such as M-PESA, it was the interaction between the new business model (notably its approach to financing, delivery, and partnerships) and the progressive and enabling policy environment that facilitated scaling up; both were necessary and neither was sufficient without the other.

The propagation of hybrid models starts with nonprofit actors and their investment choices. Altering these choices requires a fundamental change of culture for some organizations: one that accepts a higher frequency of failure, is comfortable with providing subsidies to profitable entities, and is sufficiently flexible to allow partners to operate freely rather than being excessively bound by the stipulations of an operational manual. A number of donor agencies are making efforts to move in this direction.

This emergence of hybrid models does not spell the end of traditional subsidized and for-profit models. The case studies suggest a number of ways in which these too can advance. Moreover, the typology of subsidized, for-profit, and hybrid models for scaling up is not mutually exclusive. An intervention that starts with a subsidy model, for instance, may metamorphose into a for-profit or hybrid model over time.

For subsidized models, new technologies offer great promise for overcoming long-standing weaknesses in delivery. However, these will be of little help unless organizations—donors especially—can tackle the perverse incentives that drive many away from the goal of achieving scale and lead instead to small, fragmented efforts. A stricter division of labor among nonprofit actors could advance scaling up but has proven hard to implement over the past decade. New approaches, such as triangular cooperation and vertical funds, offer promise but only if they are designed for scale; today, many are not.

The scope for growth in for-profit models could receive a major boost through the expansion of financial services to poor populations. Nevertheless, it remains unclear whether multinational corporations can be drawn into BoP markets. Social enterprises cannot be expected to completely fill their shoes, but they are capable of delivering at scale if they are supported with technical assistance and incorporated into market networks. Steps to leverage existing, informal providers into upgraded franchises offer an alternate route to scaling up impact. Ultimately, more information is needed on the unit costs of service provision in order to determine which sectors offer the most promise for BoP markets.

Any attempt to scale up encounters both opportunities and hurdles. The successful examples from our case studies took the commitment of leaders over long periods of time. These leaders were willing to take risks even when the business model remained unproven, because they understood the transformational impact of a scaled-up effort for the BoP market and the intangible value that could be generated in terms of a brand or an expanded network. They also demonstrated skill and empathy in understanding the perspective of their customers and earning their trust. In many cases, such trust is a prerequisite to the behavioral change required for new product markets to succeed.

Furthermore, effective partnerships are at the core of all successful scaling-up initiatives. Rarely can any one organization—public or private—tackle a major development challenge on its own. But partnerships do not happen without deliberate efforts on all sides to establish clear and transparent mechanisms of cooperation and a division of labor. Partnerships require a common vision, shared goals, and agreements over execution details, including resources, responsibilities, and risks. Sustained implementation of partnership agreements in turn requires institutional leadership, mutual trust, and staying power among the partners.

Are we at a tipping point in terms of the takeoff of scalable solutions for development? Some caution here may be prudent. Theory tells us that identifying a viable business model and reaching scale can take years but that, once a model is proven, it should be possible to replicate it quickly. Yet the case of mobile money doesn't seem to fit this model. M-PESA reached large scale in Kenya in only two to three years but replication in many other countries has proven harder and slower.

It is unclear what can account for this. One explanation is that business models that appear replicable, like M-PESA's, may not be universally applicable after all. Safaricom saw M-PESA as a loyalty driver to protect and expand its market share in its core profitable mobile business; it did not need to turn a profit from mobile money. Furthermore, the main appeal of M-PESA to consumers was the ability to send money home, a practice that is less common in other countries. This is a reminder that external validity applies only weakly in scaling up.

Another explanation is that the demonstration effect can have a more insidious side. Kenyan regulators and policymakers may have played a less supportive role in the emergence of mobile money if they had known what a tremendous success it would turn out to be and the subsequent opportunities created for rent seeking. Officials in other countries are better prepared to seize such opportunities when mobile money offerings are launched, with potentially negative consequences for whether these offerings succeed. In some circumstances, then, scaling up could become its own worst enemy.

At the same time, M-PESA has developed a virtuous circle of scaling up. Other services that piggyback on M-PESA's infrastructure in Kenya are experiencing their own rapid transitions to scale. The propagation of hybrid models could trigger a similar effect. If corporations and other private sector actors (social enterprises, impact investors) can be drawn into BoP markets with the assistance of, and in partnership with, governments, donors, and INGOs, agent networks will expand, driving down unit costs and further increasing the number of market-based opportunities. This will broaden the scope of for-profit models in delivering development solutions, creating yet more momentum. The provision of cash transfers directly to poor populations by governments and donors, channeled through mobile money services, can enhance the participation of poor people in BoP markets, providing a further channel of reinforcement.

These opportunities for scaling up will not solve all development problems, but offer the best chance for improving the lives of millions of poor people. We hope through this book to encourage more development actors to think systematically about getting to scale.

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