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A Portfolio Approach to Impact Investment

A Practical Guide to Building, Analyzing and Managing a Portfolio of Impact Investments

- This research presents a portfolio management tool to analyze impact investments across the three dimensions that determine the performance of these assets: impact, return and risk.
- Using our own portfolio and the experiences of over twenty leading impact investors, we have created a graphical framework to set targets, map investments and aggregate the profile of the portfolio as a whole.
- The work responds to an increasing demand for portfolio management strategies from both new and experienced impact asset managers, as market opportunities and portfolios grow.

Social Finance

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J.P. Morgan Securities plc

See page 47 for important disclosures

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Acknowledgements

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J.P. Morgan Social Finance Group

Serving the growing market for impact investments

J.P. Morgan Social Finance is dedicated to serving and growing the nascent market for impact investments – those intended to deliver positive impact alongside financial return. To this effect, the Social Finance Group was created in 2007 as a business unit to invest proprietary capital in the market and provide client advisory services and analytical market research.

Click here to visit the J.P. Morgan Social Finance website at www.jpmorganchase.com/socialfinance

J.P. Morgan Social Finance Research

Building a library of market analysis for impact investments

In 2010, in partnership with the Rockefeller Foundation and the Global Impact Investing Network (GIIN), we published *Impact Investments: An Emerging Asset Class* (Nov 2010), which provided a market landscape for investors beginning to explore the impact investment market. In 2011, we conducted an institutional investor survey (again in partnership with the GIIN), which produced data on over 2,200 private transactions that spanned debt and equity, developed and emerging markets, and across sectors. The resulting publication, *Insight into the Impact Investment Market* (Dec 2011), revealed investors' expectations for returns, the risks they perceive, their approaches to impact measurement, and their perceptions of the market. Having analyzed that sample of individual investments, we now present a portfolio management framework that incorporates the third dimension of impact.

Click here for the full J.P. Morgan Social Finance Research Library, also referenced in Appendix VI.

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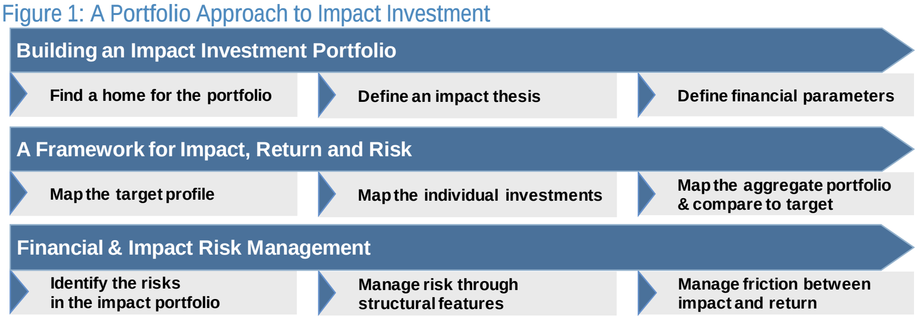
Executive Summary

Throughout, we use the term "social" to include both social and environmental concerns.

Also, we use the term "institutional investor" to reference non-individual investors, including foundations, financial institutions and funds.

This report is written as a practical guide to building, analyzing and managing portfolios of impact investments for professional investors. In traditional financial analysis, investment management tools allow investors to evaluate the return and risk of individual investments and portfolios. This research presents a tool to analyze impact investments across the three dimensions that determine the performance of these assets: impact, return and risk. Throughout, we reference the experiences of impact investors with case studies of how they approach each step of the portfolio construction and management process. The content for this research was informed by our own investment experience as well as that of 23 institutional investors that we interviewed. Figure 1 provides an overview of the report structure, and we summarize the key findings below.

Figure 1: A Portfolio Approach to Impact Investment



Source: J.P. Morgan.

Building an Impact Investment Portfolio

Find a home for the portfolio

To successfully build a portfolio of impact investments, investors need to assign an individual or a team to source, commit to and manage this set of investments, and institutions are setting up their organizations in different ways to address this need. Some investors establish a separate portfolio with its own management team while others employ a "hub-spoke" strategy where a centralized impact team partners with various portfolio managers across instrument types (such as fixed income and equity) to manage the portfolio's multiple dimensions. Still others bring the total institution in line with the impact mission.

Define an impact thesis

Once the organizational structure is in place, the portfolio management team will need to articulate the impact mission of the portfolio. For many impact investors, the impact thesis is usually driven by the value set of an individual or organization and can reference a theory of change, often with reference to specific impact objectives such as access to clean water or affordable housing. An impact thesis can reference a target population, business model or set of outcomes through which the investor intends to deliver the impact, some examples of which are shown in Table 1.

Table 1: Illustrative components of an impact thesis

Target population	Target business model	Target impact
Income level	Product/service provider to target population	Number of target population reached
Degree of inclusion	Utilizing target population retail distribution	Percent of business reaching target population
Region of inhabitance	Utilizing target population suppliers	Scale of outputs
	Implementing energy and natural resource efficiency	Quality of outputs

Source: J.P. Morgan

Define financial parameters

Alongside the impact thesis, the investment team will determine the investment scope with respect to the parameters that can drive financial performance. These parameters include: the instruments that will be eligible for investments; the geographies and sectors of focus; the growth stage and scalability of the businesses that will be targeted; and the risk appetite of the investor.

Abandon the trade-off debate for economic analysis

In setting the investment scope and return expectations, we encourage investors to abandon broad debates about whether they need to trade-off financial return in exchange for impact. We rather propose that investors rely on economic analysis on a deal-by-deal basis of the revenue potential and cost profile of the intervention they are looking to fund, and set risk-adjusted return expectations accordingly.

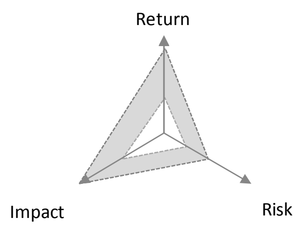
A Framework for Impact, Return & Risk

Once the target characteristics of the portfolio are defined, investors can map the following across the three dimensions of impact, return and risk: a target profile for the portfolio, the expected profile of the individual opportunities and the profile of the aggregate portfolio, which can then be assessed against the target.

Map the target profile

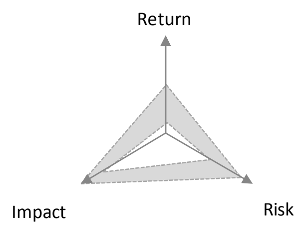
To illustrate how different investors might map their portfolio targets, we present the graph of our own J.P. Morgan Social Finance target portfolio – the shaded grey area in Figure 2 – alongside the profile that might be targeted by an investor with a higher risk appetite and a lower return threshold, and the graph that might represent the target for an investor pursuing only non-negative impact with a low risk appetite.[1]

Figure 2: J.P. Morgan Social Finance target portfolio graph



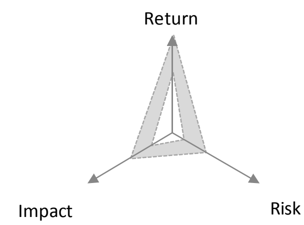
Source: J.P. Morgan.

Figure 3: High risk investor's target portfolio graph



Source: J.P. Morgan.

Figure 4: "Non-negative impact" investor's target portfolio graph

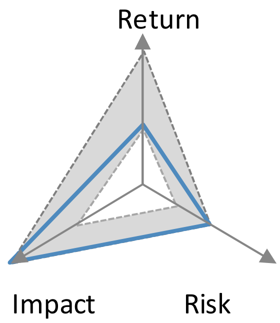


Source: J.P. Morgan.

[1] We use the term non-negative to indicate, for example, a socially responsible investor that might employ some negative screening to exclude negative impact from their portfolio but does not actively pursue positive impact. Readers should note that we imply no particular correlation or relationship between impact, return and risk.

Figure 5: One investment in the context of portfolio targets

The grey shaded area represents our portfolio targets; the bold blue triangle represents an individual investment.



Source: J.P. Morgan.

Map the individual investments

Next, we map out expectations for an individual investments based on assessments of the impact, return and risk. Once that investment is mapped, we can then compare it to the portfolio target as shown in Figure 5. Although we show an example in which the individual investment profile does fit within the portfolio targets, in general investors may not require that each investment necessarily fits within the target range, so long as the aggregate does.

Map the aggregate portfolio & compare to target

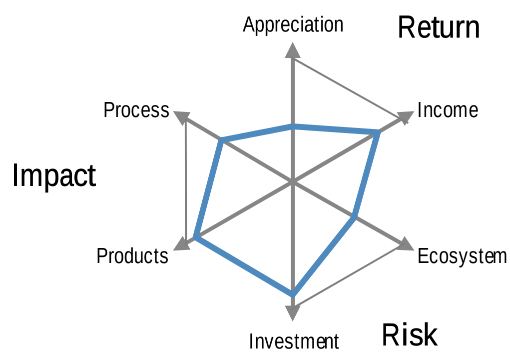
Once the portfolio begins to grow, we can consolidate the individual investment graphs into one graph representing the characterization of the portfolio as a whole, aggregating the individual graphs by either overlaying them or averaging them (simply, or on a notional-weighted basis). Then, this aggregate can be compared to the target profile for the portfolio to ensure alignment.

Expand the dimensions of the graph, if desired

Investors should consider the three-dimensional graph as a template. For some, the simplicity of this approach might be appropriate for aggregating across large portfolios at a high level. Others might prefer to use a more nuanced framework that better reflects the different contributing factors of the parameters represented on each axis – impact, return and risk.[2] As an example, we could consider an investment graph across six dimensions, splitting each of the three into two components, as shown using a hypothetical investment in Figure 6.

Figure 6: Illustrative graph in six dimensions

The bold blue hexagon illustrates the profile of a hypothetical debt investment.



Source: J.P. Morgan.

Once the targets have been set and the portfolio begins to grow, investors are then faced with managing the investments to ensure that the portfolio delivers both impact and financial returns in line with the targets.

[2] To ensure the investment profile is not oversimplified, we advocate the use of this framework – whether in three dimensions or more – in conjunction with a more detailed understanding of the investments, and never on a stand-alone basis.

Financial & Impact Risk Management

Identify the risks in the impact portfolio

On an individual investment basis, the risks that arise for impact investments are often the same risks that would arise for a traditional investment in the same sector, region or instrument. Just as we abandon the trade-off debate on return across the asset class and encourage deal-by-deal analysis, we encourage investors to assess the risk profile that results from their particular impact thesis and motivation.

There are also some cross-market risks to consider, including: the early stage of the market and its supporting ecosystem; mission drift; the responsible combination of different types of capital (including grants); and the moral hazard of recognizing impact failure or financial loss. The development of the market over time should erode some of the risks associated with its early stage and ecosystem. While some of these risks will remain in place, investors will likely develop better processes for recognizing and dealing with them.

Manage risk through structural features

Once the risk profile of the investment is determined, investors manage it using structural features such as seniority in the capital structure, fund intermediaries, and compensation-related or covenant-based incentives. With respect to the currency risk that arises for investors allocating capital internationally, some investors referenced diversification across countries as the preferred means of management.

Manage friction between impact and return

Many investors cite that they pursue opportunities where the impact mission is synergetic with the financial return pursuit. Several organizations also acknowledged that at times friction can arise between these two pursuits. Some of the challenges referenced include: the investee's growth coinciding with a reduction in jobs; the investee maintaining mission; or ensuring impact measurement. Some investors manage these challenges by building covenants referencing the mission into the deal.

Portfolio diversification

Rather than setting hard targets for diversification as can more easily be done for public equity portfolios, impact investors tend to take a more opportunistic approach to portfolio diversification, monitoring the broader concentrations in any sector, geography, instrument, or impact pursuit. Many of them referenced being mostly responsive to the opportunity set before arriving at an inflection point at which they could become more strategic about diversification as the portfolio grows.

Looking Forward

Challenges should ease over time

In order to be successful today, investors need to be realistic about the stage of the market, employing patient capital, bringing a dynamic approach and taking an active management role to the investment. Whether investing directly or indirectly, investors need to navigate a broad ecosystem to ensure success. Investors today share a collaborative spirit in meeting these challenges with the broader goal of catalyzing capital towards impact investments. This research has been a first step towards sharing the experiences of these field builders to help investors establish a strategic approach to portfolio management for impact investments.

1. A Portfolio Theory for Impact Investment

Throughout this paper, we refer to the analysis of individual impact investments or portfolios rather than the asset class as a whole. As such, we refrain from characterizing the asset class by a singular defining set of return and risk traits or by a single impact character.

In traditional financial analysis, investment management tools allow investors to evaluate the return and risk of individual investments and portfolios. This research presents a tool to analyze impact investments across the three dimensions that determine the performance of these assets: impact, return and risk. In order to put this work into context, we explain the purpose and process of this framework.

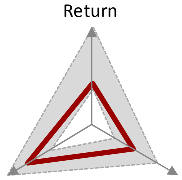
Starting with traditional portfolio theory

In traditional finance, modern portfolio theory (MPT) evolved as an important portfolio management tool because it allowed investment managers to distill a multi-dimensional set of information into a graphical representation using just two parameters: risk and return (and the correlation between them). With the additional dimension of impact and growing portfolios, investors in the impact investment market are increasingly in need of a framework that can clearly represent the nature of both the individual investments and the aggregate portfolios in three dimensions.

Adding the impact dimension

Figure 7: Aggregate portfolio representation

The grey shaded area represents our portfolio targets; the bold red triangle represents an aggregated portfolio.



Source: J.P. Morgan.

NB: Readers should note that we imply no particular correlation or relationship between these three parameters.

The framework we have developed is presented in the next three sections. In Section 2, we present the considerations that investors face at the stage of building the portfolio, including choosing an organizational structure to manage the portfolio and defining the impact and financial targets with which the portfolio will be built. In Section 3, we translate those targets into a graphical representation along the three dimensions of impact, return and risk. We then use this graphical structure to represent the profiles of individual investment opportunities. Finally, we aggregate these individual graphs to represent the profile of the whole portfolio. Figure 7 shows what the outcome of this assessment can look like – with the shaded area representing the target profile of the portfolio across three dimensions and the bold red triangle showing the actual aggregate portfolio profile. Once this assessment has been made, it can be used to determine whether the portfolio is skewed away from the targets in any one direction, and further asset allocation decisions can then be made accordingly. In Section 4, we present the financial and impact risks that arise for investors, and some of the ways in which they manage these risks.

Conversations with a range of institutional investors inform this research

In order to inform these conclusions beyond our own investment activity, we have interviewed 23 institutional investors who operate across geographies and sectors, and who range in organization type from foundations to financial institutions and from pension funds to fund managers. We asked these investors about their approach to portfolio construction and management, from the perspective of attaining the pursued impact while delivering target returns and mitigating perceived risks.

Scope of the research

In this research we present the ways in which investors manage their impact portfolios and the framework that we have developed as a result of what we learned. We do not address the larger question of how to manage these portfolios in the broader context of the traditional investment portfolios or grant portfolios that some impact investors manage. This remains a question for future research.

2. Building an Impact Investment Portfolio

In the main body of this report, we present a high-level approach that applies to direct investments into companies and indirect investments through fund intermediaries. More analysis of the considerations that arise for fund and company investments can be found in Appendix II.

Many of the interviews we conducted for this research referenced articulating a mission as one of the most important steps to building an impact investment portfolio. In this section, we explain how investors define their impact thesis and set financial parameters for the target profile of the portfolio. In order to determine those targets, there will need to be a team responsible for managing the portfolio itself. We present some of the organizational structures with which investors manage their impact portfolios and then explain the process behind defining the impact thesis and setting targets for the financial parameters.

Find a home for the portfolio

To successfully build a portfolio of impact investments, investors will need to assign an individual or a team to source, commit to and manage this set of investments. As we will see in the examples below, institutional investors utilize different organizational structures to establish these teams.

Organizationally, investors manage impact portfolios in different ways

Some impact investors establish a separate portfolio with its own management team while others employ a "hub-spoke" strategy where a centralized impact team partners with various portfolio managers across instrument types (such as fixed income and equity) to manage the portfolio's multiple dimensions. Below we provide some more detail on some of the organizational structures institutions have established to manage their impact portfolios.

- **Separate team**: Some impact investment portfolios are managed by a separate team that will operate alongside program officers responsible for grant-making, as is the case at foundations like the Rockefeller Foundation with program-related investment (PRI) teams,[3] or alongside the teams making investments into traditional assets as is the case at J.P. Morgan Social Finance.
- **"Hub-spoke" partnership**: Other organizations apply the impact thesis as an overlay strategy to the portfolios they manage. This structure is managed as a partnership between a centralized team and the individual portfolio management teams to bring consistent oversight to the cross-portfolio set of impact investments. This is the case for example at PGGM and TIAA-CREF.
- **Whole institution**: Still others, mainly asset managers, have their entire institution dedicated to impact investments and split out the portfolios by instrument, sector or asset type. This is the case, for example, at Bridges Ventures, a UK-based fund manager with real estate portfolios and equity portfolios, and at MicroVest, a US-based fund manager with portfolios separated by instrument type (debt and equity). The F.B. Heron Foundation has also committed to bringing their entire portfolio into impact investments, across a diversified set of assets.

[3] A program-related investment is an investment made by a US-based foundation that qualifies as a charitable expense under the tax code, allowing the foundation to include the investment as part of the 5% of assets it must distribute philanthropically each year.

Table 2 shows some examples of investors including foundations, pension funds, financial institutions and fund managers and the organizational structures they use. Regardless of structure, these teams require a skill set that allows them to articulate both an impact thesis for the portfolio and a financial profile for the investments they will target. We present the ways in which investors are setting these targets below.

Table 2: Organizational structures across institutional investors

Investor type	Example	Portfolio management
Foundation	The Rockefeller Foundation	Separate team
	The F. B. Heron Foundation	Whole institution
Pension fund	TIAA-CREF	“Hub-spoke” partnership
	PGGM	“Hub-spoke” partnership
Financial Institution	Storebrand	Separate team
	J.P. Morgan Social Finance	Separate team
Fund manager	MicroVest	Whole institution
	Sarona Asset Management	Whole institution

Source: J.P. Morgan

Case study: PGGM, combining financial and social return objectives through a hub-spoke organizational structure

The Dutch investment firm PGGM is one of the largest pension fund managers in Europe, investing assets worth over EUR 120bn on behalf of institutional clients. Responsible investment is integrated into PGGM’s general investment policy through six pillars: ESG (Environmental, social and governance) integration, Targeted ESG investments, Engagement, Voting at shareholders meetings, Legal proceedings and Exclusions. The Targeted ESG Investments – those that not only contribute financially to the performance for clients but are also intended to create social value – align with our definition of impact investments, so we consider this sub-portfolio here.[4]

By making targeted ESG investments, PGGM and its clients seek to consciously address important social themes, such as climate change and poverty. Targeted ESG investments can be made in all investment categories. The various investment teams are responsible for selecting them, with the support of the Responsible Investment department. Total commitments were increased to EUR 4.7bn in 2011 (4.1% of total assets under management). These are demarcated mandates. By contrast, investments in solar panel manufacturers and hospitals that may have an impact, but were not chosen with the intention of creating social added value, are not held in separate mandates and are not earmarked as Targeted ESG Investments. PGGM has developed a tool with the Erasmus Centre for Strategic Philanthropy (ECSP) at Erasmus University Rotterdam to measure the social impact of its Targeted ESG Investments.

Case study: The F. B. Heron Foundation, removing the traditional separation of investment from grant-making

Like other American foundations, The F. B. Heron Foundation has focused for years on helping families at the bottom of the economic and social scale – inheritors of persistent poverty, racial and ethnic discrimination, social and geographic isolation, and various failures in markets, social policies, and safety nets. In the wake of the financial crisis, The F.B. Heron Foundation re-evaluated the effectiveness of its pursuit of asset ownership as its core mission strategy and decided that the economic environment called for a strategy focused on employment and job-creation as its first order effect. Long-time mission investors, Heron believed that its strategy would require resources beyond its grant-making – and they moved the asset allocation strategy of the entire foundation towards facilitating the new mission. They now plan to invest 100 percent of the endowment and leverage their broader resources for mission. They reorganized their operations so that all capital investment is managed through a single capital deployment department, removing the traditional separation of investment from grant-making found at most U.S. foundations. Heron has combined grant-making and investing into a single, focused activity: to deploy capital for mission.

[4] See Appendix I for our definition of Impact Investments

Define an impact thesis

The Impact Reporting and Investment Standards (IRIS) initiative of the Global Impact Investing Network (GIIN) oversees the development of a set of standardized metrics for describing an organization's social, environmental, and financial performance. Founded in 2008, IRIS has since been adopted by hundreds of impact investment funds and thousands of companies globally as part of their social performance measurement and reporting. For more, see http://iris.thegiin.org/.

For any impact investor, it is critical to articulate a set of well-defined impact goals for the portfolio. This is often easier said than done, particularly at this stage in the market, as impact goals are best articulated when their measurement is well-defined. Nonetheless, we attempt to distill some of the most common characteristics of an impact thesis based on our own experience and our interviews.

Articulate the mission of the portfolio[5]

For many impact investors, the impact thesis is usually driven by the value set of an individual or organization and can reference a theory of change with respect to poverty alleviation or environmental sustainability for example. The impact thesis may be integrated into the mission statement of the business, or it may be a separate, complementary statement in the organizational charter. The statements below give hypothetical and actual examples of mission statements that include an impact thesis.

Sample mission statements from IRIS

- To empower overlooked individuals at the Base of the Pyramid, by selling innovative products that enable access to basic services.
- To provide financial services to the urban and rural poor, building financial literacy and pride among women.
- To address the world's growing energy needs through sustainable scalable solar energy solutions.

Mission statements from investors

- Accion is a private, nonprofit organization with the mission of giving people the financial tools they need to improve their lives. – Accion International
- Acumen Fund is a non-profit global venture fund that uses entrepreneurial approaches to solve the problems of global poverty. – Acumen Fund
- Our mission is to grow rural prosperity by investing in small and growing agricultural businesses that build sustainable livelihoods in Africa and Latin America. – Root Capital

Define social and/or environmental impact objectives

Many mission statements reference a set of defined impact objectives. As a set of examples, we have categorized the IRIS objectives by what might be considered three different missions that would each reference a sub-set of those objectives. The full set of objectives is included in Table 3 below.

Table 3: Impact objectives

Increase incomes and assets for low-income or excluded people	Improve basic welfare for people in need	Mitigate climate change
Access to energy	Access to clean water	Biodiversity conservation
Access to financial services	Affordable housing	Energy and fuel efficiency
Access to education	Conflict resolution	Natural resources conservation
Access to information	Disease-specific prevention and mitigation	Pollution prevention and waste management
Agricultural productivity	Equality and empowerment	Sustainable energy
Capacity-building	Food security	Sustainable land use
Community development	Generate funds for charitable giving	Water resources management
Employment generation	Health improvement	
Income/productivity growth	Human rights protection or expansion	

Source: IRIS. As defined at iris.thegiin.org.

[5] Further guidance on articulating an impact mission can be found in *Guidelines for How to Measure and Report Social Impact*, A Hornby, Investing for Good, 2012.

Some impact mission statements may be as broad as "increase incomes and assets for low-income and excluded people", while others may be as specific as "access to energy". Regardless of the breadth of the target impact, many statements include reference to one or more of the following:

- A **target population**, which could be defined by income level, degree of inclusion or access, or other characteristics
- A **target model** of impact delivery, which focuses the investment opportunity set on certain business models
- **Target impact**, which can be measured to determine the success of the intervention[6]

These parameters are not exhaustive but can give some guidance towards the characteristics common to impact missions across our experience and that of the institutions we interviewed. Taking these one by one, we give some examples of each in the tables below and then provide a few case studies for more detail.

Referencing a target population

An impact thesis may reference a target population with defining characteristics such as income level or degree of inclusion, as shown in Table 4. The income level can reference the base of the economic pyramid (BoP): the global population earning less than USD 3,000 per year, as defined by the World Resources Institute.[7] Investors might also include the base of the economic pyramid in developed countries who may earn a higher income than the global BoP but who still need improved access to services and opportunities – this larger group is what we call the BoP+.[8] Some other investors reference a degree of inclusion or a region of inhabitance. Examples of all three types of criteria are listed in Table 4.

Table 4: Target population

Defining criteria	Examples of descriptors	Examples of specific population targets
Income level	BoP or BoP+	Acumen Fund invests patient capital in institutions that can be effective in reaching the BoP
Degree of inclusion	Excluded, Underserved, Rural, Off-grid	AllLife provides insurance to people living with HIV in South Africa, a population that is often excluded from access to such products
Region of inhabitance	Frontier markets, underserved areas, rural	Bridges Ventures invests in ambitious businesses in the 25% most deprived wards in the UK

Source: J.P. Morgan

Case Study: AllLife, bringing insurance products to excluded populations

AllLife was established in 2004 to bring an innovative approach to life insurance in South Africa. AllLife is a profitable business which designs, distributes and administers life insurance products to individuals living with HIV or Type 1 or Type 2 diabetes mellitus who commit to follow an appropriate health monitoring and treatment program. Since 2005, the company has provided affordable life insurance coverage for thousands of people living with HIV, as well as significantly improving the health experience of the individuals insured through the company's adherence management program. In 2008, AllLife extended cover to people living with diabetes mellitus, once again based on their commitment to ongoing health monitoring.

[6] Some will reference outputs, others will reference outcomes, and others might reference impact. See Appendix IV for more details.

[7] See *The Next 4 Billion: Market Size and Business Strategy at the Base of the Pyramid,* International Finance Corporation (IFC) and World Resources Institute (WRI), 2007.

[8] For more discussion, see *Impact Investments: An Emerging Asset Class,* J.P. Morgan and the Rockefeller Foundation, Nov 2010.

Referencing a target business model for impact delivery

The impact thesis may also specify a target business model for impact delivery, such as delivering products or services like healthcare or housing to customers in the target population. Other business models utilize processes that intentionally include suppliers or distributors from the target population in the value chain, such as utilizing informal retail franchises for distribution or aggregating the produce of smallholder farmers. Other models will work towards environmental conservation and sustainability goals, such as improving the efficiency of natural resource utilization. Table 5 lists some examples of these business models.

Table 5: Target business model

Defining criteria	Examples of descriptors	Examples of specific business model targets
Product/service provider to target population	Low-cost healthcare	Aravind Eye Care System provides affordable, world-class eye care to the poor in India
Utilizing target population distribution networks	Utilizing and improving informal retail networks for distributors	The Bayer Green World programme targets smallholder farmers in Kenya and identifies top performing agrodealers, and trains them to become "local consultancy centers" for farmers
Utilizing target population suppliers	Smallholder farmer aggregators	Afro-Kai engages more than 9,000 farmers across Uganda through the trade, aggregation, processing, and transport of sorghum, barley, cassava, groundnuts, and maize
Implementing energy and natural resource efficiency	Drip irrigation	Global Easy Water Products focuses on developing and delivering low-cost irrigation solutions to small farmers in India

Source: Monitor, J.P. Morgan.

Case study: Afro-Kai, aggregating smallholder farmer produce

Incorporated in 1984, Afro-Kai engages more than 9,000 farmers across Uganda through the trade, aggregation, processing, and transport of sorghum, barley, cassava, groundnuts, and maize. The core business is commodity processing and trading, but Afro-Kai has also been contracted by Nile Breweries as its barley and sorghum handler, processor, and third-party extension service provider. This relationship, which guarantees a forward price and purchase of all outputs, enables Afro-Kai to contract with small farmers to increase productivity and volume of output by providing seeds at a subsidized rate, offering timely cash payment, and providing access to a guaranteed market. Afro-Kai has a significant impact on participating farmers, increasing their profit by an estimated 32 per cent.[9]

Case study: Global Easy Water Products (GEWP), improving water efficiency

GEWP is a for-profit social enterprise in India that focuses on developing and delivering low-cost irrigation solutions to small farmers who are often overlooked by technology advancements. GEWP's mission is to distribute products that help smallholder farmers to increase their available income, improve their nutrition and earn their way out of poverty. The company's portfolio contains over 50 different products primarily in drip tape, micro sprinklers, fertilizer tanks and flexible water storage tanks.[10]

Referencing target impact[11]

There may also be reference in the impact thesis to specific impact targets. This could be quantifiable – for example, a specific number of people reached within the target population – or more general – for example, targeting delivery of certain services at scale. The impact that we have referenced as "pioneer" is reflective of some investors' mission to fund interventions that address challenges to which there are few alternative responses. Table 6 summarizes some of the common impact targets referenced in the marketplace, and provides a few examples of how these might be interpreted to assess portfolio performance relative to mission.

[9] See *Promise and Progress: Market-based Solutions to Poverty in Africa*, M Kubzansky, A Cooper and V Barbary, Monitor Group, May 2011.

[10] See *From Blueprint to Scale: The Case for Philanthropy in Impact Investing*, H Koh, A Karamchandani and R Katz, Monitor Group, Apr 2012.

[11] Some will reference outputs, others will reference outcomes, and others might reference impact. See Appendix IV for more details.

Table 6: Target impact

Defining criteria	Examples of descriptors	Examples of specific impact targets
Number of target population reached	Number of customers	LeapFrog Investments aims to reach 25mm low-income and underserved people worldwide
Percent of business reaching target population	Minimum percentage of customers in target population	The Africa Health Fund managed by Aureos has set development targets according to the percentage of BoP clients served by portfolio companies
Scale of outputs	Cost-effective expansion of product/service delivery	Shell Foundation aims to act as a catalyst in the very early stage by proving business models that can be replicated at a large scale
Quality of outputs	Improved quality of products/services available	D.Light provides energy and lighting solutions to households without access to reliable electricity
Pioneer	Addressing a gap in market for which there are few alternatives	Root Capital provides capital to "the missing middle" (enterprises underserved by either microfinance and commercial banks)

Source: J.P. Morgan.

Case study: Shell Foundation, investing to build scalable solutions

Shell Foundation is an independent charity that catalyses scalable and sustainable solutions to global development challenges. Established by the Shell Group in 2000, the Foundation applies business thinking to a range of social and environmental issues linked to the energy industry – harnessing links to its corporate founder where appropriate to deliver greater development impact. The Foundation deploys an ‘enterprise-based’ approach: it identifies the market failures that prevent products and services with the potential to support sustainable development from reaching the poor, then co-creates new business models with long-term ‘social enterprise’ partners to service these markets. The Foundation staff provides the vital business development support to help these partners develop the skills, capacity and incentives to operate at scale and progress towards financial independence. By applying this approach to major global challenges such as job creation through small and medium enterprises, urban mobility, indoor air pollution, access to modern energy, and sustainable supply chains – and by learning from both success and failure over the last 12 years – Shell Foundation has created several strategic partners that now deliver large-scale impact in multiple countries across Africa, Asia and Latin America.

Case study: Root Capital, lending to address a funding gap

Root Capital is a nonprofit social investment fund that grows rural prosperity in poor, environmentally vulnerable places in Africa and Latin America by lending capital, delivering financial training, and strengthening market connections for small and growing agricultural businesses. Root Capital’s lending is directed towards “the missing middle” of developing-world finance, targeting businesses that are too big for microfinance and generally unable to secure credit from conventional commercial banks. Loans provided to small and growing businesses range from USD 50,000 to USD 2mm. Since 1999, Root Capital has disbursed more than USD 368mm in loans to 367 businesses. These loans have helped Root Capital clients improve livelihoods for more than 500,000 rural households in Africa and Latin America.

Many impact investors today rely upon a well-articulated impact thesis with defined parameters to set the scope of their investable universe. Once they have articulated their impact thesis, they will be able to find investment opportunities that align with the intent of that thesis and hopefully set out some metrics by which they will judge the success of their investments from an impact perspective. The next consideration, alongside the impact mission, will be to set a focus for the parameters that determine financial performance.

Define parameters that will drive financial performance

Setting the parameters of the investment scope

Alongside defining the impact mission, investors will set the scope of the investment universe that they will consider, as determined by the drivers of target returns and the drivers of risk to those returns. These drivers will include some of the components listed below, each of which is listed with an example of how one institution has incorporated that parameter in its investment strategy. We explore these factors in more detail in Appendix II and we also present some of the features that differentiate impact investments from traditional investments in Appendix III.

- *Geography*
  LeapFrog Investments, a cross-regional financial services fund, used impact parameters like population size, income level and development rankings to target countries in need of investment, as well as the degree of investment by other impact funds. Then, they cross-referenced the short-list of countries against practical considerations like whether the team had experience in those countries, and whether the operating language in the country was accessible to the team. Finally, they considered the political and economic stability to ensure a level of comfort in finding a future path to exit for the investment.

- *Sector*
  Pearl Capital Partners is a specialist agriculture investment firm that has been investing in small and medium-sized East African agribusinesses since 2006. They invest between USD 250,000 and USD 2.5mm in growing agricultural small and/or medium-sized businesses in East Africa, typically using a combination of equity, quasi-equity, equity-related and debt investments.[12]

- *Instrument type*
  Calvert Foundation issues and distributes Community Investment Notes, retail debt instruments that provide a means by which retail investors can invest directly in their communities. Given the desire for liquidity by retail investors, Calvert Foundation focused on short- and medium-term debt instruments as the preferred funding structure. Consequently, to match their assets with their liabilities, Calvert Foundation makes fixed income investments into their investee businesses. The full value of the principal that Calvert Foundation borrows is lent out to help underserved communities. As loans are repaid, the capital is lent out again, multiplying the social impact that the investment has created. At maturity, the capital is returned to investors with interest.

- *Growth stage of business & scalability*
  Shell Foundation characterizes itself as an enterprise philanthropist, supporting social enterprise partners with more than money (including funding, business skills and access to market linkages) from the incubation stage through the pilot of the business. The goal is to create a pipeline of businesses ready to scale up their operations that would be appropriate for impact investors pursuing opportunities with higher return potential and catalyzing a financially sustainable model for the delivery of sustainable transport, enterprise development, access to energy and sustainable value chains.

- *Risk appetite*
  Root Capital, which provides loans ranging from USD 50,000 to USD 2mm to rural, small and growing agribusinesses in Latin America and Africa, manages two lending portfolios: the Sustainable Trade Fund (STF) that includes loans for businesses that export natural products such as coffee, cocoa, nuts, and fresh fruits and vegetables and represent the core lending activity; and the Frontier Portfolios that have a higher risk profile and include loans for activities such as the production of goods for domestic consumption rather than for export.

[12] We define quasi-equity and equity-related as instruments between debt and equity, typically a debt instrument with potential profit participation. E.g. Convertible debt, warrant, debt with equity kicker. These made up 2% of the investments reported in our 2011 investment survey, *Insight into the Impact Investment Market*, Dec 2011.

Abandon the idea of a trade-off
Set return expectations driven by the economics of each intervention

Abandon the tradeoff debate for economic analysis

In analyzing the financial expectations of an opportunity, one of the most common debates in the impact investment marketplace is whether or not there needs to be a "trade-off" on financial returns in order to add the pursuit of impact to the investment. We believe that the variety of profiles that exist in the impact investment market – across impact, return and risk, across geographies, sectors, and instruments – makes this question intractable. We should not aim to describe this diverse set of assets with one overall statement about the relationship between return and impact, because it serves little purpose to characterize with an average such a broad universe of opportunities. Rather, we encourage investors to assess each opportunity individually, and let the economics of the intervention determine the return profile.

Set risk-adjusted return expectations: Consider revenues, costs and risks

Changing our language from a sector-wide trade-off debate to an economics-driven approach will bring more financial rigor to the analysis of impact investments. Some investments may reasonably be expected to achieve competitive returns while return expectations may be lower for other investments. In Section 3, Appendix II and Appendix III, we present in more detail some of the considerations that arise when assessing the financial return potential and risk profile of impact investments.

Use focus and diversification, together

Once the impact mission and financial targets are determined, investors have identified an area of focus. For example, an investor might target an impact objective such as financial inclusion or a business sector such as agriculture. Indeed, investors that have more than one portfolio, often separate those portfolios by area of focus.

Recognizing that focus, while necessary, can also concentrate risk, some investors cite a strategic area of diversification for their portfolio, like geography or sector, to balance this concentration. Some investors, like IGNIA, report setting specific diversification limits to their portfolio such as a company exposure limit of 15% and a sector exposure limit of 40%. Others, such as Acumen Fund, referenced that the diversification is applied more softly to maintain an opportunistic responsiveness to the pipeline of opportunities they evaluate, without specific portfolio targets that would constrain them too tightly.

Incorporating a diversification strategy
There are several permutations of focus and diversification across sector, growth stage, geography and impact theme. For example, Bridges Ventures invests in the United Kingdom only, and the diversification comes through in the sector distribution of their various portfolios. The Bridges Sustainable Growth Funds focus on backing businesses in four key impact themes where they believe growth and financial returns go hand-in-hand with wider societal impacts: under-served areas, health & wellbeing, education & skills and environment. By contrast, LeapFrog Financial Inclusion Fund has chosen to focus on one sector – micro-insurance (and related financial services) – and diversifies with respect to geography.

Case study: LeapFrog, using sector focus with geographical and growth stage diversification

LeapFrog is the world's largest dedicated investor in insurance and related financial services to low-income and excluded people. In building their investment strategy, LeapFrog has focused mostly on one sector – the insurance sector – that is directly aligned with their impact thesis: that insurance can provide safety nets and springboards for under-served people, with the scale necessary to make a dent on global poverty. Given the sector focus, the portfolio is diversified with respect to geography to mitigate some of the country and currency risk and with respect to stage of the business. For example, LeapFrog's portfolio today includes two earlier-stage companies that focus mostly on low-income or excluded populations – AllLife in South Africa and Express Life in Ghana– and three later-stage traditional insurance companies that are moving into the micro-insurance segment – Apollo in Kenya and Shriram and Mahindra in India.

In using focus and diversification together, impact investors are not very different from traditional investors in their portfolio construction: the main distinction is the pursuit of an impact objective. This objective, together with the private nature of much of the market today, can make it challenging to find the best opportunities that are aligned with the investment mandate.

Sourcing deals

While infrastructure for deal sourcing is growing, the market today remains fairly dependent on networks and contacts to source investment opportunities. A few key considerations have been repeated by several investors as being helpful in the pursuit of the best deals (and potentially in finding exit opportunities as well):

- **Network of like-minded investors**: Given the early-stage of the market, a network of like-minded investors can help to source quality opportunities and can also help to (formally or informally) collaborate in the due diligence process.
- **Local presence**: Given many impact investors allocate capital outside of their home market, there is an important role for a member of the team or a partner to bring local market knowledge into the process, both for sourcing deals and for ongoing risk management.
- **Advisors, banks and conferences**: Increasingly, advisory firms and banks are working with their clients to help them source impact investment opportunities. Some investors might also find introductions to opportunities at the impact investment conferences that are appearing on the global agenda.

Today, impact portfolio construction is an iterative process

Through our conversations, it has emerged that several investors were not in a position to be as strategic as it might appear above when they started out. Rather, they started out with a broader focus that allowed opportunistic allocations. As the portfolio and their knowledge of the market's opportunity set grew, they began to better define the focus and refine the strategy to accommodate both their organizational interests and the deal flow aligned with their focus.

Case study: Storebrand, expanding beyond the microfinance debt investments

Storebrand, a financial institution in Norway offering pension, insurance, asset management and banking services, invests in microfinance and social investments to contribute to economic development in emerging economies, and at the same time generate a positive financial return. As of Dec 31, 2011, Storebrand has committed ca. USD 50mm to microfinance and social investments and intends to increase the investments in this sector. The nature of the Storebrand portfolio was historically a function of the market at the time: in 2005, when the first investments were made, most impact investment funds were debt funds focused on the microfinance sector. Their equity allocation evolved organically as the set of market opportunities grew, and today the allocation is roughly split between debt and equity. The sector exposure has also expanded beyond microfinance into healthcare, for example, as investment opportunities in other sectors matured.

Case study: Accion and Frontier Investments, building out a portfolio in adjacent sectors

Begun as a grassroots community development initiative in 22 shantytowns in Venezuela, Accion today is one of the premier microfinance organizations in the world, with a network of lending partners that spans Latin America, Africa, Asia and the United States. Accion's Frontier Investments Group is an early and growth stage impact investing fund focused on catalyzing a new approach to financial inclusion. Having identified an opportunity to invest in business models that have the potential to further the impact of microfinance, Frontier's mandate is to invest in disruptive business models and technologies that will radically enhance the efficiency, reach and scope of products and services for the unbanked. To accomplish this vision, Frontier leverages Accion's five decades of experience in emerging markets – including feet-on-the-ground and institutional relationships in four continents and a deep bench of operational and product specialists working in emerging market enterprises that serve the poor.

In the next section, we translate the portfolio targets onto a graphical map. We then show how to use this map to graph individual investments and compare the aggregate portfolio to the target profile determined at the outset.

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3. A Framework for Impact, Return & Risk

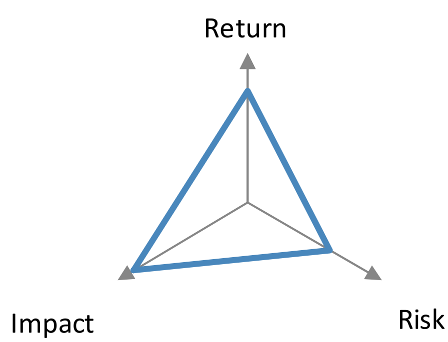
Though we acknowledge that there is a return on social impact, our use of the word "return" throughout this section refers to "financial return," for the sake of clarity.

Once the target characteristics of the portfolio are defined, investors may start to analyze the set of investments that fall within the scope of those portfolio targets. In this section, we present a way of mapping impact, return and risk for investments to graphically represent the nature of a portfolio across these three vectors. Using this map, an investor can graph a target profile for the portfolio, the expected profile of the individual opportunities, and the actual profile of the aggregate portfolio. The actual portfolio profile can then be assessed against the portfolio targets to determine whether the two are aligned.

Characterizing investments in three dimensions

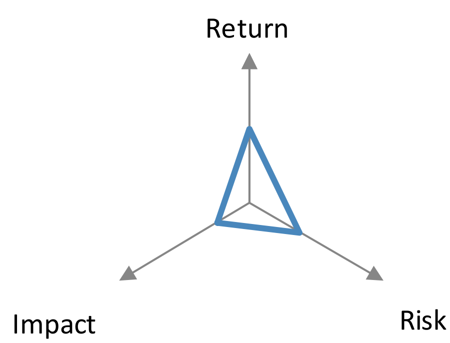
For each company, the target output of our portfolio analysis will be a map on three axes, like the examples shown in Figure 8 and Figure 9.[13] These maps are shown without numerical axes to reflect that each investor can adapt this map to the level of accuracy they wish to employ. For example, some investors rank the risk of their investments using a high/medium/low indicator. These investors might use a scale of one to three on their risk axis. Others might rank the risks more granularly, from one to ten. Still others might prefer to just show relative shapes rather than numbering the axes. Whatever the scale used, the general shape of the map should suit any approach.

Figure 8: Example investment graph:
High return, high risk, high impact



Source: J.P. Morgan.

Figure 9: Example investment graph:
Low return, low risk, low impact



Source: J.P. Morgan.

Map the target profile

In this section, we turn to our own portfolio to provide an example of how one could use this framework to set targets, analyze investments and manage the portfolio relative to the targets. We start by presenting the targets themselves, and then walk through how those targets translate into an investment graph that we can then use to manage the actual portfolio.

[13] Readers should note that we imply no particular correlation or relationship between these three parameters. The choice of high, high, high and low, low, low is purely illustrative.

J.P. Morgan Social Finance (JPM SF) Portfolio Targets

For our own portfolio, we have outlined the investment thesis for the portfolio, highlighting the impact thesis in particular:

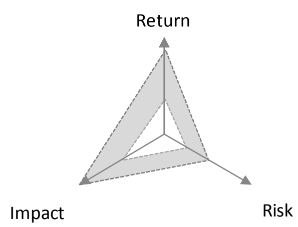
- **JPM SF investment thesis**: To invest in impact funds that deliver a reasonable rate of return while simultaneously improving livelihoods of low-income and excluded populations worldwide.
- **JPM SF impact thesis**: To improve livelihoods of low-income and excluded populations worldwide by engaging those populations as consumers or suppliers.

With these targets, JPM SF invests in funds rather than directly into companies. However, the analysis below applies for both types of investments (see Appendix II for the considerations specific to fund or company investments).

Assign impact, return, and risk targets

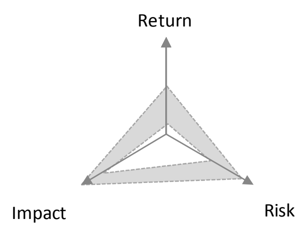
For investors that choose to quantify their impact, return, and risk targets, they will need to determine the scale that should be used for each axis on the graph. We refrain from showing our rankings on the graph of our target portfolio in Figure 10. Instead, we present the map of our target portfolio area – the shaded grey area – alongside the graph that might be targeted by an investor with a higher risk appetite and a lower return threshold (Figure 11) and a graph that represents the targets for a hypothetical investor pursuing non-negative impact with a low risk appetite (Figure 12)[14]. Below we walk through our assessment for each component of the graph, and then we compare our target to what these two hypothetical investors might pursue.

Figure 10: J.P. Morgan Social Finance target portfolio graph



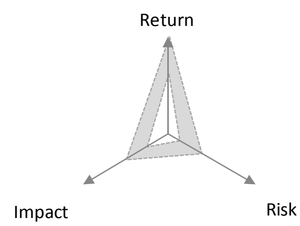
Source: J.P. Morgan.

Figure 11: High risk investor's target portfolio graph



Source: J.P. Morgan.

Figure 12: "Non-negative impact" investor's target portfolio graph



Source: J.P. Morgan.

Scorecards are common ways of quantifying impact relative to the mission of the investor.

Impact

Our impact assessment consists of a due diligence exercise to come to a view on the intent and the impact of the proposed investment opportunity. For each opportunity, we assign a ranking from one to five on questions addressing the fund manager's intent and questions regarding the people, products or processes through which the impact will be delivered.[15] The result of each scorecard is a weighted average across these questions, giving an overall ranking between one and five for the investment. In general, we target a minimum score of three, and in fact all of our funds to date have scored four or above.

[14] We use the term "non-negative" to indicate the responsible investor that might employ some negative screening to exclude negative impact from their portfolio but does not actively pursue positive impact.

[15] For more on impact delivery, see *Impact Investments: An Emerging Asset Class*, J.P. Morgan and the Rockefeller Foundation, Nov 2010.

Different investors determine their target return profiles based on different goals. Some with fiduciary responsibility will maximize returns, while others may accept lower returns in order to make the investments with the impact they seek.

Return

We assess the performance of the portfolio on a blended basis – the aggregate financial return and social impact of our invested capital are considered in determining success. In practice this means we will consider returns below the threshold used internally for other businesses of the firm, if the impact objectives of the opportunity are compelling and consistent with our stated thesis. The intent of our portfolio, however, is to demonstrate that there are investable opportunities in the market with commercial or near-commercial returns that would be appropriate for institutional investors, and we assess opportunities for their potential to deliver those returns.

Several investors referenced that they too aim to balance risks for each investment, for example, mitigating high country risk by focusing on later stage, proven businesses for example or investing in earlier stage businesses in less volatile geographies.

Risk

Our target risk profile – not too high and not too low – acknowledges that investing in a new market requires some risk appetite. As a result, we aim to mitigate some of those risks by avoiding frontier markets where our firm doesn't have a presence and avoiding opportunities exclusively focused on very early stage start-ups. While we do maintain flexibility with respect to all of the parameters that determine risk, we also try to find a balance across risk factors to reduce the net risk profile of any investment. For our portfolio, an opportunity in a riskier macroeconomic region may be more attractive, for example, if it is at a later stage of growth. Similarly, if the company risk is high because the business model is unproven, we will look for country-level risk mitigants.

Contrasting our targets to those of a "high risk" investor

The graph in Figure 10 pulls together the considerations above into an illustration of the profile of the portfolio we target. To provide contrast, Figure 11 represents a hypothetical graph for a higher risk investor. Several of the investors that we interviewed indicated an explicit desire to invest in frontier markets that might be too risky for other investors, and this is reflected in the chart by their higher risk appetite and lower return target[16]. By contrast, J.P. Morgan Social Finance is less focused on frontier markets and so our target portfolio profile reflects a higher return target and lower risk appetite accordingly.

Contrasting our targets to those of a "non-negative impact" investor

In order to show the different targets that investors might have for the impact component, we also compare our targets with those of a hypothetical "non-negative impact" investor. We use the term non-negative to indicate for example a responsible investor that might employ some negative screening to exclude negative impact from their portfolio, but does not actively pursue positive impact. These investors will likely target impact above a minimum threshold by abstaining from funding tobacco, say, but will not insist on intentional positive impact as part of the business mission. The minimum threshold and the lower overall target are reflected in Figure 12.

[16] Some investors may have a higher risk appetite because they have a return target.

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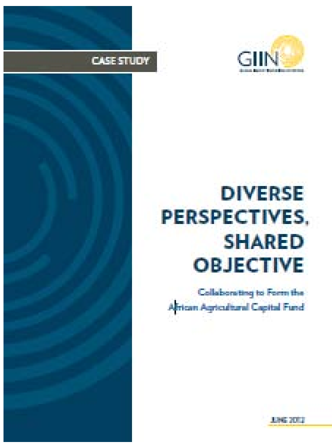
For a full case study on this investment, see *Diverse Perspectives, Shared Objective: Collaborating to Form the African Agricultural Capital Fund*, The GIIN, Jun 2012.



Map the individual investments

In the above figures, we have presented the graphs of target portfolio profiles; the next step will be to assess individual investment opportunities relative to those targets. In order to make this exercise as tangible as possible, we present some of the considerations that arose for our investment team in analyzing the impact, return and risk profile of the African Agricultural Capital Fund (AACF).

Case study: African Agricultural Capital Fund

The African Agricultural Capital Fund transaction brought four investors together with the fund manager to structure the fund, requiring willingness from all parties to compromise and be open to constructive problem-solving throughout negotiations.

Background on the transaction

The African Agricultural Capital Fund, managed by Pearl Capital Partners, primarily invests in small- and medium-sized agricultural enterprises to improve the livelihoods of smallholder farmers in East Africa. In September 2011, J.P. Morgan Social Finance, The Bill & Melinda Gates Foundation, the Gatsby Charitable Foundation, and the Rockefeller Foundation closed a USD 25mm impact investment into the fund. The JPM SF investment was in the form of debt for which The United States Agency for International Development (USAID) provided a 50 percent guarantee. USAID also grant-funded a technical assistance facility for the fund's investees. The transaction entailed a detailed negotiation process, in which the investors and the fund manager jointly developed a capital structure and social impact governance mechanisms to satisfy each participant's social and financial goals.

Table 7: Fund information

Term	Description
Fund manager	Pearl Capital Partners
Inception year	2011
Geographic focus	At least 85% in East Africa (Tanzania, Kenya, and Uganda); up to 15% in neighboring countries
Fund term	10 years, with an option to extend two years
Fund impact thesis	Improve the livelihoods of smallholder farmers by investing in agricultural enterprises that provide improved access to goods, services, and markets
Impact measurement and assessment	IRIS metrics to track and report smallholder farmer outreach; will obtain a GIIRS rating[17]
Investee technical assistance	Provided to AACF's investees as needed through a USD 1.5mm USAID grant-funded facility
Fund assets under management	USD 25mm
Investment instruments	Debt, quasi-equity, and equity
Investment period	Maximum of 5 years
Investment size	USD 200,000–2,500,000
Target gross portfolio return	At least 15%
Target number of investees	Approximately 20 agricultural enterprises
Fund management fees	2.5% fee, 20% carry

Source: *Diverse Perspectives, Shared Objective: Collaborating to Form the African Agricultural Capital Fund,* The GIIN, Jun 2012.

Impact assessment

The Fund was established with a specific social impact target: to improve the lives of at least 250,000 smallholder farmer households, such that within five years of investment each affected household should realize an increase of at least USD 80 in annual income. The investors and fund manager agreed that an impact committee would screen potential investments during the investment review process before financial due diligence begins to mitigate pipeline risk from an impact perspective.

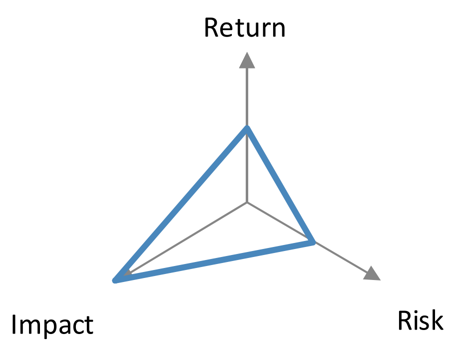
[17] The Global Impact Investing Rating System (GIIRS) is a system for rating the social and environmental impact of companies and funds.

Return and risk assessment: Fund level
Pearl Capital attracted these investors because it was one of the few fund managers with experience investing in East African agricultural small and medium-sized enterprises (SMEs). The fund was established with a target return of at least 15%, but investors were aware that the fund's track record was not substantial – a common issue across the market raised by many investors – and that the sector as a whole lacked a long history of impact investment.[18] To address these concerns, the investors conducted extensive due diligence on the fund manager and encouraged the fund to hire two additional employees to increase capacity.

Return and risk assessment: Underlying company level
Due to the emerging nature of the formalized East African agricultural sector, AACF's target investees are likely to be under-resourced and may not have the skills or systems necessary to adapt to business or market challenges. The grant-funded technical assistance (TA) facility was designed to help mitigate risk for investors by allocating resources to sustain investees' operations and commercial viability.

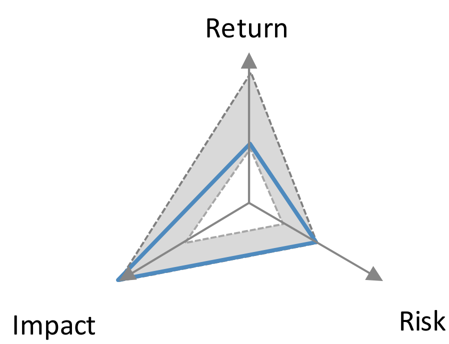
We map out our expectations for the JPM SF debt investment into AACF in Figure 13, based on the impact, return and risk assessments presented above. We then verify whether it aligns with our portfolio targets, as shown in Figure 14. Although we show an example in which the individual investment does fit within the portfolio targets, investors may not require that each investment necessarily fits within the target range, so long as the aggregate does.

Figure 13: J.P. Morgan Social Finance's AACF investment



Source: J.P. Morgan.

Figure 14: AACF in the context of our portfolio target



Source: J.P. Morgan.

In order to illustrate some more general cases, we also draw illustrative graphs for three hypothetical investments, shown in Figure 15, Figure 16 and Figure 17. In order to make these examples more tangible, we provide some characterization of the investments that might be represented by the graphs below.

- Figure 15 (Investment 1) illustrates a USD 2mm equity investment with a medium impact, high return, and medium risk profile.
- Figure 16 (Investment 2) illustrates a USD 25mm short tenor, senior secured debt investment with a high impact, low return and low risk profile.

[18] See *Insight into the Impact Investment Market*, J.P. Morgan and The GIIN, Dec 2011.

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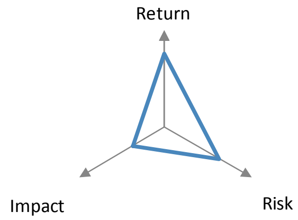
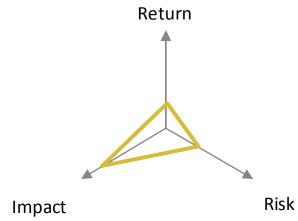
- Figure 17 (Investment 3) illustrates a USD 8mm long tenor, unsecured debt investment with a high impact, high return and high risk profile.

Figure 15: Investment 1
Notional = USD 2mm



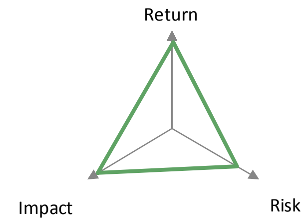
Source: J.P. Morgan.

Figure 16: Investment 2
Notional = USD 25mm



Source: J.P. Morgan.

Figure 17: Investment 3
Notional = USD 8mm



Source: J.P. Morgan.

Map the aggregate portfolio & compare to target

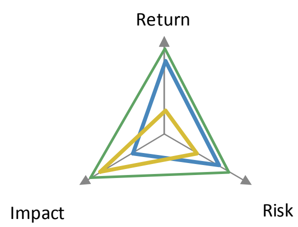
Once commitments have been made to the first opportunities, we can begin to consolidate the individual investment graphs into one graph representing the portfolio as a whole. There are several ways in which the aggregate graph can be drawn, which we illustrate below.

Three methods of aggregation: Overlay, simple average, weighted average

Once we have mapped the individual investments, we can then construct a graph to represent the aggregated portfolio in three ways:

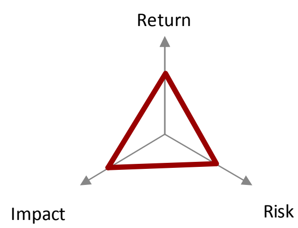
1. Simply overlay the three graphs on top of one another in the same chart, as shown in Figure 18.
2. Calculate a simple average across each of the three parameters of the three investments, as shown in Figure 19.
3. Calculate an average across each parameter that weights each investment by its notional size, as shown in Figure 20.

Figure 18: Overlay graph



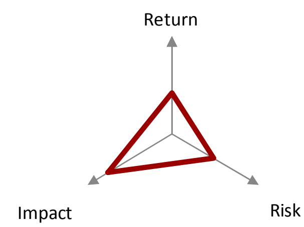
Source: J.P. Morgan.

Figure 19: Simple average graph



Source: J.P. Morgan.

Figure 20: Weighted average graph

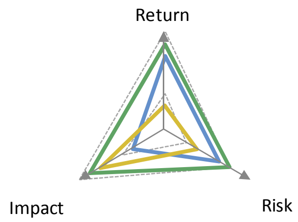


Source: J.P. Morgan.

Compare aggregate to target

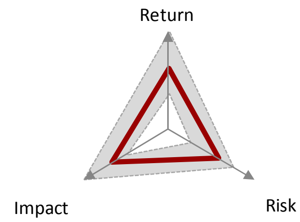
Once the aggregate graphs are drawn, an investor can then compare these to the target set for the portfolio. If there is any skew in the portfolio such that the aggregate graph falls outside the target area, then the investor has a guide as to the profile of investments that they should pursue in order to re-balance the portfolio towards the target profile. In Figure 21, Figure 22, and Figure 23 we plot the various aggregate graphs against a hypothetical target profile, for illustration.

Figure 21: Overlay graph



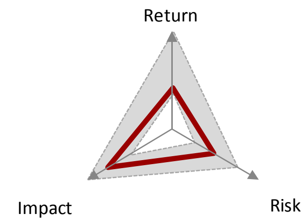
Source: J.P. Morgan.

Figure 22: Un-weighted average aggregate



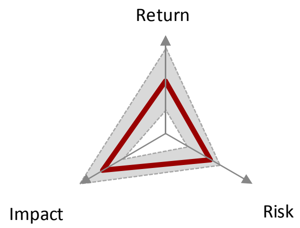
Source: J.P. Morgan.

Figure 23: Weighted average aggregate



Source: J.P. Morgan.

Figure 24: JPM SF weighted average aggregate & target profile



Source: J.P. Morgan.

Case Study: Mapping the aggregate JPM SF portfolio against our targets

The risks posed by the geography and political environment, by the agriculture sector's seasonality and dependence on climate factors, led the J.P. Morgan Social Finance investment team to determine that a debt instrument was the most appropriate tool for the investment – forsaking upside in exchange for downside protection. At the time of considering this opportunity, the portfolio contained four equity funds. In the context of that portfolio, (the full portfolio is shown in Table 8), the inclusion of AACF resulted in the overall profile shown in Figure 24. This chart also shows that the inclusion of this investment kept the profile of the aggregate portfolio within our targets across all three dimensions.

Table 8: The J.P. Morgan Social Finance Principal Investment Portfolio

	MicroVest II-A, LP	LeapFrog Financial Inclusion Fund	IGNIA Fund I	Bridges Social Entrepreneurs Fund	African Agricultural Capital Fund
Fund summary	MicroVest II seeks sustainable solutions to poverty by facilitating the flow of capital to pro-poor finance institutions serving low-income individuals in emerging markets such as Latin America, Asia and Eastern Europe	LeapFrog is the world's first micro-insurance fund, investing in businesses providing insurance and related services to low-income and financially excluded people	IGNIA is a venture capital fund based in Mexico supporting the founding and expansion of high growth social enterprises serving low-income populations in Mexico	Bridges Social Entrepreneurs Fund provides growth capital to support high-impact, scalable and financially sustainable enterprises in the UK	African Agricultural Capital Fund (AACF) is a private equity fund that invests in agri-business to support the development of smallholder farmers and rural economies
Impact mission	To provide capital to low-income finance institutions and to help build capital markets serving individuals at the base of the economic pyramid	LeapFrog aims to reach 25mm low-income and vulnerable people, 15mm of them women and children, by providing them with a springboard to escape poverty	To identify entrepreneurs with scalable businesses that deliver high value propositions to the base of the economic pyramid	To support scalable, high-impact social enterprises with a focus on serving the most deprived 25% of the population in the United Kingdom	To invest in small and medium-sized agriculture-related businesses in East Africa
Sector	Microfinance	Microinsurance	Multi-sector	Multi-sector	Agriculture
Geography	Emerging markets	Emerging markets	Mexico	United Kingdom	East Africa
Instrument	Equity	Equity	Equity	Equity	Debt
Investment Size	USD 10mm	USD 10mm	USD 5mm	GBP 2.75mm	USD 8mm
Fund size	USD 60mm	USD 137mm	USD 102mm	GBP 11.75mm	USD 25mm
Tenor	7 years	10 years	12 years	10 years	10 years

Source: J.P. Morgan.

There will be benefits and biases to each aggregation method. Overlaying all the graphs may be helpful with a portfolio of five investments but is likely to become less valuable when 50 investments are involved. Weighting by investment notional will skew the outcome towards the largest investments, while a simple un-weighted average will give more representation to the smallest deals. In analyzing the portfolio, looking at the outcome of more than one aggregation method can help to ensure a more complete understanding of the true nature of the portfolio. Additionally, splitting out a portfolio into sub-categories by sector, region, impact pursuit or instrument can also provide better visibility on larger portfolios.

Expand the dimensions of the graph

Breaking out the return, risk and impact components into more granularity

Investors should consider the three-dimensional graph as a template. For some, the simplicity of this approach might be appropriate for aggregating across large portfolios at a high level. Others might prefer to use a more nuanced framework that better reflects the different contributing factors of the parameters represented on each axis – impact, return and risk.[19] As an example, we could consider an investment graph across six dimensions, splitting each of the three into two components, as shown using hypothetical investments in Figure 25 and Figure 26.

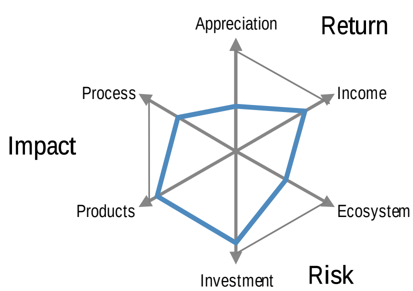
Illustrative portfolio targets

In order to understand why the two illustrative examples score the way they do, we first need to understand the target profile of the investor. For the sake of this illustration, we are considering an investor that targets the following:

- Impact: The investor targets businesses that deliver products and services to underserved communities while meeting a high-standard of employment and resource efficiency practices
- Return: The investor seeks to balance asset income and asset appreciation
- Risk: The investor seeks a balance between ecosystem risk and investment risk

Figure 25: Illustrative investment #1

The bold blue hexagon illustrates the profile of a hypothetical investment.



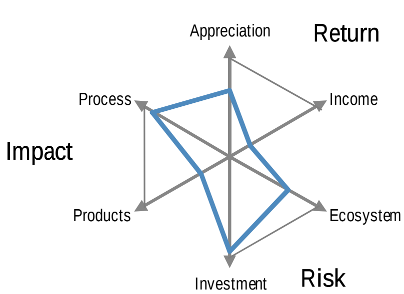
Source: J.P. Morgan.

In Figure 25, we illustrate the profile for a hypothetical debt investment with the following assessment:

- Impact: The company is delivering low-cost education, so ranks highly on the product metric, and utilizes fairly impactful employment and operating practices
- Return: The debt structure shifts the return profile towards income rather than appreciation.
- Risk: The country in which the company operates has developed a supportive regulatory policy for impact businesses, reducing the ecosystem risk. However, the company is at an early stage in its development, so the investment risk remains high.

Figure 26:Illustrative investment #2

The bold blue hexagon illustrates the profile of a hypothetical investment.



Source: J.P. Morgan.

In Figure 26, we illustrate the profile for a hypothetical equity investment with the following assessment:

- Impact: The fund is focused on improving working conditions and energy efficiency in its portfolio companies, ranking very highly on process. It does not target businesses delivering products or services to an underserved population, though some may be included in the portfolio for other reasons.
- Return: The equity structure provides more asset appreciation than income.
- Risk: The country in which the fund operates has a challenging infrastructure for developing the value chains needed to scale the business (high ecosystem risk), although the company is maturing to growth stage.

[19] To ensure the investment profile is not oversimplified, we advocate the use of this framework – whether in three dimensions or more – in conjunction with a more detailed understanding of the investments and never on a stand-alone basis.

4. Financial & Impact Risk Management

Once the portfolio is constructed, ongoing portfolio management will remain multi-dimensional. In this section, we present the nature of risk in the portfolio, and then explain how some investors manage risk through structural features and manage the friction that can sometimes arise between the financial and impact pursuits.

The nature of risk in the impact portfolio

Impact thesis and financial targets determine investment scope and risk profile

On an individual investment basis, the types of risk that arise for impact investments are often the same risks that would arise for a traditional investment in the same sector, region or instrument. While we do not believe the inclusion of an impact pursuit necessarily contributes to risk, we do believe that the impact thesis will determine the scope of the investments for the portfolio, and hence the risk profile.

For example, J.P. Morgan Social Finance's impact thesis leads us to invest mostly in emerging markets where products and services are less readily available and affordable for low-income and/or excluded populations, so country and currency risk are likely to be prominent in our impact investment portfolio. With the view that SMEs are the engine for job and wealth creation and are critical to sustained poverty alleviation in developing countries, the Lundin Foundation is making calculated investments into early stage companies and SME-focused funds in Africa to address a funding gap that has historically persisted for these enterprises. Acumen Fund cites that they prefer to invest through equity instruments in order to be able to exercise influence over their investees and insure against mission drift. The risk profiles of these investors' portfolios will be directly related to their respective impact missions.

Avoid extrapolating risk profile from a specific mandate to the whole market

These respective pursuits determine particular risk profiles for each investor's portfolio, but we should be cautious of extrapolating those characteristics to the market as a whole. Just as we abandon the trade-off debate on return and encourage investment-by-investment analysis, we encourage investors to assess the risk profile that results from their particular impact thesis and motivation.

Yet cross-market risks do exist

Early stage of the market today

While we encourage individual investment risk assessment, the market does have some characteristics that apply more broadly. For one, it remains small relative to traditional markets, and the market remains young resulting in a short track record of performance to date. As a result, portfolios and deal sizes tend to be smaller than many institutional investors would normally consider, and fund managers tend to be less experienced at delivering on the dual-return objective than their counterparts in traditional funds are at delivering financial returns.

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Case study: Christian Super, managing risk for impact investments

One superannuation fund in Australia, Christian Super, highlights that the early stage of the market means that their impact allocation adds certain risks but emphasize that it also reduces other risks. They acknowledge that this is a market that includes unproven assets without established track records. They also recognize that the effect of combining impact assets is an unknown in itself, given for example the fact that many of the impact assets tend to attract a particular set of investors that might expose them to behavioral finance risks or that an impact pursuit such as climate change might go out of favor. However, they point out that they expect these assets to reduce market risk in their portfolio, since they should be less likely to fall in value when broader markets decline given they are held by fewer and less mainstream investors.[20]

Ecosystem risk

The impact investment market is largely dependent on the development of a broader ecosystem to support its growth, with such components as policy support and impact measurement infrastructure under development. The significant support from the investment community at large should mitigate such risks for the impact investment market, but it is widely acknowledged that a lot of progress remains to be made before this risk wanes.

Mission drift

There is also the risk that investees drift away from their intended mission without the approval of investors. This is a risk among traditional fund managers more generally since managers can be tempted to invest in sectors outside of their mandates when attractive opportunities arise or yields in their designated assets become less competitive. The impact mission simply adds another dimension to the style-drift risk familiar to traditional fund investors.

While changing the investment approach without investor approval is certainly an unsatisfactory manager practice, it is important to maintain the flexibility to respond to changing market conditions. Several microfinance investors, for example, now consider other adjacent sectors as the market in those sectors begins to grow and since the microfinance sector experienced a challenging period with the crisis in India.[21] Other managers have had to adapt their strategies in order to weather the financial crisis of recent years or to respond to successes or failures.

Combination of grant and investment capital

While some impact investments are innovating structures that bring together grant capital with investment capital, there can be risks associated with this. The Rockefeller Foundation notes that they do not tend to invest in organizations receiving grants, partly for fear that the grant capital might fund the investment return rather than the actual business performance. While there are innovative ways to effectively combine these different types of capital as mentioned above, investors do need to check that the capital is combined in a construction that respects the expectations and intentions of the respective funders.[22] We discuss the role of different types of capital in more detail in Appendix III.

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[20] Note that we prefer this characterization to what some might reference as low correlation, since a claim to low correlation requires a quantifiable justification using historical performance data. Given a significant time series of return data is not currently available currently, it is difficult to calculate actual correlations for the impact investment market (and correlations can change dramatically over time in any case). Rather, we prefer this behavioural finance approach.

[21] For more details, please see *Discovering Limits: Global Microfinance Valuation Survey 2011*, J.P. Morgan and CGAP, Jul 2011

[22] The Root Capital grant-funded “equity” tranche referenced in Appendix III, for example, may not pay the returns for the senior debt investors, but it does absorb risk and could

Moral hazard

Recognizing loss is an emotional challenge for any investor, as it means crystallizing failure. This is the case in traditional finance as well as impact finance, but there is a risk that the moral hazard of delaying or failing to recognize losses is heightened in this market because of the additional (and arguably more potent) failure: that of delivering on the impact mission. Exactly because the investor is explicitly focused on helping the recipient of the funding, it will be even more difficult to enforce loan covenants or submit a claim on assets than would be the case for a traditional lender. Maintaining rigor with respect to loss recognition and structuring transactions in alignment with the impact mission is especially important in this sector, and some investors are choosing their investment instruments with this consideration in mind.

Case study: The Prudential Insurance Company of America, structuring investments against moral hazard

The Prudential Insurance Company of America has invested over USD 1bn through its Social Investment Program to support and improve communities since 1976. The portfolio consists of various investment instruments through which this capital has been allocated, including private equity and debt. In evaluating investments in this space, Prudential is careful to structure investments to match the unique character of investees and to avoid jeopardizing their mission goals. One example of this balance is to use dedicated collateral rather than unsecured general recourse obligations to secure loans.[23]

Some of these systemic risks will change over time

The development of the market over time should erode some of the risks associated with the early stage of the market and its ecosystem. While some of these risks will remain in place, investors will likely develop better processes for recognizing and dealing with such drift through experience. The microfinance market is a good example of how systemic risk evolves as a new market grows.

Case study: Evolution of risk in the microfinance industry

The microfinance industry has been growing significantly over the past decade. With microfinance gaining scale, there has been a gradual shift in risk perceptions in the industry. While there is still a strong focus on credit risk, other risks such as liquidity and funding risks have decreased in importance as the industry has matured and attracted more capital. A number of other concerns have sustained despite (or arisen on the back of) this growth. Key risks for an investor today also include: (1) corporate governance risk, linked to the strength of management teams at microfinance institutions, potential conflicts of interest and lack of independence; (2) political and regulatory risk, including the risk of political interference; (3) competition risk, which puts pressure on margins and can fuel irresponsible lending; and (4) impact risk, such as the risk of employing poor or exploitative lending practices.[24]

Manage risk through structural features

Once the risk profile of the investment is determined, it can then be managed – should the investor wish – using structural features such as seniority in the capital structure, fund intermediaries, or compensation-related incentives.

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potentially be viewed as using grant capital to subsidize returns for investors. As such, the grant funders must be providing capital with this intent and understanding.

[23] This may be the case for most traditional investors as well, but the inclusion of a social motivation in preferring such a structure is noteworthy.

[24] For more details on the microfinance market, please see *Volume Growth and Valuation Contraction*, J.P. Morgan and CGAP, May 2012 and *Microfinance Banana Skins 2012*, Centre for the Study of Financial Innovation, Jul 2012.

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Choosing the right investment instrument

The choice of investment instrument will usually be motivated by the risk and return appetite of the investor, which can be formalized in investment guideline constraints. For instance, although the J.P. Morgan Social Finance portfolio typically considers equity investment opportunities, the risks posed by the AACF transaction – including geography and political environment, the agriculture sector's seasonality and dependence on climate factors – led the investment team to determine that a debt instrument was the most appropriate investment tool.[25]

Others access higher potential returns while building in protection against financial risk and exit challenges by investing through equity-like debt investments. For example, Bridges Ventures and Big Society Capital, which both invest in the UK, may structure their investments as "quasi-equity", since some of the investees are legally structured as organizations that cannot take on traditional equity capital.

Currency risk: Long tenors can make diversification preferable to hedging

Currency volatility is one risk that has been raised by investors considering impact investments into markets abroad. While there are financial instruments available in the market for hedging currency volatility, several fund managers and investors have cited the long tenor of their impact investments as reducing the effectiveness that those hedges might have (particularly relative to the cost) and instead choose country diversification as their means of mitigating currency risk in their portfolio. Another approach, employed by some private equity managers in Brazil for example, offers investors returns with a hurdle rate that references inflation.[26]

Investing through fund intermediaries

For investors allocating capital in markets outside those in which they operate, it may make sense to utilize fund intermediaries to manage the investments on-the-ground. Fund intermediaries can also relieve some of the burden of managing the investments post-commitment, which can often require a high level of engagement due to the early nature of many impact businesses. Some investors may even prefer to utilize a double-layer of intermediation, through a fund-of-funds structure, to either bring a more diversified exposure across sectors and regions or to allow for a limited partner role that would allow a more passive approach.

Case study: Sarona Asset Management, shifting from direct investing to fund investing

Sarona Asset Management, and its predecessors, have been investing in frontier and emerging markets for 60 years under the banner "Business Solutions to Poverty". Until very recently, the only way to channel growth capital to entrepreneurs in Emerging Markets was by providing direct loans and equity capital on a "fly in – fly out" basis. It is a relatively risky strategy: investors based thousands of miles away from investee companies can do little more than provide financing and hope that it will be used wisely. Over the last ten years or so, Sarona monitored the growth of a locally-based private equity industry backed by development finance institutions. By 2009, Sarona felt that the time had come for a strategic shift away from direct investing and towards supporting local small and medium-size enterprises through the selection of top quality, locally-based private equity teams. In private equity there are two main tools helpful in managing risk: 1) careful selection based on long experience and 2) diversification. By shifting to a fund-of-fund model, Sarona can continue to apply its experience in selecting the best managers and can construct diversified portfolios accessing 12-18 different funds across Africa, Asia, and Latin America, investing in over 150 companies across a variety of sectors. In this way, Sarona believes it can do a better job at serving the interests of investors and investees alike.

[25] *Diverse Perspectives, Shared Objective: Collaborating to Form the African Agricultural Capital Fund*, The GIIN, Jun 2012.
[26] A hurdle rate is the minimum return to investors to be achieved before a carry is permitted.

Linking compensation to financial and/or impact targets to avoid mission drift

Impact measurement is often difficult to contractualize

As the impact investment market often parallels the venture capital or private debt fund market, many investors and fund managers have followed those models for building compensation structures into their investments. Impact investors may link compensation to financial returns, but the early stage of the market demands flexibility on linking compensation to impact objectives. The objectives for the portfolio may be set in the impact thesis, but investors recognize that identifying the right metrics for an investment will be an iterative process, refined over time. As such, it can be challenging to incorporate a contractual link between a successful impact determination and the compensation of the managers delivering that impact.

Some are starting to experiment with impact-based incentive structures

However, investors are increasingly working to develop impact-based incentive structures, as many recognize that this can help to ensure the managers' commitment to the stated impact mission. Below, we provide two case studies: one where the objectives are in place for a company and the other where the incentives are structured at the fund level. We also direct readers towards a recently published set of case studies on this topic.[27]

Case study: LeapFrog, incorporating impact objectives to investment terms

At the company level, LeapFrog has incorporated impact objectives in the compensation structure for the managers of one of its portfolio companies, Apollo. Apollo is a traditional insurer moving into the micro-insurance market with the help of LeapFrog. With their investment, LeapFrog negotiated that Apollo should allocate its bonus pool with 20% of total entitlement linked to the performance on micro-insurance impact objectives.

Case study: AACF, implementing mechanisms to ensure social impact

At the fund level, J.P. Morgan Social Finance's investment into AACF presented a challenge in finding the right structure to ensure that smallholder farmer livelihood improvement would be a priority in all of AACF's investments. The original offering memorandum called for the fund manager's compensation to be tied to the fund's measurable impact on smallholder farmers. The five stakeholders ultimately decided not to pursue an impact-based compensation model because they determined it could not create focused incentives for the fund manager. In lieu of an impact-based compensation model, the stakeholders established fund governance mechanisms to help prioritize investments with high potential for social impact.[28]

Manage friction between impact and return

Many investors cite that they pursue opportunities where the impact mission is synergetic with the financial return pursuit and that in the long term bringing impact into the financial decisions can make businesses more sustainable. At the same time, many of the organizations that we interviewed acknowledge that friction can arise between these two pursuits. Here, we highlight a few cases of friction, and the action that the investor took in response.

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[27] See *Impact-Based Incentive Structures: Aligning Fund Manager Compensation with Social and Environmental Performance*, GIIN, Aug 2012.

[28] For more on this transaction, see *Diverse Perspectives, Shared Objective: Collaborating to Form the African Agricultural Capital Fund*, GIIN, Jun 2012.

When growth eliminates jobs

Job creation is often referenced by impact investors as one of the components of the impact they pro-actively pursue. For example, the Lundin Foundation referenced that they have faced short-term trade-offs between creating (or keeping) jobs and bringing the company to the next stage of growth through investment in technology, for example. While job creation is part of the Lundin Foundation's impact mission, the foundation prioritizes the viability and competitiveness of the business to ensure that those jobs sustain for the long term.

Maintaining focus on an impact business within a traditional business

Several investors referenced that friction can arise when a traditional business is encouraged by impact investors to move into a lower-income segment of customers. LeapFrog, for example, has invested in larger insurance companies looking to implement a BoP strategy. In the case of one company, the fund manager was able to align their mission with the management of the company based on both the impact achievable and the financial opportunities in that less competitive market.

Maintaining mission more generally

Increasingly, investors state that they are incorporating terms in investment documents that allow them to ensure that the investee remains aligned to the impact mission. Frontier Investments, for example, have insured themselves against mission drift in their investee companies by including a clause in the term sheet requiring the company to find them an exit in case it drifts away from the financial inclusion mission that qualified the business for the investment in the first place. Similarly, Acumen Fund uses covenants in their investment documents to ensure that the BoP strategy that attracted their investment remains intact. Importantly, they note that an investee management decision to move away from that strategy would likely lead them to exit the investment, rather than block the move. AACF provides another example, as the agreements with investees incorporate an "intent vs. use" clause, which allows the fund to withdraw investments if enterprises use them in ways that undermine their engagement with smallholder farmers. Further, in order to mobilize U.S. foundations to invest rather than donate, fund managers must be able to ensure no drift from the impact mission and to provide for exits in the event that any covenants are broken.

Ensuring impact measurement

Several investors have also incorporated impact measurement and regular reporting requirements to their investment terms. Some, like the Rockefeller Foundation make investments conditional on the funds submitting to an impact rating by GIIRS. Big Society Capital has also strategically decided to incorporate impact measurement in their investment terms to ensure both the intermediaries and the underlying businesses in which they invest maintain alignment with the mission.

Portfolio diversification

As mentioned above, investors often find a softer approach to diversification to be more suitable to the private nature of this market. Rather than setting exposure limits as can be done for public equity portfolios, impact investors tend to take a more opportunistic approach while monitoring the broader concentrations in any sector, geography, instrument, or impact pursuit. Many of them arrive at an inflection point at which they become more strategic about diversification as the portfolio grows.

Case study: J.P. Morgan Social Finance, adding strategic targets to an opportunistic approach

As already indicated, the J.P. Morgan Social Finance portfolio currently consists of close to USD 40mm of committed capital across five different funds. While the portfolio began opportunistically, we have now reached a stage where we can be more strategic about growth and diversification with respect to geography and sector. For example, our first investments were in the financial services sector, which we felt were the most natural entry points for the impact investment market at the time. As the market has developed, we have been focused on broadening our sector exposure by investing in two cross-sector funds and one single sector fund. Our portfolio now has an investment footprint across 30 countries, on 5 continents.

Case study: MicroVest, balancing risks across different parameters

MicroVest manages a family of funds that make debt and equity investments in microfinance and other low-income financial institutions across broad geographic areas. The manager generally pursues diversification across geographies and institutions, scanning individual company limits, country limits and high-risk country exposures. At times, participating in high-risk countries might lead the manager to choose a shorter tenor for the investment, or to target more mature businesses in which to invest (rather than investing at an earlier stage of growth). Within countries, MicroVest also assesses the balance between rural and urban presence to avoid concentration in either.

Case study: TIAA-CREF, building diversification across instruments and geographies

TIAA-CREF, a Fortune 100 financial services organization, is the leading retirement system for Americans who work in the academic, research, medical, and cultural fields. TIAA-CREF pursues impact investing through its Global Social and Community Investing Department within the company's Asset Management division. Its efforts support global microfinance, community bank deposits, corporate social real estate, and green building technology. This strategy is funded by the TIAA General Account, which is not available for direct investment but supports the claims-paying ability of our guaranteed annuities. It has committed capital of over USD 120mm in microfinance through its Global Microfinance Investment Program (GMIP). The program seeks to promote economic development from the bottom up, and includes investments in leading microfinance companies and private equity funds. GMIP is a globally diversified program which captures a wide range of microfinance models and products, including small deposits, micro-insurance, and small and medium enterprise lending.

5. Looking Forward

For investors building and managing impact portfolios today, the strategies presented above should provide a broadly applicable guide, which can then be refined according to their particular ambitions. One way in which the process will differ by institution is the determination of success, as institutions will value the impact and financial performance aspects differently, as we describe below.

Benchmarking success will depend on the investor

Benchmarking investment performance is always a challenge, no matter whether the investment is made for purely financial return or for impact as well. In the case of impact investments, the additional impact dimension feeds through to the benchmarking process as well, and different investors may focus their determination of success on different components of the performance.

Each investor will determine their metrics for success

While impact investors are by nature placing value on the dual mission of impact and financial return, some investors will naturally find themselves more focused on one of these goals relative to the other. Some foundations, for example, may benchmark the success of their investment by comparing the delivered impact against the impact that might have been expected from a grant-funded intervention. Some institutional investors, on the other hand, may prioritize the benchmarking of the financial success against the performance of other investment opportunities in which they might otherwise have invested. In either case, there is likely to be a minimum threshold for performance on both financial returns and impact – we simply reference that there can be stronger focus towards one relative to the other.[29]

Some challenges should ease in a maturing market

We also anticipate that some of the challenges that arise in portfolio construction and management today will ease over time as the market continues to establish itself. In order to be successful today, investors need to be realistic about the stage of the market, employing patient capital, bringing a dynamic set of expectations and taking an active management role to the investment. Whether investing directly or indirectly, investors will need to navigate a broad ecosystem in order to ensure the investment's success, utilizing technical assistance and managing any friction that can arise between the financial and impact pursuits.

The nature of the market today, while early in its development, is characterized by a collaborative spirit across many investors that share a broader goal of catalyzing the continued allocation of capital towards impact investments. The immediate response we received from our interview participants at the request to share their experiences is testament to this camaraderie. This research has been a first step towards sharing the experiences of these field builders to help investors new to the market establish a strategic approach to portfolio management for impact investments.

[29] This alludes to the "finance first" or "impact first" designations that have been used by the Monitor Group in describing investors' approach to this market (see *Investing for Social and Environmental Impact,* Monitor Institute, Jan 2009).

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Appendix I: Defining Impact Investments

For more on the definition of impact investments, and background on the broader market, see:

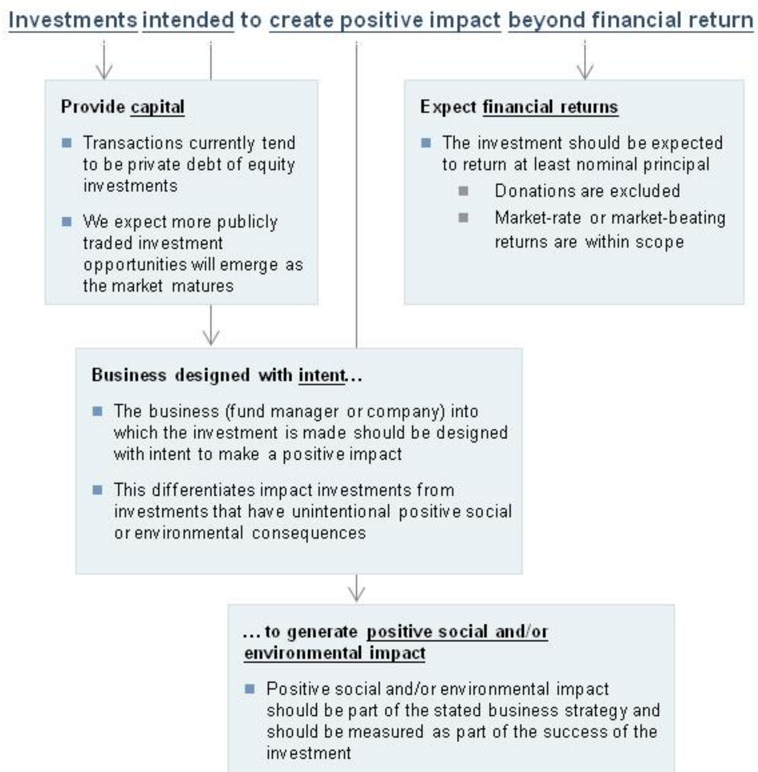
Impact Investments: An Emerging Asset Class
J.P. Morgan, the Rockefeller Foundation and the GIIN, Nov 2010

Click here for full PDF

For more on the GIIN, see www.thegiin.org

The definition for impact investments that we published in 2010 is outlined in Figure 27 below. In short, impact investments are investments intended to create positive impact beyond financial return. Underlying this definition are four key components: An impact investment provides **capital** to a business with **intent** to generate positive **social and/or environmental impact** alongside **financial** returns.

Figure 27: Defining Impact Investments



Source: J.P. Morgan.

Reference impact assets rather than investing behavior

One source of confusion in the market is driven by interchanging reference to assets versus behavior: Some will refer to impact invest*ing* rather than impact invest*ments*. For the purposes of analysis, it is easier to set our scope as those assets (companies or funds) characterized by their intent to deliver impact, than to analyze a set of investments made with a given intent. An asset class can be defined only by the characteristics of the assets themselves, not by the behavior of investors buying those assets. This is why in our definition the intent for impact rests with the business receiving the funds, whether at the fund level in the case of investment funds, or at the company level in the case of direct investments. In our view, it is easier to document intent for impact in the founding documents of a fund or company, such as the mission statement or articles of affiliation, than in the behavior of an investor. This is not to discount the intent of the investor, which is critical to channeling capital, but rather to be rigorous in the definition of a set of assets.

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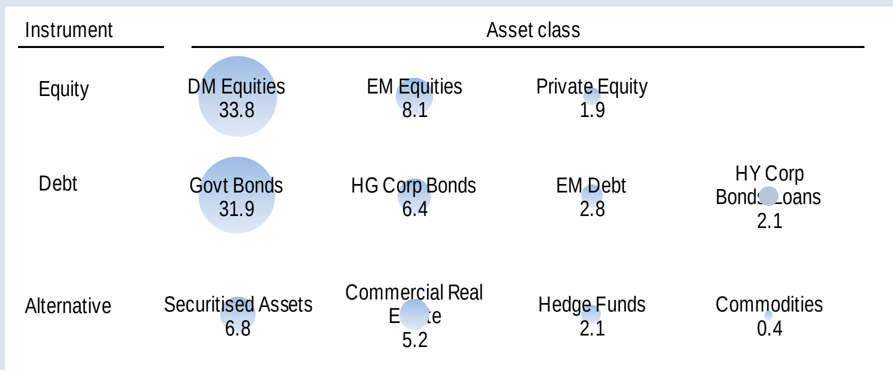
We notice some muddy water in the market when references are made to asset classes, and we feel it appropriate to clarify the difference between investment instruments and asset classes. Investment instruments will include debt, equity, and alternatives, while asset classes, by contrast, are not necessarily mutually exclusive and often overlay the different instruments. Sometimes asset classes reference single instruments like “private equity” and sometimes they reference multiple instruments like “hedge funds”. Impact investments constitute a cross-instrument asset class like hedge funds. Figure 28 illustrates asset classes and the instruments they utilize, with the size of the bubble illustrating the relative market capitalization.[30]

Figure 28: Asset classes across instruments
Global asset market capitalizations, USD trillions



Source: J.P. Morgan.

For the sake of comparison, assess issuer rather than investor

Another challenge with associating the intent to the investor is that of comparing investment performance. In evaluating traditional equity or debt investments, there is no reference to ownership – only to the performance of the company or fund itself. For the sake of tractability, this needs to be the model with which this sector approaches investment evaluation as well – on both the financial and impact components. This also avoids the unattractive predicament of a social enterprise having to declare that some of its capital is impact investment capital, while other capital is not. Further, it avoids the situation of investments changing nature as a result of changing ownership. If this is to become an analyzable set of investments, it needs to be the investments themselves that we consider, not who makes them.

A set of cross-instrument assets channeling capital: An emerging asset class

Our recognition of impact investments as an asset class responds to the fact that these assets have the potential to channel significant capital and are beginning to do so. This is where the investor behavior comes into play – when both the buy side and sell side organizations are assigning investment management roles with specific impact components, we must acknowledge that this is a trend that will result in increasing capital flows towards this sector.

[30] NB: We do not have a measure of the current market capitalization of the impact investment market.

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Appendix II: Company versus Fund Investments

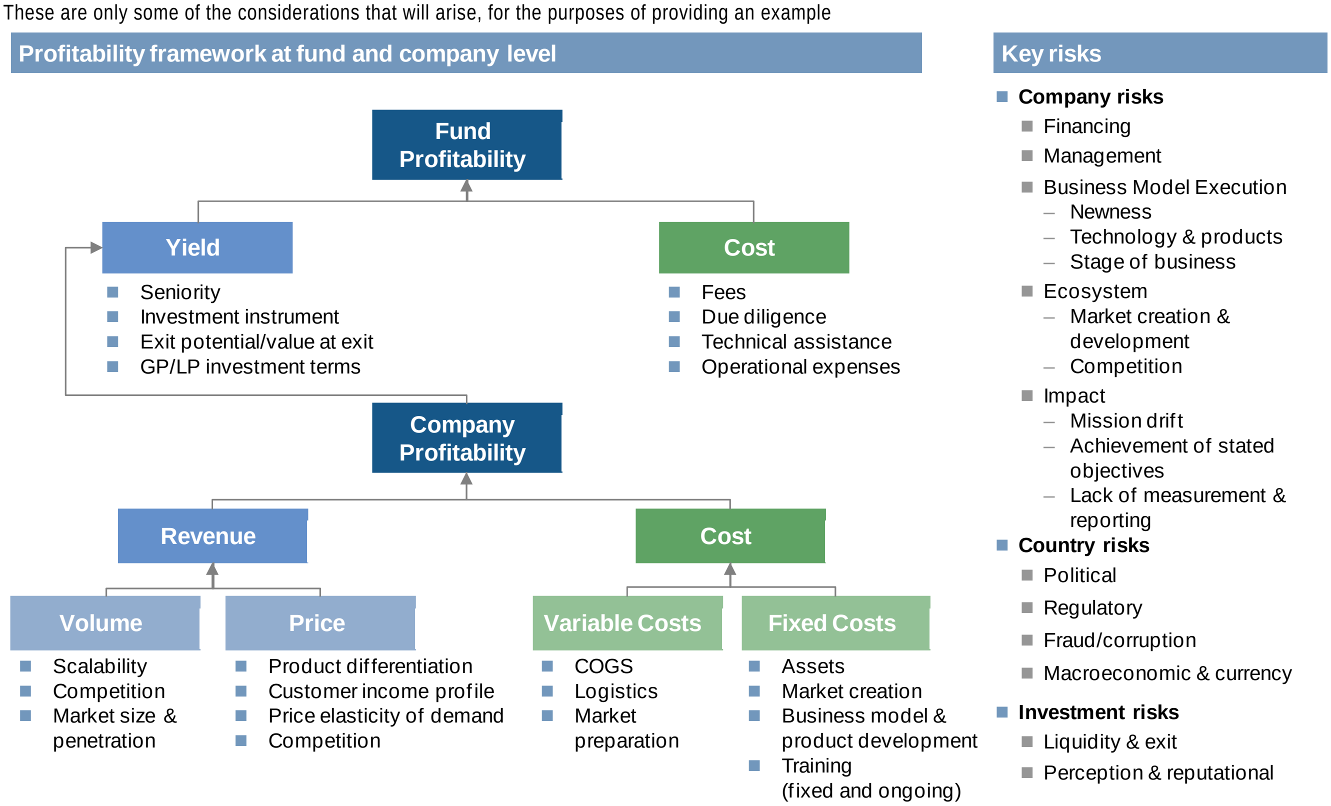
The assessments above have been presented to apply generally to impact investments, whether made directly into companies or indirectly through a fund intermediary. In this section, we present some of the specific considerations that arise in analyzing company and fund investments.

Company-level and fund-level considerations

In general, the drivers of profitability and risk for impact investments are similar to those for a traditional investment, and the company and fund-level considerations translate as well. The profit-tree in Figure 29 provides a starting point for the analysis of the return and risk for a company investment and at the fund level as well. As the figure shows, the profitability for a company investment will be driven more by operating concerns including the volume and price at which the product or service will be sold and the costs associated with the development and distribution. At the fund level, profitability will also be driven by the financial structure of the investor's participation in the fund, the fund manager's operational expenses, and the cost of due diligence on the pipeline of opportunities that the manager is considering. The risk considerations will include country risk, investment risk, and company risk.

Figure 29: Illustrative profit-tree for analyzing potential return and risk of an impact investment

These are only some of the considerations that will arise, for the purposes of providing an example



Source: J.P. Morgan.

Some of the factors driving profitability and risk that are more specific to impact investments include market creation and ecosystem development, for example. We discuss these differentiating features in more detail in the next appendix. Below, we provide some insight into the company-level analysis from Monitor Group, which has performed significant analysis of impact businesses in both Africa and India.

For more on the profitability of impact businesses serving low-income customers or engaging low-income suppliers, agents or distributors, see:
Promise and Progress: Market-based solutions to poverty in Africa,
M Kubzansky, A Cooper and V Barbary, Monitor Group, May 2011.

and

Emerging Markets, Emerging Models, A Karamchandani, M Kubzansky, P Frandano, Monitor Group, Mar 2009.

In-depth company-level analysis:
Monitor Group's study of market-based solutions to poverty in Africa

In 2011, Monitor Group published the findings from a year-long study of more than 270 market-based initiatives to solve poverty in Africa, initiatives that use the market economy to engage low-income people as customers or business associates (suppliers, distributors or agents). The research identified three common themes across the more successful market-based solutions (MBSs) that can help us think about the drivers of profitability for companies pursuing similar business models in similar regions.

1. Firstly, Monitor finds that many enterprises achieved viability by adopting an expanded view of low-income consumers or business associates, engaging those at the bottom of the pyramid but also those in adjacent income groups to buffer the volatility and risk that arises when dealing with the very poor.
2. A second finding identifies that MBSs can operate sustainably selling "push" products only if they engage in large-scale demand stimulation to educate target customers about the benefits of the offerings. While this may be expensive, companies in sectors as diverse as mobile-enabled services and agriculture inputs successfully incorporate this cost into an economically viable business model, although it often requires higher gross margins to afford the "push".
3. Thirdly, they find that "market joiners" – businesses joining a market already in existence – are able to achieve scale more quickly than "market creators" – those that pioneer new products or services for low-income customers, which typically take a decade or more to reach scale in India, for example.

The findings of Monitor Group's research can help investors to think about the costs and benefits of operating in such markets and the types of businesses that are likely to deliver solutions at scale when serving low-income customers. They have published the findings of similar research study in India as well, and we recommend both sources for examples of economic analysis at the company level in this market.

Appendix III: Differentiating Impact Investments

Many of the drivers of profitability and risk for impact investments are the same as for traditional investments. Below, we highlight some of the factors that are more specific to the imapct investment market.

At the market level

The presence of the impact thesis

While some view the inclusion of an impact thesis as a constraint that would restrict the profitability of the investment, we believe that it should be viewed simply as contributing to defining the focus of the investments, which does not have a general affect on profits necessarily. For example, if the impact mission of one investor is to more efficiently deliver consumer goods to low-income populations in frontier markets, some will assume that low prices and high operating costs should determine low return expectations.[31] But perhaps the lack of competition might result in high demand, and hence high sales volumes, to the business. Again, as we have been advocating, investors should assess each opportunity individually to determine which factors – costs or margins, volumes or competition – might drive financial performance the most, given the impact thesis.

Pioneering structures and partnerships

Many investors cite a specific desire to employ innovative financial structures to ensure the investment best meets the needs of entrepreneurs and also to demonstrate a role for other investors that might then follow suit. Part of our motivation for participating in the AACF referenced above, for example, was related to showcasing the viability of a transaction that brings together different types of investors – foundations and a financial institution – with different risk/return profiles coming together to create a new investment solution. The Rockefeller Foundation also cited this goal as making it critical for their investment to leverage commercial capital, though it was not needed to close the deal. In fact, to demonstrate ways in which different forms of capital could come together they were willing to take on more risk than if they were only interested in capitalizing the fund itself.

Case Study: Big Society Capital, offering more flexible finance to match the impact mission

Big Society Capital is an independent financial institution established to develop and shape a sustainable social investment market in the UK by investing in social investment finance intermediaries. The goal of developing the market is likely to lead BSC to structure loans with longer tenors than might be offered by commercial lenders and largely on an unsecured basis to allow the recipient organizations more flexibility in their growth.

The newness of the market

Stepping back to consider the market more broadly, its early stage nature can also present some challenges that should hopefully begin to dissolve over time as the market matures. Today, for example, investors may also need to support the

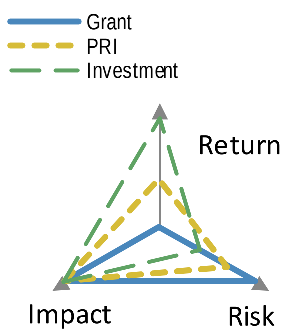
[31] We do not claim that low margins are necessary in order to serve low-income markets, but rather referencing a common assumption about the market. As Erik Simanis argues in *Reality Check at the Bottom of the Pyramid* (Harvard Business Review, Jun 2012), higher margins may be both necessary and possible for base of the pyramid business success.

development of a broader ecosystem to support the business, investing in such things as market creation (stimulating demand for a product that does not yet have natural demand) and business model validation for disruptive business models.[32] The costs associated with addressing these issues can dampen return expectations today, and some investors cope with this cost by setting up a parallel funding facility.

Case Study: LeapFrog Labs, subsidizing the cost of innovation

Having recognized that innovative business models require research & development, LeapFrog established LeapFrog Labs, a grant-funded parallel facility to the fund. LeapFrog Labs provides technical assistance to the portfolio companies of the fund and also enables innovation by subsidizing the cost of testing new models and approaches for the investee companies.

Figure 30: The types of funding that capitalize in impact investments
Illustrative profiles



Source: J.P. Morgan.

The combination of different types of capital: grant, PRI and investment

Funding with the right type of capital

Another feature of this market that is unique to others is that some opportunities at the early stage can be more appropriate for grant capital than for investment capital. Prudential cites that they consider which investments should be made from their foundation as PRIs – often those deals with a more direct connection to the foundation's thesis and sometimes those with higher risk or lower return. The Esmée Fairbairn Foundation also has a grant portfolio alongside their mission-related investment portfolio, and they find the opportunities to be fairly self-selecting in terms of the appropriate type of capital.

Grant capital alongside (or below) investment capital

In addition, individual investments are sometimes made alongside grant capital. Often, the grant is provided to fund technical assistance to the investee, to help with market creation or to fund more in-depth impact measurement. Sometimes, though, the grants take the place of equity as a loss-absorption facility to attract more commercial investors.

To link these various types of capital back to our framework for impact, return and risk, we show in Figure 30 the graphs you might expect to see for investors with different pools of capital. Naturally, a grant is not an investment so is outside the scope of our analysis, but we include it in this graph to illustrate the relative targets of the three types of funding that can capitalize impact funds or businesses.

Case Study: Root Capital, building the capital structure appropriate for the risk appetite

Root Capital is one fund that has successfully utilized a mixed pool of capital for their work. The mission of the firm is to grow rural prosperity by investing in small and growing agricultural businesses that build sustainable livelihoods in Africa and Latin America. The firm is strategically committed to funding businesses that struggle to source capital from traditional commercial lenders, addressing the "missing middle" with loans typically between USD 50,000 and USD 2mm. Given the risk profile and cost of delivering such loans, the firm raises philanthropic capital from grantors to provide an equity first-loss tranche for their funds. With this capital in place, debt investors are then able to provide senior funding, with different debt-net asset ratios across the various funds depending on the risk of the fund's underlying portfolio.

[32] See *From Blueprint to Scale: The Case for Philanthropy in Impact Investing*, H Koh, A Karamchandani and R Katz, Monitor Group, Apr 2012.

At the investment level

Market creation and development

The disruptive nature of some impact business models can mean that significant investment needs to be made in developing the demand and the supporting value chain for a new market. The company (and its investors) may need to invest considerable resources to essentially build market demand for a new product or service through marketing and education, and there is a risk that the demand fails to materialize sufficiently to turn the business into a profitable venture.

Competition

The pursuit of an impact mission can lead to innovative business models for which there is little competition at the outset. Once created, however, the demand for a new product is not something over which the company that invested in creating it can maintain control. Thus, a company can spend resources to help their own business, while also lowering the barrier to entry for competitors, which can in turn put pressure on prices and volumes.

Technical assistance

For investors supporting new entrepreneurs, there can often be a benefit to providing a technical assistance facility alongside the investment. Often, this is grant-funded to mitigate the cost to investors.

Ecosystem development

The impact investment market is characterized by its disruptive nature, and often the success of the investments can depend on the regulatory or policy support from the governments of both the investor and the investee.

Impact mission drift

Impact mission drift can arise in both successful and failing ventures, where pressures on the financials – from investors or would-be investors – can lead the management to prioritize profits at the cost of mission.

Case Study: IGNIA, identifying business risk and ecosystem risk

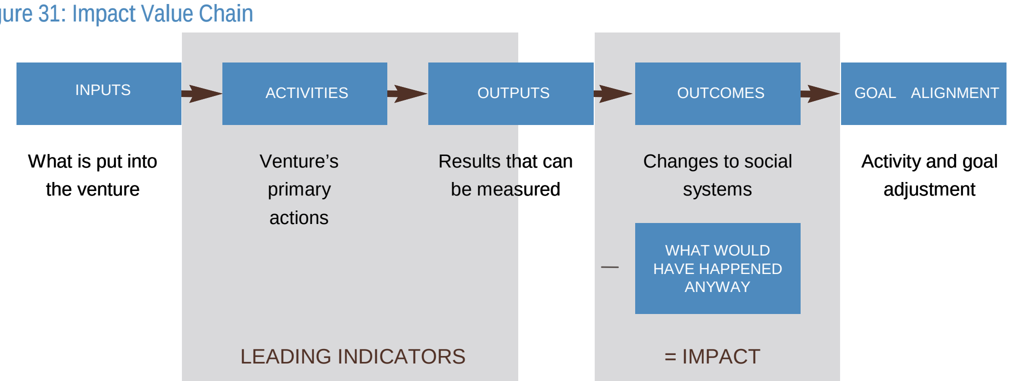
IGNIA is an impact investing venture capital fund that supports high growth enterprises serving the base of the socio-economic pyramid in Mexico. When assessing the risk of an investment, IGNIA organizes the risk analysis into two components: the risk inherent in the business model itself – the business risk – and the risk related to the broader ecosystem in which that business will need to operate in order to be successful – the industry ecosystem risk.

Appendix IV: The Impact Spectrum

Defining our terminology: Outputs, outcomes and impact

Throughout this paper, we reference the measurement of ‘impact’ because that is the term used by most market participants. However, in social science, ‘impact’ has a specific definition: it describes outcome(s) that can be attributed to a particular intervention, as depicted in Figure 31. An academic impact evaluation of a bednet manufacturer, for example, might entail a multi-year study on the incidence of malaria among target customers, with a control group to understand what would have happened to those customers if they had not purchased bednets. This type of evaluation would provide the greatest possible certainty that the bednet company had delivered the social impact intended by its management.

Figure 31: Impact Value Chain



Source: The Rockefeller Foundation, J.P. Morgan.

Rigorous impact evaluation, including Randomized Control Trial (“RCT”), is powerful, but onerous and expensive in practice. Many impact investors therefore settle for measuring ‘activities’ or ‘outputs’ (such as number of bednets sold) rather than running control groups to measure the ‘impact’.[33] Investors balance the need for rigorous impact evaluation against the need for simple, cost effective ways of measuring this impact. We believe the tools being developed to balance these needs should build on knowledge generated by the existing body of academic literature, while acknowledging the need for systems that add value and are pragmatic for investment activity.

[33] There could also be ethical questions about running control groups if it meant denying the product or service to a part of the population that should have equal access.

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Appendix V: Interview Participants

Table 9: Interview participants

Investor type	Interview participants
Foundation	The Bill and Melinda Gates Foundation Calvert Foundation The Esmée Fairbairn Foundation The F. B. Heron Foundation The Lundin Foundation The Rockefeller Foundation Shell Foundation
Pension fund	Christian Super PGGM TIAA-CREF
Financial institution	J.P. Morgan The Prudential Insurance Company of America Storebrand
Fund manager	Acumen Fund Big Society Capital Bridges Ventures Accion and Frontier Investments IGNIA LeapFrog Investments MicroVest Pearl Capital Partners Root Capital Sarona Asset Management
Company	AllLife
Other	IRIS Monitor Group

Appendix VI: Social Finance Library

Cross-sector research

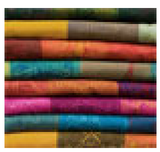
Insight into the Impact Investment Market: An in-depth analysis of investor perspectives and over 2,200 transactions
J.P. Morgan and the GIIN, Dec 2011

Counter(Imp)acting Austerity: The Global Trend of Government Support for Impact Investment
J.P. Morgan, Nov 2011

Impact Investments: An Emerging Asset Class
J.P. Morgan, The Rockefeller Foundation and the GIIN, Nov 2010

Microfinance research

Volume Growth and Valuation Contraction: Global Microfinance Valuation Survey
J.P. Morgan and CGAP, May 2012



Discovering Limits: Global Microfinance Valuation Survey
J.P. Morgan and CGAP, Jul 2011

All Eyes on Microfinance Asset Quality: Global Microfinance Valuation Survey
J.P. Morgan and CGAP, Mar 2010

Shedding Light on Microfinance Equity Valuation: Global Microfinance Valuation Survey
J.P. Morgan and CGAP, Feb 2009

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