Cross-Sector Healthcare Solutions
Public-Private Partnerships

Healthcare PPP Guide

Designing Healthcare Solutions with PPPs

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The PPP Initiative Ltd. (PPPI) collaborates with governments, multilateral organizations, leading research universities, and selected private sector organizations to facilitate the development of public-private partnerships (PPPs) in healthcare.

Developed at Harvard Kennedy School and Johns Hopkins SAIS, PPPI—now an independent entity—works regularly with The Bartlett Faculty of the Built Environment at University College London, National University of Singapore Saw Swee Hock School of Public Health, Tsinghua University School of Public Policy and Management, and the Stanford Asia Health Policy Program.

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[1]Office of Global Affairs, U.S. Department of Health and Human Services

PREFACE

What Is the *Healthcare PPP Guide*?

The *Healthcare PPP Guide* is a primer in the motivations and incentives that underpin successful public-private partnerships (PPPs) in healthcare. It covers the foundational tenets of public-private partnerships: what they are, how they work, and whom they can benefit. It will also provide you with useful tools for engaging in PPPs: how they behave in different circumstances, how to think about them analytically, and how we can make them work better. The *Guide* is designed to be used by both public-sector and private-sector professionals.

But on a more basic level, the *Healthcare PPP Guide* is a toolkit designed to help you make sense of the notoriously complex and nuanced structures known as public-private partnerships. Although the *Guide* was prepared with a special emphasis on non-communicable diseases (NCDs), the principles and frameworks outlined within are highly adaptable, and could be used to address many different kinds of healthcare challenges, including aging populations, infectious diseases, and even the Covid-19 pandemic.

Public-private partnerships are complex, flexible structures. Each must be adapted to the particular issues it attempts to solve, and for that reason, PPPs can prove challenging for a first-time learner. They can be confusing, and at times, counter-intuitive. The *Healthcare PPP Guide* is designed to help you make sense of these complex structures, and has emerged from fifteen years of investment in developing PPP methodologies and frameworks by the PPP Initiative and its predecessors at Johns Hopkins and Harvard Kennedy School.

The *Guide* will help you to clarify your thinking around PPPs, but truly understanding them will require hard work—critical thinking, keen engagement, and significant investments of time and energy.

How to Use This Guide

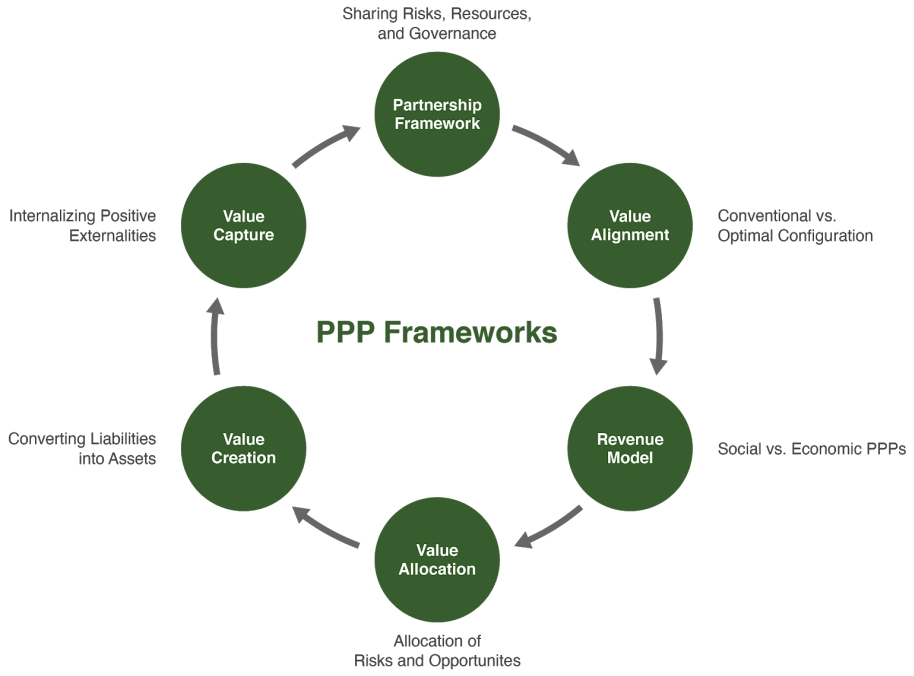
The *Healthcare PPP Guide* is not meant to serve as a one-size-fits-all approach to creating PPP solutions. It is not meant as a training manual. Rather, the *Guide* is a primer in PPP analysis—the process of mapping constituent incentives and allocating risks and opportunities to arrive at mutually-beneficial solutions. To that end, it is constructed around a series of essential frameworks and skills which will help you navigate pitfalls to successfully implement PPP-based solutions.

Key Frameworks

Ultimately, the challenge of designing a PPP is an exercise in problem-solving. In their creation, operation, and analysis, PPPs will present you with a series of problems, from the high-level and structural to the low-level and granular. Sometimes problems will be yours, sometimes they will be your partner's. It is important to recognize that, in a codependent partnership, addressing your partner's problems is often just as important as addressing your own.

These six key frameworks are pieces of a methodology that will help you correctly identify, break down, and understand the complex issues presented by PPPs.

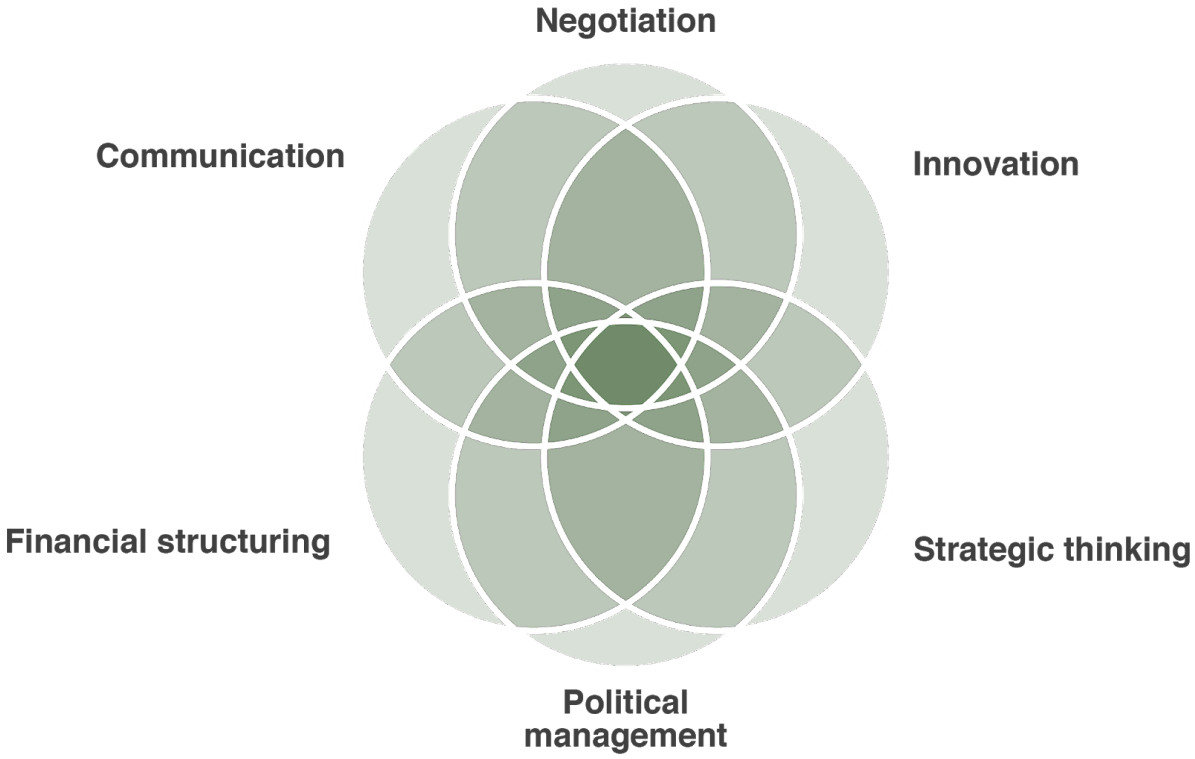
- Sharing Risks, Resources, and Governance
- Conventional vs. Optimal Configuration
- Social vs. Economic PPPs
- Allocation of Risks and Opportunities
- Converting Liabilities into Assets
- Internalizing Positive Externalities



Key Skills

Key skills, then, are the tools in your toolkit. Where the frameworks can help you to understand issues that stand in the way of successful PPPs, the skills can be used to resolve those issues. These skills can be used to overcome obstacles, increase capacity, or improve efficiency. We will use six key skills over the course of this Guide:

- Negotiation
- Innovation
- Strategic thinking
- Political management (and stakeholder analysis)
- Financial structuring
- Communication



The Use of Case Studies

Evidence-based case studies form the intellectual backbone of the *Guide*. The case method, a teaching tool developed at Harvard Business School in the 1920s, allows you to engage with real-world examples, ensuring a more complete understanding of the factors that influence the design and function of successful PPPs. Importantly, the case studies also reference a multitude of countries with drastically different cultures, norms, and forms of government, underscoring the importance of country context in PPPs.

Cases are selected purposefully. Each focuses either on healthcare, a PPP, or PPP skills and frameworks. Many cases, of course, focus on all three. Cases have also been selected for their relevance to a variety of publicly-controlled assets and public-policy issues, including healthcare and political or cultural issues.

Cases are subject to interpretation, and are meant not as simple object lessons, but as a basis for complex discussions within workshops. Some cases describe successes, others describe failures, but each will each inform your understanding of the management structures, decision-making frameworks, and problem-solving techniques that underpin successful PPPs.

Sometimes, we refer to "examples" as opposed to case studies. These examples, while they do not adhere to the research standards of a published case study, can be also drawn from the real world. In a handful of instances in the Guide, they are hypothetical, and are clearly noted as such. Both case studies and examples provide tangibility, helping to elucidate the complex concepts you will encounter.

Throughout the guide, you may see multiple references to a particular case study. This is because each case study intersects with multiple frameworks and skills, and must be considered through multiple lenses to be fully understood. A case may come up three or four times as we consider how each framework applies to it. Similarly, each framework and skill will be mentioned repeatedly, as the frameworks and skills are not isolated concepts, but intersecting building blocks of "PPP thinking," a larger methodology designed to help you understand, break down, and ultimately solve complex public-policy problems.

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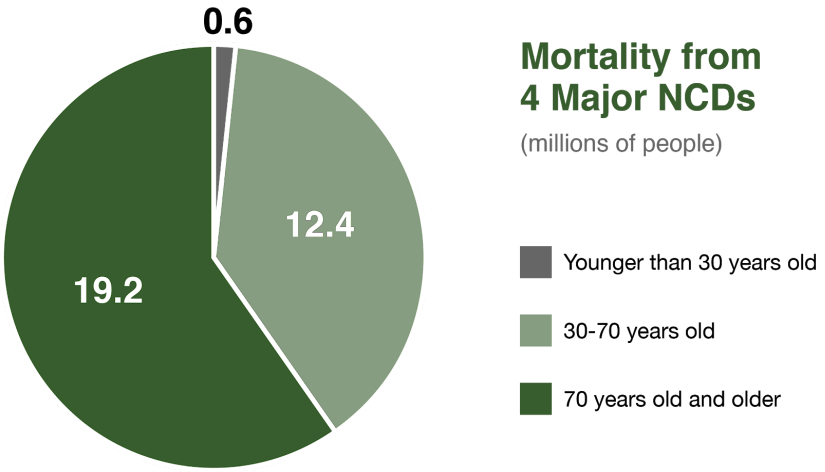
INTRODUCTION

New Challenges in Global Health

The *Healthcare PPP Guide* is designed to help high-level public- and private-sector executives engage in the design and execution of public-private partnerships. Though many in these kinds of roles are familiar with PPPs—some may have engaged with them in the past—PPPs still face significant capacity issues that limit their widespread use. Governments may feel they lack the highly-trained personnel necessary to pull off a PPP. They may feel ill-equipped to develop innovative solutions to complex problems, or unable to keep up with the breakneck pace of innovation emerging from the private sector. Conversely, the private-sector may feel less equipped to engage large numbers of citizens, or scale a project to address the needs of an entire country, for example. They may lack adequate funding. Or, even when a potent partnership opportunity presents itself, they may struggle to protect their bottom line while still delivering positive healthcare outcomes. The *Guide* is designed to help professionals in both sectors tackle all of these challenges and deliver solutions to the healthcare challenges facing a changing world.

With each passing year, the challenges facing Ministries of Health continue to mount, and 2020 has been no exception. As the world has developed since the millennium, so too have the diseases that we face. And while most Ministries of Health prepare to combat infectious diseases, many remain unprepared for the growing challenge of non-communicable diseases.

In the years prior to the Covid-19 pandemic, non-communicable diseases (NCDs) were responsible for 71 percent of global deaths. (Needless to say, with Covid-19 having claimed over one million lives as of this writing, that percentage will likely not hold.) The four major NCDs—diabetes, cardiovascular disease, chronic respiratory conditions, and cancer—kill 41 million people each year. (Chronic mental health conditions are also considered NCDs.) Of that 41 million, 15 million are considered premature, affecting individuals between 30 and 69 years of age; 85 percent of these premature deaths occur in low- and middle-income countries.[2]



Because they are chronic conditions, NCDs are incredibly difficult and expensive to manage. They strain healthcare structures—especially in rapidly-aging countries, where demand for healthcare and eldercare threatens to outpace supply, and in poorer countries, where a large percentage of the population cannot afford to pay a market rate for healthcare services.

What's more, the NCD crisis has now been imbued with an unfortunate new urgency. Covid-19 patients with preexisting NCD conditions are far more likely to become severely ill and suffer the most dire outcomes. Simply put, any strategy to address Covid-19—or prepare the world for future pandemics—must seek to address the growing problem of NCDs.

But while PPPs have been deployed in the past to great effect to combat infectious diseases like HIV/AIDS (and have even played a significant role in the Covid-19 crisis), they are only just beginning to play a role in the fight against NCDs. And while we can learn from the

[2]"Non-communicable diseases," World Health Organization, 2018, https://www.who.int.

successes and failures of the fight against infectious disease to design PPPs for NCDs, the challenge of applying PPP models to NCDs is a complex one. The fight against NCDs will include efforts to improve both treatment and prevention, involving a wide variety of private-sector partners.

Furthermore, the global population continues to age, exacerbating the incidence and impact of these non-communicable diseases. Over 900 million people are elderly (defined as over the age of 60), and by 2050 that number is expected to rise to two billion, further straining our already-stretched healthcare and eldercare structures.[3] Continuing urbanization creates economies of scale for hospital services (as citizens move closer to well-funded urban hospitals), but also exacerbates NCD risk factors (as citizens breathe polluted urban air or trade active, rural jobs for passive office work).

Massive structural and demographic issues like these present healthcare challenges. They present administrative challenges. And of course, they present humanitarian challenges. But they also present economic challenges—the challenge of delivering goods and services to people in need, the challenge of producing those goods and services affordably, and the challenge of creating economies of scale. In an ideal world, governments would be able to shoulder the massive costs associated with these kinds of issues, but unfortunately, they are often unable to address these issues alone. The scale of the challenge is simply too great, and the costs too high.

If we are to succeed in mitigating the effects of these diseases, governments and the private sector must be empowered and motivated to work together productively and sustainably. PPPs can be powerful tools for addressing complex public policy challenges like these.

Make no mistake: failure is a distinct possibility, and risk must be managed effectively. But, by leveraging the strengths of the public and private sectors at once, PPPs can deliver results where governments or the private sector alone might fail.

Once primarily considered financing tools, PPPs are increasingly being seen as catalysts for innovation. By leveraging the assets and capacity of both the public and private sectors, PPPs can deliver meaningful economic and social returns using collaborative solutions and governance.

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[3] "Ageing and Health," World Health Organization. 2018, https://www.who.int.

NCDs: An Economic Problem

As much as NCDs are a human problem, they are an economic one, too. Chronic diseases are expensive to manage and treat, for one, but they also pose an opportunity cost in the form of diminished worker productivity. According to a 2011 report by the World Economic Forum and the Harvard School of Public Health, "with respect to cardiovascular disease, chronic respiratory disease, cancer, diabetes and mental health, the macroeconomic simulations suggest a cumulative output loss of U.S. $47 trillion over the next two decades."[4]

If governments are to succeed in combating NCDs, it is essential that they consider the problem in economic terms. Though the cost of addressing these challenges will be high, the cost of inaction is even higher. A 2016 study from the University of Victoria, Australia, commissioned by the Global Initiative on Health and the Economy at the U.S. Chamber of Commerce sheds additional light on the total costs associated with NCDs.[5] This report provides estimates of the economic cost across 18 countries caused by productivity losses arising from absenteeism, presenteeism (workers who are present but not fully productive), and early retirement due to poor health. The study finds that the cost in lost productivity is high for all countries examined (about 7.4% of GDP on average), and for almost all countries that cost is projected to increase. In the fall of 2020, the Global Initiative on Health and the Economy released a follow-on study to estimate the economic and social returns from investing in interventions to improve health outcomes of the working age population. The study uses a cost-benefit framework to estimate the costs of the interventions needed to treat the key illnesses which adversely affect people's ability to work, to determine the improved health outcomes of those interventions, and to place an economic value on their health benefits. The study found that "on average, countries may realize a return of $20 for every $1 invested in cardiovascular disease and diabetes interventions. Likewise, countries may realize a return of $22 for every $1 invested in for anxiety disorders and depression interventions."[6]

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[4]Bloom D, Cafiero E, Jané-Llopis E, Abrahams-Gessel S, Bloom L, Fathima S. *The global economic burden of non-communicable diseases.* 2011. World Economic Forum, Geneva.

[5]Disclosure: As of December 11th, 2019, Susan Capps, Executive Director, International Policy at Amgen, was appointed Executive Chair of the GIHE Board. Since 2017, PPPI has worked periodically with the GIHE on PPP healthcare issues facing China and on PPP workshops for the Ministry of Health in Saudi Arabia.

[6]Rasmussen, Sweeny, Welsh, Kumnick, Reeve, & Dayal. *Increasing Social and Economic Benefits Globally: Rates of Return on Health Investments.* US Chamber of Commerce, Global Initiative on Health and the Economy and Victoria University, Melbourne. September 2020.
https://www.uschamber.com/report/increasing-social-and-economic-benefits-globally-rates-of-return-health-investments

Furthermore, an economic understanding of the NCD issue will allow governments to identify opportunities for private-sector involvement, locate and capitalize on untapped value, and ultimately build a broader coalition of support within the private sector, while managing conflicts of interest.

WHO Independent High-Level Commission on NCDs: Recommendation Six

This kind of economic approach to the NCD problem is already gaining traction in the international community. On December 10th, two years after its inception, the WHO's Independent High Level Commission on Non-Communicable Diseases released its Final Report. The Report's Recommendation Six explicitly calls for the "establishment of a platform, as an integral part of WHO, with the aim of securing more meaningful and effective contributions from the private sector."[7, 8]

WHO's authorization of a platform represents a major step forward, indicating just how much the conversation surrounding NCDs has evolved in the two years since the Commission began its work. In early 2018, the Commission was focused primarily on the health impacts of NCDs. The NCD Platform signals an increased focus on the economic impacts of NCDs, and outlines an institutional construct to address them: the Platform—a flexible structure which will allow participants to construct solutions within a productive, supportive environment, and will address—per Recommendation Six —"the impact of economic, market, and commercial factors."

Private-sector engagement will be crucial in preventing and controlling NCDs, and governments can work to incentivize the private sector towards progress. Enter the public-private partnership.

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[7] "It's Time to Walk the Talk: WHO High-Level Commission on NCDs final report," World Health Organization, 2019.

[8] Disclosure: Professor Trager served as a technical expert with the WHO Commission, presenting in Geneva a paper, "Potential Business Models that Involve Private Sector Support for National Responses in Preventing and Controlling NCDs," commissioned by WHO. Since then, Professor Trager has worked steadily with significant members of the Commission to advance the cause of PPPs in healthcare, while also working closely with the World Economic Forum and the government of the United States.

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SECTION I

Preparation

CHAPTER 1

What is a public-private partnership?

Key Framework: Sharing Risks, Resources, and Governance

A **public-private partnership** (PPP) is a collaborative organizational structure in which public, private, and non-profit partners agree to share risks, resources, and decision-making authority.

While there are many different ways for the public and private sectors to engage with one another—from contracts to simple dialogues—it's the sharing of decision-making authority that makes PPPs unique. In a well-designed PPP, this form of shared governance is capable of yielding new and innovative solutions. In a poorly-designed PPP, it can be a bureaucratic roadblock to progress. Though the specific allocation of decision-making authority is unique to each PPP, all PPPs are reliant on trust, communication, and cooperation. Through an iterative process of negotiation, participants in a PPP must develop a framework that encourages each partner to make decisions in the best interests of the partnership.

PPPs are flexible structures; each one must be tailored to the unique conditions of the problem it attempts to solve. But ultimately, the goal of a PPP is always the same: to capture long-term value for both partners. Note that where the private sector is concerned, "long-term value" may not necessarily mean immediate profitability. Sometimes, profitability from a PPP can be expected to arrive in a longer timeframe. In other cases, the profit motive may be secondary to more abstract goals, such as developing a market entry strategy or improving brand image. However, in the long run, sustainable economic results provide the foundation for the strongest partnerships.

PPPs are no longer primarily financing tools—increasingly, they are being used by developed countries as catalysts for innovation. PPPs are especially necessary in low- and middle-income countries, where complex health policy problems are often made more difficult by limitations in operational capacity.

PPPs can act as a source of that operational capacity—both in addressing fiscal risk and in spurring more effective infrastructure development. They can also act as an instrument to facilitate economic development and reform.

NOTE

Is It a PPP?

Given the many different ways that governments can interact with the private sector, it's hardly surprising that many non-PPP projects are often mislabeled as PPPs. This is often the case for traditional contractor-type arrangements (basically elegant forms of outsourcing), in which a government hires a private company to build a piece of infrastructure. But these are not necessarily PPPs.

Generally speaking, a public-private partnership can be differentiated from other forms of cross-sector collaboration in two ways. First, in a PPP, the private sector partner must bear a significant amount of risk. And second, the private sector's profits must be at least partially contingent upon the success of the project at large.

To illustrate how different forms of cross-sector collaboration can either be or not be a PPP, let's imagine a hypothetical project: the construction of a new subway line in a dense urban environment. Looking to expand its mass transit network, a city government identifies a route for a new subway line. The project will be expensive, requiring extensive tunneling, replacement of existing sewer and power lines, and the wholesale construction of several stations. But after a competitive bidding process, the government identifies an independent contractor who it believes can complete the project for a reasonable price—to be paid as a flat fee upon completion of the line. When the project is complete, the government assumes responsibility for operating and maintaining the line, and the contractor is paid. Is this a PPP? Though this does represent a type of collaboration between the public and private sectors, it would not fit the definition of a PPP, because the private sector does not shoulder a significant portion of the risk in the project, and its remuneration is not tied to the project's success.

But let's imagine, now, that the company hired to build the subway line is also given a 75-year lease, during which it is able to collect fares from passengers at an agreed-upon rate. The government pays a smaller portion of the construction fees—not nearly enough to cover the private sector's costs, but mitigating some of the risk for the private sector nonetheless. It also contributes the public land for the project—the streets under which the subway line will run—at no cost to the private sector. When the project is complete, the company maintains responsibility for operating the trains and

collecting fares from passengers, though any increase in fare or decrease train service may be negotiated with the government.

This project is a public-private partnership. The private-sector partner is not merely a contractor paid at a flat rate, they are heavily invested in the success of the project. They have assumed risk: if the construction process goes over time or budget, or if unforeseen circumstances drive up costs, they shoulder—at least partially—the cost. Their profits are also closely tied with the success of the project: if the line is too slow, too inefficient, too dirty, or poorly maintained, passenger levels will drop, and the company will sacrifice profits. If, on the other hand, the line exceeds expectations, shuttling passengers to their destination quickly and pleasantly, they may stand to make even more fare income than projected.

While our imaginary subway line does present an easy-to-comprehend example of the difference between a PPP and other forms of cross-sector collaboration, it is important to note that not all PPPs are alike. It is not essential, for example, that consumers pay a market tariff (such as the fares paid by the passengers) directly to the company. It is only essential that remuneration be in some way tied to performance. And in fact, in the following chapters we will discuss further how PPPs can still work in situations where the public is unable or unwilling to pay for services.

Setting Healthcare Priorities

One crucial role of the public sector in any PPP strategy is to set clear healthcare priorities. Obviously, these priorities will vary greatly based on the country in question. (For example, diseases associated with an aging population might affect a country like Japan—median age 48.6—far more significantly than a country like Nigeria—median age 18.6.[9]) However, regardless of country context, establishing clear, consistent priorities will greatly help the private sector to engage more effectively.

That is not to say, however, that priorities need be static over the course of an extended strategy of private-sector engagement. Priorities may shift and develop as public- and private-sector partners work to achieve consensus. Furthermore, not all healthcare priorities make good candidates for PPPs. Determining which priorities to pursue is an essential role for any governmental partner in a prospective PPP.

[9]"The World Factbook," Central Intelligence Agency, accessed March 2020, https://www.cia.gov/library/publications/the-world-factbook/

Favorable Conditions: When Do PPPs Make Sense?

Before we can delve into how to build a successful PPP, we must first consider how to distinguish between situations that would be best served with one and situations that would not.

1. Credible Partners

Successful PPPs are built on trust and credibility. Healthcare PPPs can be particularly useful in low- and middle-income countries, where large percentages of the public cannot afford to pay a market rate for healthcare services. However, countries like these present unique challenges for companies hoping to engage in PPPs. Low- and middle-income governments may have a limited ability to subsidize healthcare solutions. They may have undertrained human resources who lack the skills necessary to create effective partnerships. There may even be opposition within the government to public-private partnerships, particularly with regard to healthcare.

But how can we determine whether a partner is credible? Credibility should be assessed on two separate axes: commitment to solving the problem and capacity to deliver results. It is crucial to look not only for credible partner institutions, but also credible individuals within those institutions as well.

Commitment to Solving The Problem

Determining a partner's commitment to a given PPP is not a strictly quantitative process. There are a few key questions you should ask to ascertain a partner's level of commitment.

- Is this partner ready to spend the capital—both financial and human—necessary to bring the PPP to fruition?
- Have funds been committed? How much has been apportioned for the project? Are those funds conditional on certain terms?
- What opposition exists within the institution and beyond?
- What other stakeholders are relevant to the problem? Are there non-partner stakeholders whose commitment is relevant? Do these stakeholders compromise or increase overall credibility?

Capacity to Deliver Results

Of course, even highly committed partners may lack the capacity to engage effectively in partnerships. Partners should be evaluated according to several key questions:

- How highly does this partner rank within their institution? (While many people within a corporation or government can be a viable liaison to the PPP, generally speaking, higher-ranking executives have greater latitude to enact and expedite change.)
- What is the partner's authority to control resources? Is there a system in place for turning around approvals quickly and efficiently? Does this partner have a clear, consistent line of communication to high-level executives? How direct is that line of communication?
- Does this partner have enough capital—financial, political, human—to embark upon and complete the project? Are there other sources of capital available?
- Has this partner engaged successfully in PPPs in the past? What were the outcomes?
- What human resources can be marshalled in service of the project? Are those human resources skilled (or potentially skilled) enough to engage effectively in a PPP?
- How do your resources and skills complement this partner's?

2. Issues Requiring Cross-Sector Solutions

Some solutions require participation by both the public and private sectors in order to work properly. The government may be more effective at engaging the public and imposing regulations, but the private sector might be better able to create efficient economies of scale and drive innovation. PPPs—if designed well—can utilize the strengths of both partners while mitigating their respective weaknesses.

3. Assets Masking as Liabilities

A PPP can be deployed to great effect as a mechanism for leveraging sub-optimized value. Often, governments are in possession of assets that are under-performing. These sub-optimized assets can even become costly liabilities, costing the public sector millions of dollars. In many cases, however, if these liabilities were to be leveraged by the private sector, they could actually deliver returns for both the public and private sectors. We will discuss in greater detail how to turn liabilities into assets in Chapter Three.

4. Issues Requiring Innovative Solutions

PPPs can catalyze innovative solutions, both in terms of financing and operations. As flexible structures, PPPs can be endlessly molded and improved upon, yielding new solutions to seemingly intractable problems. Policy issues that require an innovative approach may be well-suited to PPPs; their distinct structure often leads to the development of new modes of financing, governance, and operational capacity.

Hazards: When Not to Engage

While PPPs are powerful tools, they are not panaceas. In fact, there are numerous situations that would be better served by more conventional structures.

1. Misaligned Values

If public- and private-sector values are not aligned, the PPP will fail to deliver on its objectives. Successful partnerships are those in which partners are incentivized to work towards aligned goals *in aligned ways*.

Imagine, for example, a public-private partnership designed to reduce the impact of cardiovascular disease. A private-sector partner might support a massive rollout of treatment options—expanding demand for its products while expanding access to people who need them. A government, on the other hand, might conclude that its money is better spent on preventative care—encouraging its citizens to eat better and exercise more. In this case, the private-sector partner and the government are in agreement about a final goal—reducing the impact of cardiovascular conditions—but in disagreement about the methods they would use to achieve it. A PPP designed on such a foundation must reconcile this misalignment. Counterintuitively, in many cases, it is more important that partners agree on their methods than on their ultimate goals—we will discuss this more in Chapter Two.

Harvard Business School professors Christensen, Marx, and Stevenson have dubbed this multi-axis approach to understanding alignment of values the "Agreement Matrix."[10] By separating agreement into the two axes of "goals" and "methods," we are better able to describe agreement, and better able to find the locus of disagreements when they arise.

It is important to recognize that, in most cases, misaligned values are not fatal flaws. While misaligned values do present a serious hazard to a successful PPP, with well-structured incentives, often seemingly divergent values can be moved further into alignment. We'll discuss how in Chapter Three.

Because values can be so divergent across sectors, many public-sector institutions have strict conflict-of-interest laws which prohibit or heavily circumscribe engagement with potentially conflicted private-sector partners. However, conflicts of interest are not a binary proposition. Companies, or even divisions within companies, can be more or less conflicted

[10]Christensen, C., Marx, M., & Stevenson, H. "The Tools of Cooperation and Change." *Harvard Business Review*, Oct 2006, https://hbr.org/

than others. It is essential to take a nuanced approach in determining which kinds of conflicts are fatal to a partnership and which are manageable.

NOTE

Conflicts of Interest

Total compatibility between partners may be difficult to achieve. Large multinational corporations and governments have many divisions and ministries working towards numerous different goals. In many cases, some of those goals will be in direct conflict with the goals of the partnership. This can create a **conflict of interest**.

The presence of conflicts of interest, however, doesn't necessarily mean that a partnership is unviable. Though many government agencies look at conflicts of interests as an excuse to disengage from PPPs entirely, the reality is far more nuanced.

While it is essential to manage conflicts of interest, it is not essential to avoid them altogether. Many a potential partnership has been abandoned at the first sight of an apparent conflict. But in fact, many conflicts can be mitigated by allocating incentives thoughtfully. A structure that incentivizes partners to act in the best interests of the partnership can help to overcome an apparent conflict of interest. Thus, in seeking out potential partners, conflicts of interest should be seen as a "yellow light" rather than a "red light."

For example, in the realm of diabetes prevention, a large soft drink company—let's call it "BigSodaCo"—might be acting against the public interest, selling high-sugar beverages that contribute to diabetes.[11] But, if a government had plans to build a water system, BigSodaCo might make an excellent partner, as they have a financial stake in access to safe, clean water systems with which to manufacture their products closer to market. While BigSodaCo's interest in pursuing a water system might be motivated by a desire to manufacture soft drinks on a more sustainable basis in that location, this doesn't mean that BigSodaCo should be summarily prohibited from partnership. It simply means that a government might want to weigh the benefits (clean water) and hazards (more soft-drink products) of this conflict.

[11]This is a hypothetical example; any similarity to existing corporations or initiatives is purely coincidental.

Let's say BigSodaCo is willing to commit $250 million to a waterworks project. The Minister of Water (or whichever ministry manages water management in a given country) might be receptive to partnering with BigSodaCo to raise much-needed capital and leverage necessary expertise. Both the Ministry and BigSodaCo are committed to improving the quantity and quality of water.

Would this be a good plan for the government?

While the plan might be viable and attractive to the Ministry of Water, it is certainly less attractive for the Ministry of Health. Soft drinks are a major contributor to NCDs, particularly diabetes. It's true that decreased costs could lead to increased profits for BigSodaCo. But decreased costs could also enable price reductions, increased market penetration, and ultimately higher levels of soft drink consumption. Higher soft drink consumption could lead to higher rates of diabetes, and the $250 million in funding for the water project could end up *costing* the Ministry of Health $250 million in treatment. Perhaps—as demonstrated in the University of Victoria study we discussed on page 12—it would cost the Ministry of Finance another $250 million in lost tax revenue due to decreased worker productivity from diabetes and related diseases.[12]

In this case, BigSodaCo's conflict of interest would render the partnership unattractive to the government. BigSodaCo's participation in one public-health goal—clean water—is at odds with another—reduced rates of diabetes—and is even worse financially, costing the government $500 million against a $250 million investment. Under this arrangement, the government would be better off securing funding from elsewhere. Does this mean that the government should walk away? Not necessarily. The partners should first attempt to mitigate the conflict of interest through effective incentive design.

For example, senior government representatives might ask BigSodaCo to, as a condition of the partnership, commit to an aggressive program of reformulation, reducing the amount of sugar in their drinks. Reformulation would mitigate the public health consequences of soft drink consumption, reducing the expected increase in diabetes incidence. BigSodaCo would still be incentivized to sell its products in large volumes,

[12]Of course, the real-world calculations that determine how a conflict of interest affects large governmental systems can be far more complex. A ministry of health might also see some *benefit* in a BigSodaCo-backed water project, which could promise to reduce the incidence of water-borne illnesses. For the purposes of this thought experiment, however, we will keep it simple.

but with a less dangerous version of those products, the deal might once again be beneficial to both parties.

As you will see, in some cases, conflicts of interest can prove fatal to a partnership. But, as with most PPP challenges, an effective deal design can make all the difference. We will discuss deal design more in Chapter Four.

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2. Inconsistent Executive Leadership

PPPs, especially in their early stages, tend to be fragile constructions. Disputes over governance and financing are common. Governments, pushed to work across ministries and perpendicular to conventional bureaucratic structures, may have difficulty delivering results quickly or efficiently enough for the private sector. Support for a PPP might wax and wane depending on political circumstances beyond either partner's control. Governmental support of a given PPP might even be contingent on the outcome of a yet-undecided election.

On the other hand, companies unaccustomed to working with governments or constricted by rigid quarterly earnings reports may find the public-sector approach to public health to be insufficiently profit-focused. Private-sector partners are similarly not immune to executive turnover and may also be weighing long-term results against short-term liabilities. Both partners may hold pre-existing biases against the other.

Without executives in the public and private sectors who are both invested in success *and* authorized to enact changes quickly and efficiently, PPPs will struggle to get off the ground. As we've noted earlier, in choosing partners, it is important to partner not just with reputable corporations, but with qualified and effective individuals within those companies. Each partner must be clear-eyed about the perspective of the other up front—and recognize the limits set forth by those perspectives, which will often differ. Partners must have both the motivation and the capacity to deliver on projects. Partners that lack the credibility or authority necessary to meet expectations will find it hard to engage in successful partnerships.

3. Poor Environment for Governance

Trustworthy partners being a prerequisite for a successful partnership, it is essential that partner governments have a demonstrated commitment to the rule of law. A culture of corruption is among the more serious hazards for developing a PPP because an environment that does not ensure binding contracts is not a suitable one for a public-private partnership. This does not necessarily limit the private sector to partnering with democratic governments,

but in general, a culture of corruption makes partnerships more expensive, less credible with the public, and ultimately less viable. Transparency is a prerequisite for success in PPPs.

Let's explore how issues of transparency can prove challenging even for a successful PPP, by examining the case of the National Kidney Foundation of Singapore (NKF). In the wake of a significant scandal, NKF struggled to regain credibility. Ultimately, only through a government takeover of NKF could credibility be restored and transparency reestablished, illustrating the importance of clear, consistent governance in managing a PPP. It's important to note that while this case does not involve a culture of corruption, it does demonstrate the importance of diligently monitoring the potential for corruption, even in seemingly trustworthy institutions. Constant vigilance is required.

CASE STUDY

National Kidney Foundation of Singapore[13]

In the late 1990s and early 2000s, the National Kidney Foundation of Singapore (NKF) was the largest and most well-endowed charity in the country. A public-private partnership established in 1969, NKF provided chronic dialysis care to 70% of Singapore's end-stage renal disease (ESRD, also known as "kidney failure") population.

[13]Trager, A., Kng, C., & Lotti, M., "The National Kidney Foundation Singapore: Charity Juggernaut or Semi-Public Agency?" PPP Initiative, 2017.

From 1992-2004, CEO T. T. Durai made NKF a household name in Singapore. His inventiveness in acquiring research money was notable. Using new and innovative kinds of fundraising activities (even including live variety shows and celebrity performances), Durai established a formidable fundraising machinery within NKF. He developed an innovative business model that included well-funded programs focused on education and prevention, as well as large budgets for research and marketing.

But in 2005, Durai and other employees at NKF were embroiled in a corruption scandal centering around the misuse of donated funds. Durai would eventually go to jail, serving a three-month sentence for his lavish unsanctioned spending, and the scandal seriously compromised public trust in NKF. In the two days following the opening of Durai's trial, an online petition for his resignation garnered around 40,000 signatures, and some 6,800 of NKF's regular donors called to cancel their donations. Donations plummeted from $37 million USD in 2005-2006 to $16 million in 2006-2007.

In order to maintain NKF's public interest work, the Minister of Health took drastic action, reforming NKF and appointing an all-new board to rebuild public confidence in the organization. The return to credibility came at a price. NKF slashed staff, cut non-core programs, rented out its former offices to others, and drew down its endowment to respond to decreased donation revenue. Moreover, the government became more involved in NKF operations. The new leadership refocused the mandate of NKF and slowly transformed NKF into a highly transparent charitable institution based on a significantly more traditional organizational model. NKF's transition to a more bureaucratic model was successful in restoring public confidence, but it did mean that Durai's innovative means for collecting donations would need to be restrained.

Scandal struck again in 2016, when the NKF board of directors announced that it had fired CEO Edmund Kwok for improper behavior with an employee. This scandal was weathered somewhat more easily, but NKF's statement to the media was a telling reference to the turmoil of its earlier scandal: "The board of NKF would like to assure all stakeholders, including patients, donors, supporters and employees, that Mr. Kwok's personal indiscretion has nothing to do with the stewardship of our finances. Our operations are not affected by this matter and our services to patients and beneficiaries continue as per normal."[14] With the second scandal, the Ministry of Health was able to employ a lighter touch, and allowed NKF leadership to manage the scandal internally.

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[14]Boh, Samantha. (2016). "NKF sacks CEO Edmund Kwok, says personal indiscretion not related to stewardship of finances." *The Straits Times*, 20 Retrieved at https://www.straitstimes.com/

Today, with NCDs on the rise, NKF's challenges are more pronounced than ever. Diabetes rates are skyrocketing in Singapore. In 2017, diabetes was responsible for 70 percent of all kidney disease cases, compared to 10 percent in 1992. As demand for dialysis begins to outpace supply, NKF has even begun to reconsider its mandate: can it become a force for prevention as well as treatment?

While NKF has moved successfully past both scandals—one centering on corruption and the other on personal indiscretions—it now faces important strategic questions in light of new operational challenges and its transformed model. Will NKF continue to attract top-tier private-sector partners given the circumstances? Should NKF change its current allocation of responsibility and resources with the Ministry of Health? Can NKF return to some of its older strategies to address some of its current operational difficulties, or has the corruption scandal irreversibly defined NKF's trajectory? If the latter, then how is it to move past its current difficulties?

Key Skills and Frameworks:

- Communication
- Strategic Thinking
- Political Management

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4. Flawed Assumptions

Strong PPPs depend on sound financial structures. So much so, in fact, that financial structuring is one of our six key skills (we will discuss it further in Chapter Three). But sound financial structures are dependent on sound financial assumptions. After all, a financial model is only as good as the data that goes into it. Models that assume incorrect costs, rates of use, or levels of demand are ultimately doomed to fail, as partners cannot draw legitimate conclusions from illegitimate assumptions. Flawed assumptions often emerge from wishful thinking. Even when elaborate models are constructed, partners are often incentivized—wittingly and unwittingly—to develop models that confirm their biases. Independent review by a third party can help mitigate this risk, but too often, consultants play an unhelpful role by producing studies that are too optimistic, possibly designed to satisfy a public sector client's desire to justify a project. Accordingly, the private sector is increasingly skeptical of projections they deem to be overly optimistic. Well-designed PPPs will rely on disinterested third parties to form assumptions, and will assure that those assumptions are vetted.

Using the case of Indiana Toll Road, we can examine how flawed assumptions and overly optimistic projections proved highly detrimental to a transportation PPP.

CASE STUDY

Indiana Toll Road[15]

The Indiana Toll Road is a 157-mile stretch of Interstate 80/90 spanning the width of the state of Indiana, linking the Chicago Skyway to the Ohio Turnpike. In 2005, as a part of his Major Moves initiative, a 10-year plan to modernize Indiana's highway infrastructure, then-Governor Mitch Daniels conceived of a plan to lease the road to a private company, offloading maintenance costs to a private-sector partner in exchange for the potential toll revenues. Daniels, an experienced politician and a graduate of Princeton, felt that the private sector could help him remove the maintenance liabilities from the public balance sheet.

In 2006, the Indiana Toll Road Concession Company (ITRCC), a joint venture between Spanish construction firm Cintra and Australian toll road company Macquarie Atlas Roads, assumed responsibility for operating, maintaining, and improving the road, paying $3.8 billion for a 75-year lease. The $3.8 billion winning bid was an optimistic $1

[15]Hillion, Pierre, & Wee, Jean. "Public-Private Partnerships: The Project Financing of the Indiana Toll Road," Harvard Business School, May 2012.

billion more than the second-highest bid, but ITRCC believed that, based on their traffic estimates, the price still represented a significant potential for profit.

Governor Daniels was thrilled. A $3.8 billion deal far exceeded his expectations. ITRCC, too, felt they had negotiated a fair price. It set to making infrastructure improvements on the road and waited for the toll revenues to pour in.

But the increased traffic never came. Just two years after the deal was signed, the 2008 global financial crisis plunged the United States into the Great Recession. Economic turmoil set in; people began to drive less. More importantly, commercial trucking, which was identified in early projections as key to the toll road's profitability, decreased dramatically. In fact, traffic along the route was 11% *lower* in 2013 than it had been in 2007. The flawed traffic estimates led to low toll revenues, and ITRCC was unable to cover its debt servicing obligations. In 2014, just eight years into a 75-year agreement, ITRCC filed for bankruptcy. Under the terms of the agreement, it would have to continue to operate the road until a new operator was identified, and in 2015, Australian firm IFM Investors agreed to buy ITRCC for $5.75 billion.

Indiana Toll Road is a classic example of flawed assumptions dooming an otherwise potentially sound PPP. While—to be fair to ITRCC—the financial crash of 2008 could not have been so easily predicted, the exceptionally high $3.8 billion price left very little room for error in their traffic estimates. Furthermore, the inflexible structure underpinning the deal made it impossible for ITRCC to renegotiate and avoid bankruptcy. (We will discuss the importance of flexible agreements in more detail in Chapter Five.)

Had the traffic estimates been correct and the bid price lower, the Indiana Toll Road PPP could have been a win-win. Instead, it's become a costly liability for the private sector. The more interesting question, though, is this: was the Indiana Toll Road PPP a win for the government?

The answer is undoubtedly "yes." Governor Daniels out-negotiated the private sector to provide his state with cheap infrastructure. But, lest we take the wrong lessons from the Indiana Toll Road case, it is important to remember that not all PPPs are like toll roads. Some healthcare PPPs involve the continued provision of services over long periods of time. While physical infrastructure (like improvements to a road) remain long after the private-sector operator goes bankrupt, in a service-based PPP (such as a hospital or clinic) such an outcome would be a loss for both partners. Ultimately,

forming a viable PPP over the long run is generally better for *both* parties than a failure that benefits any one side.

Key Skills and Frameworks:

- Communication
- Allocation of Risks and Opportunities
- Negotiation
- Financial Structuring

We have just identified a number of favorable and unfavorable conditions for engaging in PPPs. While these conditions are meant to be instructive, they are not meant to be exhaustive, nor definitive. In establishing a PPP, you may run into serious risks and hazards not applicable to any of the categories above. You may also be able to mitigate these hazards through effective incentive design.

The conditions underpinning a given policy issue are flexible. Flawed assumptions can be fixed with new, better assumptions. Inconsistent leaders can demonstrate consistency on certain items. The above items should be considered a toolbox more than a template. The favorable conditions are not absolute, nor are the hazards necessarily fatal.

By using a disciplined approach and employing the frameworks, case studies, and skills we will discuss in Chapters Two and Three, most issues and obstacles can be overcome.

CHAPTER 2

What kinds of PPPs are there?

Now that we've explored the types of policy issues that might benefit from a public-private partnership, we can begin to explore the types of PPPs that can be used to solve them.

Key Framework: Economic vs. Social PPPs

There are two distinct types of PPPs: **economic** and **social**.[16] Though they have a lot in common, each requires a different organizational structure.

Economic PPPs

Put simply, economic PPPs are those that offer a potentially viable return for investors. The market price for these assets or services exceeds the cost of operating them, leaving adequate returns for private-sector investors or funds for re-investment in the assets. In other words, economic PPPs are those that are meant to be financially sustainable, and in which the returns on investment are largely financial in nature. A privately-funded, government-supported toll road is a prototypical example of an economic PPP, because the market tariffs—the tolls paid by drivers—exceed the cost of operating the road.

Social PPPs

Social PPPs are those that require significant (more than 50% of operating revenue) government subsidies—such as healthcare or water systems. These types of PPPs are trickier to manage in low- and middle-income countries because the financial costs of running them substantially exceed their realistic market prices. In many cases, the poor may be regular users, but cannot afford to pay a market price for services without substantial government support. In middle-class countries, subsidies may be lower. Social PPPs, being inherently dependent on subsidies, are considered far riskier for investors because they are long-term assets dependent on short-term political cycles to renew subsidies. Therefore, social PPPs require greater skill, a more adaptable project structure, and more flexible financial models. However, with proper structures and alignment of interests—using the frameworks, evidence-based case studies, and skills—risk can be reduced, and a social PPP can still return value to all partners. This value *may* be financial, but in the case of social PPPs, it may also take a number of different forms, such as social good, public goodwill, or improved worker productivity. (We will discuss value as a concept in detail in Section Three.)

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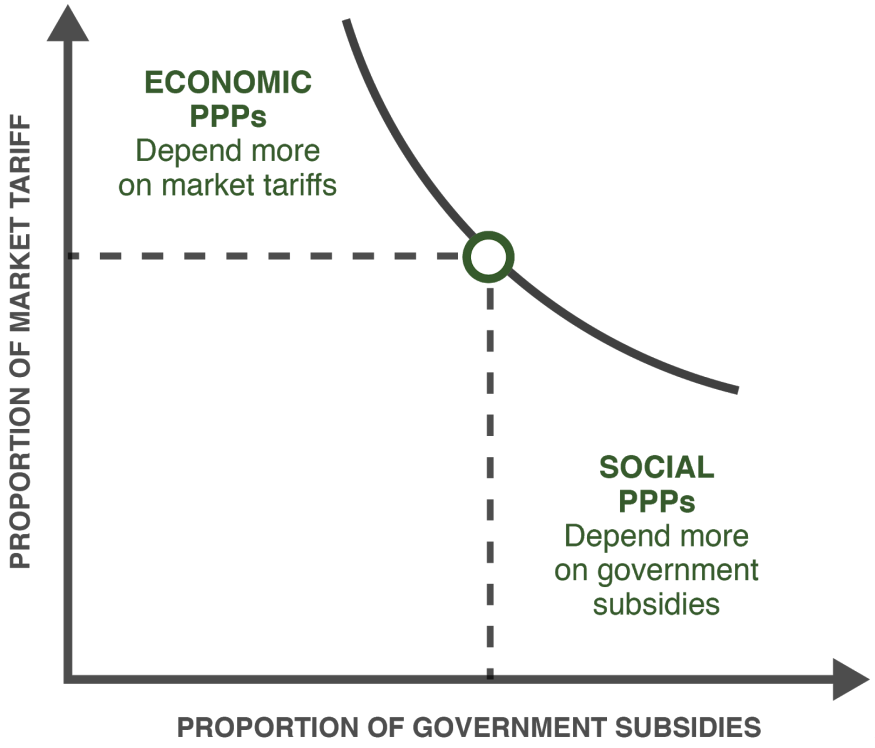
[16]Trager, A., Guan, H., & Rai, R. "Mapping PPPs Across Countries (China and India)," PPP Initiative Ltd., 2015

Generally speaking, healthcare PPPs tend to fall on the social side of the spectrum. In low- and middle-income countries, until populations stabilize, healthcare costs can run high. For most consumers in these countries, the market price is out of reach. However, that doesn't mean that healthcare PPPs cannot be viable. With well-structured incentives, a social PPP can still yield operating returns over the long-run. (Operating returns can be profits, but they can also be strategic objectives, market entry objectives, or brand image improvements.) But bringing the private sector along for a social PPP is more complicated. It requires a deeper understanding of what motivates the private sector to enter a given market.



[17]

[17]Trager, Guan, & Rai, "Mapping PPPs"

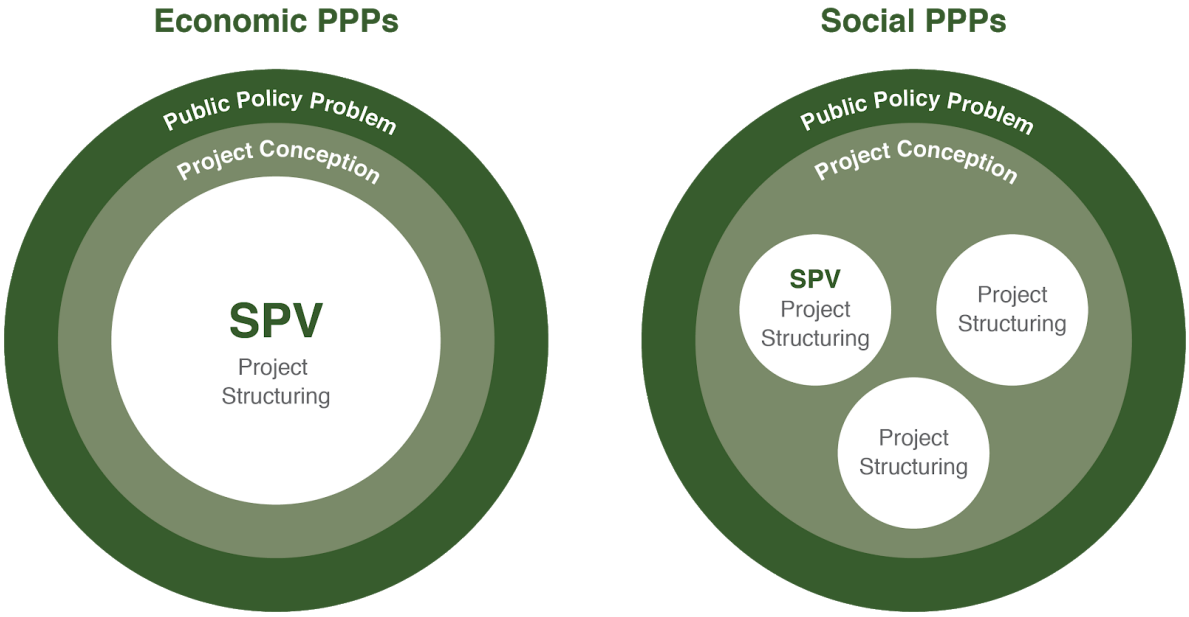
Different Kinds of PPPs Face Unique Challenges

While there are many ways to form a PPP, most projects will involve the use of a **Special Purpose Vehicle** (SPV). A special purpose vehicle is a legal entity formed to separate the PPP from either the public- or private-sector partner.

SPVs offer several distinct advantages for PPP projects. First, an SPV affords a project its own, siloed structure for decision-making and governance. Rather than attempting to coordinate decisions and approvals across large government ministries or corporate structures, partners can empower the SPV to make decisions quickly, efficiently, and independently. An SPV can also help to shield partners from risk, by creating a distinct legal entity from the partners to act as the PPP itself. The SPV can also insulate the partnership from risk, ensuring that a PPP's obligations are unaffected by financial turbulence among one or both of the partners.

But while SPVs are commonplace in PPP structuring, the way that a project is structured can vary widely between economic and social PPPs. Let's examine the visualization on the opposite page. In this diagram, the relative area of each concentric circle corresponds—roughly, of course—to the degree of difficulty presented by each element of the PPP process. It's easy to see that economic and social PPPs present distinct challenges. As we can see, economic PPPs tend to be more straightforward. Once the problem is understood, most resources going towards solving the problem are contained in the structuring of a single project. Compare this to the diagram of a social PPP, in which project conception requires considerably more work, and often results in structuring multiple transactions, and thus multiple SPVs. Large-scale social PPP projects can actually result in many distinct SPVs, all within a single project. This is due to the fact that—without the clear promise of monetary returns to the private sector—social PPPs tend to be more delicate, and often require discrete, interconnected solutions to several distinct issues.

For social PPPs, a large percentage of a project's difficulty lies in identifying the exact contours of a public-policy problem and conceiving of the project itself. Without the promise of adequate returns to motivate the private sector, even the preliminary step of developing an appealing project becomes a daunting task—though not an impossible one. There are ways of minimizing risk and maximizing opportunity, as we will discuss shortly.



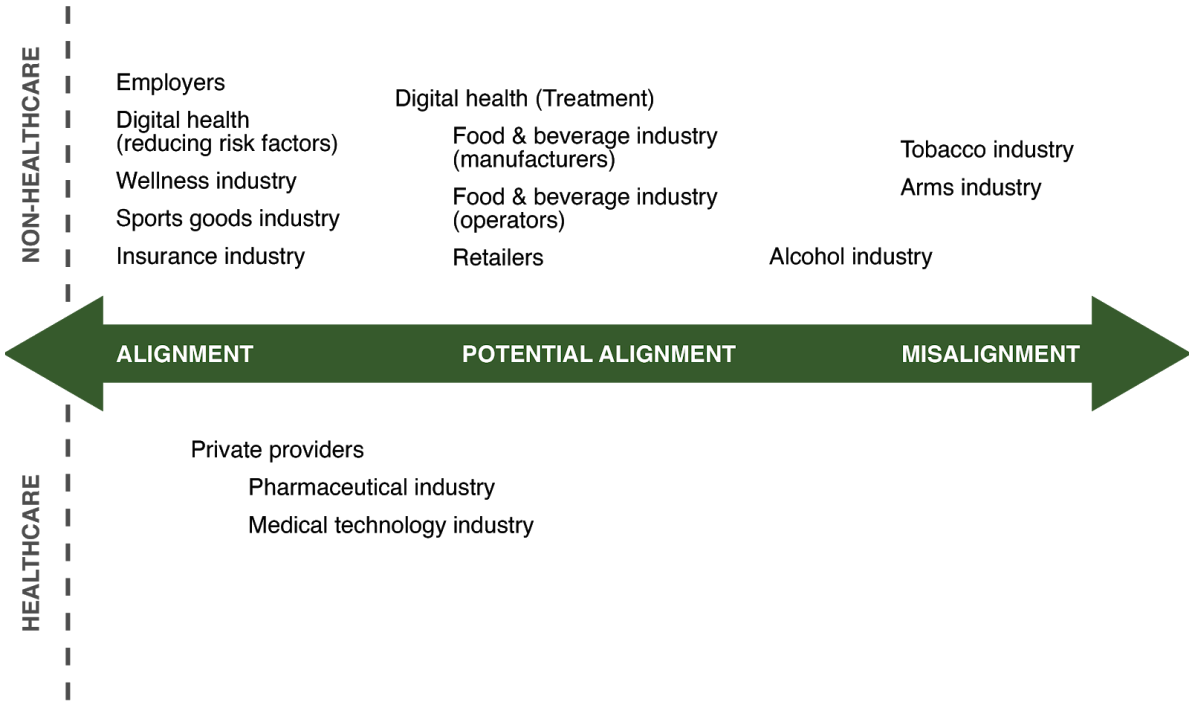
Understanding the Value Alignment Scale

If we want to incentivize private-sector partners to act in the best interests of the partnership, we must first ask ourselves: why does the private sector do what they do? What motivates a company to make the choices it makes?

The answer would seem obvious at first glance: a return on investment. While we could point to situations in which the private sector chose to delay profits—perhaps for strategic benefit—it seems fairly obvious to say that returns—whether in the form of direct profits or strategic benefits—are what drive the majority of private-sector actions. But what does the pursuit of private-sector value mean for public-sector health goals?

Within the private sector, there are many industries that directly and indirectly influence NCD outcomes. But of course, not all of these industries influence NCD outcomes for the better. **Value alignment**, then, is a metric for determining the relative alignment of a given company's values with public-sector health goals. We can categorize these differences on a spectrum we call the "Value Alignment Scale."

The Value Alignment Scale[18]



Perfect Alignment

Industries whose values are in perfect alignment with the public sector are those for whom an increase in demand for their goods and services leads to an increase in health. Industries that fall into this category include the wellness industry, the sporting goods industry, the insurance industry (including prior authorizations), and elements of the digital health industry focused on prevention.

Imperfect Alignment

Industries whose values are in imperfect alignment with the public sector are those for whom an increase in demand for their goods and services leads to an increase in health; however, demand for their goods and services is caused by the presence of disease or infirmity. Examples of industries in imperfect alignment include the pharmaceutical industry, the medical technology industry, private healthcare providers, and elements of the digital health industry focused on treatment.

[18]Alan M. Trager and So Yoon Sim. *Potential Business Models that Involve Private-Sector Support for National Responses in Preventing and Controlling NCDs*. 2019. (WHO commissioned this paper. It was presented by Professor Trager in Geneva in April 2019).

Potential Alignment

Industries whose values are potentially aligned with the public sector are those for whom changes to their goods and services could lead to an increase in health, but profits are not directly contingent on the relative health of the populace. Examples of industries potentially aligned with the public sector include the food and beverage industries. These industries could see value in reformulation of products to meet healthier standards. They could also be incentivized to be more selective about the provision and advertisement of unhealthy products. However, their goods and services do not inherently make people healthier. Companies in potential alignment are particularly likely to be affected by conflict of interest rules, since their pursuit of value is more often at odds with public sector health goals.

Misalignments

Industries whose values are misaligned with the public sector are those for whom an increase in demand for their goods and services leads to a decrease in health. Examples of misaligned industries include the tobacco industry and the firearms industry. These industries are excluded from participation in PPPs, as they have no incentive whatsoever to partner with the public sector. WHO, for example, has explicitly excluded tobacco as an eligible industry for partnership.

Value alignment is a powerful tool for mapping the interests of a given company, but a company's value alignment is not set in stone. Value alignments can move and shift based on market conditions and incentives. One goal of any well-designed PPP, then, is to push the values of the partners as close together as possible, so that both partners are always working in concert with one another. In the case of healthcare PPPs, this usually involves bringing the private sector into better alignment with public sector health goals using effective incentive design. However, it can also involve adjusting public-sector objectives and expectations to include an acceptance of the profit motive. While profits do not necessarily come at the expense of a project's overall efficiency, public-sector partners are often wary of the potential for a conflict of interest. So, though private-sector incentives must be nudged into better alignment with public-sector health goals, value alignment can sometimes involve a shift in the public-sector's values as well.

And of course, PPPs do not exist in a vacuum, either—it is essential to engage the public in order to effect change. After all, no partner can hope to change market dynamics without engaging the public—the consumers themselves—as a partner. We will discuss this further in Chapter Four.

Key Framework: Optimal vs. Conventional Configuration[19]

Now that we understand the modalities of value alignment, we can begin to explore the two types of PPP configurations. Broadly speaking, economic and social PPPs require different configurations in order to work properly. Economic PPPs can use a **conventional configuration**—which aligns operational capacity between partners—but social PPPs require an **optimal configuration**, which aligns both operational capacity and values.

Conventional Configuration

Conventional configurations align operational capacity between partners. Improving operations is a core focus of almost any public-private partnership. Operational capacity can be defined as a PPP's capability to deliver on its goals through various operational mechanisms, including financing, skills, and authorizations. Conventional configurations focus entirely on aligning capacity between public and private partners by sharing risks, resources, and decision-making. Governments can often be apprehensive about ceding this kind of management control to the private sector.

The conventional configuration requires ongoing adjustments and management of varying stakeholders to align resources and interests. It is also missing an alignment of public and private values. This type of model—one in which the partners have unaligned values—can work well for economic PPPs, since the private sector places value on profit, and economic PPPs are those that are inherently profitable.

As we will see, aligning public and private interests becomes more challenging when you remove the potential for significant financial returns. However, it's still possible using an optimal configuration.

Optimal Configurations

In the optimal configuration, not only is operational capacity shared between the public and private sectors, but so are values. In other words, partners are in agreement about both their methods and their goals. This type of configuration is far more effective for social PPPs and in situations where the economic returns may not be as clear or immediate. Without the promise of adequate financial returns to incentivize the private sector, a social PPP must be optimally configured to ensure that both parties share common goals. These goals may include the eventual realization of profits, but must include some form of value—otherwise the PPP will not be sustainable. Optimal configurations depend on sustaining an alignment of values over long time periods.

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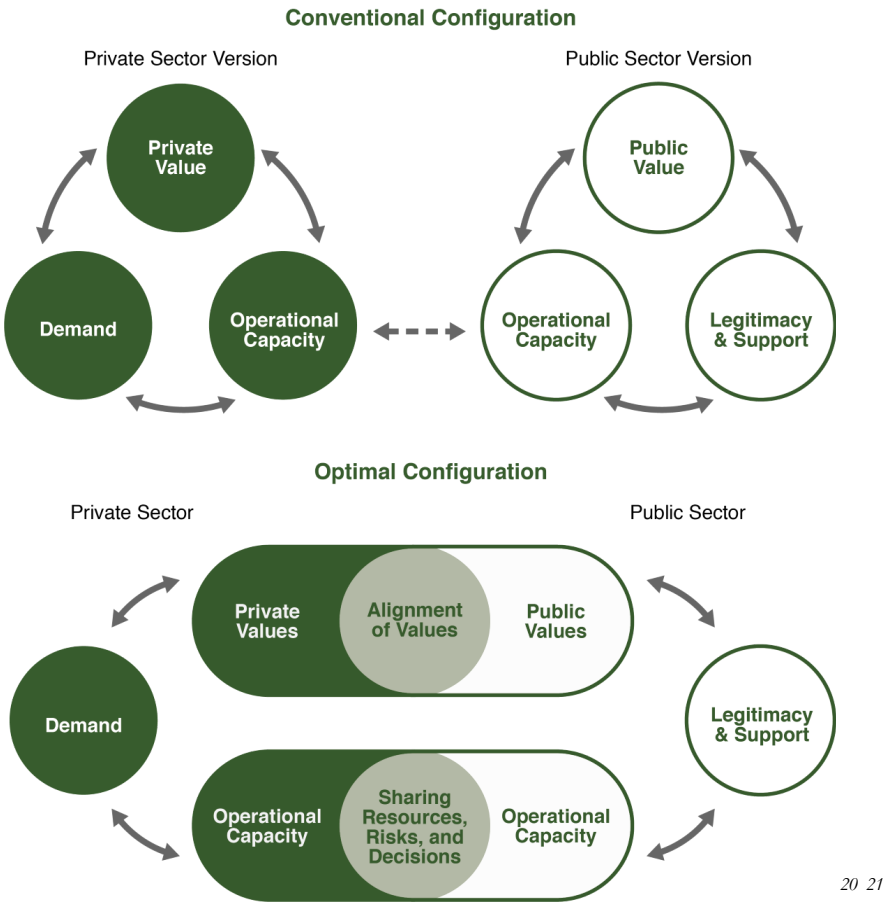
[19]Trager, A., Guan, H., & Rai, R. (2015). *Mapping PPPs Across Countries (China and India).*



Optimal vs. Conventional Configurations: Two Case Studies

The difference between an optimal configuration and a conventional configuration lies in the sharing of values. While conventionally configured PPPs allow partners to have divergent values, optimally configured PPPs are those in which partners see value in the same things. In other words: in both configurations partners are in agreement about the PPP's goals, but in optimal configurations partners are also in agreement about their motivations and incentives. We can better understand how these configurations differ with the help of some

[20]Mark Moore, "The Strategic Triangle," in *Recognizing Public Value* (Cambridge: Harvard University Press, 2013), 108.
[21]Trager, A., Guan, H., & Rai, R. "Mapping"

illuminating case studies. First, let's look at a real-world example of a conventional configuration—using the world's most famous park.

CASE STUDY

Parks and Partnerships: Central Park[22]

Spanning 840 acres and stretching from 59th to 110th Streets in New York City, Central Park is visited 42 million times every year by New Yorkers and tourists alike.[23] It is the most-visited urban park in the United States, and one of the most-visited tourist attractions in the world. As an economic entity, it provides massive value to its neighbors in the form of sky-high property values, improved health and happiness, and tourism revenues for local businesses.

[22]John D. Donahue, "Parks and Partnership in New York City" Harvard Kennedy School, 2004, Case Number 1743.0.
[23]The Central Park Conservancy. (2018). *Annual Report.* Retrieved at http://www.centralparknyc.org.

But this was not always the case. In fact, at the peak of New York City's financial crisis in the 1970s, this now-magnificent park was in a sorry state of disrepair. Starved for resources, the Parks Department was unable to keep the parks clean, well-maintained, or safe.

Knowing that the park system could not be saved using public money alone, the New York Parks Department decided to see if it could harness private money to bring Central Park into a state of good repair.

The Central Park Conservancy was founded in 1980 as a way to fundraise from private donors to contribute to the maintenance, safety, and improvement of Central Park. In the 40 years since, neighbors of the park—both corporate and individual—have raised over $700 million. It's a large sum, but it pales in comparison to the value that the resurgence of the park has bestowed on its neighbors. According to an analysis commissioned by the Conservancy, in 2014, Central Park added $26 billion to the value of the properties surrounding it (defined as being between Amsterdam Avenue, Lexington Avenue, 53rd Street, and 116th Street).[24] And, of course, that's just the property value alone. The same report estimates the additional annual economic output in 2014 due to park visitors and tourists at $203.8 million.

The city and the private sector had different reasons for wanting to see the park succeed. The public sector was looking to decrease the financial strain associated with Central Park, removing the liability of maintenance from its balance sheet. The private sector, on the other hand, saw an obvious financial upside to being located next to a clean, safe park and world-famous tourist attraction. In this case, though operational capacity—park safety and maintenance, capital improvement initiatives—is shared, value is not.

Remember that conventionally-configured PPPs are valid, workable structures focused on improved operational capacity. In the case of Central Park, the private and public sectors did not need to be in agreement about why Central Park should be improved. Both sectors valued free, open access to the park, but the private sector valued the increased real estate and lifestyle value that came with the improvements, while the public sector valued removing park maintenance from its balance sheet, and, in the long run, the increased property tax revenue that accompanied the increased real estate value. Yet despite these

[24]"The Central Park Effect," The Central Park Conservancy, 2015, http://www.centralparknyc.org.

subtly divergent interests, the partnership still works, because success for both partners is contingent on the same outcome: improving the operational capacity of the park.

However, it is also true that many conventionally-configured PPPs fail when returns are not realized. For example, when FedEx partnered in the early 2000s with the Eaton Corporation and the US-based Environmental Defense Fund to begin integrating hybrid-electric delivery trucks, the project stalled and ultimately failed because while low-emission vehicles are of obvious public health and environmental benefit, the lower fuel costs did not make up for the 20% premium FedEx paid to purchase hybrid trucks. In the end, public and private values were not aligned, and the project proved unsustainable.[25] Had this PPP utilized an optimal configuration, it might have been able to weather the 20% increase in truck costs. Perhaps—for example—a deal could have been designed in which Eaton stood to gain financially from FedEx's lowered fuel costs, incentivizing Eaton to sell the trucks at a lower price. This kind of structural change would have incentivized both partners to act in the best interests of the partnership. As designed, however, the project ultimately failed. FedEx was unable (or unwilling) to continue to participate at a loss.

8,000 miles from Central Park, in the small, African nation of Lesotho, a project to build a hospital faced a completely different set of challenges. As such, it leveraged an optimal configuration where value was shared in addition to operational capacity.

CASE STUDY

Lesotho National Referral Hospital

[25]Mack, B. & Trager, A. "Power Partnerships: The Creation of a Hybrid Electric Delivery Truck Eaton, FedEx and Environmental Defense," Harvard Kennedy School, 2005, Case Number 1820.0.

Lesotho is a small landlocked country surrounded by South Africa, about 275 miles from Durban. With a population of just under two million, Lesotho's economic activity is limited. Its main export is water, to its neighbor, South Africa.

As a lower-middle-income nation, Lesotho also struggles to meet the healthcare demands of its citizens. It has the second-highest incidence of HIV of any country in the world,[26]and an average life expectancy of 53.[27]

In 2006, the government of Lesotho engaged in a pioneering project, using a PPP to build a National Referral Hospital to replace its outdated major hospital. The Lesotho PPP project was marked by a concerted effort to use performance metrics to align the values and incentives of public and private stakeholders.

The National Referral Hospital PPP brought together a private-sector operator and government regulators. The partnership agreement used standard performance monitoring metrics to determine the size of payments allocated to the operator. In other words, if the operator did well, they received payment. If they did poorly, they were penalized with reduced service payments, which cut into their profitability. The Lesotho PPP is innovative, however, in that it uses clinical performance metrics to determine the amount that the government must pay the operator. Failure to meet key clinical objectives results in steep penalties for the operator. In other words, profitability for the operator is directly contingent upon healthcare outcomes.

The performance indicators were highly specific: How long were wait times for emergency surgeries, as measured by a random sampling? How often were sheets changed on beds? How clean were those sheets? The sophisticated metrics allowed partners to accurately measure the performance of the hospital, and assign payments accordingly.

By explicitly tying government value to private value—making profit contingent on better healthcare outcomes—the PPP created an optimal configuration, where both values and operational capacity are shared between partners.

Imagine approaching the Lesotho hospital project with a conventional structure (i.e. without performance metrics). The partners would no longer be in agreement about the preferred outcome. The private-sector operator might be incentivized to suboptimize care, saving money and increasing their profit margin in the process. It could actually make more money

[26]"HIV and AIDS in Lesotho," Avert, 2019, https://www.avert.org/

[27]"Lesotho," in *The World Fact Book*. Central Intelligence Agency, accessed December 2019, https://www.cia.gov/

by offering inferior service. The government, on the other hand, might be incentivized to defund the rest of the healthcare system, saving money in their budget by sending more patients to the hospital than the operator could manage profitably. (We will discuss the particular incentive structure that prevented the government from doing this later on.) Without a structure that tied their interests together, the partnership would have relied solely on the goodwill of both partners, hardly a stable foundation.

Of course, this doesn't mean that the private-sector operator would have *necessarily* taken steps to sub-optimize care without the performance metrics. The operator may have feared the political reprisal or public-relations consequences that come with cutting services. It may have even profitably provided *better* service than the metrics required. The metrics, however, act as an insurance policy for both parties. Instead of relying on abstract notions of trustworthiness or goodwill, both partners can rest assured that their interests and values are aligned.

Lesotho's sophisticated PPP design was highly contingent on officials developing key partnership skills like negotiation and communication to get the job done. Chapter Three will examine the frameworks and skills partners can use to execute PPPs.

CHAPTER 3

How are PPPs designed?

Key Framework: Allocation of Risks and Opportunities

Any PPP—for that matter, any business arrangement—comes with risks. In order to realize a partnership, partners put up resources—time, money, political capital—and those resources run the risk of being sub-optimized. In some cases, partners may incur additional obligations that put them at risk even beyond the resources they commit at a project's start. This risk must be managed.

Determining, from the outset, to what degree you and your partners are willing to accept risk—and what kinds of risk are most palatable—can ensure a productive allocation of those risks between partners.

Generally speaking, PPPs are attractive to governments because they offer the potential of quality infrastructure "on the cheap." Faced with rising costs, a government looking to do "more with less" will be inclined to push risk—financial or operational—onto the private sector, removing costly liabilities from their balance sheets in exchange for allowing the private sector to share in the opportunity that large-scale projects offer.

Naturally, the private sector is quick to try to push as much of that risk as is rational back onto the public sector, while maintaining its share of opportunities. The allocation of risks and opportunities is a process of negotiation and renegotiation, and ultimately, successful partnerships are those in which risks and opportunities are allocated effectively and sustainably.

It is important to note that effective allocation of risks and opportunities does not necessarily mean that risks and opportunities are equally allocated among partners. One partner may take on more risk than another. Generally speaking, however, each partner's share of risk will be *proportional* to the share of opportunity it stands to realize. But of course, accurately quantifying risk and opportunity is easier said than done.

Let's return to the Lesotho National Referral Hospital to examine how an agreement can explicitly use the allocation of risk and opportunity to create a stronger partnership.

CASE STUDY

Lesotho National Referral Hospital

Recall that the Lesotho PPP project used performance metrics to determine the revenues that would be allotted to the private-sector partner.

The Lesotho PPP project provides a perfect example of efficiently distributing risks and rewards among the partners. Because its profits are contingent on meeting performance metrics, the private sector assumes a degree of risk—the risk that the operator will not meet the standards and the venture will become unprofitable.

But the Lesotho PPP was structured to provide a proportional degree of risk on the government's side, ensuring value alignment in day-to-day operations. The agreement stipulated that the government would pay a small sum—50 *maloti* (about USD $3.30)—for every patient exceeding the 310,000 patient cap set in the agreement, disincentivizing the government from offloading an undue burden of care onto the operator.

With the patient cap and associated fee structure, the government of Lesotho depended on the country's existing healthcare infrastructure. If the existing network of clinics and hospitals proved insufficient or failed to improve in tandem with the new hospital, patients would flock to the new hospital, resulting in millions extra paid to the private sector—money that would have to come from other health services or ministries.

In this case, partners in Lesotho achieved an efficient allocation of risk and opportunity, because while both partners stood to see some benefit from the PPP, both partners also had "skin in the game."[28]

Let's compare the sophisticated allocation of risk and opportunity on display in the Lesotho case with the case of the Indiana Toll Road, in which risk and opportunity were allocated much less effectively.

[28]Note that this kind of sophisticated structure is not easily established. Though the PPP employed powerful high-caliber partners such as the World Bank (WB) and the International Finance Corporation (IFC), and was armed with advanced skills and tools, nearly four years into the project, the WB approved a sole source procurement with PPP Initiative (Trager and Guan) to help Lesotho develop its skills further. Ensuing executive education programs focused on advanced negotiation training prior to a re-negotiation. This speaks to the complex nature of the skills required by PPPs.

CASE STUDY

Indiana Toll Road

Recall that, in the case of the Indiana Toll Road, lower-than-expected traffic volumes—and lower-than-expected toll revenues—forced the private operator, Indiana Toll Road Concession Company, into bankruptcy. While the Indiana Toll Road case illustrates the dire financial consequences of flawed assumptions, it also demonstrates the consequences of improperly allocating risk.

The financial implications of this spectacular failure only affected the private-sector partners, with few consequences for Indiana taxpayers. Risk, in this case, was eagerly assumed by the private sector. The public sector on the other hand, held almost no risk. The partnership contract set limits on toll increases for drivers, limiting ITRCC's ability to raise prices, and guaranteed public availability of the road. In some ways, the bankruptcy of ITRCC was actually the best-case-scenario for the state of Indiana. Under the contract, in the event that ITRCC went bankrupt and was unable to find new investors, tolling authority would actually have returned to the state. Simply put, Governor Daniels had out-negotiated the private sector. Under the terms of the deal, the state of Indiana held almost no risk. In 2015, Australian firm IFM Investors agreed to buy ITRCC for $5.75 billion (a higher price given that the costly infrastructure upgrades had already been completed), counting on increased toll revenues in a post-recession economy to make the investment worthwhile.[29]

And what about the allocation of opportunity? Did the failure of ITRCC have any effect on the government's returns from the project? No. Even post-bankruptcy, the State of Indiana benefited from the "free" infrastructure improvements to the road and the $3.8 billion windfall. The road remains open to traffic. As Governor Daniels told *Barron's* in 2009, "It was the best deal since Manhattan was sold for beads,"[30] emphasizing the importance of strong negotiation skills.

The failure of the Indiana Toll Road has become somewhat of an object lesson for future PPPs in public infrastructure. Most toll road agreements in the wake of the ITRCC deal feature some form of "availability payments," payments based on the availability of the road and inversely proportional to road usage. These kinds of

[29]Tom Hals, "Australia's IFM Investors to Pay $5.7 Billion for Indiana Toll Road," *Reuters,* March 11, 2015, https://www.reuters.com/
[30]Andrew Bary, "The Long and Binding Road," *The Wall Street Journal.* May 11, 2009, https://www.wsj.com/

payments insulate private-sector operators from fluctuations in traffic flow, which can be difficult to predict, shifting some risk from the private sector back to the public sector.

Incentive structures that pit partners against each other speak to fundamental flaws in incentive design. Had this PPP better allocated risk and opportunity, the partnership might have weathered even the flawed traffic assumptions.

The Importance of Accountability

Ultimately, the allocation of risks and opportunities always relies on accountability. And ensuring accountability is no easy task. The Lesotho example is ideal in this regard. By tying opportunities to risks directly, the PPP ensures that both partners hold up their side of the bargain. Otherwise, they risk serious financial consequences. In cases where opportunities cannot be tied explicitly to risk, it is still essential to develop structures—whether contractual or incentive-based—that ensure accountability from both parties.

Key Framework: Internalizing Positive Externalities

What Is an Externality?

At its most basic level, economics is the study of the purchase and sale of goods and services. Consumers and producers buy and sell goods and services at a mutually agreed-upon price determined by the market. But many transactions have side effects that affect third parties beyond the buyer and the seller. These side effects are called externalities.

To understand externalities better, let's imagine a large factory on the banks of a river. This factory does quite well, selling its wares throughout the region. As a part of its production process, this factory produces some small amounts of industrial waste, which it allows to run off into the river. This is the cheapest option for disposing of the waste. (Let's presume, for the purposes of our example, that any environmental laws protecting the river are poorly enforced.)

But imagine now that there exists a sizable community along the banks of the now-polluted river. The products produced in the factory are not relevant to the people in this community. As such, they do not buy anything from the factory, nor do they do any business with the factory whatsoever. Therefore they do not engage in any transactions with the business. Are these people truly unaffected by the factory's business?

Of course not. Even if the neighbors don't participate in any transactions with the factory directly, the transactions have significant impacts on them. Perhaps the children in the community can no longer swim in the river. Maybe the community's drinking water is tainted. If pollution reduces the river's fish population, the livelihoods of local fishermen could be placed in jeopardy. Perhaps the river even starts to smell due to the excess runoff, harming property values in the area.

The economic activity taking place in the factory has created several significant issues for this community. But notice: none of these adverse effects have any impact on the price paid by consumers for the factory's wares. The effects of the polluted water are entirely external to the transaction, hence the term "externality."

Of course, externalities do not have to be negative. In healthcare, for example, the sale of vaccines for contagious diseases provides considerable benefits to the wider community (even to those who do not get the vaccines themselves) in the forms of herd immunity and reduced disease incidence. These positive externalities are sources of incredible value, even though this value is also not accounted for in the sale price of the vaccine.

A PPP designed to address the pollution in the river might try to "internalize" the negative externalities of pollution as well as the positive externalities associated with a clean river. Powerful incentives can be used to ensure that the adverse effects of economic activity are incorporated into the economic equation and that the factory is economically motivated to keep the river clean.

Internalizing Positive Externalities

In capitalist systems, governments are generally expected to take on the less profitable functions of civil society. Publicly owned and controlled assets such as mass transit systems, water systems, or sanitation systems—while they are crucial to maintaining a functioning society—generally cost more to operate than the revenue they bring in. These costly liabilities can prove debilitating to a government's balance sheet. However, these assets all contain potentially positive externalities. Mass transit systems reduce traffic and auto exhaust on city streets, and water and sanitation systems enable citizens to live healthy, productive lives.

If a PPP could take that untapped economic value and internalize it into the economic equation, then these costly liabilities might become less costly. In fact, if these externalities could be properly internalized, then these liabilities might not even be liabilities at all; they might be assets in disguise. By acknowledging and unlocking the untapped value that these

assets provide—the act of internalizing positive externalities—PPPs can create a more accurate economic equation that correctly values these assets. We can see how liabilities become assets by returning once more to the parks of New York.

CASE STUDY

Parks and Partnerships: Bryant Park[31]

Though today it is a beautiful asset to its community, Manhattan's Bryant Park was once a costly liability for the New York City Parks Department. Much like Central Park, Bryant Park was poorly maintained, a haven for crime, and an eyesore to the neighborhood.

[31]John D. Donahue. (2004). *Parks and Partnership in New York City.* Harvard Kennedy School 1743.0.

The Bryant Park Restoration Corporation was established in 1980 as a not-for-profit private management company charged with renovating and managing Bryant Park. By turning over restoration of the park to the private sector, the Parks Department felt it could offload a costly liability without sacrificing the quality of the park. For their part, realizing the value that a beautiful park could provide to its neighbors and surrounding businesses, the Corporation decided to source capital, both human and financial, by internalizing the park's potential externalities.

Following a rigorous stakeholder analysis (a skill we will discuss in further detail in just a few pages), the Corporation came up with a set of potential stakeholders who had a vested interest in seeing the park improve, a list that mainly included the park's corporate neighbors and surrounding businesses. Eventually, the analysis led the Corporation, in conjunction with the city government, to form a Business Improvement District (BID). While there are dozens of BIDs in New York City, Bryant Park's is the only one established explicitly for a park. The BID amounts to what is essentially a "voluntary tax" paid by property owners surrounding the park, the proceeds of which must be invested in the park's upkeep.

Though the project of revitalizing the park using private money took seven years to complete, it was ultimately a massive success. Bryant Park now stands as an anchor between Grand Central Terminal and Times Square, and as any one of the park's 12 million annual visitors can attest, the neighborhood around it has been transformed.

The PPP faced issues, of course. There were accounting issues—how to develop a special "lockbox" account for the exclusive use of the BID? There were budgetary issues—how would the BID define the kinds of activities that were counted in the park's budget, and how could the PPP design a five-year budget that would suit the project?

There were policy issues—the park's success needed to be available on a long enough timeframe to account for its ultimate success or failure, but it also needed to be converted from a pilot project to a fully-scaled operation effectively.

And of course, there were messaging issues—there were those who felt the park had been privatized, and that it had become discriminatory. How could the PPP's value be effectively communicated to the public?

We will discuss how government professionals can address these kinds of challenges later in the guide, but despite these smaller hurdles, the BID's design had already succeeded on a structural level.

By devising a structure that enabled the internalization of a small portion of the positive externalities of the park, such as increases in real estate values, tourism, health, and happiness, the NYC Parks Department was able to take a public liability—an unsafe, dirty park—and turn it into a highly profitable public asset. And, by participating in the BID, private-sector entities around the park were able to contribute to higher real estate values and tourism revenues, which in turn produced substantial new taxable value to the city government.

Key Skills and Frameworks

- Engaging the Public as a Partner
- Social PPPs vs. Economic PPPs
- Turning Liabilities into Assets
- Innovation
- Political Management/Governance

Key Framework: Converting Liabilities into Assets

The Bryant Park case study provides a perfect example of turning liabilities into assets. By simply internalizing the inherent value contained within Bryant Park, New York was able to affordably provide for its maintenance and implement substantial capital improvements, all while unlocking new, untapped value for the private sector.

A public park is a tangible example of an asset masking as a liability. But what if we were to apply the concept to something more abstract—such as the health and well-being of a country's population? Putting aside for a minute the inherent cynicism of valuing human lives in dollars and cents, the potential economic value of an entire country's citizenry is simply massive. A productive, innovative workforce is the backbone of any healthy economy. On the other hand, when large percentages of that country's population are morbidly sick, that same citizenry's care can become a costly liability—incurring massive costs in the forms of medical care and prescription drugs. In the case of non-communicable diseases, loved ones of the sick might withdraw from the workforce to care for the ailing, further reducing national economic productivity.

One study that profiled eighteen countries (from industrialized markets such as the United States and Japan to developing markets such as Kenya and Indonesia) found that the costs associated with workforce withdrawal due to informal caregiving represented a 7.7% loss in GDP in 2015, projected to rise to 8.6% by 2030.[32]

Costs that high cannot be shrugged off, and present a strong argument in favor of increased preventative care (as opposed to treatments). When brokering a healthcare PPP, it is crucial to factor in not only the tangible costs of having an unhealthy populace, but also the opportunity cost levied by the nonworking sick. Ultimately, a healthy population is not only cheaper to maintain—it is an asset in and of itself.

Key Skill: Stakeholder Analysis

Identifying and Understanding Your Partners

The first step in executing a PPP is understanding your partner(s) and key stakeholders—who they are, what they want, and how you can help them achieve their goals. While private- and public-sector partners may have similar goals, their motivations are usually quite different. Understanding your partners' incentives will help you to craft effective, sustainable partnerships.

Stakeholder analysis is a powerful tool for discerning the motivations and incentives that dictate a given situation. Stanford professor and political scientist Francis Fukuyama defines stakeholder analysis as the "mapping of actors who are concerned with the particular policy problem, either as supporters of a solution, or opponents who want to maintain the status quo."[33]

Stakeholder analysis is not merely the act of establishing a numerical representation of a partner's motivations—rather, it is a qualitative process of defining who has a stake in a given paradigm, what that stake is, and how they can be incentivized to act on behalf of a common set of goals. Stakeholder analysis is a crucial element in selecting partners, but also in designing the PPP itself.

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[32]"The Economic Cost of Disease," Global Initiative on Health and the Economy—U.S. Chamber of Commerce, 2018, https://www.uschamber.com/

[33]Fukuyama, Francis. "What's Wrong with Public Policy Education," *The American Interest,* August 1, 2018, https://www.the-american-interest.com/

As Fukuyama writes, "From an analysis of the power and interests of the different stakeholders, one can begin to build coalitions of proponents, and think about strategies for expanding the coalition and neutralizing those who are opposed." While often linked to legitimacy and support, stakeholder analysis can be a powerful tool for mapping financial outcomes as well. It is generally considered a part of political management, a skill which we will discuss in more detail later on.

Stakeholders can come in many forms, but generally, PPPs are composed of some combination of public-sector partners, private-sector partners, and—sometimes—non-governmental and multilateral partners. PPPs can have more than two partners; often, successful PPPs will rely on partnerships between two or more governmental agencies.

Public-Sector Partners

The motivations and incentives that guide governments are vastly different from those that guide private corporations. With no profit motive guiding their decision-making, governments are mostly motivated by a desire to work in the public interest. (Of course, this excludes corrupt governments, as we have discussed before.) This is not to say that governments are purely altruistic, but that by and large, they are usually motivated by the political consequences of their actions—whether an action undertaken by a government will increase or decrease popular support. Of course, a public-private partnership's impact on popular support is entirely conditional on the project's success. A successful PPP could result in increased popular support, a failure could deliver the opposite. These political calculations can even vary based on the timing of a project. For example, fearing political repercussions, a government's willingness and capacity to participate in a PPP may be drastically different during an election year—for better or for worse.

Democracies are particularly vulnerable to shifting political winds, and given the relatively rapid political cycles that govern the public sector, it is crucial to determine the degree to which a government's capacity to deliver on the PPP is contingent on preserving a certain political dynamic. Imagine a country where one dominant political party is open to private-sector collaboration, but another party is staunchly opposed. Such an unstable political dynamic is inherently less predictable, and thus riskier for private-sector partners looking to enter into long-term contracts. PPPs are long-term assets. As such, short-term political cycles introduce risk. If the PPP-opposed government assumes power, what becomes of, say, a ten-year PPP contract? Thus, it is highly important to build partnerships with as broad a political consensus as possible, so as to insulate partnerships from political change or factionalism.

Government aversion to private-sector collaboration usually stems from one of three key objections. First, governments may be concerned about impropriety in partnerships, or the appearance of impropriety. Even in situations where no literal conflict of interest exists, public-sector partners can open themselves up to criticism for appearing insufficiently divested from conflicts. Moreover, government participation in a PPP can often create confusion among the general public. Because governments frequently act as regulators of the private sector, their participation in a PPP—particularly one without adequate "guardrails"—can appear to introduce a conflict of interest, even when this is not necessarily the case. Transparency is essential to diminish misunderstandings of this nature.

Governments may also be concerned that they will be out-negotiated by skilled private-sector partners. With significant experience in the kinds of contracts pursued by multinational corporations, the private-sector is generally better prepared to model outcomes and negotiate a contract successfully.

And third, governments may also face political blowback for a PPP, particularly if a large public-sector workforce fears that their jobs are at risk of being privatized. This is certainly the case in healthcare. For perspective, there are over 59 million healthcare workers worldwide.[34] In the United Kingdom, the National Health Service employs 1.5 million people; it is the country's largest employer.[35] According to the CDC, in the United States, healthcare employs 18 million individuals, many of whom are employed in the private sector; healthcare is the fastest-growing sector of the US economy.[36] Fears of privatization and job loss—however misguided—represent a serious hazard to governments looking to engage in a healthcare PPP.

For governments, these risks are certainly real, and must be considered. However, all three (and numerous other types of risks) can be managed through effective communication, incentive design, and careful monitoring.

Another unique characteristic of the public sector is the siloing of different government functions by ministry. Most healthcare PPPs will involve some kind of coordination with representatives from a ministry of health or equivalent institution. However, there are numerous other ministries and organizations within the public sector that might also come into play, including additional ministries—Finance, Transportation, Agriculture—and even

[34] https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5299814/
[35] https://www.nuffieldtrust.org.uk/resource/the-nhs-workforce-in-numbers
[36] https://www.cdc.gov/niosh/topics/healthcare/default.html

PPP-specific institutions established at the country level. Aging populations, for example, present challenges that cut across a number of ministries. A ministry of health might be engaged to provide medical care to seniors, but the ministry of transportation may need to provide wheelchair-accessible transit to and from the hospital in order to enable mobility-limited seniors to seek this care. The ministry of finance might be involved to administer social security (or a similar program). As we can see, the "ripple effects" that emerge even from a single issue can extend across an entire government. This is why—as we will discuss in a few pages—it is essential to carefully consider a project's scope.

Elements of Public-Sector Capacity

- Regulation
- Taxation
- Access to capital
- Engagement with the public as a partner

Private-Sector Partners

As we have discussed, private-sector partners typically operate in the pursuit of value. This value may not necessarily come in the form of profit, but while companies may be inclined to participate in public projects as a show of goodwill or brand-building, the PPP model is contingent on providing both partners with tangible value.

As previously noted, the accrual of tangible value doesn't necessarily mean that private-sector partners are operating in opposition to public-sector health goals. It does, however, mean that private-sector partners must, in some way, stand to eventually make a profit from a PPP.

Many governments and public advocates look askance at the profit motive, but it is crucial when engaging a private-sector partner to give that partner the latitude to assert on behalf of their bottom line. Private-sector partners cannot be expected to take on losses in the long run—though in the short run, depending on the scope of the project, PPPs can start out in unprofitable circumstances. We will discuss project scope in a few pages.

To that end, private-sector partners must be authorized and capable of analyzing PPPs on an appropriately long timeline. Oftentimes, the private sector, beholden to a quarterly earnings report, is unwilling to accept losses in the short term. Private-sector partners with wide latitude to assess the project on a longer time frame are those who are more likely to make for good partners.

It is also worth noting that the shareholder-value-above-all-else model is increasingly becoming antiquated in the business community. The Business Roundtable, a non-profit association based in Washington, D.C. whose members are all chief executive officers of major U.S. companies, released an updated "Statement on the Purpose of a Corporation," which includes commitments to investing in employees, dealing fairly and ethically with suppliers, and supporting local communities. The Statement concludes, "Each of our stakeholders is essential. We commit to deliver value to all of them, for the future success of our companies, our communities and our country."[37]

Thus, corporations may be primarily concerned with profits, but they are also deeply concerned with their strategic goals, brand image, and ethical engagement with various stakeholders.

Elements of Private-Sector Capacity

- Innovation
- Technology
- Human resources
- Process management
- Additional capital
- Expanded financing options
- Operational capacity
- Efficient decision-making capability

Non-Governmental Partners and Multilaterals

Where gaps still exist between public and private partners, NGOs and multilaterals—institutions like the World Economic Forum, World Bank, and the World Health Organization—can provide operational support. Oftentimes, the apparatus to effectively distribute treatments, bring goods to market, or bring services to people who need them does not exist in low-income countries. NGOs and multilaterals often have the on-the-ground resources to overcome these last remaining capacity gaps. They can also act as intermediaries or independent entities, reducing conflicts of interest and increasing legitimacy and political viability.

The NCD Platform at WHO

The WHO's High-Level Commission on NCDs, which published its Final Report in December 2019, has approved Recommendation Six for a Platform within WHO designed

[37]The Business Roundtable. (2019). *Statement on the Purpose of a Corporation.* Retrieved at https://opportunity.businessroundtable.org/

to facilitate partnerships between the public and private sectors to move forward on NCD solutions. (Note that the Platform does not explicitly limit its scope to PPPs, but to all types of partnership.) The Platform is a flexible structure which will allow participants to construct solutions within a productive, supportive environment. Using evidence-based case studies and well-developed frameworks, the Platform would build trust among stakeholders (including within WHO), facilitate exchanges of information, provide a repository of essential frameworks, skills, and evidence-based case studies, and enable sustainable engagement of the private sector in NCD solutions. The Platform could also provide guidance on the management of conflicts of interest and the navigation of legal, regulatory, and contractual matters.

Of course, the healthcare landscape has changed dramatically since December 2019. With Covid-19 demanding a significant percentage of healthcare budgets and attention spans, NCDs are no longer any country's top priority—and rightly so. As such, the Platform remains under development. However, as the pandemic subsides and countries look to the future, addressing NCDs will be as essential as ever, if not moreso. The significant comorbidities between NCDs and Covid-19 require a holistic approach to the future of healthcare. And if addressing NCDs was a significant challenge in its own right before the pandemic, it is now also a key element of pandemic preparedness.

Other Stakeholders

Of course, the stakeholders for a PPP include many more groups and individuals than the partners themselves. In healthcare PPPs, non-partner corporations, healthcare infrastructure, and an engaged public are all relevant stakeholders. Thus, the process of stakeholder analysis is one of mapping not only partners, but all relevant individuals and institutions.

Key Skill: Strategic Thinking

In the context of public-private partnerships, strategic thinking refers to the use of strategic decision-making in developing PPP solutions. "Strategy" is a broad term that can encompass a number of distinct thought-processes and modes, but PPPs tend to share a few key strategic frameworks.

Once the idea for the project is conceived (and after a rigorous stakeholder analysis is conducted), the next step is to devise a strategy for implementing a viable version of the project. But what does a viable version look like? And how much should that version resemble the project's ultimate goal?

Determining Project Scope

The first step in developing a strategy for PPP implementation is determining a project's scope. "Scope" refers to the defined features and functions of the project. Even the simplest of public policy problems can build into a widely-scoped project.

Even projects with an apparently limited scope can build laterally into a multifaceted project. A project to reduce the impact of cardiovascular disease, for example, might start with a limited scope: a marketing campaign to encourage reduced calorie consumption. But as the project grows, it might need to include education programs, public exercise programs in public parks, and increased health screening and monitoring. This increased scope, obviously, drives costs upwards—however, it also presents new opportunities for the private sector to step in and remove some costs borne by the public sector. Increased project scope can also result in the inclusion of multiple government ministries in a single project, or coordination between national and provincial governments.

The increased complexity of a far-reaching project can increase a project's impact, but large PPPs with too wide a scope can become financially unwieldy, and are more vulnerable to barriers and obstacles—both corporate and governmental. This is why many PPPs start off as smaller-scale pilot projects.

The Use of Pilot Projects

Most Ministries of Health are highly regulated. Generally, large-scale projects, in order to be approved, require an authorizing environment, followed by preliminary legislative and regulatory approvals, the development of a financial model, and at least one other, final approval.

Obviously, the details of the approvals process can vary widely by government. But bureaucratic approval processes are a common feature of most Ministries of Health. Add in the regulations imposed by partner corporations, and the process of even getting a PPP off the ground appears significantly more daunting. For these reasons, PPP participants tend to choose pilot projects as a logical "first step." Some PPPs will even require multiple simultaneous pilot projects, as depicted in the SPV diagram in Chapter Two.

Pilot projects have a few key advantages. In most governments, they exist outside of the dense approval processes and regulations required of larger-scale projects. They are also quite a bit cheaper and can provide a proof-of-concept for a larger project down the road. Conversely, pilot projects face significant drawbacks. Their limited scope can reduce their

effectiveness, so it can be difficult to approximate the effectiveness of a large-scale project using only a pilot as a model.

Going to Scale

Pilot projects are generally far too small-scale to produce widespread, measurable results. It can be difficult to even measure the efficacy of a pilot project, particularly in healthcare, because of this limitation. Thus, it is essential for PPP participants to view the pilot not as an end result, but as a stepping stone on the way to a larger project. The process of going to scale varies widely from government to government, but in all cases, PPP participants will face the challenge of moving from pilot to scale as quickly and efficiently as possible.

But discussing strategy this way can be overly abstract. Let's examine some real-world strategic paradigms to better understand how strategic thinking can benefit one or both partners in a PPP.

Developing a New Market or Expanding an Existing One

Companies may not be able to sell their goods and services effectively everywhere. Limited demand or excessive fixed costs might make it difficult to expand into a given market, even if a company is in perfect alignment with public sector health goals.

Imagine, for example, that you are a government that wants to increase consumption of healthy snacks and decrease the consumption of unhealthy ones. In many countries, demand for healthy snacks would be insufficient to offset the costs of bringing these goods to a new market. Private-sector snack manufacturers are unlikely to attempt a massive expansion in a country without sufficient demand. Without getting into the snack business yourself—a difficult proposition for a government—how could you increase access for healthy substitutes to unhealthy processed foods?

First, you would need to create a viable market for healthy snacks by increasing demand within the country. Governments enjoy a unique capacity to engage the public as a partner, shifting tastes and influencing demand. By engaging in large-scale public education and marketing campaigns, governments can help the private sector to develop health-positive markets, increasing demand for healthy goods and services, and bringing the profit motive into better alignment with the public health motive. Governments can also decrease demand for unhealthy snacks by imposing taxes on them. By creating a more solution-friendly market, governments can ensure that their respective countries are competitive and receptive to NCD solutions.

The example of Singapore's Health Promotion Board provides a concrete example:

CASE STUDY

Singapore's Health Promotion Board[38]

Established in 2001 by the Singapore Ministry of Health, Singapore's Health Promotion Board (HPB) often uses PPP strategies to promote healthier living in Singapore—with a special focus on improving the diet and exercise habits of the Singaporean people.

Importantly, Singapore's government was wary of using taxation as a means of affecting dietary and exercise habits, preferring a voluntary approach to compliance. HPB would have to work *with* the private sector, rather than taxing them. The solution would require creative thinking.

In an attempt to alter the dietary habits of Singaporeans, the HPB developed a "Healthier Choice" symbol (a decal which would adorn menus and packaging for healthier food options), provided advertising dollars to shift market preferences, and supplied grants to private-sector food and beverage companies to encourage reformulations. HPB's efforts were highly successful. Consumers responded to the healthier choice symbol with increased demand for healthier options, and by reducing the up-front costs of reformulation, HPB was able to encourage an accelerated timeline for reformulation efforts, helping the private sector to meet that demand. Using both demand- and supply-side levers (increasing demand for healthy products and providing grants to develop those products), HPB was able to "bend the cost curve" for healthy food products. By bringing more healthy options to market, HPB's model significantly affected the dietary habits of Singaporean citizens. We will discuss HPB in more detail throughout Section Two.

Key Skills and Frameworks

- Engaging the Public as a Partner
- Social PPPs vs. Economic PPPs
- Sharing Risks, Resources, and Governance
- Innovation

[38] Trager, A., & Lundberg, C. (2018). *Do the Elderly Have to Be Ailing? Singapore's Health Promotion Board.*

Leveraging a Third Party to Increase Operational Capacity

Often, the interests of the public and private sectors are already aligned, but operational capacity is disjointed, and value cannot be realized in the real world. In these cases, even though the profit motive should provide a stable underpinning for a PPP, a third party is needed to increase operational capacity.

One important role that an independent non-profit entity can play is pooling of demand. Often, by aggregating demand from smaller, poorer regions, a non-profit can create a viable market where there was none before.

EXAMPLE

Gavi, The Vaccine Alliance

A potent example of demand pooling can be found in Gavi, the Vaccine Alliance (GAVI). While funding for vaccines comes from governments and donors, the vaccines themselves come from the pharmaceutical industry. GAVI, a non-profit, exists to aggregate demand for vaccines among a number of low-income countries. By pooling the demand of many low-income countries at once, GAVI lowers the cost of immunizations, making them cheaper to administer across entire regions. More importantly, by creating an economy of scale, GAVI creates an incentive for the private sector to enter into new marketplaces, connecting millions with much-needed vaccines. By ensuring the predictability of the introduction of immunization programs, GAVI helps to avoid the negative medical externalities associated with inconsistent immunization.

Key Skills and Frameworks:

- Strategic Thinking
- Allocation of Risks and Opportunities
- Conventional vs. Optimal Configuration
- Innovation
- Strategic Thinking
- Financial Structuring

Indeed, we have observed this type of demand-pooling happening at the national level regarding the coronavirus vaccines. Large-scale purchases of hundreds of millions of doses around the world have justified the development of a Covid-19 vaccine at record-breaking

speed. In the United States, for example, a July agreement with the federal government and Pfizer—$1.95 billion for 100 million doses (but only if their vaccine proved successful)—provided the company with a guaranteed buyer, and incentivized a massive $2 billion investment on the part of the company in vaccine development costs.[39]

Key Skill: Innovation

PPPs, in addition to being financing tools, can also be powerful drivers of innovation. Innovation can come in many forms. As we've discussed, creative financing can unlock hidden value, and creative operational innovations can create economies of scale where they did not exist before. But more importantly, innovations in PPP are driven by the frameworks underpinning successful PPPs. Governments can provide and support an environment for innovation.

Ultimately, the frameworks and models that underpin PPPs are just as flexible as the PPPs themselves. "PPP thinking" doesn't necessarily mean picking from a list of applicable solutions or grafting the lessons of a certain case study onto a situation. By internalizing the concepts and frameworks that underpin successful PPPs, successful practitioners can develop new, innovative solutions to seemingly intractable problems.

EXAMPLE

The High Line[40]

If we examine these two pictures, we can see how innovation in a public-private partnership can transform entire neighborhoods at a net profit to the city government. This first picture shows the New York Central Railroad's West Side Line, an elevated structure cutting its way through West Chelsea in Manhattan. No longer used for freight traffic, the hulking steel structure was a useless eyesore, casting its dark shadow over the entire neighborhood.

[39]LaFraniere, Thomas, Weiland, Gelles, Stolberg, & Grady. "Politics, Science and the Remarkable Race for a Coronavirus Vaccine," *The New York Times*. 21 November 2020. https://www.nytimes.com/2020/11/21/us/politics/coronavirus-vaccine.html?referringSource=articleShare

[40]Bowen, T., & Stepan, A, "Public-Private Partnerships for Green Space in NYC," Columbia University School of International and Public Affairs, 2014, Case Number 14-0005.0.

Movements to tear down the structure cropped up several times in the latter half of the 20th century, but it wasn't until 1999 that two Chelsea residents came up with the idea of turning the unused elevated tracks into a public park. They established Friends of the High Line and set to pitching their case to the city. They argued that, unlike demolition, their plan could actually net the city money by creating a valuable new public asset.

Says John Alschuler, chairman of real estate consultancy HR&A Advisors, a firm to whom Friends of the High Line turned for assistance, "Our firm did a very rigorous, very careful study and we argued, absolutely correctly, as it turned out, to the government, that an investment in park and open space will return more cash value back to the government in terms of increased property tax revenue, increased sales tax revenue, increased income tax revenue, that would pay three, four times what the cost of the park was."

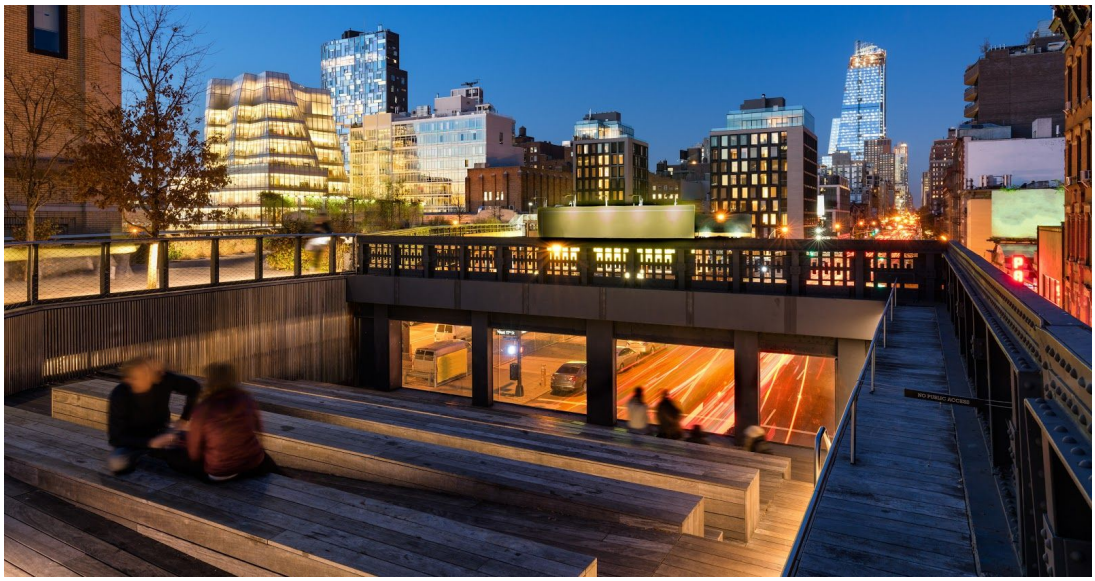
In 2002, a more PPP-friendly administration assumed control of the city government (under the leadership of New York's new mayor, Michael Bloomberg, and new parks commissioner, Adrian Benepe) and prospects for the High Line improved significantly. In 2005, the city created a Special District, much like Bryant Park's BID, rezoned to allow for mixed residential and commercial use. And the Special District came with an added incentive. Property owners near the High Line would be allowed to build higher than typical zoning allowed. Developers quickly took advantage of the opportunity to build higher, and the city used the additional money to finance stairways and elevators that would allow future visitors to access the viaduct.

In 2006, after a series of design competitions, construction on the High Line began. Using an innovative authorizing structure involving five different institutions—Friends of the High Line, the city's Economic Development Corporation, the Department of

City Planning, the Parks Department, and the mayor's office—the High Line was able to fast-track approval processes. Of course, there were trade-offs. Having so many institutions involved also created numerous redundancies and inefficiencies.

In 2009, the city and Friends of the High Line signed a public-private agreement stipulating that while the park would be incorporated into the city parks system, the city would maintain the viaduct holding up the park, and Friends of the High Line would operate and manage the park itself. "The first two sections of the park cost $152.3 million, of which the city provided $112.2 million, the federal government $20 million and New York State $400,000. The park's annual operating budget averaged around $3 million a year. In 2011, Friends of the High Line brought in about $30 million and spent about $20 million, much of that for construction. Construction of the third and final section began in 2012 and was projected to cost $90 million, toward which the city committed $10 million." By 2013, the city's analysis put the cumulative economic benefit of the park at close to a billion dollars, well over the roughly $200 million HR&A had originally projected."[41]

Today, if you visit the High Line, you'll see a beautiful park—one of the most popular in New York City. But of course, if you look to either side of the old rail bridge, you'll also notice other important changes—an array of boutique hotels, high-priced apartments, and revenue-generating retail shops and restaurants.



[41]Bowen & Stepan, "Public-Private Partnerships for Green Space."

In the end, Alschuler was right. The increased tax revenue brought in by the High Line paid for the park many times over. By 2013, the city's analysis put the cumulative economic benefit of the park at close to one billion dollars. By combining the authority of the public sector to enact change with the ability of the private sector to raise capital, a PPP structure was able to transform not just a rail bridge, but an entire neighborhood in the process. As of 2018, the park—a mere seven acres—saw about eight million visitors each year.[42] The High Line proves the ability of PPPs to imagine new, innovative solutions: turning liabilities into assets, sharing risks, opportunities, and governance, and internalizing positive externalities.

Key Skill: Financial Structuring

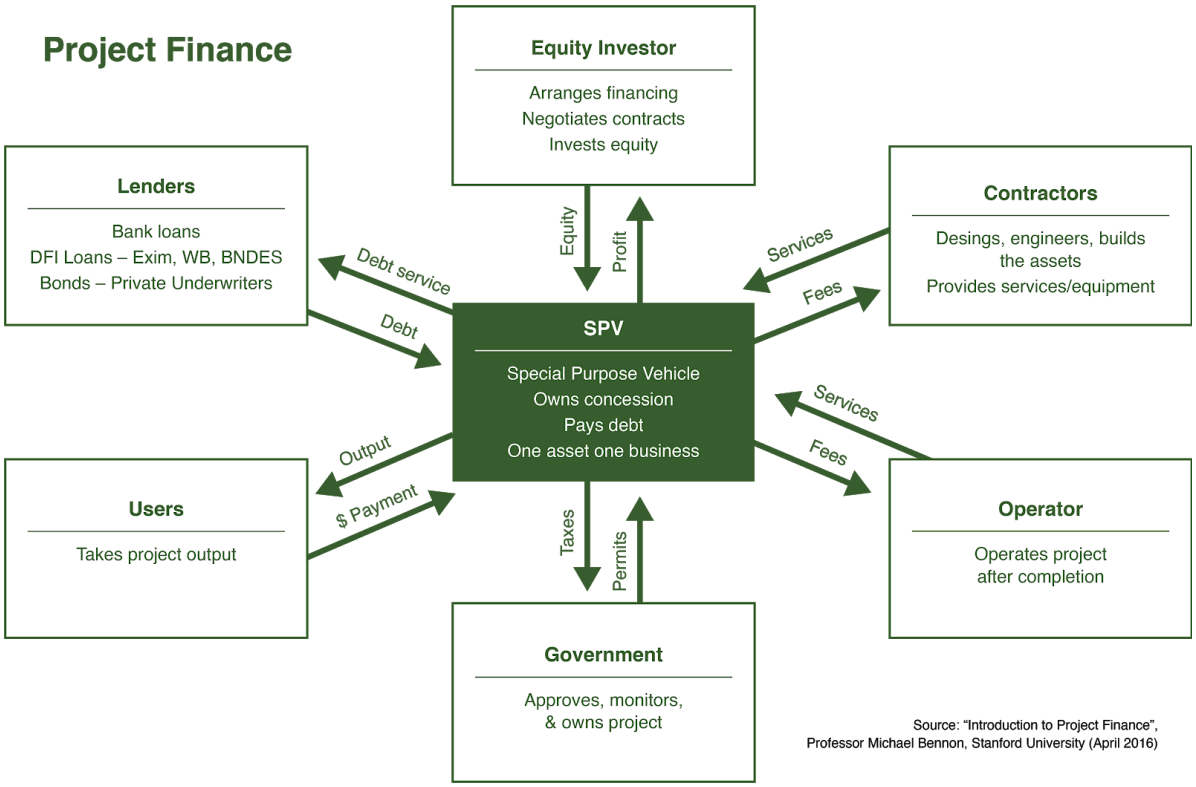
PPPs are unique financial structures, drawing funds from both the public and private sectors. While each PPP will be slightly different, most will rely on the formation of a special purpose vehicle (SPV)—that is, a solitary financial entity, legally separate from each partner. This ensures shared governance between the partners, but also allows the SPV to engage quickly and effectively with a number of other entities—from government institutions, to vendors, and the general public.

In general, a PPP will engage with six different types of entities: **contractors, operators, governments, users, lenders, and equity investors.**

The passage of funds and value from each of these parties is demonstrated in the chart on the next page. It is worth noting, however, that the chart does not include the externalities which are transferred to the general public. To clarify, though these externalities do reflect real, tangible value, they are not included in this chart because they do not constitute a specific financial transaction.

[42]C.J. Hughes, "The High Line: A Place to See and Be Seen." *The New York Times,* December 12, 2018.

Diagramming Project Finance



Source: "Introduction to Project Finance", Professor Michael Bennon, Stanford University (April 2016)

SECTION II

Engagement

CHAPTER 4

How can partners engage more effectively?

Now that we have a firm understanding of some of the frameworks and skills that underpin successful PPP preparation, we can discuss effective engagement strategies. We will apply these concepts across a number of case studies—some new, some which we've already visited. As you'll learn, the real world is quite a bit messier than any model. In most situations, multiple frameworks will be relevant to a single situation. Section Two will delve into the types of strategies and techniques that you can use to improve your PPP engagement.

Engaging Stakeholders Effectively

Engaging stakeholders in the process of developing a PPP is a complex, multifaceted process. Of course, it will follow directly from your process of preparation—considering the relative Value Alignment of your stakeholders, determining to what degree your project is an economic or a social PPP, and settling on a preliminary vision for the project's scope and impact. But engagement can also come with surprises—the need for an expanding scope, unforeseen points of conflict, and previously unidentified assets and liabilities.

Engagement will take place across a number of stakeholders, from private sector partners to the general public. It is important to remember that while all partners in a PPP are stakeholders, not all stakeholders are partners. It may also be the case that some stakeholders appear to be potential partners at first, but may eventually be unable to rise to the challenges of partnership. Through convenings, negotiation, and effective political management, governments can make determinations about which stakeholders can become effective partners, and engage different kinds of stakeholders effectively.

Engaging the Private Sector

The private sector is, of course, a crucial stakeholder in a public-private partnership. But as we have discussed, rather than being a monolithic entity, the private sector comprises numerous sectors and industries, each of which has a different relationship to healthcare outcomes. Recall how the Value Alignment Scale can be used to differentiate between companies whose interests are aligned with healthcare goals and those whose interests are misaligned. While the Value Alignment Scale can be useful in Preparation—selecting effective partners and understanding their interests and motivations—it is also a useful tool

for developing an effective private-sector engagement strategy. How does engagement differ when a company is well-aligned, versus less well-aligned? How can strong engagement be used to nudge alignment? The answers to these questions will differ from project to project, but by comparing the insurance industry to the technology industry, we can begin to explore different modalities for private-sector engagement.

EXAMPLE

Private-Sector Engagement: Two Modalities

The Insurance Industry

The private insurance industry exists in some countries as a supplement to government-underwritten care and in others as the primary mechanism for bearing the costs of healthcare. In both cases, its purpose is simple: to spread the financial risks of expensive healthcare across large populations. Because insurance companies are highly motivated to attenuate risk among their customers, their interests are very closely aligned with those of the public sector. Simply put, healthy behaviors can reduce costs for insurance companies, thereby increasing profit margins. This creates an opportunity for partnership.

In fact, many insurance companies have enacted rules and regulations to encourage healthier behavior among their customers: premiums are generally higher for smokers, or those with high blood pressure, for example. These kinds of tools can be helpful, to an extent. In many cases, however, their effect is limited. After all, while a 20% increase in one's insurance premium each year might seem at first like a profound motivator to stop smoking, it pales in comparison to the sheer addictiveness of tobacco. Still, tools like these can still be helpful in managing NCDs and "narrowing the funnel" for healthcare services, a concept we will discuss later in this chapter.

By partnering with governments (through convenings, negotiation, and eventually full-fledged PPPs) insurance companies could help engage the public in solutions, encourage better habits, and reduce NCD risk factors. Insurance should be considered an "aligned" industry.

Digital Health and Technology

Technology also has the potential to increase efficiency, encourage healthy habits, and optimize outcomes on a massive scale. The opportunities for partnership within the technology sector are myriad, and there exists much untapped potential.

Companies that produce digital fitness tools, for example, are highly aligned with the interests of governments. The potential of digital health tools to engage the public as a partner in encouraging positive changes in behavior cannot be overstated. In August 2019, for example, Singapore's Health Promotion Board announced a new partnership with the American fitness wearable brand Fitbit to give away one million digital fitness trackers.[43] This move will almost certainly result in improvements to physical fitness, not to mention an increasingly detailed picture of Singapore's relevant health data. Seeing value for both the government and for Fitbit, the HPB was able to include digital technology as one piece of a larger strategy to encourage healthy behaviors. (We will discuss Singapore's strategy in more detail in a few pages.)

Technology could also play a significant role in increasing efficiency within existing healthcare structures, and for regulators. Healthcare systems generate massive amounts of data. Through effective management of this data through technology, healthcare services can be optimized and costs can be reduced. But even in 2020, many in the healthcare sector are still using paper records, limiting the transfer of information across the healthcare system and creating inefficiencies and redundancies. The effective engagement of the technology sector in managing data could provide significantly improved healthcare outcomes. And yet, resistance to innovations that depend primarily on technology is common among Ministries of Health and other healthcare-facing parts of government.

This resistance has traditionally stemmed from three concerns: value for money, job security, and privacy. Governments, skeptical of technological solutions sold to them by tech firms, are unlikely to support a costly overhaul of healthcare data systems without sufficient evidence that the overhaul would result in significant cost savings or improved outcomes. Furthermore, governments also have a responsibility to the workers employed in existing healthcare systems. And of course, the intersection of data-based technology companies and healthcare also raises significant privacy concerns. How much should the private sector (or the government) know about a citizen's health history, their workout regimen, or their diet? Even if comprehensive data analysis can produce better healthcare outcomes, the question of privacy remains.

However, resistance to technology is waning. Through effective convenings, and using the engagement strategies of negotiation, political management, and innovation,

[43]Yee, Yip Wai, "Fitbit, HPB Clarify Health Trackers Giveaway," *The Straits Times,* 2019, https://www.straitstimes.com/

governments can work with the private sector to develop effective, affordable healthcare solutions that maintain strong standards for data privacy. If properly managed, strong private-sector engagement can also pursue the transferral of knowledge to benefit employees in the government and healthcare structures, ensuring that workers share in the benefits of technological advancement.

As we can see, the engagement strategies for these two industries would be quite different. In the case of the insurance industry, government partners should work to strengthen existing structures and underwrite clear incentives encouraging healthy behavior. In the case of the technology sector, negotiation of various interests and privacy issues would allow governments to reach an agreeable solution and benefit from the significant increases in efficiency promised by technology. Both industries, however, provide an effective means for governments to engage the public as a partner by using the private sector as a tool for distributing digital health technologies, promoting the efficient use of healthcare data, or incentivizing large numbers of people to engage in the project of their own health.

But of course, these two are far from the only types of private-sector industries that are relevant to healthcare. Returning to the Value Alignment Scale, we can see that a whole host of industries have impacts—both positive and negative—on healthcare outcomes. Insurance and technology are far from the only industries that could benefit from engagement with the government. The food and beverage industries, for example, could be engaged in partnerships focused on reformulation efforts to reduce ingredients like sugar, salt, or trans fats.

We will discuss, through case studies, a number of different industries in the section ahead, with special emphasis placed on how specific engagement strategies and skills can align values and produce effective partnerships.

Engaging with Multilaterals

So far, we have discussed governments and the private sector as the principal partners in our PPP negotiations. But there are many other institutions and venues that act as intermediaries, secondary partners, or even facilitators in a public-private partnership. Multilaterals—such as the World Bank and the World Health Organization—will often play a significant role in shaping and facilitating PPP policy.

These organizations, like governments, are highly cautious about conflicts of interest. Some even have policies that explicitly prohibit engagement when a conflict of interest is present.

Thus, in engaging with these influential institutions, it is crucial that professionals be prepared to manage conflicts. As we've discussed, problem-solving in PPPs is often a matter of solving *someone else's* problem, even as you solve your own. This is especially true for multilaterals, who are fearful of the political repercussions of an appearance of impropriety.

We can see this dynamic at play in the Lesotho Hospital Case Study. Backed by the International Finance Corporation and the World Bank, the project was highly sensitive to conflict of interest issues, and both of these top-tier multilaterals were highly protective of their legitimacy. Recall that the contract relied on a set of highly-specific performance metrics. While these served to ensure that risk and opportunity were apportioned efficiently, they also served a second purpose: fostering legitimacy. By creating such a rigid and specific set of metrics, the project ensured that backers like the World Bank and the IFC would be able to demonstrate to critics exactly how the project was designed, and how the public stood to benefit. In a word, the metrics were a form of *transparency*. And though the project did face criticism—something we will discuss in future chapters—the critiques were, notably, not centered on conflicts of interest.

Narrowing the Funnel: Reducing Demand for Healthcare Services

Demand can have a profound impact on a PPP's effectiveness, profitability, and ultimately, sustainability. But while high levels of demand might be good for the economics of a toll road, they can be catastrophic for healthcare PPPs. With aging populations putting additional strain on already burdened healthcare systems, governments must seek to "narrow the funnel" of patients seeking care in the future. Without a significant reduction in demand, the more sensitive elements of healthcare systems will soon be overwhelmed—if they aren't already. Even today, this strain on supply manifests itself in long wait times for procedures and dispensation of medicine. Obviously, the key is not to restrict access to healthcare, but to reduce the demands placed on the system by an unhealthy population. Ultimately, reducing demand for healthcare services is a matter of prevention—making people healthier. But how should governments actually go about reducing demand? Singapore's Health Promotion Board provides a clarifying example.

CASE STUDY

Singapore's Health Promotion Board

Let's return once more to the Health Promotion Board. We've examined how Singapore was able to effectively modify market dynamics from the supply side, by

engaging with food hawkers and producers. But improving healthcare outcomes is also dependent on demand-side interventions.

Reducing demand for healthcare services was a huge priority for the HPB. As Professor Chia Kee Seng, founding dean of the National University of Singapore Saw Swee Hock School of Public Health, put it: "If we do not take care of the elderly issues of the future today, we will forever be behind the curve. You must go upstream to deal with the people who are young today."

In order to effectively reduce demand for healthcare services, the Health Promotion Board would need to encourage healthy behaviors among its citizens, but how? Major NCD risk factors like smoking, consuming unhealthy foods, inactivity, and the harmful use of alcohol are all highly addictive—some more so than others. How could the HPB engage the population efficiently given the limited resources available to them, especially given the immense challenge of breaking these highly addictive habits?

It was a tall order for any government. But for the HPB, the solution was contingent upon engaging an entirely new stakeholder in the PPP equation: the public. We will discuss in a few pages how the HPB used public engagement as a tool for reducing demand.

And of course, the importance of "narrowing the funnel" has only become more apparent during the Covid-19 pandemic. Images of overwhelmed hospitals in northern Italy, parts of the United States, and around the world have dominated the news. Patients suffering from an NCD are more likely to experience hospitalization and death. And while PPPs have been deployed to expand healthcare capacity during the crisis, an equally valuable role for the private sector may lie in reducing the number of hospitalizations needed through prevention.

Bending the Cost Curves

Demand reduction offers the possibility of "bending the cost curve" on long-term healthcare, or reducing the slope of the line that represents the cost of healthcare over time. As populations age, multiple cost curves begin to rise. We understand this intuitively—the costs of administering healthcare to an average human being are much larger when he is old than when he is young. Thus, the cost curve increases dramatically. Expand this to include an entire population, and you have millions or billions of cost curves. If that population on average is aging, then the average curve is also sloping upwards.

This can create problems for governments, which operate on limited budgets. Upward-sloping curves require governments to make tough choices between more expensive robust solutions and cheaper stop-gap measures.

Of course, when it comes to the private sector, there are many companies that stand to make money off of stop-gap measures. You might ask yourself, then, why would the private sector want to partner in efforts to narrow the funnel?

Take the pharmaceutical industry for example. It might seem at first that the private sector would not be incentivized to reduce the incidence of NCDs in the population. After all, most drug companies are in "imperfect alignment," which is to say that while their products might have a beneficial effect on public health, their business model does rely on the presence of disease. Why would a company that sells heart medication be interested in reducing the number of patients suffering from cardiovascular disease?

It's a reasonable question. But it belies an overly simplistic view of the pharmaceutical industry, whose motives can be aligned (and misaligned) with public health goals in numerous, often contradictory ways.

Due to the realities of patent law and the wide availability of generic drugs, pharmaceutical companies tend to make the most profit off of robust solutions—not stop-gaps. In a more conventional market situation, these companies would be incentivized to pursue both new treatments for NCDs and mass production of less-effective treatments. But, because the magnitude of the NCD problem is so large, the simple reality is that if governments—stuck with rising costs along an upward-sloping curve—are forced to invest heavily in cheap treatments, they will not also be able to invest in robust solutions.

By bending the average curve downward using preventative measures, high-quality treatments become more affordable. Thus, paradoxically, it is often in the private sector's interest—even in cases of imperfect alignment—to ensure that governments have demand under control. By narrowing the funnel, the private sector can, in some cases, increase their share of a highly profitable market.

Engaging The Public as a Partner

Another crucial stakeholder in PPPs is the public—that is, the general population. Compliance—patient adherence to pharmaceutical treatments and lifestyle interventions—is notoriously difficult. According to the National Institutes of Health, upwards of 40% of

patients do not comply precisely with doctor recommendations,[44] and NCD interventions—which generally rely on sweeping changes to diet and exercise habits—are much more difficult to comply with than a prescription drug regimen. Ultimately, the success of a healthcare PPP is highly contingent on partners' ability to engage the public as a partner. Nowhere has the importance of effective public engagement been more apparent than in the 2020 outbreak of Covid-19. Though the situation is—as of this writing—still developing, the fight to implement "social distancing" measures among citizens has demonstrated the importance of effective public engagement. A similar dynamic—though not quite as immediate—exists in the NCD space, as we will explore over the next few pages.

Another potent example of engaging the public as a partner—albeit not in the healthcare space—comes again in the form of New York City's parks.

CASE STUDY

New York City Parks and Partnerships

Let's revisit the New York City parks system once more. We have already discussed how the public sector was able to harness the untapped value of Central Park, Bryant Park, and the High Line by developing a network of private donors and creating a Business Improvement District. But these cases also provide illuminating examples of engaging the public as a partner, because much of the upkeep and maintenance of New York's world-famous parks is done on a volunteer basis.

Volunteers in park conservancies and related organizations perform most of the flower-planting, gardening, and clean-up in New York City. By 2003, The Partnership for Parks, the organization that coordinates this volunteer effort, had somewhere near 70,000 volunteers in its database. For a public service, engaging neighbors as volunteers offers numerous benefits. First, and most obviously, volunteers are free. A volunteer base of 70,000 people is able to seriously reduce labor costs for park maintenance. In fact, in 2002, volunteers logged over one million hours in support of the parks—estimates indicate that the parks department saved $40 million on civil service staffers. But, volunteers offered another, less obvious benefit: buy-in. Because citizens were putting their own effort into the parks, they were less inclined to litter or deface

[44]Martin, L., Williams, S., Haskard, K., & DiMatteo, M. "The Challenge of Patient Adherence," *Therapeutics and Clinical Risk Management,* 2005, 189-199.

them. Even those who did not volunteer directly were able to appreciate the efforts of their neighbors:

> "By enlarging the circle of 'ownership,' moreover, partnerships were seen to alter for the better the ways New Yorkers thought about and behaved toward the parks… A receptionist at a Wall Street firm might hesitate to let her dog run unleashed in Bryant Park if her company's CEO was on the board of the Restoration Corporation. An Upper East Side teenager whose father planted flowers with the Conservancy every spring might steer his skateboard more carefully through Central Park, and his Queens counterpart whose mother stood watch four hours a week at the neighborhood playground might resist the temptation to visit that playground late at night to adorn it with graffiti. It was hard to calibrate the impact of such effects...but parks officials and their private partners were convinced these kinds of shifts in attitude and perception were pivotal to the improvement of New York's park system."[45]

By engaging the public successfully, New York City was able to not only minimize labor costs with volunteers, but also reduce the overall burden of maintenance by harnessing the enthusiasm that comes with strong community buy-in.[46]

Healthcare PPPs should strive to do the same. For one, an engaged public—one that takes positive steps to improve NCD outcomes—is one that complies with regular screening recommendations and adheres to treatment regimens prescribed by doctors. And by engaging proactively in their own health, eating nutritiously, exercising regularly, and abstaining from destructive behaviors like smoking, an engaged public will incur fewer "maintenance costs" over time, to borrow an analogy from New York's parks.

In other words, each human body within a given country should be looked upon as an asset. Certainly, when a person is sick, that asset can become a liability—a costly drain on society and a "missing worker" from the country's labor force. But, if those bodies can be made healthy, they can become powerful assets—spurring growth, driving innovation, and boosting productivity.

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[45]John D. Donahue, "Parks and Partnership in New York City," Harvard Kennedy School, 2004, Case Number HKS086 (Based on research by Donahue and Center for Business and Government Senior Fellow Alan M. Trager, with assistance from Jordana Rubel.)

[46]Disclosure: Professor Alan M. Trager served as the Chairman of the Board of the Riverside Park Conservancy

By engaging the public as a partner, Singapore's Health Promotion Board managed to "narrow the funnel" for healthcare services, while turning the liabilities of some of its sick citizens into assets.

EXAMPLE

Singapore's Health Promotion Board

We have discussed how the HPB worked to reduce demand for NCD treatments by engaging with younger populations to "narrow the funnel" before the populations aged. Yoong Kang Zee, the CEO of HPB, who assumed the role in 2013, knew that there had to be a way to engage the public in funnel-narrowing initiatives.

The Health Promotion Board attempted to engage the public through a series of initiatives, including the "Healthier Choice" symbol, which we discussed earlier, but also by promoting exercise among the general public, encouraging workplace fitness programs, and even establishing new fitness centers in public places like parks and shopping malls. HPB also engaged in a massive public education program, providing the public with credible information on diet, exercise and other health-related topics, and cultivated an extensive system of health "ambassadors,"some 4,500 volunteers tasked with promoting healthy living in their communities.

By engaging the public effectively in their own wellbeing, Singapore's HPB was able to effectively reduce long-term demand for NCD-related care. These initiatives may not have had an immediate payoff, but will make caseloads more manageable in the future by curbing NCD incidence.

Of course, NCD reduction in narrowing the funnel is not only a matter of reaching large numbers of citizens with interventions, but also a matter of reaching the right citizens. By targeting efforts most heavily at those citizens who are most at risk for a given NCD, governments can increase their return on investment. This is an area where private-sector intervention has been consistently under-utilized.

With each passing year, big data becomes a more omnipresent fixture in our lives, influencing the kinds of advertisements we're exposed to, what news articles we see, and even tracking our personal calendars and whereabouts. The privacy concerns presented by this growing accumulation of data by large technology companies have been heavily

scrutinized, and rightly so. But the potential for big data to profoundly impact healthcare outcomes has been, so far, under-leveraged. Wearables, mobile apps, and smartphones can all generate huge amounts of medical data, which could be used to identify risk factors, identify at-risk citizens, and manage ongoing disease. Ballantyne and Stewart identify three main ways that medical data can be used across the public and private sectors, including "Private sector organisations apply[ing] to use public sector data for research; electronic health records includ[ing] data generated in the private sector (apps, private hospitals, private specialist providers) and data produced by public health agencies; and public and private sector agencies form[ing] partnerships to pool resources and/or expertise to provide clinical care, or support research, innovation and product development."[47]

The presence of big data in healthcare PPPs raises privacy concerns as well, particularly where the commercialization of medical data is concerned. As Ballantyne and Stewart write, "Empirical research consistently suggests public discomfort with the use of health data for commercial gain, or with commercial (for-profit) companies accessing their health data."

Though the ethics of privacy are well beyond the scope of the *Healthcare PPP Guide,* the potential political hazards of a perceived government or private-sector overreach are apparent. A thorough stakeholder analysis would consider existing cultural norms, national and provincial privacy laws, and the need for a strong and clear communication strategy, if data was to be included in healthcare. Furthermore, ambitious convenings—bringing together the public, private, healthcare, and technology sectors—could help to bridge the significant gaps preventing governments from capitalizing fully on the potential benefits of a technologically-driven approach to healthcare.

Narrowing the Funnel: Engaging the Food and Beverage Industries

Food and beverage companies generally fall into the "potential alignment" category, as their products can have profound impacts on health, but not always for the better. Many foods, of course, promote good health. Unfortunately, however, these foods tend to be more expensive, leading low-income individuals to source less healthy substitutes, such as processed foods and highly caloric beverages. These processed options are huge contributors to NCD incidence. Processed foods are high in salt and contribute to obesity and cardiovascular disease. And non-water beverages—most of which are quite high in sugar—have adverse effects on diabetes incidence.

[47] https://link.springer.com/article/10.1007/s41649-019-00100-7

On some fundamental level, addressing the incidence of NCDs will involve large-scale changes to dietary habits. But convincing the public to change the way it eats will be no small task. In most parts of the world, foods are inextricably tied with culture, family, religion, and society as a whole.

Nowhere is this more true than in Singapore, where a world-famous street food culture encourages citizens to over-indulge in high-sugar, high-fat foods.

CASE STUDY

Singapore's Health Promotion Board

Singapore's food culture is incredibly rich, and Singapore's unique culture of street vendors forms the cultural backbone of its culinary heritage. In fact, street food is so much a part of Singapore's national heritage that the government recently submitted a bid to include Singapore's food hawker culture in the UNESCO Representative List of the Intangible Cultural Heritage of Humanity.[48]

[48]Liza Weisstuch, "Getting a Taste of Singapore's Famously Flavorful Street Food," *The Washington Post,* September 27, 2019, https://www.washingtonpost.com/

It was a tall order, then, that Singapore's Health Promotion Board was tasked with reducing the NCD impact of Singaporean street food—generally high in sugar, salt, and saturated fats. Joining forces with 51 different food companies, the HPB launched the Healthier Hawker program in 2011. Hawkers who offered healthier options like brown rice or whole-grain noodles were given a special HPB-issued decal that they could display on their stalls. Menu items of 500 calories or less were also highlighted in Singapore's hawker centers.

By partnering with a potent cultural institution, street hawkers, the HPB found a new, innovative way to engage the public. Ultimately, the HPB decided to pivot from the Healthier Hawker Program to the Healthier Dining Program, which targets large chains instead of individual food stands. A focus on large chains enables HPB to reach even more consumers at considerably less expense.

Conflicts of Interest: The Limits of Voluntary Partnerships

We have discussed how, despite many governments' staunch prohibitions against conflicts of interest in private-sector engagement, conflicts can often be managed effectively. Of course, this is not always the case. In many situations, private-sector actors can be unable (or unwilling) to move their business models into adequate alignment. These cases often require a "firmer touch," meaning more aggressive governance. But, there are still ways to be strategic and tactical about assigning disincentives to misaligned industries, without necessarily employing taxation (which, while sometimes necessary, can be a greater political challenge). For its part, the private sector must also recognize that, to a certain extent, the costs imposed by large industries that are misaligned with NCD goals are so great as to make aggressive government action inevitable. We have seen this in the tobacco industry, and this aggressive approach may soon become more common with soft drinks and processed foods.

The case of the Health Promotion Board offers a potential roadmap for addressing unresolvable conflicts, using economic thinking to positively impact NCD outcomes without resorting to taxes.

CASE STUDY

Singapore's Health Promotion Board

While HPB's use of the Healthier Choice Symbol (HCS) decal offers a positive incentive for hawkers willing to adjust their recipes, there are situations in which tougher tactics are required. Private-sector companies are often unable or unwilling to bring their business model into further alignment with public-sector health goals. In these cases, powerful conflicts of interest necessitate powerful disincentives.

Singapore's Ministry of Health (MOH) recently announced a new program to reduce sugars and saturated fats in pre-packaged beverages. Cooperating with the HPB (and building on their successful HCS program), the MOH recently announced plans to assign a letter grade—A, B, C, or D—to all pre-packaged beverages, depending on its relative nutritional value. Grades will be determined by examining sugar and saturated-fat content. The system, dubbed "Nutrigrade," assigns powerful disincentives to beverages assigned poor grades. Unhealthier beverages (those graded C or D) will be required to print their grade on packaging, and beverages assigned a D grade will be banned from advertising online, in print, and anywhere else except at point-of-sale.

In fact, the Nutrigrade grading system is not too dissimilar from this Guide's concept of Value Alignment. Each of the four categories corresponds—roughly of course—to one of the modes of Value Alignment, A-graded producers being in perfect alignment, B being imperfect, C being potential, and D being misaligned.

But where the HCS program offered incentives for well-aligned hawkers and food producers, the Nutrigrade system uses governmental authority to push misaligned producers towards better alignment. While the HCS program will continue, its standards will be aligned with Nutrigrade such that all HCS-eligible beverages must receive either an A or a B grade. This adaptation and evolution of the HCS program demonstrates its efficacy, but also the need for significant disincentives to motivate companies that are unable or unwilling to align their interests with the public good. These packaging requirements and advertising prohibitions will strongly push misaligned beverage companies towards better alignment. In other words, if the HCS program was a carrot, Nutrigrade adds a potent stick.

Key Skill: Negotiation

We have seen how successful PPPs create incentive structures that align the interests and motivations of public and private partners. But how do PPPs arrive at these structures? Incentive structures—and the allocation of risks and opportunities—are devised through an iterative process of negotiation. But far from the winner-take-all style of negotiation commonly associated with, say, settling on a sale price, PPPs require a far more nuanced approach.

Negotiation is the skill through which all the others are affected. Though negotiation is a common skillset, professionals in both the public and private sectors hold deeply ingrained misconceptions about how negotiation works. Many view it as a "soft skill," referring to the interpersonal qualities that characterize effective negotiators. However, far from the "firm handshake and eye contact" model, negotiating in PPPs involves hard analytical skills like stakeholder analysis and incentive mapping. Government partners may feel themselves highly skilled at negotiation in situations where they hold large amounts of power, but can also feel out-gunned in situations—like PPPs—where they have less leverage. Not surprisingly, in negotiating a PPP, government officials can feel outgunned, as executives in the private sector generally have far more experience with the kinds of negotiations involved in PPP design.

Effective PPP negotiation also requires an open mindset: openness to creating success for your own team *and* the other party, openness to new and innovative ways of protecting your own interests, and openness to revising and recalibrating deals as circumstances develop. While conventional negotiation tactics are all geared towards finding success *at the table,* three-dimensional negotiation begins even before that.

3-D Negotiation

Three-dimensional negotiation is a negotiation framework introduced at Harvard Business School that accounts for the nuance required by public-private partnerships. The three relevant dimensions are tactics, deal design, and setup.

3-D negotiation is not a method for capitalizing on an adversarial negotiation. Rather, it is a method for arriving at a unique structure that benefits all parties and ultimately ensures the sustainability of a PPP over long periods of time. In other words, the goal of a 3-D negotiation is to produce win-win agreements, not winners and losers.

In three-dimensional negotiation, effective setup and deal-design enable successes at the negotiating table, decreasing the emphasis on traditional zero-sum negotiating strategies and tactics. Engaging in effective setup away from the table allows parties to change the underlying design of the negotiation at the table, creating more value for all parties.

3-D: Setup

The highest level of 3-D negotiation—the third dimension, for the sake of this explanation—is setup. An effective setup ensures that "right parties are approached in the right order to deal with the right issues, by the right means, at the right time, under the right set of expectations, and facing the right no-deal options."[49] Identifying the right parties to a negotiation requires more nuance than simply focusing on the individuals with the highest rank. Instead, it is often more effective to target and influence the issue-area experts that executives are likely to consult in the decision-making process. Mapping stakeholders, their underlying interests, and the relationships between them is often a useful first step, which we have discussed.

Sequencing is also key to negotiation setup. Dealmakers should consider whether it is advantageous or not to include partners sequentially or simultaneously, and whether each step of the process should be public or private. Successful negotiators will also look to strengthen their no-deal options—sometimes referred to as BATNA, "best alternative to a negotiated agreement"—to improve their negotiating positions. A tightly choreographed negotiation unlocks additional possibilities for all parties, which can then be captured with an effective deal design.

2-D: Deal Design

The next or "second" level of 3-D negotiation is deal design. Successful designs emphasize shared values and aligned interests for all parties, very similar to the optimal PPP configurations introduced earlier. Just as importantly, however, dealmakers must look beyond pure economic value to diagnose potential sources of noneconomic value, which are especially crucial in negotiations about social PPPs and healthcare. By creating situations that seek to align the values of the public and private sectors, government professionals can create a beneficial framework for both parties without sacrificing capital at the negotiating table.

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[49]Lax, D., & Sebenius, J. (2003, November). 3-D Negotiation: Playing the Whole Game. *Harvard Business Review*. Retrieved at: https://hbr.org/

Well-designed deals create mutually acceptable balances of risks and benefits while identifying and executing on opportunities to further the interests of various parties, a process that creates sizable "wins" for one party at low or no cost to others. Because PPPs are usually long-term partnerships, and social PPPs are especially volatile due to their focus on pressing current issues, negotiators should be sure to design flexibility and room for growth into agreements, recognizing that it is impossible to negotiate out every single eventuality.

1-D: Tactics

The first dimension, tactics, strategy, and other "at the table" concerns, are the focus of most negotiation books. One of the premises of 3-D negotiation is that successful setup and deal design "away from the table" create conditions for success at the table and minimize the need for potentially counterproductive hardball strategies.

Successful 3-D negotiators broaden the zone of possible agreements (ZOPA), are aware of cultural sensitivities and other motivating factors, develop trust, and focus on building relationships that allow for successful negotiations.

The Three Dimensions of Negotiation

	Focus	Common Barriers	Approach
1-D	Tactics (people and processes)	Interpersonal issues, poor communication, "hardball" attitudes	Act "at the table" to improve interpersonal processes and tactics
2-D	Deal Design (value and substance)	Lack of feasible or desirable agreements	Go "back to the drawing board" to design deals that unlock value that lasts
3-D	Setup (scope and sequence)	Parties, issues, BATNAs, and other elements don't support a viable process or valuable agreement	Make moves "away from the table" to create a more favorable scope and sequence

By taking the 3-D approach to negotiation, you may find yourself disclosing elements of your strategy to your partner, or you may not. While in some cases, it might be advantageous to inform your partner about moves you've made that will affect the scope of the deal, in other cases it may not be. This may seem counterintuitive to negotiators who are used to concealing their strategy during an aggressive negotiation.

Private-sector partners who out-negotiate their public-sector counterparts may win in the short term. But by failing to produce long-term value for both parties, they may have doomed the long-term prospects of the partnership, to say nothing of future partnerships. A long-term PPP strategy is contingent on maintaining viable returns for both parties over the long run and maintaining a reputation that enables partners to engage in future opportunities.

Key Questions to Consider in Negotiating

- What does your partner need?
- What are their motivations and incentives?
- How do you negotiate to minimize risk and conflicts of interest?
- How do you manage expectations?
- How do you allocate control? Who gets credit for success? Blame for failure?
- How do you engage the public as a partner, ensuring compliance and buy-in?

The "Three C's" of Negotiation

Coordination

Coordination refers to the alignment of divergent methods, practices, and value systems between partners. Creating an environment in which negotiations can yield tangible solutions which map onto existing structures within partner organizations is essential to effective negotiation. Coordination is about efficiency—a coming-together of differences to produce an environment suitable for negotiation.

Cooperation

Cooperation refers to the acknowledgement of differences and the willingness to work through them. Partners who are working together in good faith are cooperating. Effective cooperation is marked by enthusiastic participation in dialogue and solutions.

Collaboration

Collaboration refers to the product of effective coordination and cooperation. Collaboration refers to the creation of value between two or more partners—the shared creation that emerges from an effective negotiation. That value can take many forms—an agreement, a structure, a methodology, a shared understanding—but it is always a new asset to the partnership that emerges from the negotiation process.

The Importance of Cultural Context

Negotiations can also be heavily influenced by cultural context. Culture, in this case, can have a few different meanings—the culture of the country in which you're operating, the respective cultural differences between the public and private sectors—but in each case, effective communication between partners is necessary to bridge cultural divides.

For the most part, governments—especially at the local and provincial levels—are generally well-attuned to the cultural context in which they are operating. The private-sector, on the other hand, may be operating across an international or regional border, making the challenge of adapting to a new cultural context difficult. Let's see how cultural context can affect a negotiation, by examining the case of Stone Container in Honduras.

CASE STUDY

Stone Container in Honduras[50]

In the late 1980s and early 1990s, the Chicago-based Stone Container Corporation was a leading producer of containerboard, newsprint, and market pulp—all of which are produced from lumber. Concerned with increased restrictions on U.S. forestland, and fresh from a similar, successful initiative in nearby Costa Rica, the company opted to explore options in lumber-rich Honduras.

[50]Sebenius, James K., and Hannah Bowles. "Stone Container in Honduras (A)." Harvard Business School Case 897-172, March 1997. (Revised October 1999.)

A series of clandestine negotiations with the president of Honduras yielded an agreement for Stone to harvest 320,000 hectares of pine forests in exchange for $20 million. However, right up until the public release of the agreement, the president kept the precise terms and conditions of the agreement a closely guarded secret. When the deal was announced, criticism was swift. Honduran critics were quick to point fingers at a U.S. multinational engaging in secret negotiations for more than 790,000 acres of Honduran forest. Eventually, accusations of neo-imperialism and corruption doomed the project, and negotiations were halted in 1992.

In some ways, this outcome could have been anticipated. Hondurans, accustomed to dictatorships and highly wary of profiteering U.S. corporations, were suspicious of secretly negotiated agreements. Even more off-putting was the fact that the agreement between Stone and the government was written entirely in English, not Spanish. Despite Stone's commitments to replenish the forest with fast-growing trees and create 3,000 jobs for indigenous people of the region, the optics of the deal rendered the agreement unfeasible.

Stone's failure represents not just a failure of communication, but a failure of negotiation as well. Stone's deal reflected a one-dimensional approach to negotiation: settling on a sale price at the table. Even with concessions for local job creation and forest replenishment, the deal was conventional, allowing Stone to extract profit from a Honduran natural resource. The at-the-table tactics may have yielded a favorable arrangement for Stone, but the ensuing deal was ultimately unsustainable.

Let's imagine how a 3-D approach might have given Stone a better playing field. What kinds of away-from-the-table tactics could they have used to improve the negotiation process? Would Stone have been successful if they had used a PPP?

First, Stone's approach should have begun long before expressing their interest in a lumber deal. Meeting with the Honduran government, in other words, ought to have been the last step in a deal negotiation, not the first.

Stone's preparations for negotiation would have involved a rigorous stakeholder analysis. That analysis would have turned up key stakeholders in Honduras beyond just the government and the indigenous people who stood to gain employment from the project, including indigenous communities at large, environmental groups, and corruption watchdog organizations.

Stone could have benefitted from improved sequencing as well. Stone could have first travelled to the region from which they were considering harvesting lumber, met with indigenous communities, and asked what kinds of assistance they might need. By building clinics, schools, or electrical systems, Stone could have cultivated goodwill within the community and began their negotiation from a much stronger position. They could have engaged with environmental groups on how to responsibly harvest the lumber and re-seed the forests.

And perhaps most easily, they could have avoided an unnecessarily poor public appearance by drafting agreements in both Spanish and English.

The case of Stone Container does not involve a PPP. But it does provide an illuminating example of the pitfalls of engaging in negotiations without due consideration of country context. Stone opened itself up to criticism unnecessarily by foregoing a 3-D negotiation strategy.

We can see 3-D negotiation in practice by looking, again, to the efforts to develop a vaccine for the novel coronavirus. Faced with mounting pressure to develop a vaccine in record time, and with the government eager to distribute the vaccine in advance of the November 2020 election, nine leading companies signed a compact, promising not to release any of their vaccines until they had been thoroughly vetted for safety and efficacy.[51] This was an attempt to assuage the fears of a highly skeptical public, and a signal sent to elements of the Federal government eager to speed through the proper protocols. But it was also a form of 3-D negotiation. By establishing early on that no company would be willing to cut corners

[51]https://www.nytimes.com/2020/09/08/health/9-drug-companies-pledge-coronavirus-vaccine.html

on clinical trials—including those participating in the White House's Operation Warp Speed, these companies were able to control the "setup" element of future negotiations, and ensure that their credibility would not be compromised.

Managing key political elements is another crucial skill for both public and private participants in a PPP.

Key Skill: Political Management

Political management is the negotiation and communication of various political alternatives in problem solving and partnership design. This skill is generally best practiced with a facilitator or mediator who can motivate parties from different political leanings. In all government-backed projects—not just PPPs—there is a risk of sub-optimizing technical, financial, and design decisions in favor of political expediency. Strong political management can bring opposing political factions into alignment and avoid compromising a project's effectiveness. Weak political management will limit a project's reach, forcing a compromise between the right decision and the politically easy one. This demonstrates the significant roles that negotiations and communications play in the optimization of large-scale projects.

In the case of Stone Container, ineffective negotiation was inextricably tied to ineffective engagement of various political elements—including, for example, the local chamber of commerce, business organizations, newspapers, and the idigenous communities. Had Stone thought ahead and managed the relevant political factions, they might have been successful.

Let's examine a case in Taiwan that illustrates just how deeply political expediency can damage the technical success of a PPP and create avoidable financial distress.

CASE STUDY

Taiwan High Speed Rail[52]

Completed in 2007, Taiwan's high-speed rail system (THSR)—a PPP project between the Taiwan High Speed Rail Corporation and the Taiwanese government—required additional government support when the financial crisis of the late 2000s resulted in a reduction in passenger use. When the PPP could not meet the government's debt service payments, the project failed. But the failure was not just a product of an untimely financial crash. The system itself was designed in such a way that failure was unavoidable.

Hoping to avoid the political difficulties that come with laying new high-speed rail tracks in heavily populated areas—a challenge made more complicated by the fact that high-speed rail tracks must be exceptionally straight—THSR chose to situate the stations outside of major urban centers. In so doing, the project managed to avoid the staunch political opposition that comes with relocating citizens. But it also meant that

[52]Chung-Yuang Jan "Taiwan's High-Speed Rail: A Public-Private Partnership Hits a Speed Bump." Harvard Kennedy School, 2010, Case Number 1910.0

riders on the train would need to travel to remote stations outside their respective cities to board the trains at all. This increased distance resulted in diminished demand.

Even given the project's geographical compromises, the government could have taken steps to increase demand for the train. For example, the government could have raised the highway tolls along the parallel route to motivate drivers to take the new train. This was not done, and ultimately, the failure to create demand resulted in the sub-optimization of the project.

Had THSR managed the political interests at stake more appropriately, the rail system might have seen higher ridership and a higher rate of farebox recovery. Often, the politically expedient choice is not the right one.

But political management doesn't merely come down to the kinds of compromises we see in the Taiwan High Speed Rail case—political management can also be a far more multi-dimensional challenge. After all, as government professionals know all too well, a government is not a monolithic structure in which all of its representatives are in total agreement. In many cases, political management becomes a matter of managing the interests of various government institutions as well as private-sector partners.

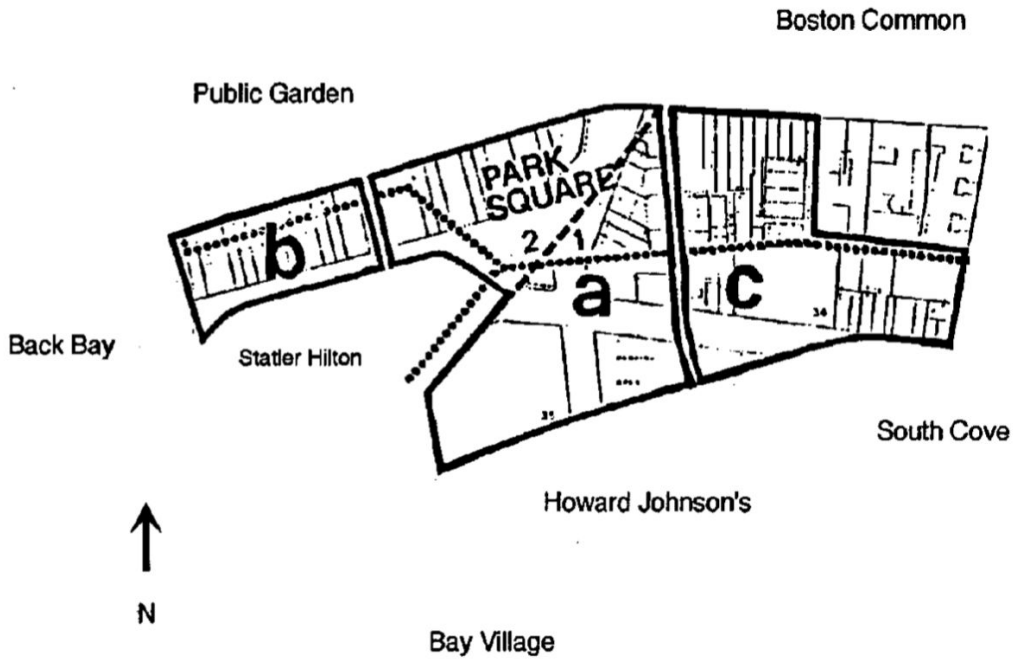
Let's examine another economic development case—that of Boston's Park Plaza—to see how ineffective political management can derail progress on a PPP. Though the Park Plaza case is not specifically about a public-private partnership, it does contain important lessons for prospective PPP practitioners.

CASE STUDY

Park Plaza[53]

In the late 1960s, Boston's Park Square, a confusing intersection of major streets and retail stores just south of Boston Common, was in desperate need of redevelopment. The Square featured a large number of vacant offices, a few large vacant lots used for parking, and the northern end of the Square (known locally as the "Combat Zone") was home to a thriving pornography industry, complete with adult bookstores, strip clubs, and a rotating cadre of for-hire sex workers. The Square's location, however, made the land highly attractive to development; it was nestled directly between Copley Square and the thriving downtown commercial district. Though private investment had renewed portions of the district throughout the 1960s, there were still major areas in need of improvement in 1970.

[53]Colin S. Diver, "Park Plaza," Harvard Kennedy School, 1975, Case Number C16-75-707.0.



The Square was characterized by a bizarre street pattern and a large number of tiny, irregular-shaped lots, meaning that a private developer would have a difficult time acquiring a large enough parcel of land to successfully redevelop it. The solution to Park Square's state of disrepair would rely on cooperation with the public sector—through a significant use of public authority—to dramatically rethink the area from the ground up. But the plan to redevelop Park Plaza would need to navigate an elaborate approval process, not just within the city of Boston, but at the state level as well.

The Massachusetts Department of Community Affairs (DCA) was established in 1968 after the consolidation of several state-level agencies into a single department which reported directly to the governor. Though the department was nominally tasked with supervising local housing and development projects, in practice the department had shown little interest in this type of policing. By 1971, while the DCA had engaged in supervising projects in some of Massachusetts's smaller towns, it had never once come into conflict with the Boston Redevelopment Authority, despite the fact that enormous redevelopment had taken place in Boston.

But in 1971, the DCA's new commissioner, Miles Mahoney, was determined to change that. It was his view that the DCA should take a more active role in supervising development projects, and the plan to redevelop Park Plaza would be one of the first tests of that role.

In March 1971, the city awarded a relatively untested firm called Boston Urban Associates (BUA) with the redevelopment rights for Park Plaza. The plan, which did not feature a firm commitment to deal with the Combat Zone, faced significant opposition from community groups, who questioned BUA's track record, worried about the plan's adverse effects on the environment, and doubted the city's wisdom in selling off its land—in the form of streets that would be discontinued to make larger development lots—for a mere $3 million. But despite the concerns raised in the public hearing process, the Boston City Council passed the resolution. The mayor approved it, and on January 13, 1972, it landed on Miles Mahoney's desk at the DCA.

The plan would need DCA's approval to proceed. And Mahoney was unimpressed with what he saw. In his mind, BUA was a less-than-ideal partner. The firm had insufficient capital and a nonexistent track record. And without a plan to address the Combat Zone, the plan was not, in his estimation, a good one for Boston. Unimpressed with the private sector partners and the logistics of the plan, Mahoney rejected the plan.

Criticism was swift. Boston's mayor, Kevin White, alleged that DCA had been a part of a "conspiracy" from the governor's office. Governor Sargent denied the accusation, but stood by DCA. Until a second submission could be made to satisfy DCA's requirements, the plan was simply illegal.

But opposition continued to mount. Boston's three daily papers—seldom in agreement about anything—denounced the decision and called on the city to reverse Mahoney's decision. Organized labor—which stood to gain roughly 3,000 construction jobs—protested outside the State House. Governor Sargent tried to reassure the crowd; while he supported the idea of a Park Plaza plan, the details would need to be right. Boos and catcalls drowned out his words. A hardhat, tossed from the mob, narrowly missed his head.

This level of support caught both Mahoney and Governor Sargent by surprise. Clearly the governor was more vulnerable than he thought. The next day, Sargent asked Mahoney to reevaluate the proposal with BUA—negotiate and maybe come to some kind of agreement. Mahoney thought it was pointless, but agreed to sit down anyway.

Negotiations seemed doomed from the start. BUA rehashed their original arguments to the DCA, and DCA's opinion of the deal, understandably, did not change. Public sentiment was largely with DCA—residents, environmentalists, and community

organizers were all wary of the plan—but that didn't matter when the Governor announced to newspapers (without telling Mahoney) that a new plan had been submitted, and that it largely addressed his concerns.

Without any political leverage of his own, Mahoney was out of options. With the governor fenced in by labor, the newspapers, and the city government, the project would move forward.

The case of Park Plaza illustrates the pitfalls that can occur when negotiating in an unstable authorizing environment. By failing to manage the political dynamics at play, Mahoney sacrificed his leverage and influence over the Park Plaza decision-making process. Had he recognized the fragility of the authorizing environment, he might have been more able to come to the negotiating table productively. After all, having some positive influence over the plans would have been superior to being flanked by the State House. Not only did the DCA fail to maintain influence over the project, it sacrificed its credibility by not reading the situation correctly.

Professor Mark Moore of the Harvard Kennedy School describes the authorizing environment this way: "It [is] not sufficient for a public manager to have his or her own view of public value; others had to share it. In particular, the group of people in positions that could confer legitimacy and provide financial support to the manager would have to agree with the conception of public value that was to be pursued."[54]

While this may have been the case at the Park Plaza project's outset—the governor and Mahoney were in agreement about the public value of ensuring a legal and sustainable project—their definitions of public value soon diverged. In the governor's view, it was clearly more important to tack towards the interests of organized labor and the editorial boards than to maintain his opposition to the project.

This change in the conception of public value reflects a change in the authorizing environment, and thus a change in the negotiating terrain. In this case, the right decision was to work through the concerns of DCA to arrive at a Park Plaza plan that satisfied all stakeholders. However, because DCA was unable to manage the political calculations at play, BUA was able to effectively navigate *around* DCA. The politically feasible decision was, as it turns out, to cut DCA out of the process entirely.

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[54]Moore, M. & Khagram, S., "On Creating Public Value: What Business Might Learn from Government about Strategic Management, " Harvard Kennedy School, March 2004, Working Paper no. 3.

Though the case of Park Plaza is not a healthcare case, it is still relevant to the kinds of PPPs we're discussing in this guide. For example, the coronavirus pandemic—and the need to rapidly develop and approve tests and vaccines—have dramatically shifted authorizing priorities in many nations. As of this writing, approvals for a Covid-19 vaccine developed in just over a year have raced through many countries' typically labyrinthine approvals processes. In the early weeks of the pandemic, tests were developed and approved at a startling pace. (We will discuss this more in Chapter Six.)

Ultimately, countries who mismanage this change in the authorizing environment might see their credibility diminished—not unlike Miles Mahoney. Imagine, hypothetically, that a vaccine with a significant side effect were to be authorized by the UK's MHRA, or the US's FDA, perhaps because those organizations were responding to political pressure. If that flawed vaccine were administered to hundreds of millions of people, it's hard to imagine those organizations retaining the same level of credibility that they enjoy now.

Moreover, most healthcare PPPs will have repercussions for economic development—the construction of hospitals and clinics, the development of healthcare professionals, or the improvement of public health at large. Governments that see the value outside of the Ministry of Health context will be more successful in leveraging that value to engage the private sector.

Maintaining Credibility

The case of Boston Park Plaza demonstrates a major pitfall facing governments looking to engage with the private sector. We have already discussed how important it is to engage with credible private-sector partners when beginning a public-private partnership. But we have not yet discussed how critical it is for governments to maintain their credibility when dealing with the private sector, and how easy it is to sacrifice that credibility.

In the case of Park Plaza, both public- and private-sector partners were at times deemed to be less than credible. In Mahoney's view, BUA's non-existent track record and limited financial backing called the private sector's credibility into question.

On the other hand, Mahoney's credibility was also limited. His failure to understand the changing nature of the authorizing environment (and the political pressures placed on the mayor and governor) led directly to his being cut out of the process. Ultimately, due to this oversight, his credibility as a supervisor of local housing and development projects was compromised, not just for this project, but for those in the future as well.

For government professionals engaging in PPPs, it is essential to maintain a firm understanding of the policy problem at hand, the decisions that must be made to solve that problem, *and* the authorizing environment in which those decisions will be made. Practitioners that do not maintain a firm grasp of the current authorizing environment run the risk of losing credibility, and even their authority.

CHAPTER 5

How can partners address obstacles without sacrificing value?

Addressing Issues as They Arise

Even with the best planning, methodology, and assumptions, the negotiation process will reveal new problems and challenges over the life of the partnership. One may not be able to identify all the hazards in advance. Some problems that come up will prove existentially threatening to the partnership.

The engagement phase of PPP creation is, simply put, where mistakes tend to happen, as partners will inevitably encounter obstacles. Minimizing the degree and frequency of these mistakes and mitigating their effects is essential to success.

The power of governments in particular to address and overcome obstacles can be seen in the United States' PPP-based efforts to develop a vaccine—efforts which, as of this writing, appear to have paid off, with vaccines from several companies already being distributed under emergency-use authorizations. For biotech firms participating in the United States' Operation Warp Speed, the benefits of having an engaged government to mitigate obstacles were obvious. According to the New York Times, "when Moderna discovered this summer that an air handling unit for its factory could not be delivered over a weekend because of Covid-19 limitations on interstate trucking, [the Defense Department] stepped in. Warp Speed officials arranged a law enforcement escort to accompany the massive piece of equipment from the Midwest to its Massachusetts manufacturing plant." In another example, "the team again sprang into action when Moderna discovered that a specialized pump, needed to make the first batches of vaccine for the clinical trials, was marooned in a rail car and was not going to be delivered on time. Federal workers tracked down the train and rummaged through it until they found the pump."[55]

Problem solving and collaborative thinking are both essential elements of the engagement phase. Partners in a PPP must be able and willing to overcome logistical, technical, and organizational hurdles—but this process does not always look the same in every country.

[55]LaFraniere, Thomas, Weiland, Gelles, Stolberg, & Grady. "Politics, Science and the Remarkable Race for a Coronavirus Vaccine," *The New York Times*. 21 November 2020.

Cultural Sensitivity and Country Context

One common mistake in PPP negotiation lies in giving insufficient consideration to country context. The simple reality of engaging in a global PPP strategy is that no two countries are quite alike. Different countries have different cultural norms, different social mores, different forms of government, and different regulatory environments. These differences—sometimes vast, sometimes subtle—can all have a great impact on the reproducibility of a given PPP model.

In other words, what works in Saudi Arabia might not work in Singapore, and vice versa. Paying special attention to country context is a crucial element of a coherent PPP strategy. The case of the development of Dharavi, Mumbai's largest slum, provides an illuminating example.

CASE STUDY

Dharavi: Developing Asia's Largest Slum[56]

Dharavi is Asia's largest slum. Nestled in the south of Mumbai, the 2.23 square kilometers of Dharavi are home to some 700,000 people—roughly the population of Boston—making the neighborhood one of the most densely-populated settlements in

[56]Iyer, Lakshmi, John D. Macomber, and Namrata Arora. (2009). "Dharavi: Developing Asia's Largest Slum (A)." Harvard Business School Case 710-004. (Revised June 2011.)

the world. Disease and sanitation issues in the area are understandably rampant. On average, only 17% of Mumbai slum residents have access to household toilets. The plan to redevelop Dharavi would not be a simple urban redevelopment case—it would have remarkable public health benefits as well.

However, the land on which Dharavi sits is also incredibly valuable. Property prices in Mumbai are among the highest in the world, and a single-story slum is hardly an efficient use of land located 20 minutes from the airport, between the city's two main railway lines.

The Indian government felt that it might be possible to redevelop Dharavi using a public-private partnership. Because land value in Mumbai was so high, it was speculated that the project could remain profitable even if private developers were forced to provide free housing to current residents of Dharavi.

Foreign developers rushed to get in on the action, and the project to develop Asia's largest slum was dubbed the Dharavi Redevelopment Project (DRP). And yet, the Indian government's attempts to redevelop Dharavi encountered a curious problem. Unlike other slums in the country, the citizens of Dharavi were highly politically organized. Because of the slum's large population, Dharavi acted as a massive political voting bloc. These were not the disenfranchised slum-dwellers typical of other low-income locales; the residents of Dharavi were organized and not afraid to wield their political power. Dharavi was also a hotbed of economic activity. These citizens were a mix of poor and middle-class residents, and the slum actually produced significant economic output—about US$600 million per year. This economic power added to Dharavi's political clout. Now the DRP had to contend with three powerful, active stakeholders: the private sector, the public sector, and the residents of Dharavi.

This case illustrates the importance of country context. The value proposition for the project was quite reasonable, but the cultural and political elements that affected the project were enormous and hard to quantify. The political clout of Dharavi's residents meant that community buy-in was essential for the project to succeed. This condition forced investors to act not only as financial analysts, but as political analysts too, adding to the riskiness of the DRP.

For one, few residents of Dharavi had legal deeds to their properties, and though slum dwellings were traded informally, residents raised concerns about how residents entitled to new housing could prove their eligibility. Residents, justifiably suspicious of massive

relocations and change, also felt that environmental impact assessments and infrastructure plans had been left purposefully vague. Residents also were concerned that informal industries like leather tanning, recycling, and fabric dyeing—which employed a bulk of Dharavi's workforce—would be deemed environmentally hazardous and forbidden with redevelopment.

These concerns, which often manifested in peaceful protests of the project, significantly impeded progress. Ultimately, hopes of moving the project forward were contingent upon understanding and reconciling the needs of various stakeholder groups unique to India, and to Dharavi.

We will discuss the Dharavi case in more detail in Section Three: Value Creation.

Flexibility of Agreements

As we have seen, PPPs can be fragile structures. We have seen how flawed estimates about demand were able to turn Indiana Toll Road from a plausible, profitable PPP to a fundamentally unsustainable one. We have discussed how *reducing* demand is important to optimize healthcare outcomes. But what if efforts to "narrow the funnel" are unsuccessful? What if demand exceeds expectations? Can a PPP successfully mitigate unexpected levels of demand?

Effective engagement is all about flexibility. Assuming that no financial projection is perfect, it stands to reason that PPPs must establish structures to help weather unexpected circumstances. The private sector, however precise in its financial models and exacting in its contractual agreements, is far from infallible. Maintaining receptiveness to unforeseen circumstances is essential to sustaining a PPP. However, contract law is often less amenable to flexibility, as contracts are designed to be as rigid and specific as possible, to avoid confusion. But flexibility of agreements does not necessarily translate to imprecise contracts. To examine how flexibility can create sustainability, let's return to Lesotho's National Referral Hospital.

CASE STUDY

Lesotho National Referral Hospital

We have already examined how Lesotho's pioneering set of performance-based metrics were able to ensure an effective allocation of risks and opportunities. But Lesotho's model was sophisticated in other ways as well.

One concern the project faced was how to manage the increased demand that would accompany success. Ironically, the better the quality of healthcare at the new hospital, the more patients who would flock to it. Would citizens bypass the 180 additional clinics scattered around Lesotho, choosing to seek treatment at the new hospital in Maseru? That kind of demand would be untenable, but there was no way to predict the threshold at which demand would exceed supply.

To address this problem, the PPP agreement established a joint services committee, with representatives from the Ministry of Health and the special purpose vehicle, which would meet quarterly to revisit the performance indicators. If it was agreed that the contract needed to be revisited to adjust for increasing demand, changes would be quickly sent back to senior principals to amend it. With all parties in agreement that changes and modifications were to be expected, an ongoing relationship of trust and understanding was established.

The flexible structure proved successful. Today, crowds do gather every day outside the hospital at around 6 a.m. But most days, by 11 a.m., all patients have been either treated or referred.

Disengaging Responsibly

You may encounter an obstacle in your engagement that is so large it appears fatal to the project. As we've discussed, there are numerous techniques and skills that can help you overcome obstacles, even large ones. However, depending on the scale or nature of an obstacle, it may become necessary to disengage from the partnership entirely. In these cases, it is essential to use communication to disengage effectively without "closing the door" on future partnerships.

While each partnership is unique, and thus the means by which a partner disengages is likely to vary, there are three general principles to keep in mind:

First, it is essential that agreements, along with being flexible, provide explicitly for the exact terms under which a partner may exit the partnership. These terms would usually include

failure of a partner to deliver on established benchmarks, or circumstances outside of the scope of the partnership, such as bankruptcy. Developing a detailed set of circumstances that would justify terminating the partnership can greatly avoid confusion and misunderstanding in the event that it proves necessary.

Second, open communication is key—before disengaging, have partners been clear and upfront where expectations have not been met? Are there ways to amend the agreements to better suit both partners' interests? Are partners open to renegotiating expectations in light of changing circumstances? It is possible that efforts to ameliorate disagreements will be unsuccessful, but an open communication strategy will help avoid unnecessary cancellation of a PPP, and ensure an amicable termination if it proves necessary.

And finally, it is crucial that a disengaging partner conduct an assessment of the partnership's failings after the fact. By thoroughly examining where the partnership failed and where it succeeded, partners—both public-sector and private-sector—can prepare themselves better for future cross-sector engagement.

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SECTION III

Value Creation

CHAPTER 6

How can partners use PPPs in value creation?

What Is Value Creation?

Value creation is the process by which partners can create value external to the assets they brought into the partnership. A successful PPP is, to borrow an old saying, "greater than the sum of its parts." By using a PPP to optimize resources, reduce inefficiencies, and drive innovation, governments can engage in value creation.

The tools, skills, and frameworks we have studied in this Guide are, in a way, all geared towards creating value. In other words, value creation is not so much a "last step" in the process (after preparation and engagement), but the goal or objective of the process itself. Each step in your process, from stakeholder analysis, to negotiation, to communication, should be assessed by asking whether it creates value for the partnership.

How Can Partners Create Value?

Generally speaking, PPPs can create value in one of two ways: by mitigating obstacles, or by creating opportunities. While these two categories often overlap, understanding the distinction between the two can be helpful in identifying areas of value.

Mitigating Obstacles

Partners can create value in a PPP by removing obstacles and points of friction between partners that would ordinarily exist without the PPP. Sources of friction can include bias, miscommunication, or misaligned incentives—we have already discussed several cases in which a well-designed PPP was able to reduce friction or redundancy between sectors, such as in the case of New York City's parks.

And as we will discuss in a few pages, governments around the world—most prominently in South Korea—have used PPPs to effectively and rapidly expand Covid-19 testing, by accelerating approvals and removing barriers for private-sector test developers. Rather than simply taking a laissez-faire approach, however, South Korea worked collaboratively with the private sector to ensure that tests were as accurate as possible, even under accelerated timelines. This approach reflects a mitigation of key obstacles.

Creating Opportunities

But of course, PPPs can also create value by creating new, organic utility. Instead of removing inefficiencies, PPPs can create new opportunities, such as the construction of new public fitness centers by Singapore's Health Promotion Board.

Turning once again to the Covid-19 crisis, we might point to PPP-based efforts to develop a vaccine, creating a new, supportive environment for the private sector to innovate on a record-setting timeline. As of this writing, vaccines developed by Moderna, AstraZeneca, and Pfizer-BioNTech have already received emergency use authorization in a handful of countries based on their safety and efficacy.

Of course, some frameworks, such as "converting liabilities into assets," involve both mitigating obstacles and creating new opportunities simultaneously.

What Is Value?

Ultimately, the challenge of creating value is also one of defining it—settling on criteria for a successful partnership, establishing metrics for determining whether those criteria have been met, and communicating success to both partners and the wider world. But in order to define value in the context of a PPP, we must first establish what that value looks like.

Obviously, specific definitions of performance and success will vary depending on the PPP in question. Additionally, it is common in PPPs that each partner will have a slightly different sense of what success looks like. Therefore, one of the key goals of successful value creation is to reach a specific and mutually agreed-upon set of criteria for what success looks like. In other words, to explicitly define "value" within the context of the PPP.

EXAMPLE

How Do Corporations Look for Value?

While defining value is a process that is unique to each PPP, many private sector corporations will address value through a series of criteria, such as those below. Though this list is meant to be instructive, it is not exhaustive. This list simply exemplifies certain kinds of criteria a private sector partner might be inclined to pursue in determining what value looks like:

Does this partnership reflect a mutually beneficial interest in areas of alignment?

Partnerships should ideally be symmetrical—partners should share equally in risks and opportunities. In order to ensure this symmetry, it is crucial that a partnership exists for the mutual benefit of both parties. By capitalizing on an area of mutual benefit, partnerships begin from a place of strength and mutual agreement.[57]

Balance: Is the partnership fundamentally equal?

While we have discussed the importance of appropriately allocating risks and opportunities already, it is important to remember that many private-sector companies will be looking for some fundamental parity in the contributions from each partner. Imagine a partnership in which one partner assumes 90% of the risk in exchange for 90% of the opportunity. Though this would theoretically be an appropriate allocation of risk and opportunity, it would not meet the criteria of being an equal partnership. Such a small investment of risk on the part of one partner could easily lead to mistrust, and ultimately instability in the partnership.

Generally speaking, partnerships that are as equitable as possible are those that are most successful. However, this does not necessarily mean that both partners must be able to commit equal amounts of each resource. One partner may contribute more capital, while the other might contribute a greater share of its human resources. Overall, both partners should try to contribute an equal amount of effort, however that is defined between them. As long as the contributions of each partner reach parity, the partnership is operating on equal footing, and stands a far greater chance of success.

In reality, however, partners from both the public or private sector may find themselves in asymmetrical partnerships due to capacity gaps—i.e., execution, financing, or innovation gaps. When faced with such constraints, either party should leverage its relative bargaining power through 3-D negotiation to level the playing field, thereby improving the likelihood of success in the PPP.

Does this partnership address a clinical care need or fill a scientific gap?

While many PPP projects are designed to improve clinical care outcomes—like the Lesotho Hospital Case—PPPs can also be helpful in developing new, innovative solutions. Many private-sector corporations, particularly those invested in developing innovations and new treatments, will be looking for specificity in terms of the project's

[57]This concept is similar to this Guide's description of the Value Alignment Scale. See Chapter Two.

goals. Value, to a private-sector company, might include offering or contributing financial support in return for developing innovative products or establishing a suitable authorizing environment for bringing those products to market. Projects with goals that align well with the business model of a private-sector partner are those that are more sustainable over the long run.

Furthermore, many of the most effective PPPs we have discussed in this Guide are not aimed at significant innovations, or "moonshot" objectives like a cure for cancer. In fact, while we have explored innovation as a potential benefit of PPPs, value creation can also happen with simpler interventions.

In Taiwan, at the beginning of the Covid-19 crisis, PPPs were used to quickly ramp up production of personal protective equipment, increasing daily production capacity from 1.88 million medical masks at the virus's first appearance in China to over 20 million.[58] So, for all that PPPs can be used to spur innovation, they are also effective management tools; their ability to increase efficiency for low-cost interventions should not be overlooked. This proves especially effective in situations where the profit motive might incentivize companies to pursue long-shot (and patent-protected) innovations, rather than engaging in low-cost, low-profit solutions.

Are both partners in agreement about the metrics used to measure success?

It is crucial that partners agree on well-defined metrics for measuring success. These metrics should be as concrete as possible, and should be flexible enough that, as circumstances change and develop over the life of the partnership, they can be revisited. However, it is also critical that this performance is linked to a clear, fair system for resolving disputes. The more closely a clear definition of success and failure is tied to the resolution of disputes, the more easily those disputes can be resolved.

Are both partners in agreement on a timeframe for the project?

We have already discussed the importance of engaging in PPPs on longer timeframes. It is equally important, however, that both partners are in agreement about a project's timeframe. If disagreement exists about when to stop and measure success, partners could conceivably come to wildly different conclusions about whether success has been achieved or not. This can lead to contentious disputes, ultimately jeopardizing the sustainability of the partnership.

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[58]Strong, Matthew. "Taiwan economics minister unveils new coronavirus mask policy." Taiwan News. May 27, 2020.
https://www.taiwannews.com.tw/en/news/3940842

Does the partnership exist within a stable authorizing environment?

We have explored, as in the Park Plaza case, how the stability of the authorizing environment is crucial to executing effectively within a PPP. However, because PPPs take place over such long timeframes, it is not always possible to maintain total stability in this regard. This is because the broader enabling environment for PPPs tends to change over long enough timeframes.[59] This type of instability is of particular concern to private-sector partners, who exert less control over the authorizing environment than their public-sector counterparts. It is crucial, then, that both partners agree to a regular reassessment and renewal of the authorizing environment underpinning a PPP.

Defining a set of criteria for assessing value is an important step in the execution of any successful PPP. However, it is just as important that partners are empowered to achieve success, not merely to define what it looks like. In other words, once partners are in agreement about what value looks like, they must then have the skills to realize that value. So how does value actually get created? There are a few common ways:

Value Creation through Value Alignment

How Does Value Alignment Create Value?

The case studies in this guide have already provided numerous examples of values being aligned to produce positive outcomes for stakeholders. In the cases of Lesotho's National Referral Hospital and Singapore's Health Promotion Board, values were aligned to create effective structures that benefit both parties.

We have already discussed how PPPs can reduce friction between the public and private sectors to deliver efficiencies that create value. By aligning the interests of public- and private-sector partners, well-designed PPPs ensure that, rather than working across purposes, partners are incentivized to act in the best interests of the partnership. But this form of value creation is only one part of the story.

When we discuss PPPs, we generally refer to their strengths in reducing costs and internalizing positive externalities, but in addition to removing inefficiencies and ensuring effective cooperation between partners, value alignment can also create *new* value. In other words, more than simply getting a job done cheaply, PPPs can sometimes get it done *better,* creating value from scratch.

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[59]Casady, Carter B. 2020. Examining the institutional drivers of Public-Private Partnership (PPP) market performance: a fuzzy set Qualitative Comparative Analysis (fsQCA). *Public Management Review*, pp.1-25.

In the case of Lesotho's National Referral Hospital, for example, performance metrics not only created a sound economic structure for both partners, they led to better healthcare outcomes for patients. Those patients may be able to return to work, or require less care from family and friends, leading to years and possibly decades of increased productivity. In the case of Singapore's Health Promotion Board, Singaporeans who encounter exercise programs or healthier choices at hawker stands may avoid contracting a non-communicable disease in the first place. While it can be difficult to quantify this type of value creation—declining incidence of NCDs is a metric best measured on a long timeframe, and the relationship between a specific program and NCD incidence can be difficult to measure exactly—that doesn't make it any less real.

Conflicts of Interest

Recall that when a large corporation has elements of their business model that conflict with public sector health goals, a conflict of interest is created. It can be difficult for governments to know whether to engage the private sector, or whether such engagement will benefit them in the long run. Recall also that conflicts of interest can be managed through effective incentive design.

While it can be challenging to effectively map the incentives of a large multinational corporation, it is a task that can prove highly valuable to a public-sector partner looking to maximize value within a PPP. There are relative risks in engaging a private-sector partner where conflicts of interest are present, as we have explored. However, it is also clear that, if governments are willing and able to manage these conflicts, they can find new areas of value that, left untapped and unexplored, could otherwise be squandered. Therefore, governments must ensure they have the necessary capacity to actually plan, execute, and manage PPP arrangements.

Let's now return to our hypothetical example about the theoretical BigSodaCo water project. Recall that the government faced a series of trade-offs—would the increased availability of fresh water increase or decrease public health? Would the cost savings of partnering with BigSodaCo offset the cost of higher rates of diabetes and other NCDs?

While the answers to these specific questions will vary from project to project, it is clear that governments who are unwilling to explore the possibilities for value creation within these trade-offs could be leaving value on the table. Measured against the opportunity cost of abandoning an entire project, the management of conflicts of interest could also be considered a form of value creation.

NCDs: The Economics of Value Creation

As studies like those at the University of Victoria begin to quantify the massive costs—both actual and opportunity—associated with NCDs, it has become clear that the problem is too large to ignore.

However, the opportunity costs associated with NCDs also present a unique opportunity. In combating non-communicable diseases, partners are actually engaging in value creation by increasing the productivity and longevity of the workforce. Addressing the NCD problem is not only a matter of reducing costs on healthcare structures, it is also a matter of increasing a population's economic output.

We have discussed how non-working citizens can quickly become liabilities, using government services at a far higher rate than they produce economic value. We have also discussed how long-term NCD patients can remove their friends and family from the workforce by requiring involved at-home care.

Likewise, we have highlighted how a healthy citizen can, by participating in the workforce, act as an economic asset to society. This, too, is a form of value creation. By delivering, say, decades of additional working life to a population, a PPP can create lasting value. How this value is ultimately captured and shared between the public and private sectors remains difficult to quantify, but new ways of measuring success are emerging to meet this very challenge (see Chapter 7).

Value Creation through Economies of Scale

What Are Economies of Scale?

Economies of scale are the per-unit cost advantages that enterprises realize in producing larger quantities of a given product. Generally speaking, as a company produces more of something, the cost per unit decreases. This is especially true for mass-produced goods.

EXAMPLE

Economies of Scale

To illustrate the point further, imagine that your company produces automobiles. What would be the costs associated with producing your first car? You would need a factory, engineers, workers, and specialized machines and tools. Workers would need to be

trained. These huge start-up costs would quickly add up, and your first car could end up costing millions of dollars to produce.

But, of course, you probably didn't get into the car business to make just one car. Imagine that instead of producing just one car, you make 100. True, some of your costs would increase—you would need more steel, more hours of labor from your workers, and perhaps your machines would need repairs and servicing. But you would also be able to spread out the up-front costs from your first car across the next 99. For example, you probably wouldn't need to create a design for your car again. You wouldn't need to build a factory, or invest in expensive machines. You wouldn't need to invest in additional training for your workers, who could make the next 99 cars just as they'd made the first one. By producing more cars, your total cost would increase, but your cost per car would decrease. If you were to make hundreds of thousands of cars in the factory, these decreases could be quite significant. This is an economy of scale.

How Do PPPs Create Economies of Scale?

This leads us to the question: are healthcare products anything like cars? Can they be mass-produced in the same way? The answer depends largely on the type of product in question. Many healthcare products are, indeed, mass-produced. Vaccines—identical goods produced in large quantities with little variation from product to product—are a perfect example of a mass-produced healthcare product. Mass production is also one of the many reasons that the pharmaceutical industry has been so profitable. Pharmacological products can be mass produced, shipped cheaply, and maintain a relatively long shelf life.

Of course, the cost-savings advantages are not the only reason to pursue a PPP. We need only turn to the Covid-19 crisis to see how PPPs have been deployed all over the world to both expand coronavirus testing and to develop a vaccine expeditiously.

But how do economies of scale apply to PPPs specifically? We have already discussed how Gavi, the Vaccine Alliance, was able to create an economy of scale by consolidating demand across entire regions, "bending the cost curve" of vaccination towards affordability. Many healthcare services can also benefit from an economy of scale. Services like dialysis rely on expensive machines whose up-front costs are prohibitive if not spread out among large numbers of patients—this, too, represents an opportunity to build an economy of scale.

We have also seen how Singapore's Health Promotion Board decided to transition from targeting individual hawkers in the Healthier Hawker Program to targeting large

chains—which serve far more consumers in far larger quantities—through the Healthy Dining Program. Because PPPs are generally deployed to create large, scalable projects, they offer distinct advantages when it comes to establishing economies of scale. Governments' unique ability to engage large numbers of consumers creates new, innovative opportunities for achieving scale through PPPs.

Of course, the private sector can also create an economy of scale, even in cases where mass production is not possible. Let's examine the case of the Steward Health Care System, a network of hospitals that worked to reduce redundancies and increase efficiency in order to capitalize on the "economy of scale" effect.

CASE STUDY

Steward Health Care System[60]

The case of the Steward Health Care System illustrates the advantages that an economy of scale can provide. In 1985, the Boston archdiocese founded Caritas Christi Health

[60]Trager, Alan M. & Kng, Christine, "Steward Health Care System: Betting on low-cost, high-quality healthcare," PPP Initiative, 2017.

Care, a non-profit established to manage six hospitals in eastern Massachusetts. As the second-largest healthcare system in New England, Caritas served roughly 500,000 patients each year and employed 12,000 personnel.

However, like many Catholic hospitals, the Caritas network prided itself on accepting patients regardless of their insurance status. While this practice was in line with Catholic priorities, it also resulted in large percentages of uninsured patients, and by 2010 Caritas found itself in dire financial straits, as uninsured patients are often unable to pay for services. Faced with mounting costs—deferred maintenance, a Catholic church unable to backstop the network due to costs associated with its high-profile sexual scandals, and $495 million in unfunded pension obligations—the network was dangerously close to insolvency. The Caritas network had become a liability.

When the network was purchased for $895 million by Cerberus Capital Management, CEO Ralph de la Torre knew that significant challenges lay ahead.[61] He was convinced, however, that the newly-formed and newly-improved Steward Health Care System could lure enough patients from Boston's expensive teaching hospitals to restore solvency to the network. De la Torre felt that, if he could convince physicians to refer their patients to its hospitals instead of to Boston's famous—and expensive—teaching hospitals, Steward could become profitable.

A large part of de la Torre's strategy relied on consolidating the patient experience vertically—making sure that network doctors would send patients to Steward facilities wherever possible; care managers would collaborate with Steward medical providers; and Steward hospitals would discharge patients into the care of Steward physicians. These strategic moves not only ensured that patients remained within the network whenever feasible, but also created new efficiencies, reducing the burden of information transfer and eliminating redundancies in care. However, it also created a need for improved managerial resources—including technology—and widened the scope of the project to include a more holistic approach to patient care than the traditional service-by-service approach.

De la Torre's acquisition of additional hospitals also represented an attempt to develop economies of scale. More properties, he thought, would spread fixed costs—specialized

[61]De La Torre holds an undergraduate degree in engineering from Duke University, an MD from Harvard Medical School, and a master's in health science and technology from MIT. Trained as a cardiac surgeon, De La Torre also served as founder, president, and CEO of the Cardiovascular Institute and Cardiovascular Management Associates at Beth Israel Deaconess Medical Center.

equipment, managerial assets—across a wider base. And as even more patients flowed through the Steward system, the marginal cost per patient would decrease. By consolidating patient care within the network while also spreading costs over a wider patient base, Steward was able to turn the failing Caritas network into a successful, solvent business. Today, Steward is the largest private physician-led healthcare network in the world, operating in nine states, and following a deal announced in 2018, in Malta.

The Steward case illustrates the benefits of an economy of scale in a more complex paradigm than the one in our car factory example. Simply put, not all healthcare products are as easily scalable as vaccines. Many healthcare products are highly individualized, requiring a treatment plan specifically prescribed to each patient. Doctors must be able to monitor progress and recommend adjustments. To return to the car factory analogy: if you had to design a completely custom vehicle for each customer, your economy of scale would diminish. Of course, in healthcare (as in cars), there are ways to customize products without redesigning them completely—this is called "mass customization," and it represents a middle-ground between mass production and total customization. Many healthcare products fall into this category—developing a specific treatment plan for a patient may be more expensive per unit than producing a thousand identical pills, but it does not mean that there are no scale advantages.

Does the necessity of individualized treatments in healthcare mean that no economy of scale exists for these kinds of products or services? Not necessarily. Steward illustrates how a large hospital network—an entity which is ultimately responsible for developing individual diagnoses and executing highly specific treatment plans—can be scaled effectively. Ultimately, the Steward case also demonstrates how effective management, communication, and strategic thinking can transform a liability into an asset.

Value Creation through Governance

Value can also be created through effective governance. Ineffective, disorganized governments can quickly create large disutilities, sub-optimize resources, and limit value creation. For an example of how governance can impact the efficacy of a PPP, we need only look to the dramatically divergent Covid-19 responses of two countries: the United States and South Korea.

EXAMPLE

Covid-19

In the early months of the Covid-19 pandemic, governments from low-, middle-, and high-income countries alike were scrambling to control its spread. Of course, what we know now—and did not know then—was that a significant portion of the virus's communicability was due to asymptomatic spread. Without the guaranteed onset of recognizable symptoms—and in less-severe cases, those symptoms that do exist are often no different from those of the common cold—one thing became clear: if governments were going to contain the virus, they would need a massive rollout of testing capacity, and fast. The solution, as determined by many governments, lay in engaging the private sector.

WHO's April 2020 "Covid-19 Strategy Update" called for a "whole-of-government, whole-of-society approach," in which governments should, "re-purpose and engage all available public, community and private sector capacity to rapidly scale up the public health system to find and test, isolate, and care for confirmed cases (whether at home or in a medical facility), and identify, trace, quarantine and support contacts."[62]

It was a unique circumstance. Rather than turning to PPPs for marginal advantages in efficiency, or cost-savings, governments were looking to the private sector for increased capacity, and an expeditious rollout of essential services. With public-sector lab capacity quickly overwhelmed, the private sector needed to be engaged. Was the private sector up to the job?

In South Korea, the answer was undoubtedly "yes." At an urgent, late-January meeting, the South Korean government engaged 20 companies in a race to find a suitable test, promising to cut through red tape and authorize an expedited approvals process. By February 12, the government had already approved two tests, and were able to cover the cost of testing for anyone with symptoms (asymptomatic citizens wanting a test could pay 150,000 won, or about 125 dollars. Concerned that the expedited approval might negatively impact the accuracy of the tests, the government decided to cross-check the fast-tracked tests to ensure they were working.

[62] *Covid-19 Strategy Update*. World Health Organization. 14 April 2020. https://www.who.int/docs/default-source/coronaviruse/covid-strategy-update-14april2020.pdf

The gamble paid off. South Korea's swift action on the pandemic is now world-famous. At its peak, the country's rate of new cases per day exceeded 1,000. By April, that number was in the single digits.

Of course, PPPs were not employed to great effect everywhere. The United States, too, employed PPPs to increase its testing capacity, partnering with pharmacies and testing firms like CVS, Walgreens, eTrueNorth, and Quest.[63] But the U.S.'s much-maligned testing strategy was, indeed, woefully slow. Was this due to inefficiencies in the private sector? It would seem not. According to Reuters, faulty government-produced tests from the CDC, and a slow, five-week FDA approvals process left the United States significantly behind the curve. In other words, it seems that it was government mismanagement, and not private-sector involvement that resulted in testing shortages across the United States.

As we can see, private-sector companies in both the United States and South Korea were able to quickly mobilize and develop effective tests. But whereas in South Korea, the government was able to move swiftly through its usual regulatory processes, in the United States, this was not the case.

This points to one of the key hazards involved in cross-sector collaboration. PPPs are not a panacea by any means. Private-sector involvement in a given project does not always ensure efficiency, competence, or value creation. While a well-structured PPP may promise these advantages, execution is key.

Of course, speeding approvals is not always a good thing, particularly in healthcare. Each PPP is unique, requiring a unique approach to governance, as we have mentioned. However, the examples above highlight how good governance—moving swiftly, engaging the private sector early, and fast-tracking (but not relying solely on) an approvals process—enabled South Korea to beat back the uncontrolled spread of Covid, while the United States failed.

Corruption and The Rule of Law: Impacts on Value Creation

We have already discussed the importance of the rule of law in developing a public-private partnership, because the rule of law is essential to brokering stable, binding contracts. We have also discussed the degree to which corruption can impede progress and create an

[63] "HHS Extends COVID-19 Testing Public-Private Partnership. 30 June 2020. https://www.hhs.gov/about/news/2020/06/30/hhs-extends-covid-19-testing-public-private-partnership.html

undesirable environment for private-sector investment. Expressed another way, these failures of governance are impediments to value creation.

The instability that comes from a corrupt government cannot be overstated. While corruption within a government may not place a project out of reach, it certainly impacts the financial considerations of a potential private-sector partner. To see this in concrete terms, let's return to India, and to the Dharavi Redevelopment Project.

CASE STUDY

Dharavi: Developing Asia's Largest Slum

Recall that in the case of the Dharavi Redevelopment Project, the residents of the Dharavi slum were able to organize politically, effectively register their demands for the project, and ultimately shape outcomes. The political clout of the residents of Dharavi added an unstable element to the project's negotiative landscape, and increased risk for investors by forcing financial analysts to act as political analysts as well. These circumstances underscore the importance of cultural sensitivity and country context in PPPs.

But the residents' concerns were far from the only unstable element present in the DRP. Corruption within the government added significantly to costs, reducing the viability of the project for private-sector investors.

If we examine Exhibit 5C—a budgetary breakdown of the Dharavi Project pulled directly from the case study—we can begin to get a sense of how corruption within the government can create inefficiencies and hinder value creation.

Exhibit 5c: Sources and Uses of Funds

Exchange Rate	50 : 1	All currency in INR

SOURCES		
Debt Financing		
Loan to value		70%
Interest rate		10%
Principal		153,237,720,577
Equity		65,488,774,760
Total Sources		218,726,495,337.22

USES		
Slum rehab		
Total cost of transit housing		11,970,000,000
Slum rehab (apartments & amenities)		
# of units		57,000
SF/unit		300
Cost/SF		1,200
Cost/unit		360,000
Total cost of slum rehab		20,520,000,000
Slum workspace/civic space		
# of units		18,000
SF/unit		300
Cost/SF		1,200
Cost/unit		360,000
Total cost of slum wrk/civic space		6,480,000,000
Market rate development		
Total allowable SF		30,000,000
Residential allocation		50%
Commercial allocation (allowable)		50%
Commercial allocation SF (allowable)		15,000,000
Actual % of allowable commercial %		100%
Market rate apartments		
# of units		15,464
SF/unit		970
Cost/unit		2,328,000
Total cost of market rate apt's		36,000,000,000
Market rate commercial space		
# of units		10,000
SF/unit		1,500
Cost/unit		3,600,000
Total cost of mkt rate comm space		36,000,000,000
Infrastructure - roads, w&s, electric		
Cost/SF		400
Project ares in SF		70,000,000
Total cost of infrastructure		28,000,000,000
Total construction costs		138,970,000,000
Bidder's premium		
Premium PSF of free sale		450
Total bidder's premium PSF of free sale		13,500,000,000
Construction loan interest		31,507,681,052
Longt-term maintenance fund		1,500,000,000
Land cost		-
Transactions costs	2%	1,285,714,286
Approval Costs as % of other costs		23%
Approval Costs		31,963,100,000
Total Uses		218,726,495,337

REVENUE	
Market rate development	
Market rate apartments	
# of units	15,464
SF/unit	970
Price/SF	12,000
Revenue/unit	11,640,000
Total revenue of market rate apt's	180,000,000,000
Market rate commercial space	
# of units	10,000
SF/unit	1,500
Net rent/SF/Yr	600
NOI	9,000,000,000
Cap Rate	14%
Total revenue of mkt rate comm space	64,285,714,286
Total Project Revenue	244,285,714,286

RETURNS	
Revenue	244,285,714,286
Cost	218,726,495,337
Profit	25,559,218,948
Profit Margin	10%
Return on Assets	12%
Return on Equity	**39%**

Source: Illustrative computations by casewriters.

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[64]Iyer, Lakshmi, John D. Macomber, and Namrata Arora. (2009). "Dharavi: Developing Asia's Largest Slum (A)." Harvard Business School Case 710-004. (Revised June 2011.)

This chart, which enumerates the sources and uses of funds within the Dharavi project, gives a relatively detailed overview of the costs associated with the project. Costs for transitional housing, infrastructure, construction, and labor, (all listed here) are relevant to private-sector investors, and obviously have profound impacts on the bottom line. However, the chart apportions a curiously large value—31,963,100,000 rupees (or roughly $445 million dollars) for "Approval Costs." As a percentage of other costs, approvals constitute 23% of the project's total budget.

That is a large number. Roughly speaking, one in every five dollars spent to redevelop Dharavi was to be spent not on the construction of valuable infrastructure or the mitigation of community concerns, or but on the securing of approvals and the navigation of the Indian bureaucracy.

It is impossible to say whether a number this large stems primarily from corruption, the costs associated with facilitation and even bribery, or from an involved bureaucratic process. But what is clear from the chart alone is that the "cost of doing business" within the Indian government (as imagined by private-sector investors) was entirely too high, and would—by necessity—cut into the value created by the project.

Ultimately, these kinds of financial considerations are key to the long-term viability of a PPP, and the Dharavi case demonstrates the degree to which reducing friction within the government can actually have a financial impact on outcomes. Governments interested in pursuing cross-sector partnerships with high-quality partners should strive to reduce this kind of friction by either rooting out corruption, simplifying approval processes, or reducing bureaucratic overhead.

Even seemingly small-scale financial considerations can have outsized impacts on the viability of a PPP project. Let's return once more to Dharavi.

CASE STUDY

Dharavi: Developing Asia's Largest Slum

While the costs associated with redeveloping Dharavi are clearly outlined in the chart above, another exhibit from the case study provides an even clearer view of how seemingly small technical adjustments to a project can have outsized effects on its cost, its viability, and ultimately the value that it creates.

Let's examine Exhibit 5b, a sensitivity analysis which expresses potential profit margins with respect to the cost of construction, the sale price for apartments, and the cost of capital.

Exhibit 5b: Sensitivity analysis with respect to cost of construction, sale price and cost of capital

5% Cost of Capital		Price (INR) Per Sq Ft of Market Rate Apartments		
	ROE	8,000	10,000	12,000
Cost (INR) Per Sq Ft of Slum Rehab	800	125%	188%	251%
	1,200	25%	74%	122%
	1,600	-40%	0%	41%

10% Cost of Capital		Price (INR) Per Sq Ft of Market Rate Apartments		
	ROE	8,000	10,000	12,000
Cost (INR) Per Sq Ft of Slum Rehab	800	28%	86%	145%
	1,200	-53%	-7%	39%
	1,600	-104%	-66%	-29%

15% Cost of Capital		Price (INR) Per Sq Ft of Market Rate Apartments		
	ROE	8,000	10,000	12,000
Cost (INR) Per Sq Ft of Slum Rehab	800	-23%	33%	88%
	1,200	-92%	-49%	-6%
	1,600	-137%	-101%	-66%

Source: Illustrative computations by casewriters.

Each of these three charts demonstrates the relationship between construction costs ("cost per square foot"), sale price of apartments ("price per square foot"), and an investor's return on equity ("ROE"). On first examination, it's clear that a cheaper cost of construction and a higher sale price yields the highest return on equity. That would seem obvious enough.

But, begin to examine the differences *between* the three charts. The first chart models a five percent cost of capital, the second, a ten percent cost of capital, and the third, a fifteen percent cost of capital. Here, "cost of capital" refers to the costs associated with procuring capital, or utilizing debt and equity to finance a project. In other words, the cost of borrowing money. As this exhibit shows, even maintaining the exact same construction cost and sale price conditions, the cost of capital can be seen to have an enormous impact on the return on equity. So much so that, in some cases, the cost of capital alone can turn a profitable endeavor into an unprofitable one.

There are many forces dictating the cost of capital—the riskiness of the project, the reliability of financial models, and even monetary forces totally beyond the scope of the project itself. Stability in the cost of capital is elemental to the project's success—it is vital that, once a project has begun, costs do not balloon and tip the project into unprofitability. Instability associated with the politics of a large project adds to uncertainty within a partnership, and can also negatively impact value creation.

In many ways, value creation is a qualitative process involving the alignment of incentives, allocation of risks, and the creation of clear value structures. But, as Exhibit 5b reminds us, value creation can also be quite literal and quantitative. Simply put, if the numbers don't work, neither will the PPP.

Value Creation through Knowledge Transfer

Successful value creation also hinges on the reproducibility of partnerships in a given country. Rather than looking at each partnership as an isolated project, governments should consider each PPP as a part of a larger PPP strategy. Successful PPPs, then, are not just those that deliver on their explicit goals, but also those that adequately prepare government professionals for future projects. While a successful partnership *could* be achieved using only consultants and outside help, a government should strive to successfully develop the skills and abilities of its professionals.

Knowledge transfer is the degree to which the skills and frameworks covered in this Guide are successfully transferred between public and private sector partners. Indeed, any benchmark for determining the success or failure of a partnership should be measured—at least partly—in terms of the degree to which the partnership prepared its participants for future PPPs. For a government looking to develop a coherent long-term PPP strategy, it is

essential to develop PPP competence among its professionals, and effective knowledge transfer resulting in sustainability should be a priority of PPP projects.

As you might imagine, measuring knowledge transfer is not a straightforward endeavor. Because "knowledge" is such an unquantifiable metric, it can be hard for PPP participants to accurately determine how much knowledge transfer has taken place through the partnership. It is more important, however, that PPP participants assess their partnerships with an eye towards knowledge transfer than that they manage to quantify it exactly.

But how can PPP participants work to encourage knowledge transfer?

Educational Programs

Human resources have a dramatic impact on the reproducibility of partnerships. Thus, education programs are essential to building capacity at the ministry level. Educational programs should strive to increase the experience and knowledge of both government and private-sector professionals from within the safety of a classroom. While programs must cover the contractual or financial arrangements underpinning PPPs, it is equally important that they cover the conceptual frameworks that dictate how PPPs work.

Of course, education does not only occur within the classroom. Successful PPPs can not only deliver on their stated goals, but also prepare PPP practitioners for future partnerships.

The Importance of a Programmatic Approach

Educational programs should not be intended as solitary events, but rather as first steps in larger PPP strategies. As such, it is essential that educational programs be accompanied by a facilitation process in order to turn the concepts and frameworks taught in classrooms and workshops into actionable projects.

Facilitation should establish priorities, level the playing field, and chart a course of action for PPP projects. Specific projects should be assessed and designed with viability in mind, adhering to the conceptual frameworks contained within this Guide. Facilitation should, eventually, lead to tangible commitments from public- and private-sector partners.

NOTE

Why Would the Private Sector Want to Help Governments Build Capacity?

We have discussed how governments, fearful of being out-negotiated by their private-sector counterparts, are often apprehensive about engaging in public-private partnerships. This apprehension can severely limit progress. By engaging with the frameworks and skills outlined in this Guide, governments should be able to build internal capacity and improve their abilities as negotiators. But this may lead you to wonder: why would the private sector want to invest in making governments into better negotiators?

Though it might seem that the private sector is making a mistake in empowering their public-sector counterparts to seek better deals, this is not necessarily the case. For several key reasons, this can be beneficial for both the public and private sectors.

First, it assures that governments will be prepared to engage in PPPs in the first place. Simply put, a government that feels unprepared for the challenges posed by a PPP is unlikely (due to political risks) to enter into deals at all. The private sector, eager to access the opportunities offered to them by PPPs—which can be win-wins that do not come at the expense of government priorities—is highly motivated to strengthen their government partners.

And as we have discussed, the Business Roundtable's updated "Statement on the Purpose of a Corporation" includes commitments to investing in employees, dealing fairly and ethically with suppliers, and supporting local communities. Of course, it remains to be seen how much these words will translate into action, especially when such voluntary agreements lack any sort of enforcement mechanisms to ensure these commitments are met.

Finally, engaging in PPPs has an additional benefit to the private sector we haven't yet mentioned: it can reduce the impact of regulation. Governments who do not feel empowered to negotiate effectively with the private sector will likely turn to blunter tools such as taxation and regulation. Thus, counter-intuitive though it may be, in many ways, empowering governments to negotiate better is actually in the best interest of the private sector. However, it should be noted that PPPs are not self-administering. They

still require strong regulatory and governance mechanisms to monitor and enforce these agreements.

Multilaterals: The NCD Platform

We have already discussed the WHO's approval of an NCD Platform designed to encourage private-sector engagement in NCD solutions. The Platform, to be housed within WHO, will bring together representatives from WHO, member states, leading academic institutions, and the private-sector into a "seamless web," building capacity for cross-sector engagement and emphasizing preparation, engagement, and value creation. By using its resources to build capacity, the Platform can help to turn WHO's goals into actionable objectives. In this sense, the Platform will act as both an essential convening mechanism and a source of knowledge about and solutions to the NCD challenge.

WHO's recommendation of a Platform in Recommendation Six of the Commission's Final Report represents a major step forward, indicating just how much the conversation surrounding NCDs has evolved in the two years since the Commission began its work. In early 2018, the Commission was focused primarily on the health impacts of NCDs. The NCD Platform signals an increased focus on the economic impacts of NCDs and outlines an institutional construct to address them.

The Platform is a flexible structure which will allow participants to construct solutions within a productive, supportive environment. Using evidence-based case studies and well-developed frameworks, the Platform will build trust among stakeholders (including within WHO), facilitate exchanges of information, provide a repository of essential frameworks, skills, and evidence-based case studies, and enable sustainable engagement of the private sector in NCD solutions. The Platform is supportive of "public-private partnerships, or, as [the] Commission seeks to frame them, partnerships for the common good."[65] The Platform could provide guidance on the management of conflicts of interest and the navigation of legal, regulatory, and contractual matters.

Governments and corporations looking to maximize the potential for knowledge transfer should look to the WHO NCD Platform—and similar multilateral institutions—for support. Indeed, partners looking to succeed in using PPPs to combat NCDs are not alone. As international support mounts for this kind of action, the WHO Platform has the potential to

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[65]"It's Time to Walk the Talk: WHO High-Level Commission on NCDs final report," World Health Organization, 2019.

become a powerful resource, not just as a reservoir of knowledge, but a continuous feedback mechanism, encouraging consistent knowledge transfers between WHO and member states.

While the NCD Platform is still under development, progress, which began in late 2019, has been stymied by the Covid-19 pandemic. There is, however, no reason to suspect that this vital institution has been abandoned. And given the significant comorbidities between NCDs and Covid-19, any strategy to address the novel coronavirus will also have to address NCDs.

CHAPTER 7

How can partners measure success?

As we have discussed, it's important that partners are in agreement about how to define success for a given PPP project. But measuring that success—determining the metrics by which a successful PPP will be distinguished from an unsuccessful one—is a challenge in and of itself. Metrics that are too vague or insufficiently quantifiable create uncertainty in the partnership. This uncertainty can lead to sub-optimization, or even the outright failure of the partnership. What kinds of metrics can be used to define success or failure?

Net Outcomes

Measuring a PPP by looking at its net outcomes is relatively straightforward: what is the magnitude of the effect of the PPP? While at first this might seem like a simple way of looking at the success or failure of a PPP, there are numerous ways to quantify a partnership's effect. Net effect could be expressed in units of dollars, lives saved, patients treated, or vaccines administered. It is crucial to assess value in terms of the units that make the most sense for a given project.

One promising new approach for measuring these different partnership objectives, intended outcomes, and goals is called the Impact Rate of Return (iRR). Developed by Columbia University professors Howard W. Buffett (son of Warren Buffet) and William B. Eimicke, iRR utilizes a standardized formula for measuring the success of partnerships.[66] Inspired by value investing—one of history's most successful investment paradigms, Buffet and Eimicke's five-point management framework utilizes iRR to help predict which projects or programs will be best at creating social value. Although a detailed illustration of iRR is beyond the scope of this guide, such a measurement tool could help PPPs deliver innovative, inclusive, and long-lasting solutions that maximize collaborative efficiency as well as positive social impact.

Value for Money

The other way to measure the effectiveness of a PPP is through value for money, or return on investment (ROI)—that is, how great was the desired effect per dollar spent? Value for money is an essential metric because it allows partners to compare a PPP against the opportunity cost of the resources allocated to it. In other words, what other programs could

[66] Buffet, Howard W.. 2018. "Chapter 12 | The Performance Framework: Predicting the Social Value of a Partnership." In Social Value Investing: A Management Framework for Effective Partnerships, edited by H. W. Buffet and W. B. Eimicke, pp. 257-282. New York, NY: Columbia University Press.

have been financed instead with the money spent on a given PPP? PPPs with good ROI will have an outsized impact per dollar. However, because PPPs are generally used to address such large challenges, it is essential to measure the ROI of a PPP on a reasonably long timeline, often five or more years. The arrangement may vary according to different strategies, product portfolios, and revenue streams.

Of course, dollars are not the only resource spent on PPPs. Human resources and political capital are also highly relevant resources in determining the "investment" spent on a PPP. There are numerous currencies that should be analyzed in an ROI context, and it's important to analyze the PPP from more than just a "per-dollar" perspective.

The Importance of Specificity

In determining the metrics that a PPP will use to measure success, it is important to establish highly specific, highly quantifiable metrics. The Lesotho Hospital case is exemplary in this regard. While the goal of the partnership was more broad—to provide effective healthcare services through the development of a large National Referral Hospital—the metrics used to measure success were highly granular: how often were sheets changed? How long were wait times for certain types of surgeries?

These kinds of specific metrics are highly useful for assessing success, as they leave little to interpretation. Large questions like "How much did care improve?" might be more reflective of the ultimate goals of the project, but they are too difficult to quantify to be useful.

The Importance of Independent Monitoring

Independent monitors are an important tool for managing contractual obligations and handling dispute resolution. The agreement to place the responsibility of actually conducting measurements with an independent, disinterested third party can reduce friction between partners and ensure a level playing field.

CASE STUDY

Lesotho National Referral Hospital

We have already seen how the highly-specific metrics used in the Lesotho case offered little room for interpretation, assuring that government and private-sector partners were in agreement about the success of the partnership. But we have not yet discussed

another crucial element of the Lesotho Hospital case study—the use of an independent monitor for assessing success.

Each quarter, the independent monitor for the PPP agreement would assess performance against the full set of performance indicators, and then subtract any relevant deductions. (Except those that the Ministry of Health elected to waive due to evidence of a good-faith effort.) Placing the responsibility for both measuring the indicators *and* calculating the deductions on an independent monitor avoids accusations of bias on the part of either partner and builds a strong foundation of trust between them.

Increased Credibility

Of course, value can also be measured using more qualitative metrics. A government's continued reputation as a credible partner will pay dividends going forward. Future partnerships and continued relevance in private-sector initiatives and operations hinge on remaining a credible, trustworthy, and effective partner. The same can be said for private partners who may want to avoid adversarial renegotiations in existing agreements in order to maintain credibility and good faith for future partnerships. Though this metric for measuring success is far less quantifiable, it is no less important. Strong partnerships beget stronger partnerships (and more opportunities) down the line.

Timeline for Evaluation

PPPs—and social PPPs in particular—tend to unfold over the long run. Thus, it is essential to evaluate success on a long enough timeline that short term expenditures don't influence future decision-making about the validity of the project.

Often, the longer timelines on which PPPs are laid out do not fit neatly into an annual budget, and fit even less neatly into the political cycles governing democratic governments. Many PPPs require longer timeframes in order to see returns, but this doesn't mean that they are not worthwhile. On the contrary, large projects like these can have an outsized impact, but it is crucial to develop a framework for evaluating them on their own terms to properly understand where success or failure actually lies.

CHAPTER 8

How can partners communicate value?

We have discussed the importance of communication in building a successful PPP. It is crucial that partners be able to communicate clearly with one another if success is to be achieved.

But communication also plays a vital role in conveying the successes of a PPP to a wider public. Too often, partners engage in successful PPPs only to fail to "claim" the success and assert the value of the partnership. Many—both in the general public and within dedicated healthcare advocacy groups—remain highly suspicious of public-private partnerships as a value-creating device. If a partnership is to be successful, then, partners must be able to effectively communicate success and progress. Ultimately, perception can be every bit as important as reality. The skill of communication is relevant in engaging effectively, of course, but it is also instrumental in conveying the value created by a PPP to a wider audience.

Even though international support for healthcare PPPs is building within WHO and member states, staunch opposition to public-private partnerships still exists. Groups and individuals highly suspicious of the profit motive are likely to be critical of new PPPs. Negotiators of successful PPPs must be prepared not only to succeed, but to communicate those successes effectively to a wider public and to potentially hostile stakeholders.

CASE STUDY

Lesotho National Referral Hospital

As we've discussed, the Lesotho National Referral Hospital project used an elaborate system of performance-based metrics to assure that public and private partners were working towards the same ends. With strong value alignment guiding incentives, the project was a robust success, providing high-quality healthcare to citizens while keeping costs under control.

However, this apparent success did not make the National Referral Hospital PPP immune to criticism. A 2014 briefing note from Oxfam referred to the PPP as a "dangerous diversion," citing flawed estimates about demand and additional payments remitted to the private sector as evidence that the PPP would not be revenue-neutral,

even as it acknowledged the significant improvements in healthcare outcomes.[67] Oxfam also put out a video denigrating the project.

OXFAM BRIEFING NOTE 7 APRIL 2014

A rural health clinic in Masianokeng, outside the capital Maseru, 2014. It takes more than three hours to travel to the nearest health facility for 25 per cent of people in Lesotho's rural areas. Photo: Sophie Freeman/Oxfam

A DANGEROUS DIVERSION

Will the IFC's flagship health PPP bankrupt Lesotho's Ministry of Health?

By attacking a project funded by the World Bank and the International Finance Corporation during the World Bank's Spring Meeting, the Oxfam report struck a stinging blow to the reputation of the PPP and other partnerships in Lesotho. The World Bank issued a point-by-point refutation, but the reputational damage was already done. Had the partners been able to better communicate success—and proactively acknowledge shortcomings—Oxfam's narrative might have been one of refining the PPP model, rather than disposing of it altogether.

[67]Marriott, Anna. (2014, April 7). *A Dangerous Diversion.* Retrieved from https://www.oxfam.org/

How, then, can PPP stakeholders avoid these kinds of outcomes? By effectively communicating not just the functionality of a PPP, but also the value it adds to the public balance sheet.

Techniques for Addressing Criticism

Common Critiques of PPPs

Criticism is common in the public sector. After all, the public feels—correctly—that it has a right to understand where its tax dollars are being spent. But as a participant in a PPP, it is important to learn to address criticism, not as a means of ignoring the concerns of the public, but as a means of making the case for your project and "claiming" the value that it provides. Many criticisms of PPPs are justified, of course. We have, in this *Guide* alone, already explored several failures in order to learn from them. But many of the criticisms levied against PPPs are motivated not by the facts, but by moral aversions to the concept of partnering with the private sector. Accusations of corruption are common, as are more moderate accusations of waste. If a government is to maintain its credibility as a PPP partner, then these criticisms must be answered—not just at the conclusion of the partnership, but also during the preparation and engagement phases. It is, of course, impossible to predict every criticism that might come your way in designing and operating a PPP. But generally, criticism falls into one of three categories.

Suspicion of The Profit Motive

We have discussed how governments are often skeptical of the profit motive in healthcare provision. This is also true for watchdog organizations and media outlets, who are often quick to criticize any private-sector return as a violation of the public trust. This dynamic was clearly on display in Oxfam's critique of Lesotho's Hospital PPP. A good technique for addressing this criticism is to try to reframe the conversation around the *results* of the PPP. Criticisms of this nature tend to center, by necessity, on concerns about the nature of the profit motive as a corrosive force. In some cases, cost curves may take time to bend, resulting in a temporary increase in costs in exchange for significantly improved service—as was the case in Lesotho. But, because a successful PPP can provide better service at a more palatable cost in the long run, the results should speak for themselves, as long as PPP representatives are able to communicate those results with consistency and discipline.

Accusations of Corruption

As we've mentioned before, the best defense to criticisms of potential corruption is to ensure total transparency of the project and to mitigate any conflicts of interest. Transparency has been notoriously poor in PPPs globally, so developing and communicating clear incentive structures that separate conflicted elements of private-sector operations from the PPP itself will help provide transparency in the face of these kinds of accusations.

Accusations of Excessive Cost

While Oxfam's critiques were largely hyperbolic and fabricated, it is true that, in many cases, costs may rise with the implementation of a healthcare PPP. With the provision of, say, additional screenings and more robust treatments, a healthcare PPP may actually be more expensive than traditional procurement methods in the immediate term. But, those improved services often result in longer periods of wellness in the future, which dramatically reduce costs. It is important for critics to assess cost structures in the long term for PPPs—generally five years or longer. Many criticisms can thus be addressed by noting that accusations of excessive cost are premature, especially when traditional procurement routinely suffers from cost overruns and service delivery delays.

CHAPTER 9

What stands in the way of success?

As we've seen, PPPs can have massive upsides for both public- and private-sector partners. They can drive innovation, close budget gaps, and even transform liabilities into assets. This begs the question: if PPPs are so excellent, why aren't they being used more widely? The answer brings us to three main **capacity gaps**.

What Are Capacity Gaps?

Capacity gaps refer to an incongruity in the supply of a given resource between public- and private-sector partners. Capacity gaps can be tangible, like a gap in financial resources between partners, or more abstract, like gaps in partners' relative ability to execute or innovate. These gaps can create friction and inefficiencies between partners, and ultimately doom a partnership. Successful PPPs must be able to bridge these gaps, either by improving the capacity of the deficient partner, or by developing a structure that allows a partnership to proceed in spite of the gap.

The Three Types of Capacity Gaps

Generally speaking, PPPs exist to fill gaps in capacity between two or more partners. These are challenges that governments cannot meet on their own, and challenges that the private sector cannot meet on its own. PPPs promise to leverage the best of each partner while mitigating the capacity gaps that impede progress. In "Mapping PPPs Across Countries (China and India)*,"*[68] the PPP Initiative was able to identify three distinct types of gaps: execution, financing, and innovation. In order to bridge these gaps, governments and companies alike will need to engage in the process of building capacity across each of these categories.

Execution Gaps

Execution gaps reflect the lack of preparation of the public and private sectors to partner with each other relative to the number and scale of potential PPP projects. Governments, for example, are often highly apprehensive about working with the private sector. This often emerges from a disparity between the private sector's negotiation skills and those of the public sector. Fearing that they will be "outgunned" by experienced private-sector negotiators and their highly refined agreements, governments are often mistrustful, if not outright fearful, of private-sector engagement (see, e.g. Chicago's notorious parking PPP).

[68]Trager, A., Guan, H., & Rai, R. "Mapping"

Simply put, many governments are under-prepared to engage effectively in PPPs. Existing PPP education focuses heavily on explaining PPP procedures, models and documentation, failing to address the frameworks that underpin PPP thinking or the sheer variety of PPP projects across different sectors. Promoting thorough understanding and critical thinking—helping both private and public sector managers think through real-world project risks and opportunities—is essential to bridging this gap. In fact, this *Guide* is, in and of itself, an attempt to bridge the execution gap.

Financing Gaps

Financing gaps are shortages in funds for a given project—the gap between what a given partner needs to finance and its ability to pay for it. A lack of financing is the most typical of the three types of gaps, and PPPs are most often used as tools for raising capital from the private sector to cover public sector shortages.

Indeed, though equity investors are ready to finance infrastructure, in most countries, only a relatively small percentage of projects are actually "bankable." Few projects offer credibly stable cash flows, and bankruptcies associated with the Indiana Toll Road (and similar projects like State Route 125 in California, and State Highway 130 in Texas) have made private-sector partners increasingly skeptical of optimistic public-sector projections. Many projects require huge capital investments to maintain politically acceptable prices, increasing the difficulty of meeting capital requirements. And still other projects are dependent on the condition of assets that are fundamentally hard to measure—such as the relative health and wellbeing of an entire citizenry. Attracting capital investment with such large unknowns is truly a difficult task.

Innovation Gaps

Innovation gaps reflect the need for both sectors to develop new and innovative solutions to complex problems. The private sector continues to move ahead of governments in its ability to produce and take advantage of innovations. But the best PPPs can allow governments and the private sector to work together to develop these new solutions, positively affecting outcomes. Innovation gaps are the most challenging to overcome. Their very nature suggests a need for solutions that haven't been invented yet. Innovation gaps, like execution gaps, are fundamentally human resources problems. Without public- and private-sector representatives who are prepared to engage with PPPs critically and conceptually, it is difficult for partnerships to develop new structures and solutions. This, in turn, is a political and labor issue—the lack of qualified professionals in both the public and private sectors can be a major obstacle in achieving innovation.

PPPs, once considered mere financing tools, are increasingly being seen as catalysts for innovation. But that innovation is—obviously—contingent upon having officials who are prepared to innovate. Developing professionals who are adept at innovating, and converting these innovative ideas into workable structures is essential to narrowing the innovation gap. But, as we have already discussed, innovation is a complex skill and process. Developing it is challenging. Ultimately, professionals in a PPP must be well-versed in the structures and incentives that underpin PPPs in order to effectively innovate.

CHAPTER 10

Conclusion

As you've probably realized by now, developing a strong, sustainable, and effective PPP is no easy task. The challenges that you will encounter—selecting partners, negotiating agreements, creating value, ensuring sustainability, and managing conflicts of interest—should not be taken lightly.

In partnering with the private sector, governments will be met with quantifiable challenges posed by the realities of the market. The motivations that guide private-sector companies are different from those that motivate governments, and aligning these incentive structures is far from simple. Using the Value Alignment Scale, government professionals can identify areas of potential agreement between the public and private sectors, but capitalizing on these areas of overlap is easier said than done, as we have discussed.

There are also cultural-cognitive barriers to progress. Mistrust between the public and private sectors is common, as is bias. Interpersonal challenges within a negotiative framework can lead to sub-optimized deals. And, as we've noted, even strong partnerships can face challenges in communicating their value to a wider audience.

Executive education workshops can help prepare public-sector officials for these kinds of challenges while also helping to determine PPP priorities and facilitate engagement with the private sector.

With all the challenges that public-private partnerships face—particularly the social PPPs associated with healthcare—it is no wonder that governments have often been apprehensive to engage in them. Indeed, these challenges have often led governments to abandon potentially beneficial PPP projects. But these challenges, imposing though they may seem, can be managed. Managing these risks requires significant effort, dedication, training, and commitment on the part of governments. But the risks associated with social PPPs can be reduced using the detailed frameworks and skills recommended in this Guide, and value can be created for both public- and private-sector partners. Simply put, the methods outlined in this guide *work*. They can be used effectively to reduce friction, improve outcomes, and ensure sustainability.

Public-private partnerships promise significant upsides for government practitioners who are able to orchestrate them effectively. With the costs of significant healthcare challenges

continuing to mount—NCDs among them—PPPs promise to optimize resources and deliver "more with less." For governments with limited resources looking to make a significant impact on healthcare outcomes, PPPs, if applied wisely and judiciously, can be a deeply powerful tool.

And of course, when it comes to NCDs like cardiovascular disease, diabetes, cancer, chronic respiratory conditions, and mental health conditions, there is a cost to inaction. Nothing has made this more apparent than the Covid-19 pandemic. And though the chronic and costly nature of these diseases create complexity for governments hoping to engage in PPPs, that complexity is also paired with opportunity.

As we know, governments alone cannot create a fruitful landscape for partnership. There is work to be done, also, within the private-sector to build capacity for PPPs and manage conflicts of interest. But, if the private sector is to occupy the role of "trustworthy partner" effectively, governments need to provide a strategic and stable authorizing foundation to enable it.

Recall that the *Guide* is a core component of a larger comprehensive method for approaching PPPs that also includes a series of high-level workshops. By applying the tools and frameworks from the *Guide* to the challenges of real-world partnership, both public- and private-sector executives will be better equipped to overcome obstacles and create sustainable partnerships.

As we've discussed, however, the *Guide* is not meant to be a template. There are no template-style solutions when it comes to PPPs, and ultimately, PPP practitioners will need to apply these skills and frameworks in unique and creative ways if success is to be realized. Some PPP projects might employ every framework and skill that the *Guide* covers, some may highlight only a few at any given time. Importantly, however, by mastering the skills and frameworks contained within *Guide*, professionals can ensure that their PPP-based solutions are methodologically sound and based on a firm understanding of how those before them have succeeded and failed.

Furthermore, international support for cross-sector engagement is already beginning to coalesce—as evidenced by WHO's commitment to private-sector engagement through the NCD Platform. With Platform-level support being built at WHO, the resources available to PPP practitioners are limited, but growing.

When it comes to the most pressing healthcare challenges of the 21st century, the world cannot afford to wait any longer. With strong international and multilateral support in place, now is the time for progress.

As a tool for engaging with the private sector, the *Guide* must be accompanied by executive education and training. But through continued learning, executive education, and support at the national and international level, government professionals can develop the preparation, execution and value creation skills needed to engage in effective partnerships. Armed with an understanding of the frameworks and skills contained within this *Guide*, you should be prepared to approach a potential partnership opportunity rationally, methodologically, and confidently.

APPENDIX

Supplementary Materials

APPENDIX 1

Policy Workshop Description

The Healthcare Policy Program on Public-Private Partnerships

Introduction to Healthcare PPPs—a hands-on workshop for public- and private-sector officials—prepares executives to develop, execute, and manage effective healthcare public-private partnerships (PPPs). Participants will learn to think clearly about the incentives guiding PPPs, manage risks, negotiate effective partnerships, and sustain those partnerships over long timeframes.

Taking the *Healthcare PPP Guide* as its core curriculum, the workshop will give participants a chance to engage in discussion-based learning centered around real-world examples. A concise coursepack, containing the case studies cited in this guide and others (as necessary), will afford participants the opportunity to explore relevant cases in greater detail.

Workshop Description

The workshop will give participants practical experience applying PPP frameworks and skills to existing healthcare challenges by using case studies to illustrate how the concepts apply to real-world examples. The workshop will be led by Alan M. Trager, President of the PPP Initiative, an independent entity that collaborates with governments, leading research universities, multilateral institutions, and multinational corporations to facilitate innovation and education in public-private partnerships.

Additionally, a group exercise designed to translate the concepts taught in the workshop to a country-specific healthcare issue will bring immediacy to the lesson. Participants will be asked to identify potential healthcare initiatives that could be approached using a PPP framework. These policy challenges—identified by participants in the workshop—will be considered as potential projects in the Facilitation and Commitments stages of the program.

Post-Workshop Analysis and Conclusion

Immediately following the workshop (ideally the day after), workshop participants should plan to meet with workshop organizers to both reflect on the outcomes of the workshop and chart a path forward. This analytical meeting should focus particularly on identifying potential PPP projects, identifying potential stakeholders, and analyzing projects for viability.

Facilitation

The workshop, however, is not intended as a solitary event, but rather as a first step in a country's larger PPP strategy. As such, it is essential that a facilitation process be undertaken

in order to turn the concepts and frameworks taught in the workshop into actionable projects.

The facilitation meeting—including both public- and private-sector executives—will establish priorities, level the playing field, and chart a course of action for PPP projects. Projects will be assessed and designed with viability in mind, adhering to the conceptual frameworks learned in the workshop and in the guide. In addition, this facilitation meeting will establish a primary point of contact within the government to coordinate with stakeholders and manage the orchestration of PPP projects.

Commitments

The facilitation process should lead, ideally, to commitments from public- and private-sector entities. The commitments process may involve a public review process.

The commitments process should seek to answer several key questions:

- Which parts of the government are going to commit resources to a PPP? At what scale?
- Which private-sector corporations are willing to commit resources? At what scale?
- Which private-sector corporations will make for stable, functional partners?
- Are there second-round partners who might be interested in partnering only after pilot projects have proven successful?

Course Description—"Introduction to Healthcare PPPs"

National University of Singapore, July 2020

"Introduction to Healthcare PPPs" is a six-session course designed to help participants understand how public-private partnerships (PPPs) can be used to confront the most significant healthcare challenges of our time, including non-communicable diseases, aging populations, and Covid-19. Due to the large scale of these challenges, it has become increasingly clear that neither governments nor the private sector has the resources to address them alone. By exploring the preparation, engagement, and value creation associated with effective partnerships—focusing on six key skills and six key frameworks—participants will learn how cross-sector, multi-stakeholder partnerships can be used to combine the strongest elements of public- and private-sector capacity to address large-scale healthcare challenges.

Developed by Professor Alan M. Trager of the PPP Initiative, an independent entity that facilitates the development of public-private partnerships through education, the course is rooted in more than 17 years of experience in PPP teaching and research.[69] The course takes as its core curriculum the *Healthcare PPP Guide*, a brand-new 135-page primer in PPP design and management supported by significant high-level government and multilateral partners. Case studies form the backbone of the *Guide*, and will be used to illustrate the wide spectrum of situations and challenges associated with PPPs. Using eleven case studies spanning six countries on three continents, students will learn about the successes and failures of various PPP and non-PPP projects, and gain hands-on experience with the decision-making processes that separate successful PPPs from unsuccessful ones.

In addition to lectures and participatory Q&A sessions led by Professor Trager, a set of two hands-on group projects will be facilitated by Professor Kee Seng Chia, Founding Dean of the Saw Swee Hock School of Public Health. Projects will focus on one of two Singapore-specific case studies—those of the Health Promotion Board and the National Kidney Foundation—which will make clear the relevance of the program's key concepts to Singapore's unique policy challenges.

The workshop will take place over six sessions during two consecutive weeks. Each session will include a one-hour lecture and Q&A session, followed by a two-hour group work session. Participants will be divided into three working groups, each of which will include representatives from the public and private sectors. Group projects will be presented to Professors Chia and Trager jointly at the end of each week. Sessions will take place at 8AM SGT (8PM EST), and will

[69]See attached bio.

be conducted using Zoom. Participants are encouraged to keep their video cameras on for the duration of the sessions, as a means of replicating as closely as possible an in-person participatory workshop environment.