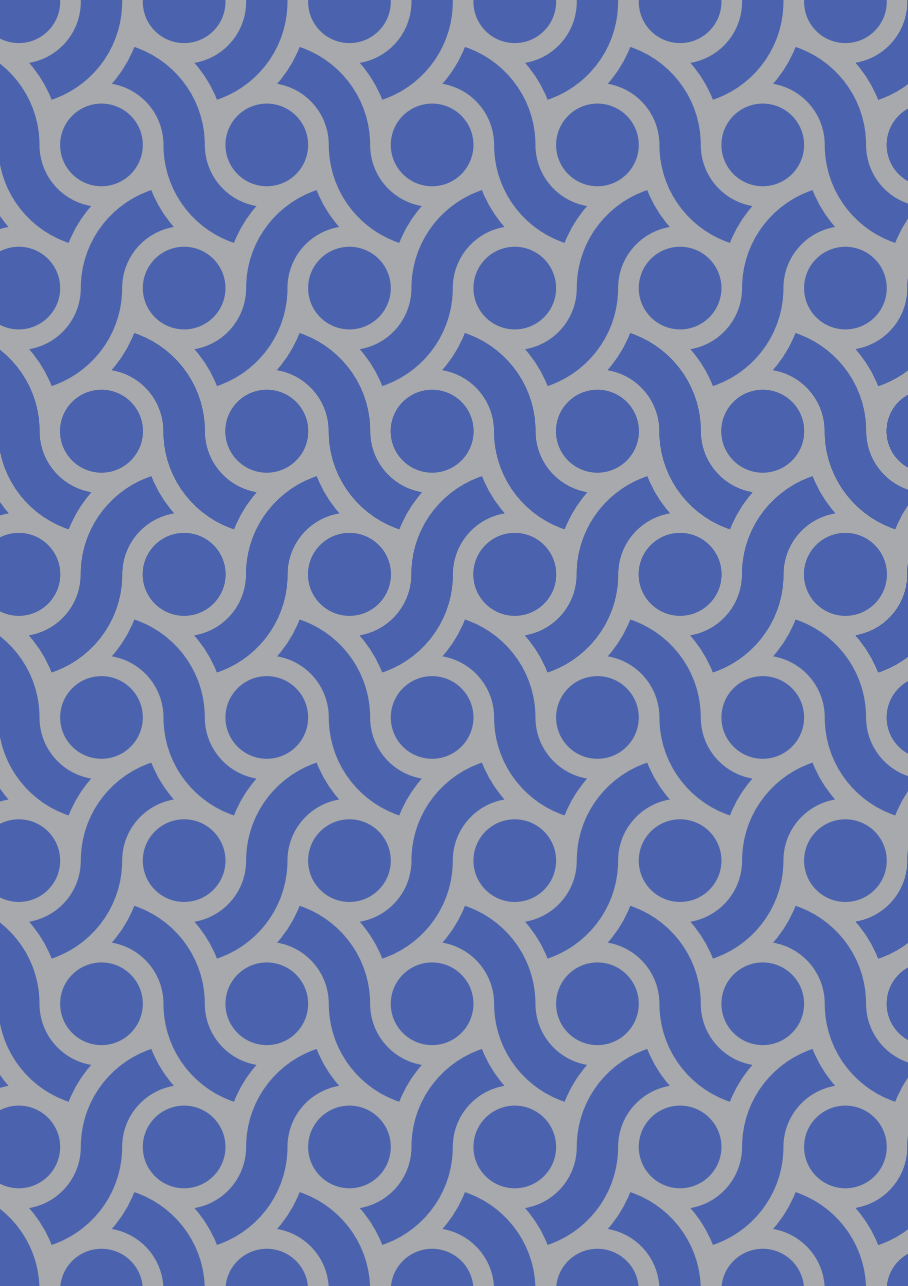


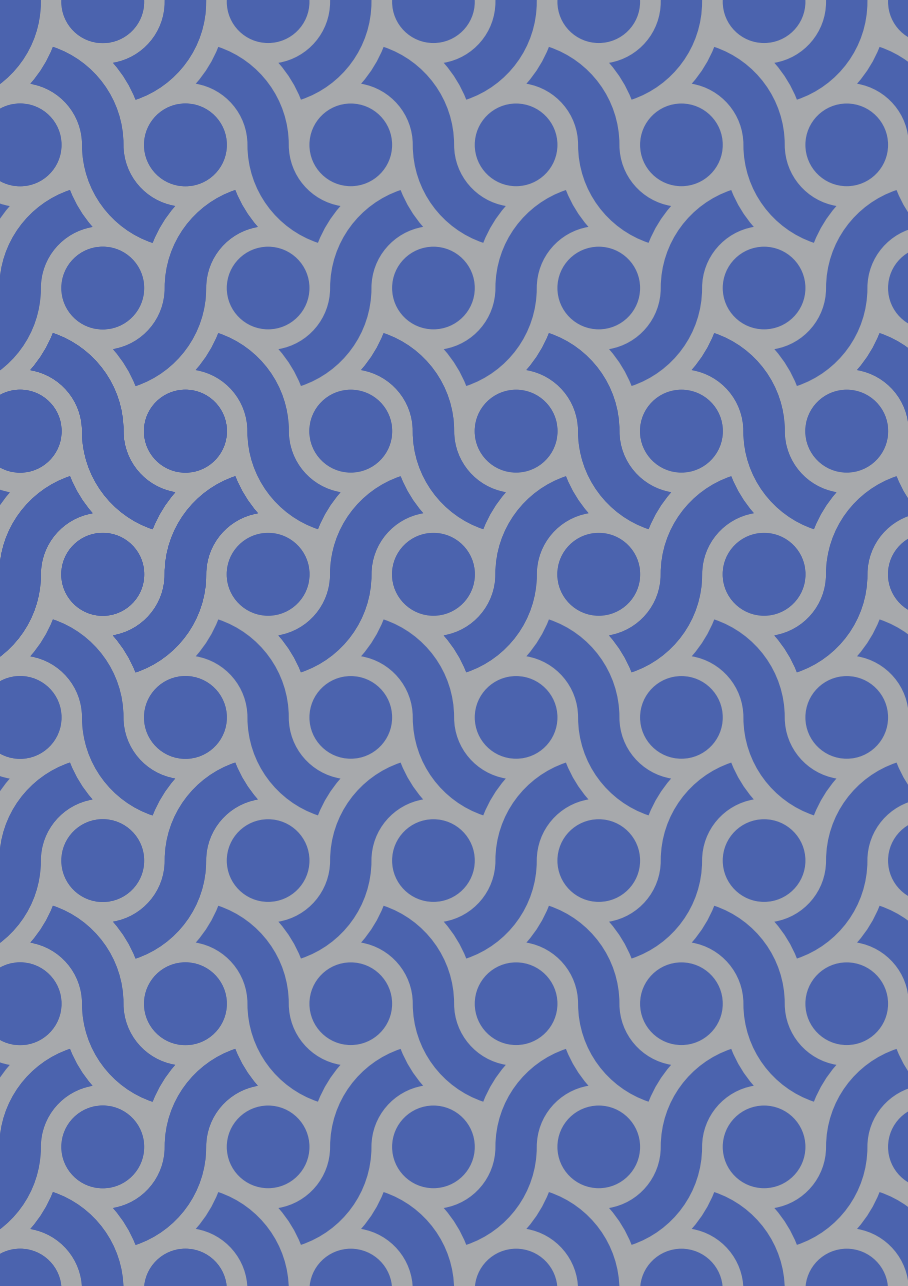


04

Insights Series 04

Financing Public-Private Partnerships

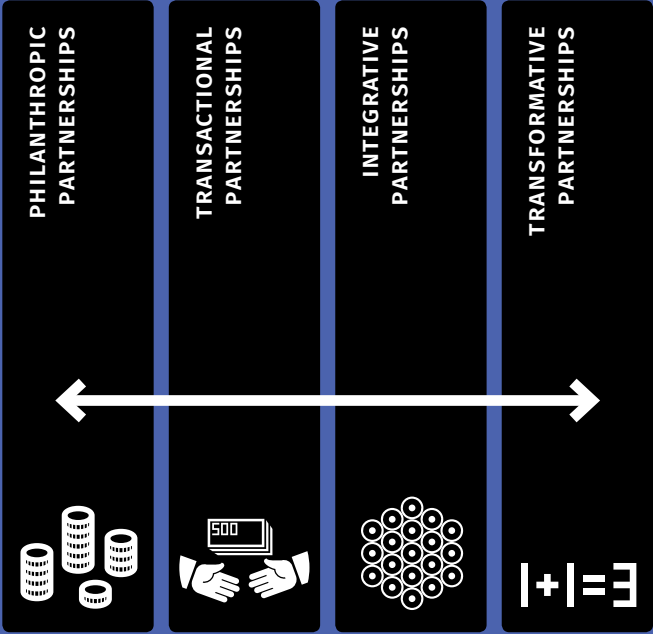




Insights Series 04

Financing Public-Private Partnerships

Figure 1:
The Collaboration
Continuum



Introduction

3

This booklet aims to serve as an introduction to the world of finance. It clarifies terms and concepts and attempts to provide guidance in developing financing strategies for Public-Private Partnerships (PPPs), especially for development practitioners who are often specialized in technical or social fields rather than in finance.

Water and food security are complex societal problems that need to be addressed in the context of sustainable development and ending poverty. Governments and donors increasingly desire to engage the private sector, acknowledging the need of a businesswise approach and private sector skills, technology, and management to increase the cost-effectiveness and long-term sustainability of development initiatives. At the same time, there are also good reasons for the private sector to be involved with the public sector. In the first booklet of PPPLab's 'Insights Series', four types of PPPs in the development sector were identified, each with different motives for private sector engagement:

- Philanthropic Partnerships provide welfare to society through charitable giving (e.g., the IKEA Foundation supporting War Child); often the business motive here is to improve social reputation.
- Transactional Partnerships improve profitability or market share from a business perspective (e.g., Pampers donates a percentage of each pack of diapers to the UNICEF child vaccination program).
- Integrative Partnerships balance business interests with social and ecological concerns (e.g., a partnership that focuses on certification programs in order to sustain their commodity chains).
- Transformative Partnerships interact with all relevant stakeholders in order to respond equally to all partners' needs (e.g., the Rabobank – WNF partnership on sustaining agribusiness).

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PPP, project, business case or business model?

PPPs are diverse in their nature and activities. They may consist of multiple projects or represent only part of a larger project (see also PPPLab's Exploration 02). Similarly, a PPP might be seeking funding on the level of the entire PPP or for just one of its projects.

A clear business case is crucial for funding, because it has a business logic that makes sense to a funder. However, for the type of projects considered here, the business case also includes a social return on investment, captured under the (developmental) "Impact" box in the PPPCanvas. This is an important value for a PPP and attracts specific funders.

For this booklet, we will talk about one 'project' with one 'business case' that can be funded in various ways.

If a PPP consists of multiple projects, it becomes a portfolio of projects and could potentially seek funding for the entire portfolio or for a part of it. If a PPP is only a part of the project, funding should not be approached from the PPP, but from the project angle.

In this document, whenever we refer to a business model we mean a schematic representation of the underlying business case, such as the PPPCanvas.

The Dutch government is also committed to a PPP approach in part of its development cooperation program. These PPPs are a form of cooperation between government and business in which both agree to work together to reach a common goal or carry out a specific task, jointly sharing the risks and responsibilities and pooling their resources and competencies. Involving the private sector allows additional finance for development to be attracted and is seen by leading development banks (2015) as the largest potential for moving from the “Billions to Trillions” needed to reach the Sustainable Development Goals.

By definition, PPPs consist of both public and private partners, each with their own objectives, and create both financial and social value. These combinations enable an array of innovative funding mechanisms. However, establishing a PPP is no easy feat. Financing such partnerships, blending the financial means from the partners, and attracting capital for their activities can all be quite challenging. If there's one rule to the world of funding, it is that the funding follows the business case, and not the other way around. We therefore begin with the PPPCanvas¹ developed by PPPLab. The PPPCanvas – like the original business model canvas of Alexander Osterwalder, on which it is based – puts the business model on one page. It is a guide to starting the process of raising financial resources.

For more detailed information on PPPLab's knowledge agenda please visit our website: www.ppplab.org

Enjoy reading, thinking along and ... asking questions! Your input, feedback, and suggestions are highly valued. Please don't hesitate to contact us at: info@ppplab.org

¹ For details, see <http://www.ppplab.org/the-pppcanvas/>

Colophon

PPPLab Food & Water is a four-year action research and joint learning initiative (2014 - 2018) to explore the relevance, effectiveness and quality of Dutch-supported Public-Private Partnerships (PPPs). PPPLab is commissioned by the Dutch Ministry of Foreign Affairs and is driven and implemented by a consortium of the Partnerships Resource Centre (PRC), Aqua for All (A4A), the Centre for Development Innovation at Wageningen UR (CDI), and the Netherlands Development Organisation (SNV). Comments and updates about this report are welcome. Please send them to: info@ppplab.org. For more information, please visit our website: www.ppplab.org

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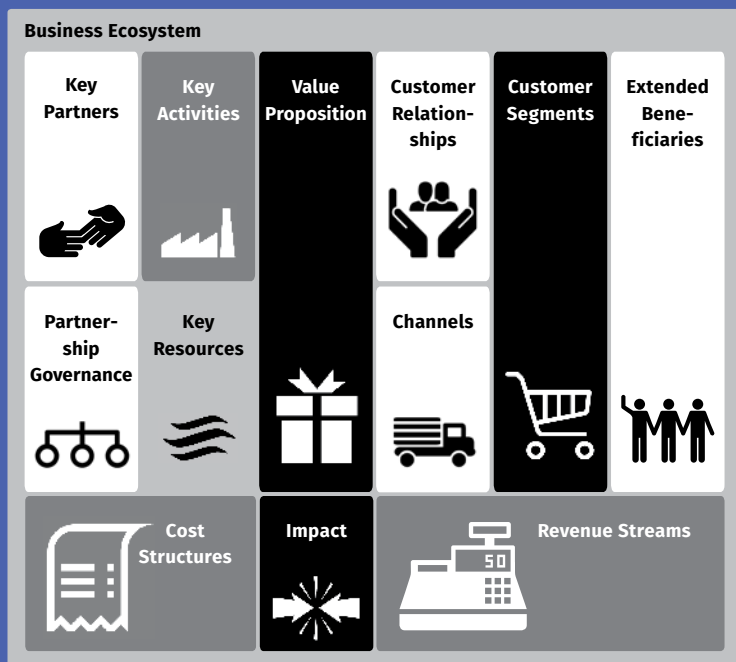


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Figure 2: PPPCanvas
*highlighting key building
 blocks for financing strategy*

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1. Getting to basic financials for a PPP

Funders have a wide variety of reasons to invest in PPPs: public or private background, motives to invest, return on investment needs, and techniques for allocating investments. They all have one thing in common: In order to invest, they need to understand the project. The PPPCanvas provides a structured approach to describing your project and the added value it will deliver.

The cornerstone of a fundable PPP is a solid business case. As is clear from the PPPCanvas, the business case for PPPs consists of both financial returns and (developmental) impact. A good business case brings confidence and accountability into the investment decision, whether this decision is made for financial or impact reasons, or for a combination of the two. The business case is a compilation of information collected through analysis and projection efforts and captures the reasoning for initiating a project. It articulates a clear path to an attractive return (whether financial, social, or both) on investment. Building a case is hard, even tedious work, but is crucial for the outcome. If we were to try and summarize this paper in one sentence, it would be: “It’s the business case, stupid!”

We will use the PPPCanvas in this document as the basis for an overview of the business case, and then use eight blocks (highlighted in Figure 2) of the PPPCanvas to capture the financial essentials. These eight blocks are grouped in three parts in the sections below:

- 1) the value proposition** (including impact and customers),
- 2) the business logic** (costs, revenues, and activities), and
- 3) the funding plan** (resources and business ecosystem).

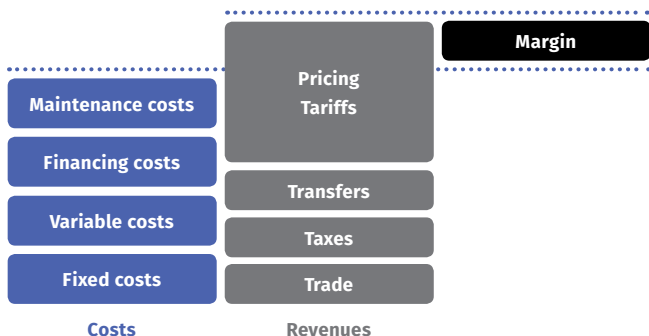
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Specify the value proposition

The goal of a development project is to create **value and impact** for the target group (**your value proposition**). By solving a problem for the target group (**your customer segment**) of the development intervention, you generate value. This concept of value generation through the project builds the foundation for the rest of the business case. Having a clear value proposition and customers willing to pay for it are key conditions for potential funders.

It is crucial to understand that we need to define the value on the level of the target group of the intervention. For example, increasing access to water in a region creates enormous value for the community as a whole, but it is hard to quantify this value without making it specific to smaller parts of the community: it becomes easier to understand the value of the water service when we consider farmers in need of irrigation. If you are creating value in multiple ways (for instance, by providing both water and sanitation), you are essentially developing multiple business positions that can each have their own business logic.

Figure 3. The business logic



The business logic: revenue streams versus costs

The value created by delivering the value proposition to the customers must be captured through a revenue stream. The biggest question at the onset of a project is what type of long-term revenues will emerge to give the project a financially sustainable basis.

A well-known cost recovery model in the WASH sector is the 3T model (OECD 2011). SNV (SNV & UTS: ISF 2014) has added a fourth T for 'trade', which is especially relevant in sanitation, where by-products such as recovered nutrients or energy can be sold. Following this 4T model, projects can generate revenues in four ways:

- 1. Tariffs:** User or company fees pay for the goods or service delivered by the PPP (e.g., locals paying for water)
- 2. Taxes:** Contributions from local government
- 3. Transfers:** Contributions from other governments (e.g., OECD support to developing countries)
- 4. Trade:** By-products that can be sold for additional revenue (e.g., nutrients stemming from sanitation)

Recurring **revenues** are needed to cover the recurring costs of the project. Naturally, if the recurring costs (the operational expenditures or OPEX) of a project are larger than its recurring revenues, the project operates at a loss. Covering losses with one-time revenue sources, such as loans or grants, introduces a liability in the financial model: one-time funds run out, resulting in a dependency on additional funding. Two of the four Ts in the model – transfers and taxes – frequently do not recur, and so should then be kept out of the operational business logic!

Recurring costs can be broken down into four common components, and have likely been identified in the **Costs component** of the PPPCanvas:

- 1) **Fixed costs:** Costs arising from the operation that are not particularly affected by production volume (e.g., office space)
- 2) **Variable costs:** Costs that are directly related to the production of a good or service (energy, resources, personnel, and transportation)
- 3) **Financing costs:** Interest and repayment of market-based financing instruments
- 4) **Maintenance costs:** Costs related to the upkeep and replacement of capital goods (e.g., maintenance of machines and buildings)

These four groups of recurring costs can be directly derived from the costs associated with the recurring **Activities** identified in the PPPCanvas.

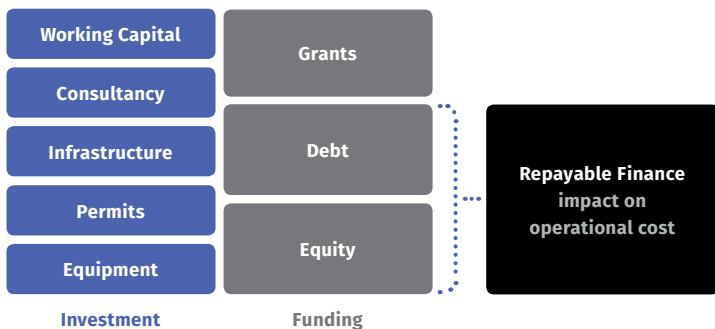
A project's long-term financial sustainability depends on there being a positive margin between revenues and recurring costs. This profit margin can be used for additional investment or to pay for financing requirements. Making a plausible calculation of the expected margin on a project is obviously crucial in attracting financing. Interestingly, this can work out in two ways in the case of PPPs: donor agencies are generally careful not to fund PPPs that are considered to be commercially viable (as they will be able to find financing in the economic market), while for other financiers this is the other way around.

Investments and the funding plan

PPPs often require new equipment or infrastructure. Investments in resources such as machinery or permits do not recur; they occur only once and should therefore be treated differently. These expenditures are called Capital Expenditures (CAPEX) and could be covered with revenues from the project; however, there is a timing issue: revenue is spread out over the project, while investment must occur up front. This means each project needs to pre-finance its investments.

All the investments in capital should be placed in a funding plan, which is an overview of one-time expenses and how they will be financed. In PPPs, in-kind contributions (such as making equipment or time available free of costs) could also be part of the plan, whether they are monetized or not. The Key Resources on the PPPCanvas determine which resources are to be incorporated in the funding plan. Additionally, the Business Ecosystem, which captures the variables of the context in which the PPP operates, plays a role here, as the risks of the PPP and

Figure 4. Capital expenditures and the funding Plan



the way these are managed will also affect the funding plan. Risks – which may be nonfinancial risks in the case of PPPs! – will need to be avoided, mitigated, or allocated – e.g., through guarantee funds, grants, or insurance.

As shown in Figure 4, both investments and funding sources are diverse. Chapter 3 covers the basic funding instruments, while Chapter 4 zooms in on more recent and innovative funding instruments that can be used to cover the investments required for the project.

One capital investment that is often overlooked is working capital: projects often require materials and goods (inventory material), and some clients may take some time to pay: all the payments that are yet to be received must also be pre-financed. Together, these items are referred to as working capital.

An important factor for a funder is the uniqueness of the resources on which the funding is spent. If the machinery used is suitable for deployment elsewhere, the machinery (assets) can be collateral for the funder, reducing their risk and thereby increasing their willingness to participate.

It is crucial to recognize that the funding alternative chosen has implications for the business logic of the project. Loans come with interest and repayment schemes, and equity providers require a return through a share in the profit. Because the development community is moving away from grant-driven instruments, the proportion of repayable funding in the funding plans of projects is likely to increase.

Funding versus Financing

While funding and financing have become interchangeable terms, they originally had distinct (though similar) meanings. One can fund a project by providing money for specific costs or a specific purpose. This is usually done on basis of an agreement and may be free of charge. On the other hand, one can finance an entity, in which case the entity needs to repay the funds after a certain amount of time, usually with interest. That entity can (partially) use the financing to fund part of its own project.

However, the distinction between these terms has become blurred over the years and the terms have thus become interchangeable. This is partly due to the fact that classic funders, such as governments and philanthropists, began to act more like financiers (especially with the use of revolving funds). This booklet will therefore not use the old (strict) definitions, but will rather use funding and financing to describe the several ways in which a financial entity provides money to a PPP.

A good funding plan, including a risk model and a risk-management approach, makes sure that the required investment is covered by funding. For a PPP, it is of course wise to have a strategy with a number of alternatives: if a subsidy or loan application is rejected, there must be a back-up option. This also means that the various funding opportunities that are available should be prioritized.

Financial reporting

It is important to distinguish between recurring (OPEX) costs and one-time investment costs (CAPEX). This is done in financial reporting, where the income statement represents an overview of all operational results over a given period, while the balance sheet represents an overview of all the assets (e.g., machinery) and liabilities (e.g., loans) present at a certain point in time. In a way, a balance sheet is a snapshot of a moment but the income statement is a movie covering a certain time period.

A crucial concern for a project and its sustainability is liquidity: the availability of cash at any moment. Consider, for example, a project that requires an expensive installation. Because the installation is written off over the course of several years, only a portion of it is presented as a cost on the income statement. But the installation needs to be paid for up front and in full: the cash needs to be there. For this reason, projects require a cash flow statement where the availability of cash is mapped.

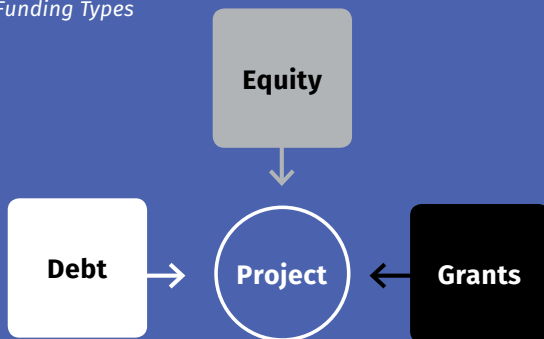
Note about debt, equity, and grants

As with the 'funding versus financing' terminology, the strict definitions of debt, equity, and grants would not allow for Figure 5's graphical representation of the fund flows to a project.

A project cannot have equity, as only a financial entity can. This entity can choose to use their equity (determined as the difference between the value of the current assets and the cost of the liabilities) to fund a project. Debts and grants influence the equity of a financial entity. In contrast, debts and grants are applicable to projects. They thus operate on a different level from equity.

However, the funding of PPPs and projects has the characteristics of these three types and, for clarity, the scheme in Figure 5 in used in this booklet. Note that some funding schemes can have the characteristics of more than one of these sources (and themselves thus exist in different forms).

Figure 5. Funding Types



2. Introduction into the world of funding

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The world of funding is filled with specific terminology. While this brief booklet can't be exhaustive, important terms in the context of PPPs will be briefly explained.²

Sources and types of funding

Funding can originate from public or private sources. There are three types of funding, shown in Figure 5: debt, equity, and grants (which include donations, transfers, and subsidies). Each of these three has various specific characteristics and in practice they can be combined, leading to a mixed portfolio.

Traditionally, development projects have relied on contributions from public funding sources, such as local or international governments and donor organizations. Private funding refers to the flows coming from users of the service, private PPP members that invest in the project, and other private financiers, such as commercial banks and pension funds.

Both public and private parties can provide nonrepayable funding through grants or subsidies. Repayable funding is funds that need to be returned to the fund-provider and can broadly be divided in debt and equity. The key difference between the two is that debt (e.g., loans and bonds) is a structural and fixed liability that (in principle) needs to be repaid periodically, whereas equity (also known as “shares”) purchases part ownership of the project and thus an entitlement to a portion of the results or profit of the project, which is therefore variable.

² Various types of PPP contracts (BOT, DBOT, BLT etc.) can be distinguished and have different funding provisions. However, as these are often used for large infrastructure projects, they are beyond the scope of this booklet, where we focus instead on development-oriented PPPs that usually use other type of contracts.

Generally speaking, debt is cheaper than equity because there are no obligations once the debt is paid off, and because the lender faces less risk than a shareholder does, and also because the interest on debt is tax deductible. However, debt is a structural commitment and can cause bankruptcy when the debtor is unable to pay (defaults). Equity providers can accept riskier projects than debt providers because equity providers stand to gain more when the project succeeds (this is called the upside of the investment).

Differences between funders

Apart from the type of funding, there are also a number of different characteristics of funders. As mentioned before, funders may be either public or privately owned. Another key characteristic of funders is their focus on the social return on

Figure 6. Types of funders with their priorities and recipients

Social return on Investment		Financial Return on investment	Priority of Funder
Just Impact	Impact first/ Impact & Profit	Profit first/ Just profit	
Public Sector/ Charity	PPP/ Social Enterprise	Traditional Business	Receiver of Funding
Philanthropist, Government, NGO	Government, Impact Investor,	Traditional Bank and Investor	
Possible Funders			

investment (SROI) or the financial return on investment (ROI) – see Figure 6. Philanthropic organizations, governments, donors, and NGOs tend to be focused on the first, while market-oriented institutions are traditionally focused on financial returns.

Increasingly, a combination of social and financial returns is aimed for by funders (think of banks like Triodos, ASN, and social entrepreneurs). Impact investors can also be placed somewhere in the middle, aiming for a combination of social and financial returns (see text box).

Apart from these generic types, two other characteristics are crucial: the first is the amount of risk an investor is willing to take and the second is the size of the investment fund.

If funders accept higher risks, they are more likely to invest in projects that are innovative. Currently, there is still a mismatch between the expectations of financial investors in terms of the risk–reward ratio and the realities provided by development projects. Investors expect a higher compensation because they perceive high risks. This has led to the so-called pioneer gap: the problem that few investors (even impact investors) are willing to invest in companies targeting the poor, and even fewer are willing to invest in the early stage of the creation of these businesses (SSIR, 2013).

PPPs are complex entities because they try to combine developmental and business objectives and operate through a consortium of partners. This brings advantages to the investors (since expertise and resources are pooled), but it also brings additional risks (e.g., coordination of the partners). Good risk management is therefore essential if PPPs are to be successful in raising funds.

For the PPP consortium, it is also two-sided: First, the consortium may be able to tap from a larger number of financing sources, because the combination of private sector, public sector, and civil society organizations broadens eligibility for certain funding. On the other hand, certain funds or investors could be hesitant to invest in what they perceive as complex partnerships or poorly understood sectors and countries.

The key question here is why some investors accept a higher risk: governments sometimes do so because projects cannot obtain other funding (market failure). Impact investors might have a social return obligation or expect a competitive advantage from investing in a specific type of investment. It is also perceived that the initial creation of social impact will lead to a reduction of risks later on, creating a better enabling environment for investments or minimizing investments costs.

The second characteristic is the size of the investment fund: fund managers want to have a manageable portfolio, which means they often have about 5–20 investments per fund. This means that their ideal project size will relate to the size of the total amount of funds they wish to invest in a sector. This can help to give a rough indication of whether, in terms of its financial scope, a PPP potentially fits within the fund portfolio.

What is an impact investor?

Impact investors are similar to regular financiers in the sense that they invest to make a financial return. However, impact investors also invest in projects that create a social or environmental impact in **addition to** the financial return.

Impact investing has four main characteristics:

Intentional: The investor intends to achieve a social or environmental impact.

Financial return: Impact investments generate a financial return on capital or at least return the capital.

Varying returns and instruments: Impact investment returns range from below-market rates to risk-adjusted market rates and may be loans or equity.

Impact Measurement: The investor commits to measuring and reporting the performance and progress of the underlying projects.



3. Innovative financing

23

As mentioned, the role of market-based repayable finance from private funders has so far been limited in the development sector. In the text box, some constraints that hamper market-based funding are mentioned.

As mentioned, the role of market-based repayable finance from private funders has so far been limited in the development sector. In the text box, some constraints that hamper market-based funding are mentioned.

There are several innovative financing approaches that can play a major role in countering the barriers mentioned here. These funding innovations serve a number of purposes (Van Bork et al., 2015):

- 1) supplementing private funding** for certain projects or programs with development aid;
- 2) reducing the risk** for private investors (by providing guarantees or insurance);
- 3) providing scale:** bringing smaller funds together in a single larger fund reduces transaction costs;
- 4) reducing scale:** projects eligible for microfinancing require only small amounts of cash, and this is difficult for larger funds to manage (introducing transaction costs).

Some innovative financing approaches and concepts are now explained. This list is not exhaustive and new models continue to emerge, but it contains the most important ones that can provide financing options for PPPs.

Key challenges for market based funding for development (OECD, 2010):

- **Affordability constraints:** In developing countries, the use of tariffs may be restricted by the purchasing power of the poorest customers of the PPP goods or services. Differentiation in tariffs (cross-subsidy) enables reaching out to the poorest poor for whom the tariffs would otherwise be too high.
- **Limited availability of funds:** Local financial markets are often insufficiently developed to provide the financing required for the PPP project. Additionally, investments in infrastructure typically require long investment horizons, which are scarce in developing countries.
- **Risk profile:** Development projects (especially in infrastructure and water) combine a number of risks, such as commercial risk (tariffs), contractual risk, currency-exchange risk and the political risks associated with these crucial resources.
- **Lack of funds at decentralized level:** Funds at subnational governments are typically scarce, reducing creditworthiness. In addition, subsovereign government levels are often not allowed to borrow so as to keep national debt levels under control.
- **Undercapitalized balance sheets:** Many local partners are already in debt, and therefore have a limited capacity for extra borrowing. Some instruments (such as a 'debt-equity swaps' or credit ratings for these partners) can help to reduce the perceived risks.
- **Lack of human capital:** Skilled project members who both understand the world of funding and the local context of the projects are scarce, resulting in a shortage of bankable projects.

Blended funding

Blended funding means mixing grants or subsidies with market-based funding (debt or equity). This enhances the impact of public (or NGO or philanthropic) investment, because private funding is added (an effect called ‘leveraging’). This reduces the risk for the private financier, because a part of the risk is carried by the public funder, who could, for instance, guarantee to cover the first losses. PPPs often (implicitly) take a blended funding approach, because both public and private partners are involved and bring in human and financial capital. This ‘leveraging’ of private resources with public funds is sometimes the reason that governments design instruments specifically for PPPs (such as FDOV and FDW in The Netherlands).

Blending can go quite far, in the sense that multiple instruments and organizations can be linked. In the case of the Maji Ni Maisha project in Kenya,³ the World Bank provided guarantees for loans that were then funded by the commercial bank K-Rep. In addition, the World Bank financed grants for project development and implementation.

Results Based Financing

Results-based financing (RBF) is a group of performance-based funding options. RBF introduces checks and balances along the service delivery chain, encouraging better governance, transparency, and enhanced accountability. It achieves this by linking payments directly to performance. RBF has become popular among some donors as it is based on conditions and therefore considered more effective. RBF also provides incentives for innovation and efficiency: because an agreed price is paid for a result, efficient work will increase profits. However, the costs of

³ <https://www.gpoba.org/node/466>

monitoring and reporting do increase the transaction costs of this type of funds. Examples of results-based financing include:

- A foundation paying for the training of each person who retains a job for at least one year (South Africa)
- the Gates Foundation paying for the evaluation of a sanitation program and will continue funding only if the project passes a certain threshold.

There are various instruments that can be grouped in this category. Below we list a few:

Output Based Aid (OBA) typically consists of subsidies to organizations providing a basic service to compensate for the poorest customers who can't afford the actual cost level of the service. The fees are intended as a supplement to the tariffs charged to these people, not as a substitute for tariffs. The subsidy is performance-based, meaning that most of it is paid only after the services or outputs have been delivered and verified by an independent agent.

Conditional Cash Transfers aim to reduce poverty by making welfare programs conditional upon the action of the receivers. The government (or other organization) only transfers money to individuals who meet certain criteria, thus incentivizing users to purchase certain products or use certain services (e.g., a cash payment to a household where all children attend school).

Advance Market Commitments are 'buyer guarantees': an organization guarantees a certain level of demand or a certain subsidy on the price that they will cover if demand does not arise from the market itself. This reduces the risk for a supplier,

since a predefined level of demand or price is guaranteed. It is best known in the area of vaccine development in developing countries, but could also be used in other sectors. best known in the area of vaccine development for developing countries, but could also be used in other sectors.

Though it may not be very common, PPPs may make use of such instruments or may consider to design a results-based financing scheme specifically for the PPP.

Though it may not be very common, PPPs may make use of such instruments or may consider designing a results-based financing scheme specifically for the PPP.

Development or social impact bonds

Impact bonds are instruments in which private investors provide funds for development interventions, and funders (mostly public sector agencies) repay investors if and only if independently verified evidence shows that the outcomes have been achieved. If the government is the outcome payer, one speaks of social impact bonds or SIBs (e.g., to tackle youth unemployment). If third parties pay for the outcome, one speaks of development impact bonds (DIBs).

DIBs and SIBs are similar to output-based financing, but the risk of nonperformance lies with the (private) investors and not with the organization providing the service.

Typical opportunity areas for impact bonds in PPP structures include education (training and education institutes), water resource management (securing sources by rainwater harvesting,

flood protection, aquifer storage), connectivity or energy coverage, road infrastructure, and housing conditions. Promising examples are found in delta-coastal protection combined with land reclamation.

A specific example of a DIB is the Educate Girls Development Impact Bond⁴: the Children's Investment Fund Foundation is the outcome payer and promises to pay back the investor the original amount plus extra returns as long as agreed targets are met. The program is independently assessed in terms of increased enrolment and the children's progress in literacy.

Microfinancing

A well-known approach in the development community is to use microfinancing to provide loans to SMEs or (groups of) households (e.g., providing a loan of \$1000 to a widow with two children in India so that she can start her own teashop). The key challenge here is to overcome the transaction costs involved with many deals and to ensure that the households understand the conditions of the financing scheme. Through the use of microfinancing, a new level of actors can be mobilized.

For PPPs, microfinancing could enhance the ability of households or SMEs to pay tariffs or product fees for the product or service provided by the project. PPPs can make use of existing microfinance products, but it could also be part of the PPP to develop new microfinance (loan) products that specifically cater to the PPP's products or services and target group. A nice example here is FINISH Kenya⁵, a PPP that is trying to develop and institutionalize sanitation loans for their project.

⁴ <http://instiglio.org/educategirlsdib/> ⁵ See <http://www.waste.nl/en/project/finish-in-kenya>

Philanthropy

While philanthropy is nothing new, a relatively new development is the increasing role big philanthropists like the Bill & Melinda Gates Foundation play in the development sector. While some of their funding is provided as grants, they can make use of a range of (innovative) financing constructions. An example is a “recoverable grant” (also known as forgivable loan), a unique type of grant where a philanthropist or nonprofit organization decides to lend money in the hope that the entrepreneur will be successful. If an entrepreneur is not successful, the funds do not need to be repaid.

A PPP approach can be attractive to philanthropists who believe in combining business with developmental objectives. Philanthropy and corporate social responsibility (CSR) are concepts that are often confused: CSR is one of many incentives for philanthropy, based on objectives such as obtaining a license to operate from a market or client perspective. CSR can be related to preconditional requirements linked to regulation, license legislation, governmental laws (like the 2% net profit law in India, obliging the private sector to provide for CSR grants), or the firm's core business (for example, pesticide-free food producers providing information about pesticides and their use).

“Enterprise philanthropy” is a kind of philanthropy where grants are provided along with ongoing, hands-on support to help social businesses move from the blueprint to the validation stage of their development. Enterprise philanthropy, as distinct from a traditional grant, has four distinct characteristics:

- (1)** an aligned purpose between grantor and grantee;
- (2)** a focus on a profitable proposition;
- (3)** a clear progression through operating milestones; and
- (4)** persistence through the many cycles of iteration of a new

business model. A good example of this is the Shell Foundation assisting Husk Power in India to establish decentralized power plants running on rice husks, bringing electricity to the rural poor.⁶

While strictly not philanthropy, we would also like to mention “angel investors” here. An angel investor (or business angel) is an affluent individual who provides capital for a business start-up, usually in exchange for debt or equity. A small but increasing number of angel investors invest online through equity crowdfunding or organize themselves into angel groups or angel networks to share research and pool their investment capital, as well as to provide advice to their portfolio companies.

Crowdfunding

Crowdfunding is a new, upcoming way to reach a community of potential funders for projects. It sources many small contributions from a large number of people, typically via the Internet. Experiences suggest that smaller, ‘do-good’ projects that do well with a broad audience are feasible for this approach. PPPs can also raise funds through crowdfunding, but it may be harder to communicate than in the case of smaller, more charitable, or more innovative projects. It is valuable to recognize that the term “crowdfunding” relates primarily to the interface (often a website) through which a crowd is reached. However, more traditional funding instruments lie underneath the interface. This means that the funds supplied could be a donation, equity funding (with shares in the project being sold to the crowd), a form of debt (a fixed return is promised), or a form of value chain funding (a good or service is repurchased).

⁶ http://ssir.org/articles/entry/closing_the_pioneer_gap



Venture capital

Venture capital is a type of funding for a new or growing business. It usually comes from venture capital firms that specialize in building high-risk financial portfolios. With venture capital, the venture capital firm gives funding to the start-up company in exchange for equity in the start-up. Commensurate with the high risk, investments are often focused on start-ups with expected high profit margins. The PPPs we focus on in this booklet (in water and food security for the base of the pyramid) are therefore not likely to be at the top of the list for venture capitalists, though here also trends of social-ecological impact are seen to gain importance.

Grouped financing

A wide array of 'grouped financing' alternatives has been created to increase access to market-based repayable finance. The basic purpose of these forms of financing is to increase the scale of the financing scheme. This reduces the transaction costs for borrowers (because they do not have to find their own funders) and reduces the risk for the lenders (because their investment is spread out over a portfolio). A PPP that consists of multiple projects but is funded at the PPP level is an example of grouped financing.

Pooled financing is an extension of grouped financing. In this variation, the borrowers (smaller municipalities or utilities) are also grouped to spread the risk on each loan. Often, borrowers are required to make a deposit in a guarantee fund to reduce the risk of individual entities not repaying.

An example is the Tamil Nadu water and sanitation pooled fund. In this case, the Tamil Nadu Urban Development Fund

was set up as a PPP with the aim of providing sustainable financing for infrastructure investment. The capital is provided by the Government of Tamil Nadu and Indian private financial institutions. This has given the fund the credibility to attract private capital that flows into development projects.

Revolving funds

The basic principle of a revolving fund is that the repayments on the issued capital flow back into the fund, allowing the fund to be replenished and allocated again to a new project. The revolving fund can distribute its capital in various ‘traditional’ ways. Traditionally, loans are used and are redistributed after repayment. In a similar fashion, however, funds can revolve through equity when the equity is sold (to a PPP partner or others).

Depending on its nature and aim, a revolving fund could be an interesting option for a PPP—e.g., if the revolving fund is set up by a donor to stimulate a specific sector in which the PPP operates, it may provide funding on more favorable terms than commercial loans or equity.

Guarantees and insurance

Guarantees and insurance on loans come in many different shapes and forms – too many to cover here. The most important use for these instruments is to bring the risk for private investors below a certain threshold. Private investors sometimes wish to counter very specific risks (such as political or currency risks). It is important to note that these instruments do not reduce the overall risk of the project: they merely shift some risk from a

private financier towards the guarantee or insurance provider. An example is the guarantee provided by Sida to MTN, a telecoms company in Uganda. MTN was selling bonds to investors to extend their mobile network to 24 rural villages. Sida provided a guarantee to the bond holders, which would repay them if MTN were not able to. MTN paid Sida a risk-related fee on the guaranteed amount.⁷

Debt for equity swaps

Sometimes, local partners in a development project already have major loan commitments, and financiers are reluctant to lend more to these partners. In those cases, debt for equity swaps can be considered, where the debt is converted into equity of the same value. This often means that the debtor transfers shares to the provider of the existing debt, making them a shareholder of the partner.

Resource concession

A resource concession is a means of delegating the funding question to a private partner (or PPP) by granting them the exclusive rights to develop a certain resource (for example, to supply water to a specific region). Based on their potential gain through successful exploitation of this right, the private partner (or PPP) invests money in the project.

⁷ <http://www.sida.se/contentassets/01c9a3938ab44047809981abd2daaff2/ce49f12a-74e9-47a4-807a-ea5d0a1899dd.pdf>

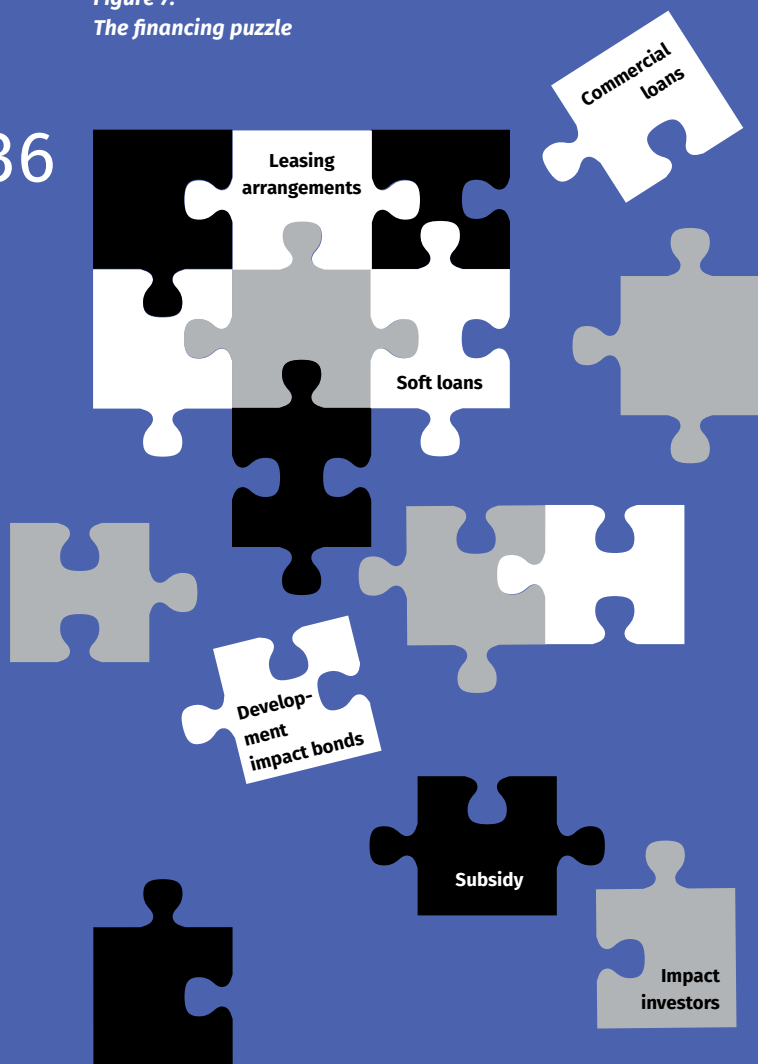
Leasing

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A lease is a contractual arrangement calling for the lessee (user) to pay the lessor (owner) for the use of an asset. Property, buildings, and vehicles are assets that are commonly leased. Industrial or business equipment is also leased. Leasing can be an important instrument for PPPs, as it allows financial entities like municipalities to lease their physical infrastructure from investors. This is especially attractive if the leasing costs can be charged to recurrent budget expenditures. The alternative to leasing would have been direct investment – i.e., fixed assets on the balance sheet, which would need to be reported as public debt. Moreover, leasing is an instrument that fits a circular business logic.

Figure 7:
The financing puzzle

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4. Tips and tricks to improve financing strategies

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As Chapter 3 described, there are only three sources of financing: equity, debt, and grants. This suggests that the choice is very straightforward. However, when we take a closer look, things are not so simple. Each of these categories contains many subcategories, presenting a large palette to choose financing options from. For example:

- commercial loans from a range of banks;
- soft loans, such as from development banks;
- funds from impact investors;
- development impact bonds;
- subsidy instruments; and
- leasing arrangements.

This list cannot simply be split into the three main categories of equity, debt, and grants, as often a mix of these is used by the various instruments and organizations. For example, an impact investor can provide capital in the form of both debt and equity. How can the pieces of the puzzle be put together?

First of all, you need to be able to articulate your own PPP value proposition in terms that the funders understand. What are the risks of the PPP? Which development stage is the PPP in? What are the growth opportunities? How much margin is available to pay for financing? What is the scale of funding that you need? How are the financials of the project expected to develop over time?

Secondly, you need to understand the financing options well. Which investor's terms suit your needs at this stage, and which will be more suitable later on? Which funder can provide something in addition to money?

Unfortunately, there is no blueprint for a PPP's financial structure. Each PPP is unique, and so is its financing strategy. As stressed throughout this booklet, it is all about the business case. However, from this business case, we can extract some rules of thumb that can help you start in the right place. Here we describe some practical tips and tricks that may be of use.

Which funder do I prioritize?

The most elementary fact to consider about a funder is its return-risk ratio: What is the expected return for the funder, and how great is the risk of not getting that return? This rather basic ratio needs to be fine-tuned to the project or PPP:

1. First of all, in the development field, 'return' may refer to social return, as well as financial return. The type of return offered needs to align with what your investor is looking for: commercial investors look for a commercial return (the revenue block of your PPPCanvas), while philanthropists are looking for impact.
2. Risk is expensive. Generally, funders do not like risky cases, and when they do, they expect a high return (either in economic or impact terms) for the risk that they are taking. It is possible to reduce the risk or allocate it, for example to insurance or guarantees. Typically these are not free.
3. Many factors relate to risk. Think about the number of partners (the fewer the better), the track record of the partners (the more experience the better), and the specificity of the equipment and infrastructure: if they can be sold easily, risk is reduced.
4. Funders tend to specialize in a specific projects maturity level (i.e., the stage of development of the project). Maturity

also relates to the risk perspective: the youngest projects are riskiest, as more things can still go wrong.

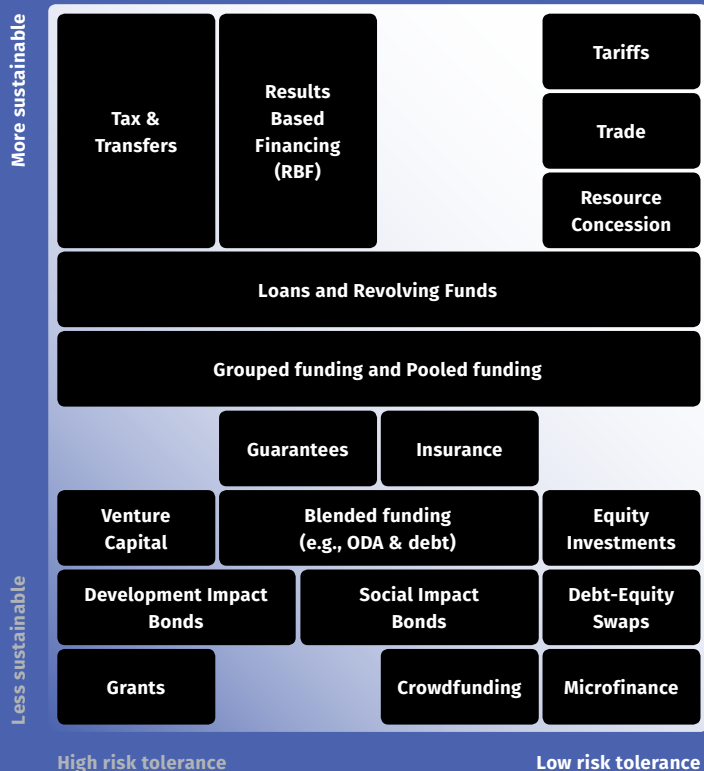
5. Funders like to diversify. To protect their portfolio against risk, they prefer to choose different projects in different countries, branches, or stages of maturity. Their thinking is that these projects will balance each other out: if one sector is doing poorly, it is best not to have all of their projects in the same sector.
6. Funders want to keep a close eye. They like to track their investments, but it is only possible to keep track of a certain number – perhaps 10–20 projects. This means that they need to spread their funds over 10–20 cases, so the ideal fund size is about 10–20 times the amount you require for your project.

Figure 8 shows a (not exhaustive) overview of various instruments; most instruments have variations. It is important to know which instruments can be used for sustainable financing and thus be used as part of the business logic. Grants and crowdfunding can be great for starting up (and are usually used for CAPEX), but they may be too uncertain, small, and nonrecurring to be a part of the business logic, and thus to base a sustainable business case on. The higher up an instrument appears in the figure, the more sustainable it generally is. This also means that the instruments placed higher in the figure are usually used for OPEX (although there are exceptions).

The other axis shows the risk tolerance of the different funding instruments. Some funders (such as venture capitalists) prefer to invest in high-risk, high-reward opportunities, while microfinancing is only an option if there is very little risk involved.

Figure 8.
Overview of instruments

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Use of Grants

Grants, including subsidies, are perfect for temporarily bridging gaps (like the pioneer gap) but can never be the cornerstone for any long-term sustainable intervention, whether this concerns a business, a nonprofit entity, or a platform. Grants from awards, challenges, calls for proposals or applications, and global development applications will usually force you to adapt your value proposition, your partnership, your approach, and your financing plan to meet their conditions. Never draft a proposal around a grant, but rather use the grant to bridge the gap. This needs to be taken into account by both applicants and funders!

A clear pitch

Finance is always built around a value proposition. Financiers like value propositions that are formulated clearly, specifically and smartly, and are preferably pitched in a few words or visuals. Train yourself to explain your value proposition in less than 32 words, to pitch your plan in less than two minutes, and explain your needs in less than five minutes.

Risks

Financing strategies are strongly correlated with the intervention risks. The greater the risk, the more complicated will be the finance structure and greater the need to blend. The point of financial engineering in PPPs is to find a solution to dealing with the risk. The risk thus drives the PPP financing structure. Risks are mostly perceived, not calculated. Approach the risks from the funder's perspective, not from your perspective (which is influenced to some extent by dreams, passion, and ambition – besides experience and an understanding of the business).

Risks should not only be assessed and tackled by mitigating measures. Remaining risks need to be allocated, no matter with what partner or funder. Frequent step-back observation of the partnership, the perceptions and expectations, the status of results and agreements and the (re-)confirmation of the personal, organizational, and common objectives can help in drafting, updating, adapting the finance strategy and the risk allocation.

The nature of PPPs has some implications for its risk profile:

- At the one hand, PPPs can be more risky than individual organizations because of the cooperation and coordination across organizational boundaries. It is beneficial to address this risk for the potential investors.
- On the other hand, PPPs may be less risky than individual organizations because the resources of the organizations involved can be leveraged more efficiently. For example, if there is a local partner with a local network, the risks related to the field-level project implementation are reduced.
- As mentioned in the introduction, it is possible that a PPP contains a portfolio of projects, where the multitude of projects helps to diversify the risks involved (as one project could compensate for another's poor performance).

Be clear on the stage of development of your PPP and the role of different type of investors

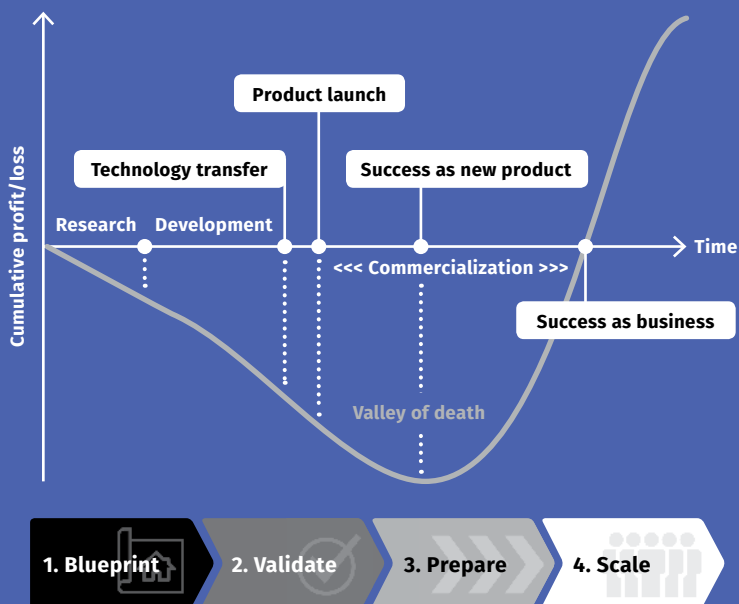
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In Figure 9, we have combined the pioneering stages that a PPP goes through (Koh et al., 2012) with an illustration of the so-called valley of death (Osawa and Miyazaki, 2006), that illustrates the pioneer gap. It is essential to understand which stage of development your PPP is at, to think through all the stages from the beginning, and engage with future investors early to learn their criteria. At the Blueprint and early Validation stages, it will be hard to attract repayable finance (due to the high risks), while the options for obtaining public resources, grants, and so on are often limited and subject to strong competition. Impact investors may only invest once the PPP has clearly exited the “valley”, but they should be engaged with and understood much earlier. Finding resources to get through the pioneer gap becomes easier if an impact investor is already committed to your concept provided you can prove that it works. Then social or development impact bonds may be developed to bridge the gap, connecting outcome payers (interested in the economic spin-off of the social impact) with revolving funds, recoverable grants or impact investors who strive for social impact, but with their upfront investment refinanced.

While we focus here on the financing aspects of reaching (sufficient) scale for a financially sustainable PPP, PPPLab's Explorations Series #4 explores scaling strategies and practices for PPPs from a much broader angle.

Figure 9.
The valley of death
and pioneering stages

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Start small, think big

Use the PPPCanvas as a snapshot tool, making a picture of your PPP in different stages. Assess how it is now, where you want it to be in the future, and the steps needed to get there. Finance strategies for PPPs are often focused on expected growth and scale up, and sometimes even a system change in which public and private parties redefine their roles and responsibilities over time to tackle costs, share revenues, and mitigate risks. A financing strategy can thus never exist without long-term planning, no matter how difficult it is to define.

Bridging deficits

To obtain a clear financial picture, you need to strictly observe the distinction between OPEX and CAPEX, and only use one-off investments for CAPEX purposes. It is however likely that it will take the project some time to get started and generate the expected revenues. These initial deficits can be covered by including a liquidity buffer in your CAPEX requirement.

Be aware of differences in language

When a museum owner and an investment manager talk about curators, they mean totally different things. The same can happen in dialogue with potential funders when talking about the various instruments, documents, or impacts that may be achieved. It is crucial to clearly define the terms that are essential to the discussion up front. Financing programs and projects is different from financing businesses. Programs have a beginning and an end; business, hopefully, never stops. Business talks about growth; programs talk about scaling up. Programs require management; business requires entrepreneurship.

Take the investors' perspective

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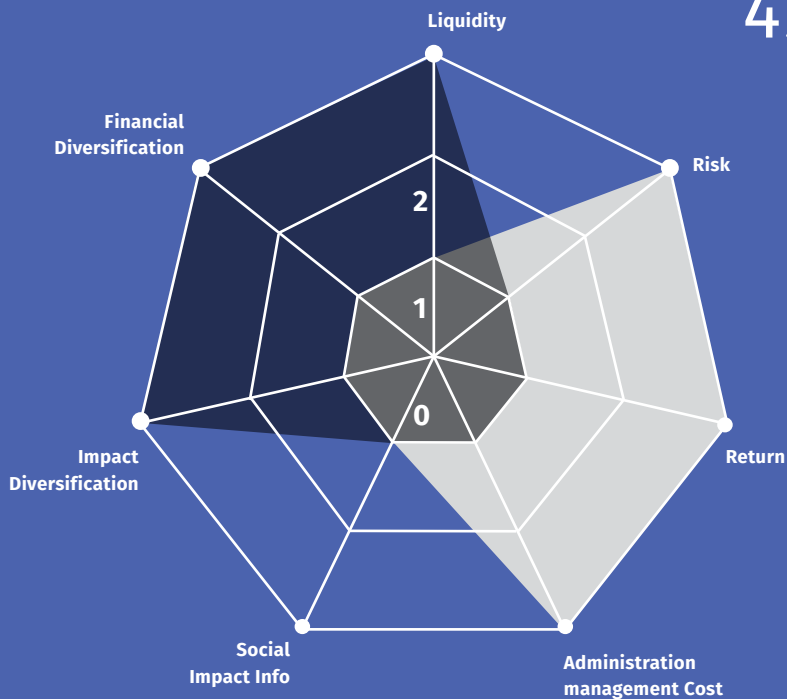
Investors' goals often differ from those of the implementer, and thinking about how you can align the project with investor needs is crucial. Figure 10 shows an adaption of the perspective used by the F.B. Heron Foundation (an impact investor all of whose investments are in so-called mission-aligned investments).⁸ The figure shows the perceived importance of business case characteristics to two investors and demonstrates the variety you may meet. In addition to risk–return considerations, investors look at management costs, whether they get a lot of feedback on their impact, whether they are diversified enough in both their financial portfolios and their impact results, and they also pay attention to liquidity: how quickly can they move out of commitments and change focus?

As you can see, in the assessment of F.B. Heron, a different type of funding results in a different perceived level of importance of certain characteristics; different characteristics are important for different types of funding. Figure 10 shows that, for example, a direct equity funder may have an opposing profile of a public debt fund.

⁸ See <http://heron.org/market/enterprises/investments>

Figure 10.
*Example of differences in
 investors' perspectives per type
 of investment*

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- = Public Debt Funds
- = Direct Equity
- 0 = Not important
- 1 = Important
- 2 = Very Important

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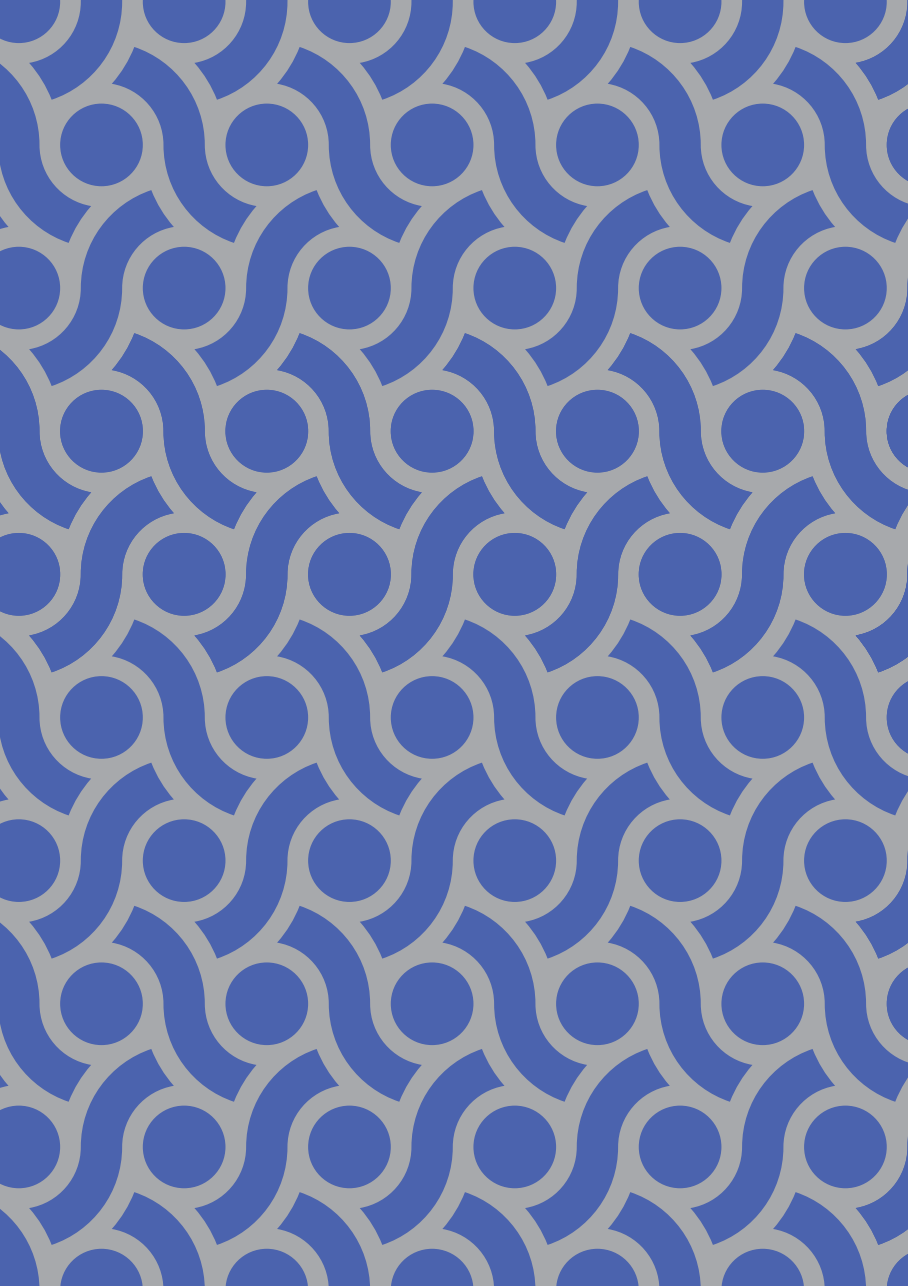
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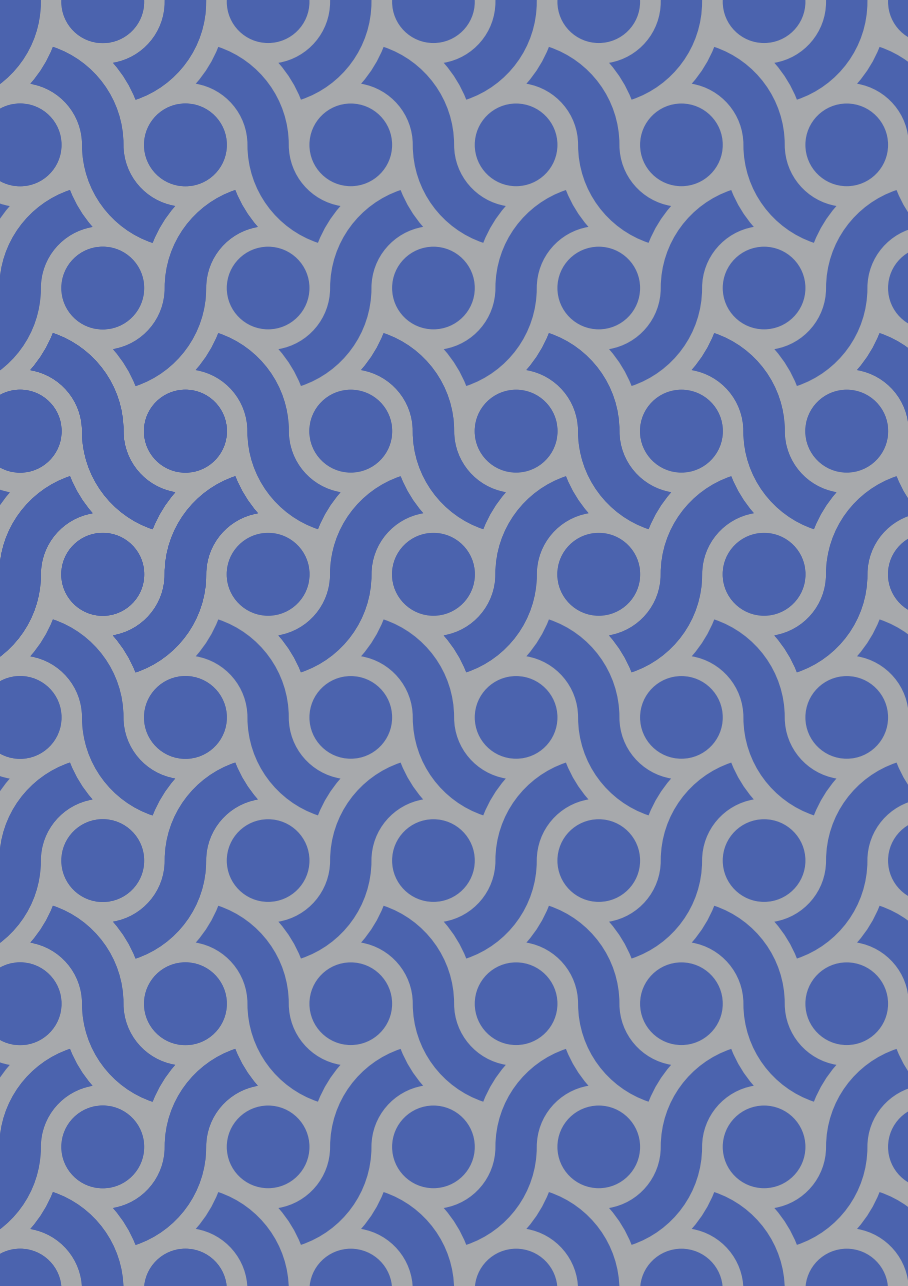
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PPPLab Food & Water is a four-year action research and joint learning initiative (2014–2018) to explore the relevance, effectiveness and quality of Dutch-supported public-private partnerships. This booklet is one of a series of 'Insights Series' booklets.