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# Impact Investment

## REWARD BEYOND PROFIT

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# Impact Investment: Reward Beyond Profit

## Why Impact Investment Deserves Our Attention

A healthy, fulfilling life in dignity for everyone on earth is no longer a mere dream. To many of us, it has become the key and, moreover, a realistic aspiration to work toward. Awareness of global demographic, ecological and economic problems is on the rise among scientists, the public, and political leaders, posing new challenges and opportunities to the financial sector. Economic and demographic trends have spawned a new form of investment that targets an environmental or social impact in addition to profit. Those trends include the following.

- Shift in consumer demand: growth of the LOHAS market. LOHAS stands for *lifestyles of health and sustainability*. In the United States, that market is worth 355 billion dollars.[1]
- Increasing base-of-pyramid consumer class: according to the McKinsey Global Institute, the number of people who earn more than ten U.S. dollars a day will have grown from 2.4 billion in 2010 to 4.2 billion in 2025.[2]
- Growth in emerging markets: from 2000 to 2010, 21 emerging economies doubled their GDP. In 2015, those markets are expected to grow by 5.4 percent on average, advanced economies by 2.3 percent.[3]
- Scarcity of natural resources: the United Nations estimates that the world will need 35 percent more food, 40 percent more water and 50 percent more energy by 2030.[4] One third of the so-called millennials, a generation estimated to inherit 30 trillion dollars over the next thirty to forty years, ranks resource scarcity and environmental protection among mankind's top challenges, and thinks that business should contribute to addressing those issues in addition to generating profits.[5]

To make the world a better place, humanity needs to solve three basic issues:

1. maintain inclusive economic growth globally to enable everyone to satisfy their needs and to achieve their potential
2. reduce anthropogenic degradation of the environment, preserve nature to make life on earth safe and comfortable for all species including humans
3. minimize societal problems such as illiteracy, crime or illness to promote economic and social prosperity

In theory, capitalism lays the foundation for businesses and economies to grow, thus producing both private and public goods, and improving the standard and quality of living of all. But this is only partly true. While economic activity such as investment

may have, and often has, favourable social or environmental effects, such public benefits are usually unintended. Conventional investment[a] is mainly profit-driven. Its social or environmental impact can be either positive or negative. Classic profit-driven economy provides many examples of how generating profit clashes with ecological or social goals. According to the Trucost data, published by GreenBiz media and research group, there is a positive correlation between corporate revenues and the environmental damage resulting from business operations, as shown in figure 1 below.[6]

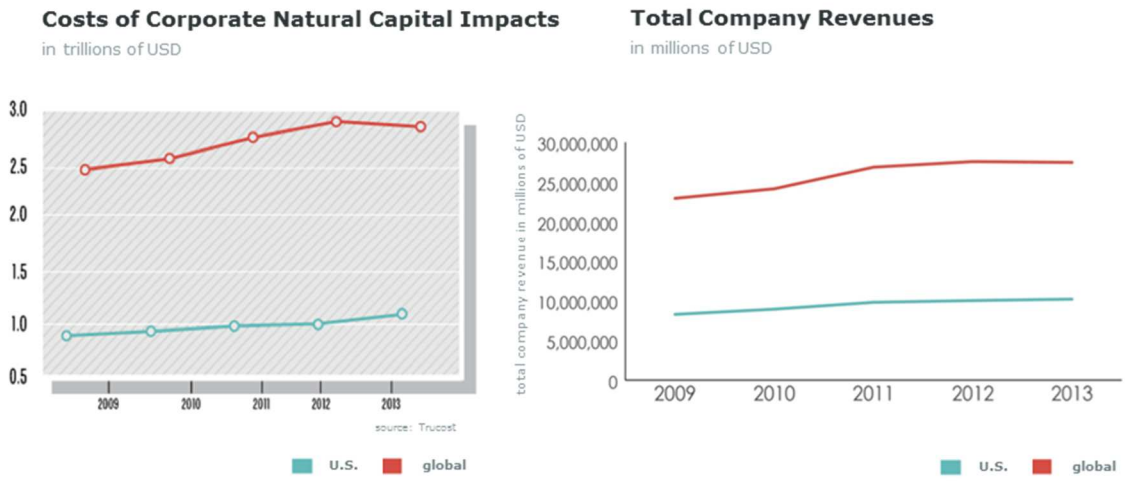


*Figure 1: correlation between corporate revenues and environmental damage 2009 to 2013 as published by GreenBiz*

Driven by continued industrialization and the rapid development of information technology, the world economy has been growing steadily for half a century.[7] Extensive growth, however, has caused or aggravated a number of equally global problems, among them environmental issues such as global warming, air and water pollution, soil erosion and contamination, as well as social concerns like poverty, hunger or financial exclusion of those below the pyramid. Environmental problems:[8]

- carbon dioxide levels in the air are at their highest in 650,000 years
- global mean temperature has gone up about 0.8 °C since 1880
- sea level is currently rising by 3.21 millimetres a year
- from 2000 to 2012, the global forest cover has decreased by 1.5 million square kilometres, more than the combined areas of Germany, France and Spain

Social problems:

- the Food and Agriculture Organization (FAO) of the United Nations estimates that nearly 870 million of the world's 7.1 billion population were suffering from chronic undernourishment in 2010 to 2012[9]
- in 2011, 14.5 percent of the world population (more than one billion people) were living on less than 1.25 U.S. dollars a day at 2005 international prices[10]
- according to UNICEF, a global 17,000 children under five died per day in 2013[11]
- in 2006, some 1.1 billion people living in developing countries had inadequate access to water, 2.6 billion lacked even basic sanitation[12]
- globally, two billion adults lack access to basic financial services[13]

[a] Conventional investment refers to holding classic instruments like stocks, bonds or cash with an expectation of capital appreciation, dividend or interest earnings, considering criteria such as liquidity, risk-adjusted return and correlation with market return.

As public awareness of such problems rose and understanding of the workings of capital deepened, an alternative form of investment emerged, called impact investment, which aims to combine financial return with a measurable public benefit.

Since 2007, when the term was coined, many financial market players, governments and the public have expressed interest in this approach. Impact investment, often paraphrased as "doing well by doing good", is a valid strategy when the social or environmental agenda is in line with business objectives. There are several examples of how capital can be deployed to address societal challenges and still be profitable in the long run.

EXAMPLE: M-KOPA

M-KOPA is a microlending company from Kenya that helps off-grid consumers purchase solar home lighting systems by instalments paid via their cell phones. By spreading the price of a solar-power home system out over several months, M-KOPA's pay-per-use purchase model allows customers to redirect wasteful daily spending on kerosene or other lighting sources toward gradual ownership of a better-value system. The company succeeded in raising capital and repaying its investors.[14]

The financial system has not only the means but also a moral duty to contribute to solving global issues, especially in the aftermath of a financial crisis, when trust in the system has been shaken and there is a momentum to adopt new approaches that would rehabilitate financial markets. Moreover, according to the *European SRI Study* from 2010, funds focusing on sustainable and responsible investment proved more resilient to crisis than conventional investment vehicles.[15] While the crisis certainly hit SRI funds, too, the impact was far from devastating, which suggests that both the bad reputation adhering to financial markets after the turmoil, and its stability could be improved by investing more sustainably and responsibly.

Impact investment is an innovative approach that could contribute significantly to improving the image of financial markets, while meeting both investors' return expectations and societal needs. This dual reward makes impact investment a concern to various stakeholders including researchers and financial analysts. That is why we have examined this subject more closely: to harness it for potential investors, and see what it has to offer to the financial system, to governments and to mankind as a whole.

# AT A GLANCE

## PURPOSE OF THIS ARTICLE

In this article, we take a critical look at impact investment as a new approach to purchasing assets, furnishing a definition as well as an overview of the market. We also analyze the challenges that the impact investment industry will have to meet to reach a more mature development stage. In particular, we aim to

- increase transparency and offer a neutral view on impact investment purposes and vehicles,
- compare impact investment with other sustainable investment strategies,
- present an overview of proven impact investment vehicles, examine them thoroughly, reveal their strengths and shortcomings,
- analyze the impact investment industry's infrastructure, main players, development indicators and latest trends,
- provide guidance to investors, introduce pricing approaches, present Consileon's impact investment decision framework, highlight opportunities and risks of participating in this emerging market,
- point out aspects of impact investment for the industry to improve on such as transparency, reporting, monitoring, auditing in order to reach maturity, thus removing barriers to potential investors, and making capital available to investees.

## OUTLINE

This article has been structured as follows: in the first chapter, we define impact investment, discuss its goals and features. Chapter two provides an overview of impact investment vehicles. The third chapter comprises Consileon's assessment of the investment vehicles discussed in the previous chapter, an evaluation of their shortcomings, as well as pricing recommendations. Finally, chapter four contrasts the impact investment market with the global assets under management (GAUM) industry, introduces major players, and offers an outlook on the impact investment market's evolution.

## TARGET AUDIENCE

This article has been written for anyone interested in solving global societal and environmental issues. In particular, it targets potential investors and investees, academia as well as government representatives who are going to engage in this market, and encourages them to strengthen their cooperation to achieve better results.

## OUR STAKE IN THE SUBJECT

We see ourselves as a consulting firm committed to sustainability. We conduct our business in a socially responsible and ethical manner not only on behalf of our stakeholders but also for the benefit of society at large, and our natural environment. Our objective is to contribute to the finance industry's evolution by promoting responsibility. But rather than advocate short-term publicity measures designed to mend capital markets' cracked reputation, we support the revaluation of current business models as well as the development of industry-specific computing platforms and applications designed to yield sustainable financial and social or ecological returns. In the long run, our ambition is to become a thought leader on that subject, while continuing to help capital markets improve their efficiency.

# EXECUTIVE SUMMARY

## DEFINITION AND GOALS OF IMPACT INVESTMENT

Impact investment is a relatively new strategy on the market of socially responsible investment (SRI), also known as *sustainable and responsible* investment. In addition to the obligatory financial return, it targets a measurable public benefit. Absent a generally accepted definition, we opted for one that reflects the five main features of impact investment:

- profit is an objective
- nonprofit impact is intentional
- impact is measurable
- impact is a net positive change
- impact and profit are equally important

As regards returns, we found that expectations range from concessionary to above market rate. We also identified three main concerns of impact investors, which have not yet been formulated clearly in the literature:

- financial inclusion[b]
- protection of the environment
- solution of social problems

In the first chapter, we present a graph and table to distinguish impact investment from other SRI strategies such as ethical, social or responsible investment. Differentiating criteria include financial and nonprofit goals. To explain how potential investors assess the impact of an investee's business model, we discuss the selection tactics of positive versus negative screening.

## IMPACT INVESTMENT VEHICLES

Options for investors aiming for impact range from conventional financial instruments to innovative vehicles designed for that target group. To provide a comprehensive overview, we look at three classes of vehicles geared to distinct impact investment purposes.

- **Microfinance funds** promote **financial inclusion** by providing capital to the poorest via specialized institutions, thus creating opportunity for both the previously excluded and the business community as a whole.
- By purchasing **green bonds** or green infrastructure funds, investors can contribute to mitigating industrial or other anthropogenic damage to the **environment**.
- **Social impact bonds** (SIB) are a vehicle for mobilizing private capital to tackle **societal problems**.

In chapter two and three, we describe and assess those impact investment vehicles by the following criteria:

- vehicle type
- investors
- government involvement
- beneficiaries
- geographic distribution
- origin

[b] Provision of financial services to disadvantaged, low-income segments of society at affordable cost.

This report is the first to present an exhaustive overview of impact investment vehicles. Detailed evaluation serves not only to compare those vehicles but also to reflect on occasions for cross-segmental implementation. Specifically, we have analyzed the strengths and shortcomings of the vehicles in each market segment (microfinance, green, social), and tabulated our results. While each vehicle has its drawbacks, we spotted three problems they share:

- financial viability: performance, liquidity
- nonprofit impact: how to measure it
- risk: reputation, complexity of business model

To address those challenges, we present our impact investment decision framework. Besides impact quantification and investment pricing tools, it includes approaches to estimate expected returns based on expert opinions. Though intuition suggests that there must be a tradeoff between profit and public benefits, according to thought leaders such as researchers at Wharton or Stanford Social Innovation Review, impact investment holds out a broad range of return opportunities from below-market (concessionary) to market-rate. As regards pricing, we differentiate three impact-return correlation scenarios.

A. No direct correlation. In such cases, the capital asset pricing model (CAPM) suffices to calculate returns.
B. Negative correlation. In this event, a top-down approach applies to calculate the implied impact. Example: a conventional and a social bond have similar features. The traditional bond yields five percent, the social bond three. The differential two percent equals the return foregone for impact. Negative correlation between return and public benefit is the prevalent case in SRI, which makes it difficult to find a substantial number of instances where nonprofit impact entails an additional financial return, or remains neutral to it.
C. Positive correlation: return increases with impact, as is the case with social impact bonds. In such instances, the so-called gamma approach applies.

To evaluate impact investment performance, we look at impact measurement. Examples include the monetization of carbon emissions. Applying the same principle, we hold that almost any impact can be quantified. It is, however, quite a challenge to measure improvement of soft factors such as employee satisfaction, let alone the happiness of an entire population.

## IMPACT INVESTMENT MARKET

Originating in 2007, the impact investment market is still in its infancy, comprising many niche players. Its growth is driven primarily by development finance institutions, and by a shift on the global investment market toward alternative assets. For impact investment to mature, players need to expand and scale up. Forecasters see the industry boom from 46 billion dollars in 2014 to 400 billion in 2020.

In chapter four, we outline the infrastructure of impact investment, including key players such as rating agencies, social stock exchanges, sustainable banks and data providers, and discuss its crucial function for labelling, monitoring, auditing and reporting. Furthermore, we contrast current impact investment facts and figures with the global investment market. Our study is the first on the nascent impact investment industry that predicts the latter's evolution based on an apparent change of global market trends.

## OUTLOOK

Our report highlights the challenges that are slowing the industry's evolution, and concludes that market leadership will depend on a player's success in defining standards and attracting volume. A major boost to the market will be an increase in the number of participants such as

pension funds, insurance companies and retail investors. To enable that growth, however, infrastructure and complementary services providers such as exchanges, rating agencies, data suppliers or consultancies also need to expand and scale up. Last but not least, regulators should be involved to enforce a legal framework for smooth collaboration.

# 1. Impact Investment: Definition, Goals, Comparison

**Impact Investment is a relatively new strategy on the SRI market, targeting a measurable public benefit beyond the obligatory financial return, which ranges from below to above market rate. Impact is mostly defined in three terms: financial inclusion, environmental protection, solution of social problems.**

## 1.1 Beyond Profit: Goals to Score with Impact Investment

Assuming that money should be invested in a way that balances profit with the needs of the planet and its people, impact investors hope to score triple bottom line goals: (1) financial or economic, (2) environmental or ecological and (3) social. Objectives beyond profit are mostly defined along three lines:

- financial inclusion of the poorest, the so-called BoP[c]
- environmental protection or nature conservation
- solution of social problems

### Financial Inclusion, Inclusive Growth

Around three billion people, almost half the world's population, are living at the base of the economic pyramid (BoP). Seeing the BoP as a potentially profitable market on the one hand, and hoping to drive social progress on the other, impact investment pioneers have developed vehicles proven to promote inclusive growth.[d]

Loans granted by microfinance funds are an example of impact investment serving financial inclusion. Extending capital to borrowers excluded from conventional finance, they contribute to building wealth among the poor while still making a profit for investors. Nonetheless, microcredits and the whole microfinance industry should be viewed with caution given their recent notoriety for excessive interest rates, low loan and monitoring standards, and borrowers caught in a debt spiral.[16]

### Environmental Protection, Nature Conservation

Environmental issues most frequently discussed today include ecological disasters caused by industry, scarcity of fossil resources, water and air pollution as well as global warming. Switching to renewable energy sources and increasing energy efficiency could mitigate them all. To raise capital for projects targeting ecological concerns such as climate change mitigation or adaptation to global warming, the impact investment industry has developed vehicles such as green bonds or infrastructure funds.

### Solution of Social Problems

Governments often fail to meet basic societal needs like employment, housing, health or education. To some extent, that is due misallocation of funds and a lack of entrepreneurial skill. Impact investment can contribute to closing those gaps.

Social impact bonds (SIB), for instance, attract private capital to finance long-term social projects carried out by private service providers, ranging from extracurricular youth education, through the provision of housing or homeless shelters, to criminal justice programmes. To

[c] BoP = base or bottom of pyramid, referring to the billions of people living on less than 2.50 dollars a day.
[d] Inclusive growth refers to stable economic growth that holds opportunity for everyone to benefit and contribute.

raise capital from private investors and allocate it to social enterprises,[e] the European Commission has initiated two funding instruments, the European Social Entrepreneurship Fund (EuSEF), and European Venture Capital (EuVECA).

In its pursuit of the three goals outlined above (inclusion, conservation, social progress), impact investment taps a huge profit potential. Reaching four billion underserved low-income individuals requires an estimated five trillion U.S. dollars.[17] Halving CO2 gas by 2050: 2 trillion U.S. dollars a year.[18] Modernizing the global infrastructure in 2013 - 2030: 57 trillion dollars.[19] While estimates vary among reports for clashing definitions of poverty, there is a consensus that impact investment constitutes a lucrative market.

## 1.2 Impact Investment as a Form of Socially Responsible Investment

Impact investment is one among four basic SRI strategies.[f] The other three are: social investment (SI), ethical investment (EI) and responsible investment (RI). The four strategies differ in their prioritization of profit and public benefit, ranging from "impact first" to "profit first". Impact-first strategies, represented by SI, settle for a lower financial return for the sake of public benefit. Both EI and RI are profit-first strategies, whereas in impact investment (II), financial and social or environmental returns are considered equally important. Accordingly, the relevance of the public benefit varies from being crucial (SI, II) to serving merely as a criterion for making an ethical or responsible choice (EI, RI).

To support their investment decision, impact investors resort to positive or negative screening. In the SRI context, screening means analyzing investment opportunities for social or ecological effects. Positive screening, also called affirmative screening, helps investors identify businesses or projects pursuing innovative approaches to protecting nature or promoting social progress. Negative or avoidance screening, by contrast, serves to avoid capital flow into sin industries[g] such as tobacco, alcohol, gambling or weapons, thus reducing harm without pushing fundamental reforms.

Figure 2 places the four SRI strategies as well as conventional investment (CI) in a Cartesian system comprising the primary goals of investment – impact and profit – as coordinates.

[e] Social enterprises are companies aiming to be profitable by solving societal problems or contributing to social inclusion, for instance by employing disabled people.
f We use SRI and sustainable investment interchangeably. Rather than merely avoid funding companies or industries whose business harms society, socially responsible investors apply environmental, social and corporate governance (ESG) criteria to produce a public benefit along with a competitive long-term financial return.
g Industries under criticism for contributing to violence and suffering. Sin products clash with ethical or socially responsible investors' intention to benefit society.

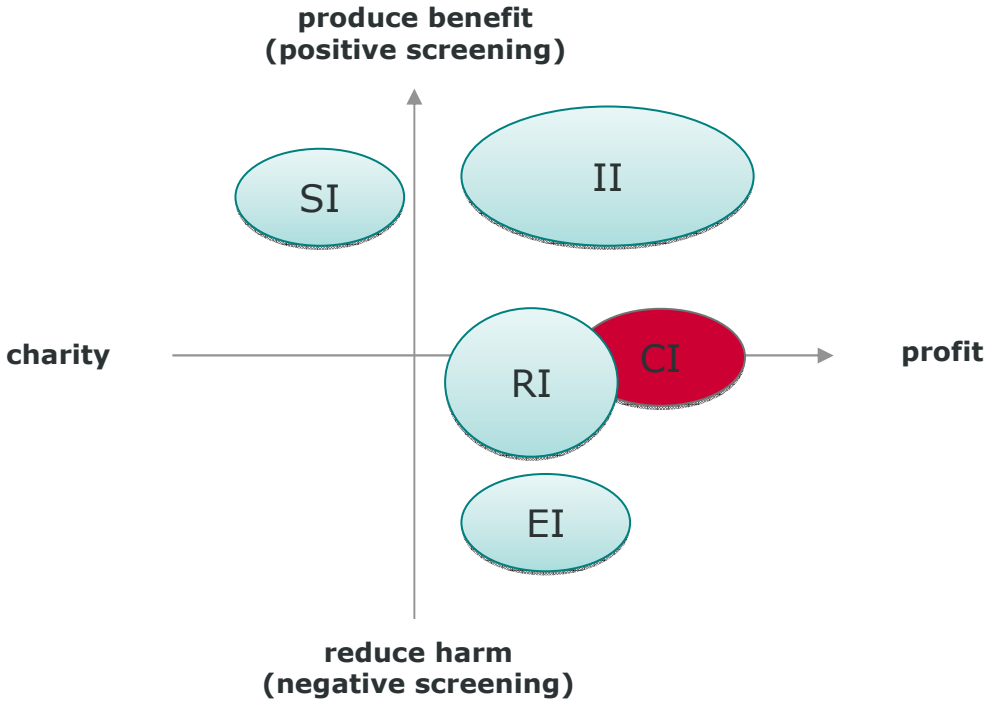


*Figure 2: impact versus profit goals of various investment strategies*

Though driven mainly by profit expectations, **ethical investment** (EI) is nonetheless in line with the investor's moral principles. Ethical investors shun industries that yield high returns at the expense of nature or society.

**Responsible investment** (RI), too, prioritizes profit, but also values environmental, social and governance (ESG) factors.[20] Responsible investors systematically integrate ESG factors in their investment decisions. However, neither ethical nor responsible investors sacrifice profit to social or ecological impact.

**Social investment** (SI) goes into projects with an explicit, measurable societal benefit. Profit is secondary.

**Impact investment** (II) targets public benefit and an explicit financial return simultaneously. While occasionally outperforming EI, RI and CI, returns from II fall behind them in other cases.

Table 1 provides an overview of the similarities and differences among sustainable investment strategies.

| Criterion | Social Investment | Ethical Investment | Responsible Investment | Impact Investment |
|---|---|---|---|---|
| **screening** | positive | negative | negative, positive | positive |
| **profit** | secondary | primary | primary | primary, on a par with impact |
| **impact** | net positive | no harm | no harm or net positive | net positive |
| **example** | investment in fair trade | exclusion of sin industries such as tobacco or arms | investment in companies with high governance standards | social impact or green bonds, green infrastructure funds |

*Table 1: sustainable investment strategies compared in terms of screening, profit and impact*

Consensus on the definition of impact investment is still pending. To clarify how we use the term in this article, we refer to and extend the definition given by the Global Impact Investing Network (GIIN):[h]

Impact investments are investments made into an organization or fund with the intention to generate a positive, measurable social or environmental impact alongside a financial return.[21]

This definition conveys the five main traits of impact investment:

- profit is an objective
- nonprofit impact is intentional
- impact is measurable
- impact is a net positive change
- impact and profit are equally important

The feature that sets impact investment apart from all other sustainable investment strategies is the fifth: a measurable public benefit is as important as the financial return.

IMPACT: known, intended, measurable social or ecological effect for the better. Impact investment thus brings about a net positive change to society or the environment.

PROFIT: impact investment targets an explicit financial return without relying on external subsidies. Investees are expected to generate self-sustaining revenues and achieve scale.

By common assumption, investors intending to achieve social objectives will have to content themselves with more modest financial returns than they would if they were to choose investments solely for their return potential. But the relation between impact and profit is not always clear. One factor does not necessarily affect the other. In the language of investing, it is possible that they are uncorrelated. Absent any consensus on the return profile of impact investment, we assume that expected returns vary.[22] Since many impact funds are private equity funds that do not publish their returns, it is difficult to collect data to back that conjecture. Research into the tradeoff in SRI has been extensive. Researchers conclude that financial returns of SRI compare to those yielded by the overall market.[23] While we agree with them in assuming a range of return expectations, additional research into impact investment outcomes is necessary to come up with an accurate answer.

[h] Nonprofit organization dedicated to increasing the scale and effectiveness of impact investing.

# 2. Impact Investment Vehicles

**While impact investors have a range of conventional financial instruments to choose from, there also are innovative vehicles designed for them. Those special vehicles can be classified by three main purposes:**

- **microfinance funds supporting inclusive growth**
- **green bonds and infrastructure funds promoting a sustainable environment**
- **social impact bonds helping to solve societal problems**

## 2.1 Most Popular and Established Vehicles

In table 2 below, we present an overview of the financial vehicles most in demand to achieve the three main impact investment goals outlined above (financial inclusion, conservation, social progress) in addition to profit. For a detailed comparison, see table A in the appendix.

| Most Popular and Established Impact Investment Vehicles | | | | | | |
|---|---|---|---|---|---|---|
| **Purpose** | **Vehicle** | **Classic Counterpart** | **Investors** | **Government Involvement** | **Beneficiaries** | **Geographic Distribution** |
| **financial inclusion** | • microfinance fund with or without government support<br>• microfinance institution<br>• bank specialized in microfinance | • loan<br>• equity<br>• bond<br>• direct guarantee<br>• counter-guarantee | institutional and retail investors | development banks and agencies lending support | • micro-entrepreneurs<br>• farmers and communities in developing countries | • established around the globe<br>• investors mostly based in developed countries, borrowers in developing countries |
| **sustainable environment** | green or climate awareness bond (CAB) issued by governmental or international organization such as European Investment Bank (EIB) | bond | institutional and retail investors | • central banks and other financial institutions as investors<br>• instruments mostly issued by international organizations | • alternative energy providers<br>• local community<br>• environment in general | • popular in developed countries, mostly USA, Canada, Europe<br>• expanding into developing countries |
| | green fund | • private equity<br>• loan | institutional and retail investors | tax relief granted to investors | • alternative energy providers<br>• local community<br>• environment in general | Netherlands, UK, Canada |
| | green infrastructure fund, structured fund | • bond<br>• equity<br>• loan<br>• mezzanine financing | institutional investors | public-private partnership (PPP) | • alternative energy providers<br>• local community | developed economies |

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| | | | | | • environment in general | |
| **solution of social problems** | social impact bond (SIB) | bond | institutional investors such as foundations, some corporate banks (Goldman Sachs) | development banks and institutions, nonprofit organizations | • social enterprises<br>• nonprofit organizations<br>• individuals<br>• community | developed countries: USA, Canada, Australia, Western Europe |

*Table 2: overview of the most popular and established impact investment vehicles*

CLASSIC COUNTERPART: impact investors have the same financial instruments at their disposal as traditional investors, including loans, (private) equity, bonds, direct and counter-guarantees. Hybrid products are available as well.

INVESTORS: while impact investment intermediaries mainly target institutional investors, some also attempt to attract retail customers.[i]

GOVERNMENT INVOLVEMENT: impact investment works with or without government involvement. When government is involved, it is either a major stakeholder, as in the case of SIB, or merely plays a supportive, advertising role, as with various microfinance models.

ORIGIN: impact investment originated in Luxemburg in 1998, when Dexia launched its first dual-objective investment fund DMCF (Dexia Micro-Credit Fund).[24] Other instruments were introduced about a decade ago.

BENEFICIARIES: besides investors, impact investment benefits social entrepreneurs, government, society at large, and the environment or nature.

GEOGRAPHIC DISTRIBUTION: while investment vehicles promoting inclusive growth are available around the globe, strategies targeting a sustainable environment and social economy have mainly been marketed in developed countries (Europe, USA, Canada, Australia). However, there has also been a trend toward expansion into developing countries.

## 2.2 Investment in Inclusive Growth: Microfinance

Microfinance emerged decades ago. Its pioneer is Muhammad Yunus, an economist and social entrepreneur from Bangladesh. In the seventies, Yunus began lending money to women in small villages. In 1983, he founded the Grameen microfinance bank. According to the World Bank, about 160 million people living in developing countries have access to microfinance today.[25]

Microfinance institutions (MFI) offer financial services such as loans or savings accounts to low-income individuals and poor communities. To raise capital, they issue investment vehicles like

[i] Examples of intermediaries targeting retail investors: Vision Microfinance asks a minimum purchase of 1,000 euros from private investors (125,000 from institutional investors). The Threadneedle UK Social Bond Fund is the first of its kind available to large and small investors, with a minimum investment of 2,000 pounds sterling. Clean energy provider SolarCity (SCTY) has offered retail investors 200 million dollars in bonds serviced from power sales proceeds.

funds, bonds, private or public equity. Globally, there are roughly 10,000 MFI, which can be classified into three tiers.[26]

- tier 1: profitable institutions, comprising around 100
- tier 2: becoming profitable, counting another 400
- tier 3 (the rest): organizations in deficit or subsidized

According to microfinance practitioners, the larger the amount lent to the borrower, the more profitable the deal. Serving very poor customers living in remote, sparsely populated areas tends to require continued subsidies. Nonetheless, profitable deals still contributing to the financial inclusion of the very poor are on the rise.[27]

**Microfinance: Interest Rates, Cost and Risk**

Microfinance institutions are known for charging interest rates ranging from two to four percent a month.[28] To see whether such high rates are justified, let us look at their components:

1. **cost of capital** for borrowing from microfinance funds
2. **provision for credit loss**: since microborrowers are poor and lack collateral, losses incurred by default tend to be high
3. **transaction costs** comprising staff time for meeting with the borrower to assess the loan, disbursement and repayment, follow-up monitoring, and operating expenses
4. **net margin** for the institution to stay profitable

While cost of capital and net margin are proportional to loan size, transaction costs are basically the same for small as for large loans. The smaller the amount, the weightier will transaction costs become. Suppose that cost of capital and net margin amount to eleven percent per year, transaction cost be twenty dollars. The interest on a loan of 500 dollars then adds up to 55 + 20 = 75, which is fifteen percent. By comparison, interest on a 100 dollar microloan amounts to 11 + 20 = 31, representing an annual interest rate of 31 percent. Credit loss provision reflecting the borrower's financial standing and ability to repay the loan will also affect their individual interest rate.

Microfinance institutions have been blamed for charging high interest on small loans to poor people. But as our sample calculation has just shown, those interest rates make economic sense. They help microfinance institutions sustain themselves and reimburse microfinance funds for the funding cost, enabling them to repay and reward their investors. Hence rather than result from profit expectations, microfinance's high interest rates are due to the economics of small loans. Investors interested in microfinance should also be aware of the following risks.

1. default: any failure of the borrower to repay a loan as contracted
2. low recovery rate, referring to the portion of the loan that can be collected after default
3. currency risk: since most borrowers live in inflation-prone developing countries, repayment may decline
4. country risk: economic, political or regulatory instability may affect borrowers' ability to repay the loan
5. intermediary risk: concerns regarding an MFI's reputation or expertise

To mitigate those risks and achieve the dual goal of profit and public benefit, microfinance funds conduct due diligence of MFI, require transparency of transactions, and visit institutions to verify their social and financial performance.

## 2.3 Investment in a Sustainable Environment: Green Bond, Structured Fund

Investment in a sustainable environment addresses ecological problems such as climate change, energy insecurity or pollution. Renewable energy (RE) and energy efficiency (EE) technology is highly instrumental in mitigating those problems.

In many developed countries, governments subsidize usage of renewable energy sources. However, to move toward a low-carbon, climate-resilient economy fast, even larger sources of private funding must be tapped. Investors interested in green projects have a variety of financial instruments at their disposal: public equity (including indices and mutual funds), fixed income (green bonds) and alternative investments (private equity, structured funds aka green infrastructure funds). As green bonds and structured funds are relatively new to the market, here is a detailed description.

**Green bonds** are fixed-income securities issued by international organizations, development banks or real-sector businesses. So far, most green bonds have been emitted by development banks and received AAA ratings.[29] They can be asset backed securities,[j] tied to specific green projects or to treasury-style bonds. Some green bonds employ structured-note mechanisms[k] backed by a variety of derivatives.[l]

While green bonds mostly target institutional investors, some are available to retail clients, too. In 2011, the Bank of America Merrill Lynch network offered ten-year green bonds from the World Bank to retail investors. The initial issue carried a fixed coupon in the first year, then converted to a floating rate.[30] In 2014, the World Bank and Merrill Lynch launched another ten-year retail green bond. Callable after the first year, that bond pays a 2.32 percent coupon during the first five years, then steps up to a maximum of 8.82.[31]

By issuing so-called Climate Awareness Bonds (CAB), the European Investment Bank (EIB), the Union's nonprofit long-term lending institution, has found a way of mobilizing capital from private investors rather than provide grants to address environmental problems.[32] Since 2007, the EIB has thus raised nine billion dollars, and led global green bond issuance in 2014.[33] CAB proceeds are ringfenced[m] in a liquidity portfolio earmarked to match disbursements to projects furnishing renewable energy such as wind, hydro, solar, geothermal, or improving energy efficiency including district heating, cogeneration, building insulation, energy loss reduction in transmission and distribution. CAB come in various sizes and maturities, and are rated and priced as other EIB bonds of the same size and maturity.[34] Table B in the appendix lists coupons and maturities for CAB issued by January 2015.

Green bonds and CAB are investment grade securities targeting an environmental benefit while yielding compatible returns. But there are some drawbacks to be considered, too.

1. Liquidity risk when bonds are issued in small size, because most investors are institutions interested in large deals.
2. Despite stringent eligibility criteria, a lack of standardized monitoring and control tools could result in misselection of projects.

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j A securitized or asset-backed bond (ABB) differs from conventional bonds in that its principal and interest are paid from revenue generated by underlying assets. Conventional bond servicing is guaranteed by the issuer. By contrast, to launch and service an ABB, a pool of revenue-generating assets is transferred to a special-purpose entity. Those assets pay bond holders their interest and principal. ABB are structured into three tranches, two of which are offered on capital markets.
k A structured note is a debt obligation with a derivative component to adjust its risk and return profile.
l The World Bank has issued green bonds with returns partly linked to an index of traded "green" companies, and another linked to the achievement of certified emission reductions in funded projects. Issuance of those bonds has been modest in scale, though, and mostly aimed at retail investors especially in Japan.
m Ringfencing = creation of a legal entity separate from a company to protect specific assets.

3. Long-term commitment to projects with uncertain outcomes may scare off potential investors.
4. As the market is still in its infancy, it is fragmented, and lacks standardized and proven products as much as transparency and review of investment projects.

To promote transparency, the World Bank publishes its eligibility criteria for projects to be funded by green bonds, maintains a separate account to ringfence proceeds, thus ensuring that the latter only go into eligible projects, monitors compliance, and reports on the projects' outcome and ecological impact. Other issuer have followed and adapted this model.[35]

Over the last decade, **structured funds** such as Green for Growth, Global Climate Partnership, European Energy Efficiency have been set up as public-private partnerships to attract institutional investment in energy efficiency and renewable energy. Initiated by the EIB and involving Deutsche Bank as investment manager, the European Energy Efficiency Fund (EEEF) finances commercially viable public EE and RE projects in 28 EU countries. Since capital is raised from the market, interest rates depend on the risk structure of each investment ranging from counterparty to technology risk.[36] Capital is provided either through intermediaries or directly. Instruments include:

- senior or junior debt running for up to 15 years on floating or fixed interest rates[n]
- equity
- mezzanine capital[o]
- guarantees
- leasing
- technical assistance

The EEEF is open to institutional, professional and other well-informed investors as defined in the Luxembourg law on special investment funds (SIF).[p] It aims to yield commercial returns. Shares are classified into three grades, returns follow a waterfall principle:[37]

- C-shares, typically purchased by governments, bear the highest risk (first loss), serving as risk buffer for the more senior share classes.
- B-shares, bought mainly by development banks, rank senior to C-shares and are remunerated at a six-month Euribor plus spread. Depending on the fund's profitability, complementary dividends are possible.
- A-shares, acquired chiefly by institutional investors, outrank B-shares. They, too, are remunerated at a six-month Euribor plus spread, if at a lower level as they are less risky. Depending on their profitability, complementary dividends are possible.

Structured funds thus constitute a vehicle for institutional investors such as pension funds or insurance companies to engage in impact investment, enhancing their credit by tranching the asset pool and issuing various share classes. Despite the availability of innovative investment vehicles designed to attract private finance into this industry, several barriers remain:

- dearth of examples
- unknown risk-return profile
- high transaction costs

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n Base rate is usually Euribor. Borrowers preferring a fixed interest rate can swap.
o Mezzanine capital is any subordinated debt or preferred equity instrument that represents a claim on a company's assets which is senior only to that of common stock. Mezzanine funding can be structured either as debt (typically an unsecured, subordinated note) or as preferred stock.
p Investment in an SIF is reserved to "well-informed" investors requiring a limited level of protection and looking for investment flexibility suitable to their particular expertise and needs. Besides institutional and professional investors, the term comprises those who confirm in writing that they adhere to the status of "well-informed" investor, and either spend a minimum of 125,000 euros or have been assessed by a credit institution, an investment firm or a management company certifying their ability to understand the risks associated with investing in SIF.

- small investment projects

Investment vehicles designed to address environmental challenges while yielding attractive returns are still in an early stage of development. To push this market, it is equally important that risks and returns of green projects become competitive, and that governments promote the commercialisation of green technology through tax relief, accelerated depreciation, investment incentives, investing alongside private capital as well as output-stage support such as feed-in tariffs. However, the need for such backing will wane. In the long run, investments in green projects will become more resilient, funds will produce track records, and the introduction of proper monitoring and control tools will make those vehicles more transparent to private investors.

## 2.4 Investment in the Solution of Societal Problems: Social Impact Bond

Discussion on how to solve social problems has been going on for centuries. Social enterprises and investment vehicles such as private equity funds, social venture funds or public-private partnerships mobilize private capital for societal purposes. For a deeper understanding of the workings of social impact investment, let us look at the one of its most innovative vehicles: social impact bonds (SIB).

Social impact bonds attract private capital into the public sector to fund measures targeting societal issues such as homelessness, criminal justice, child care, or youth engagement with education and employment, where governments often fail to be effective. Since SIB are outcome-based contracts, they are regarded as structured products. They are long-term investments and fairly illiquid. In short, a SIB is a multi-stakeholder partnership in which philanthropic funders and private investors take on the financial risk of expanding preventive programmes that help poor and vulnerable people.[38]

The first SIB was issued in Britain in 2010 to finance a rehabilitation project at Peterborough prison. Since then, they have drawn attention among politicians, social workers and financiers around the globe. Many developed countries have piloted SIB funding schemes. In 2013, the Bavarian state government was the first public sector organization in Germany to launch an SIB.[39] It funds nonprofit organizations working with young people who have disengaged from education and employment.[40]

Figure 3 below illustrates the capital flow among stakeholders in the Peterborough rehabilitation project.

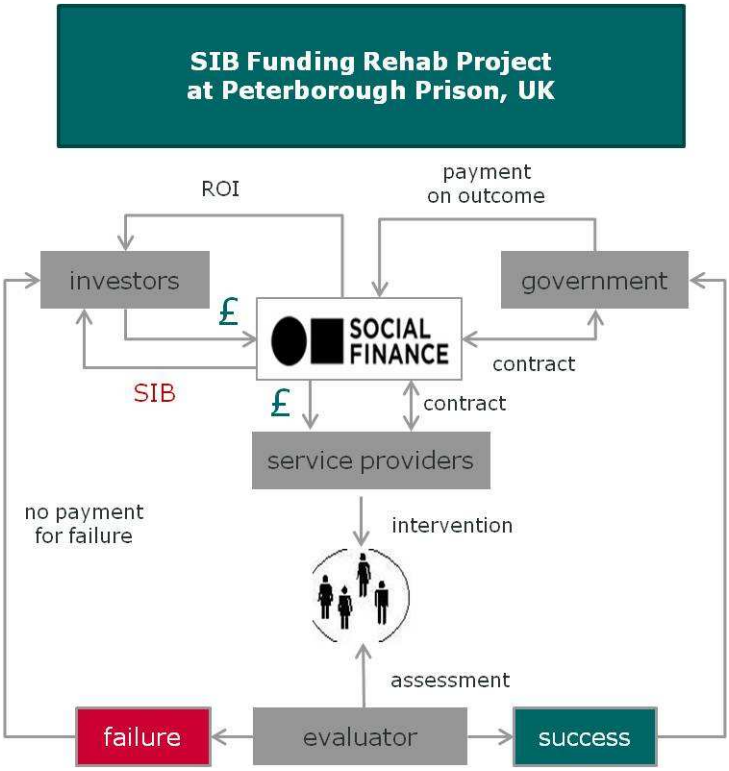


*Figure 3: SIB funding of a rehabilitation project to reduce recidivism among short-term prisoners in Peterborough, Britain*

As indicated in the figure, the return on the SIB is contingent on the success of the intervention it funds. In case of failure, funders will not even recover their principal. This trait makes SIB less attractive to retail and institutional investors. That is why those instruments are purchased mostly by philanthropists and foundations. To make them more appealing to mainstream investors, they could be modified as follows.

- Structured returns based on outcome: when projects fail to produce the desired outcome but still have some positive impact, investors could be rewarded accordingly.
- Foundations could act as guarantors and provide first-loss capital. They could promise to refund investors their principal at least. The involvement of guarantors would increase the flow of private money into that segment.

Sceptics might ask why governments should be interested in issuing SIB rather than hiring private service providers directly. In such cases, government would be the only investor and hence the only beneficiary. But we think that objection is outweighed by SIB funding's numerous benefits including:

- transfer of project risk onto private investors' shoulders
- circumvention of upfront payment
- cost savings, as government pays for success only
- solution of previously unattended social issues

The features of impact investment vehicles vary with the purposes, protagonists and regulatory requirements of each market segment. Among them, public-private structured funds constitute an innovative capital market instrument that has the potential to serve all impact-investment purposes, engaging governments to attract additional private-sector participation.

# 3. Assessment of Impact Investment Vehicles

**In our analysis, performance, risk, and impact measurement prove problematic in all impact investment vehicles. They might even become a barrier to the industry's evolution. Our impact investment decision framework addresses those challenges. The framework includes impact quantification and investment pricing tools. It also establishes the range of financial return expectations for the three main impact investment market segments.**

## 3.1 Brief Assessment

Table 3 below lists the basic strengths and shortcomings of the impact investment vehicles most in demand. For a detailed assessment including an appraisal of each vehicle's financial viability, impact and transferability, see table C in the appendix.

| Investment Purpose & Vehicle | | Assessment | |
|---|---|---|---|
| **Purpose** | **Vehicle** | **Strengths** | **Shortcomings** |
| **financial inclusion** | • microfinance fund with or without government support<br>• microfinance institution<br>• bank specialized in microfinance | • market-rate, risk-adjusted ROI<br>• address financial service needs of poor communities<br>• exploit untapped market potential | • lack of reporting standards makes it difficult to evaluate MFI success<br>• currency and country risk on top of business and liquidity risk<br>• investors from developed countries face additional risks such as transaction costs, unawareness of economic situation or intransparency of MFI<br>• in case of poor credit monitoring, microborrowers might run into unaffordable debt |
| **sustainable environment** | green or climate awareness bond (CAB) issued by go-vernmental or international organization such as EIB | • pursuit of ecological along with financial purpose<br>• market rate of return, AAA credit rating | • poor project monitoring<br>• poor marketing: few financial advisers or fund managers promote such products |
| | green infrastructure fund: public-private partnership (PPP), structured fund, fund of funds (FOF) | • dedicated fund with professional oversight<br>• sound risk-return profile through diversification | • capital hard to obtain from such funds because of tough project eligibility criteria<br>• lengthy investment decision-making due to government involvement |
| | tax-relieved green fund | • bulk of investment (70 percent) is subject-specific, mostly renewable energy (RE) or energy efficiency (EE)<br>• fund managers skilled in RE or EE | • tax relief subject to change due to industry maturity or policy shift<br>• lack of external monitoring tools<br>• huge upside and downside risk: in case of success, everyone will benefit, in case of loss investors will suffer most |
| **solution of social problems** | social impact bond (SIB) | • raises capital to finance preventive action<br>• repayment and reward contingent on project success | • no refund in case of project failure |

*Table 3: brief assessment of the strengths and shortcomings of impact investment vehicles*

## 3.2 Generic Shortcomings of Impact Investment

By our analysis, there are three concerns referring to all impact investment vehicles to such an extent that they might impede the market's evolution: (1) performance and liquidity, (2) impact measurement, (3) risk. To differentiate our assessment, we look at the original and the intermediary market separately.[q]

1. **Performance and liquidity**: by the definition given in chapter 1, profit is critical in impact investment. However, it is far from easy to find a substantial number of investable deals that yield both a public benefit and the promised financial return. Scant information on the performance of impact investments makes it difficult to assess and forecast their profitability. For uncertainty of returns, investors have been hesitant to engage in impact projects.

2. **Impact measurement and reporting**: absent any generally accepted approach or set of rules on measuring public benefit, the latter is far more difficult to quantify than an investment's financial return. Until such standards emerge, investors may resort to legal documentation, involvement on the board of the investee, customized scorecards or the Impact Reporting & Investment Standards (IRIS) published by GIIN. For more on impact monitoring and reporting, see chapter 4.1.2 below (Function of Infrastructure in Impact Evaluation and Communication).

3. **Risk**: impact investment is subject both to general financial risk factors such as liquidity, currency and country risk, and to industry-specific factors like reputation or business model complexity. Loss of trust when deals fail to produce the promised benefit might dry up the market. Once compromised, the positive image of impact investment will be hard to restore. Business models of impact funds or companies are complex since they need to comply with social and environmental requirements, and align financial with nonprofit performance. Inadequate managerial skills or deficient understanding of the nuances of such models could result in a market crash. Table 4 provides an overview of the factors that contribute to the three basic shortcomings of impact investment.

| Concern | Original Market | Intermediary Market[r] |
|---|---|---|
| **performance, liquidity** | • dearth of information on investment performance<br>• shortage of high-quality investment opportunities<br>• small-volume deals<br>• long-term maturity | • lack of investment professionals with relevant skills<br>• nonprofit impact of funds difficult to evaluate<br>• few intermediaries with positive track record |
| **impact measurement, reporting** | • inadequate impact measurement practice<br>• deficits in monitoring and control | • absence of consistent measurement and reporting standards<br>• lack of impact benchmarks |
| **risk** | • business model execution and management risk<br>• liquidity and exit risk<br>• currency and country risk<br>• perceived and reputational risk | • capital insufficient to cover risk-return spectrum |

*Table 4: three main concerns on the impact investment market*

[q] Whereas the original market comprises direct investment in companies or projects, the intermediary market stands for investment through funds, banks or other financial institutions.
[r] Concerns listed hereunder apply in addition to those referring to the original market.

Other barriers that slow down the market's evolution:

- definitional confusion, lack of common terminology on impact investment
- dearth of information and proper communication
- fragmented market
- scant research into opportunities
- lack of incentives for fund managers to promote impact investment products

## 3.3 Addressing the Shortcomings: Decision Framework

This article aims to assist potential capital providers with their impact investment decisions. To give them a better idea of what to expect from impact investment deals, how to compare such offers, and how to select the opportunity that serves their interest best, we recommend our decision framework comprising the following elements.

1. **Pricing approaches**. Before putting their money at stake, potential investors want to know what return to expect. Whether they are averse or prone to risk, all are interested in an available asset's risk-return profile. To quantify risk that could affect financial returns, many fund managers employ the capital asset pricing model (CAPM),[s] although it is a theoretical approach. In this study, we discuss the suitability of the CAPM and other approaches for evaluating impact investments.
2. **Impact quantification tools**. The second aspect that interests potential investors is how to measure impact, and how to compare projects funded with their money. The quantification method included in our framework provides clarity to support investors in their decisions.

### 3.3.1 Performance Concerns

#### *3.3.1.1 Return Expectations*

Impact investors derive their return expectations both from a deal's specific risk profile and from generic traits of the envisaged market segment. Whereas some decide to support risky social startups on challenging markets or invest pursuant to regulatory mandates, prepared to cede returns, others prefer to fund the expansion of proven renewable-energy or energy-efficiency business models, or invest in credit-enhanced transactions, expecting market or near-market rates of return.[41] Absent comprehensive data on financial as well as social returns, research into the return expectations of impact investors has been sparse.

According to Stanford Social Innovation Review, impact investment ranges from concessionary to non-concessionary.[42] Concessionary investors are willing to accept a trade-off between financial return and nonprofit impact. In general, investment in microfinance institutions or other social enterprises that serve the BoP population are concessionary because investees incur significant marketing, IT support and other upfront costs before yielding any financial return. Investors ready to participate in such ventures understand the risk and consciously sacrifice profit for the sake of environmental or social impact. Some of them also expect investees to become financially viable soon and yield market-rate returns.

Non-concessionary investors refuse to compromise on profit for public benefit. They aim for market or near-market rates of return. Experience confirms that impact investment can be profitable at market-rate levels: a growing number of impact capital providers are onto their second or third funds, which suggests that previous issuances were successful enough to retain

[s] According to the CAPM, the expected rate of return of an asset, abbreviated as E(R), equals $Rf + \beta \times (Rm - Rf)$.
Rf = risk-free rate such as interest from a government bond, Rm = market rate of return, β (beta) = sensitivity of expected excess asset return to expected excess market return, $\beta \times (Rm - Rf)$ = risk premium.

investors.[43] According to a recent study, the impact investment industry, estimated at four billion dollars, mostly yields market-rate returns.[44]

Most impact funds are private equity and hence exempt from publishing their investment performance, which makes it almost impossible to provide sound proof that non-concessionary impact investment exists. However, there are success stories such as Elevar Equity, Bridges Ventures, Bamboo Finance or Leapfrog Investments, with internal rates of return[t] exceeding 25 percent. The case for the existence of non-concessionary impact investment is that investors have special knowledge or experience of social or environmental niche markets. Diversity of expected returns can be observed across market segments. For instance, funding a renewable energy project might yield a higher return than financing a social enterprise. However, impact investors are driven not only by the financial performance of their assets but also by the public benefit they pursue.

#### *3.3.1.2 How to Price Impact-Return Correlations*

Whereas conventional investment is determined by two major factors, risk and return, a third aspect is crucial in impact investment: a measurable public benefit beyond profit. That additional factor makes impact investments difficult to price, especially since the relation between an investment's nonprofit impact and its expected return is far from clear. Sometimes impact and return are negatively correlated since part of the profit has been ceded to public benefit. At other times, they are positively correlated, which means that a higher nonprofit impact has yielded a higher return. There also are cases where the two are entirely unrelated.[45] We hence differentiate our pricing approach to reflect those three scenarios.

**(1) No correlation**. Investments whose nonprofit impact neither cuts nor boosts its financial return can be regarded as conventional deals. As their pricing will be based on risk, the CAPM is applicable: $E(R) = Rf + \beta \times (Rm - Rf)$.

**(2) Negative correlation: more impact, less return**. In other words, the investment's public benefit demands financial concessions. Since that is the impact-return relation most commonly observed, we recommend a top-down approach to pricing.[46] Referred to as implied impact, it skirts the problem of quantification by comparing impact deals with mainstream transactions similar in financial features such as risk or maturity, and measuring the total return spread between the two. Assuming that asset prices fully reflect those features, return spread can be interpreted as the price of impact.

Consider two bonds, one issued by a social organization to fund its mission, the other by a business to finance commercial operations. Both bonds mature in six years and bear similar risks. But while the commercial bond returns six percent, the social bond yields only four. The two-percent spread could be regarded as the price that impact investors pay for doing good. It is an implied numeric benchmark on a nonnumeric issue. We translate this into the pricing formula $E(R) = Rf + \beta \times (Rm - Rf) - I$, wherein I represents implied impact. Simple as this method may seem, it has its drawbacks.

- Conventional and impact investments with features similar enough to imply the impact are hard to find
- Scant data on impact investment's returns restricts comparison with traditional investment
- Implied impact is not necessarily an accurate reflection of the ecological or social value added

**(3) Positive correlation: more impact, more return**. When savings or earnings increase with nonprofit impact, as is the case with SIB or green bonds, the so-called gamma approach applies.[47] It extends the original CAPM formula by a factor referred to as gamma (γ), which aggregates impact indicators specific to an investment in order to quantify the latter's

[t] Internal rate of return (IRR) is a method used to measure and compare the profitability of investments.

compound social or environmental value added. Specifically, standardized gamma is defined as the ratio of actual to expected impact.

Expected impact is set at the beginning of the investment period, realized impact measured at the end. The standardized gamma is integrated into the CAPM formula, modifying returns as follows: $E(R) = Rf + \beta \times (Rm - Rf) \times \gamma$. If gamma equals 1, impact goals have been scored, return will be as expected. If $\gamma > 1$, actual impact exceeds expectations, investors will reap a higher return. If $\gamma < 1$, impact targets have been missed, return will fall short of expectations.

While this method works well for pricing vehicles whose returns are structured by impact achieved, such as SIB, it does not readily apply to all impact investment instruments, since the positive correlation between financial performance and nonprofit impact might turn out inconsistent. In other words, when actual impact exceeds expectations, such outperformance will not necessarily boost financial results. That, however, is another conclusion difficult to prove for shortage of data on genuine impact-investment projects.

### 3.3.2 Impact Measurement

As we have seen, answers on the profitability of impact investment products diverge. Notwithstanding, we aim to present a decision framework that helps potential investors quantify both the rate of return and the nonprofit impact to expect from a deal. A reasonable approach is to make impact comparable across projects and market segments by monetizing it, and juxtapose it with financial targets. Monetization is exemplified by the following calculation.

EXAMPLE: Impact Monetization

A wind farm's principal impact consists in saving carbon dioxide ($CO_2$) emissions, which can be measured and monetized. Imagine a start-up wind farm requiring an investment of 700 million dollars to install 100 turbines, each with a capacity of two megawatts (MW), totalling 200 MW. Each turbine is expected to save $CO_2$ emissions of roughly 1,900 tonnes per year on average.

The simplest formula to estimate the electricity generated by any power plant is *power* × *time* × *capacity factor*, wherein *power* stands for the plant's rated capacity, *time* represents the number of operating hours per year, and *capacity factor* is an adjustment to reflect that no power station operates at full output all year round.

A wind turbine's output varies with wind speed. The capacity factor of an average modern wind turbine ranges from 25 to 30 percent. It must be distinguished from the ratio of productive time, which is much higher (around 75 percent). Hence the total power generated by our 2-MW wind turbine is estimated thus:

- power capacity = 2 MW
- time = 365 × 24 hours = 8,760 hours
- capacity factor = 25 percent = 0.25
- generation = 2 × 8,760 × 0.25 = 4,380 MWh

According to the UK Department for Environment, Food & Rural Affairs (Defra), power generated by a long-term marginal plant involves 430 grams of $CO_2$ emissions per kWh equalling 430 kilograms or 0.43 tonnes per MWh. Replacing 4,380 MWh of electricity thus generated with wind power saves almost 1,900 tonnes of $CO_2$ per turbine a year: 4,380 × 0.43. Our 200 MW wind farm hence avoids an emission of roughly 1.900 × 200 ÷ 2 = 190,000 tonnes of $CO_2$. At an average price of ten dollars per tonne of $CO_2$, the impact of our wind farm's $CO_2$ savings is valued at 190,000 × 10 = 1.9 million dollars.

An investor contributing 100 million dollars, one seventh of the initial sum, helps avoid 190,000 ÷ 7 = over 27,000 tonnes of $CO_2$, which are worth more than 270,000 dollars. That sum constitutes the monetary measure of the impact of a 100-million dollar wind-power investment. In addition, investors expect a market rate of return, which was set at five percent initially. In absolute numbers, final payment at maturity equals 100 million × 1.05 = 105 million dollars.

To attract investors, we suggest presenting monetized public benefit next to expected returns as in table 5. This helps potential providers of capital compare projects, weigh envisaged investments against monetized impact and make confident choices.

| Project | Financial Return | Monetized Impact |
|---|---|---|
| 1 | 5,000,000 | 580,000 |
| 2 | 6,000,000 | 500,000 |
| 3 | 4,000,000 | 550,000 |
| 4 | 3,000,000 | 600,000 |
| 5 | 5,000,000 | 200,000 |

*Table 5: financial return and monetized impact of a fictitious 100-million-dollar investment*

Almost any nonprofit impact sought by investors can be monetized. Monetization requires the same due diligence as applied in conventional investment, just with one dimension added, which is impact.

### 3.3.3 Investment Decision Framework in a Nutshell

- If nonprofit impact and expected return are not correlated, the CAPM is applicable.
- In case of negative correlation, a top-down approach applies.
- If expected return and nonprofit impact positively correlate, apply the gamma approach.
- Impact such as carbon savings or employment creation can be monetized.
- Only when there is a clear correlation between nonprofit impact and financial return can the two be incorporated in one formula. Else impact should be quantified and presented separately alongside financial performance.

# 4. Impact Investment Market

**The impact investment market is still in its infancy, comprising many niche players, its growth driven primarily by development finance institutions, and by a shift on the global investment market toward alternative assets. For that market to mature, players need to expand and scale up. Infrastructure including data providers, rating agencies and impact measurement services is crucial in addressing reporting and transparency issues, enabling the market to boom from 46 billion dollars in 2014 to an estimated 400 billion in 2020.**

## 4.1 Market Infrastructure

### 4.1.1 Infrastructure Overview, Protagonists

Infrastructure facilitates the flow of information and capital between the supply side, represented by several categories of investors, and the demand side of businesses that yield public benefits beyond profit. In addition, regulators specify and enforce the framework set by legislators.

While established players have built on the current financial market infrastructure to engage in impact investment at low implementation cost, newcomers have spotted niches to provide specialized services such as impact measurement. Figure 4 below visualizes the entire impact investment ecosystem.

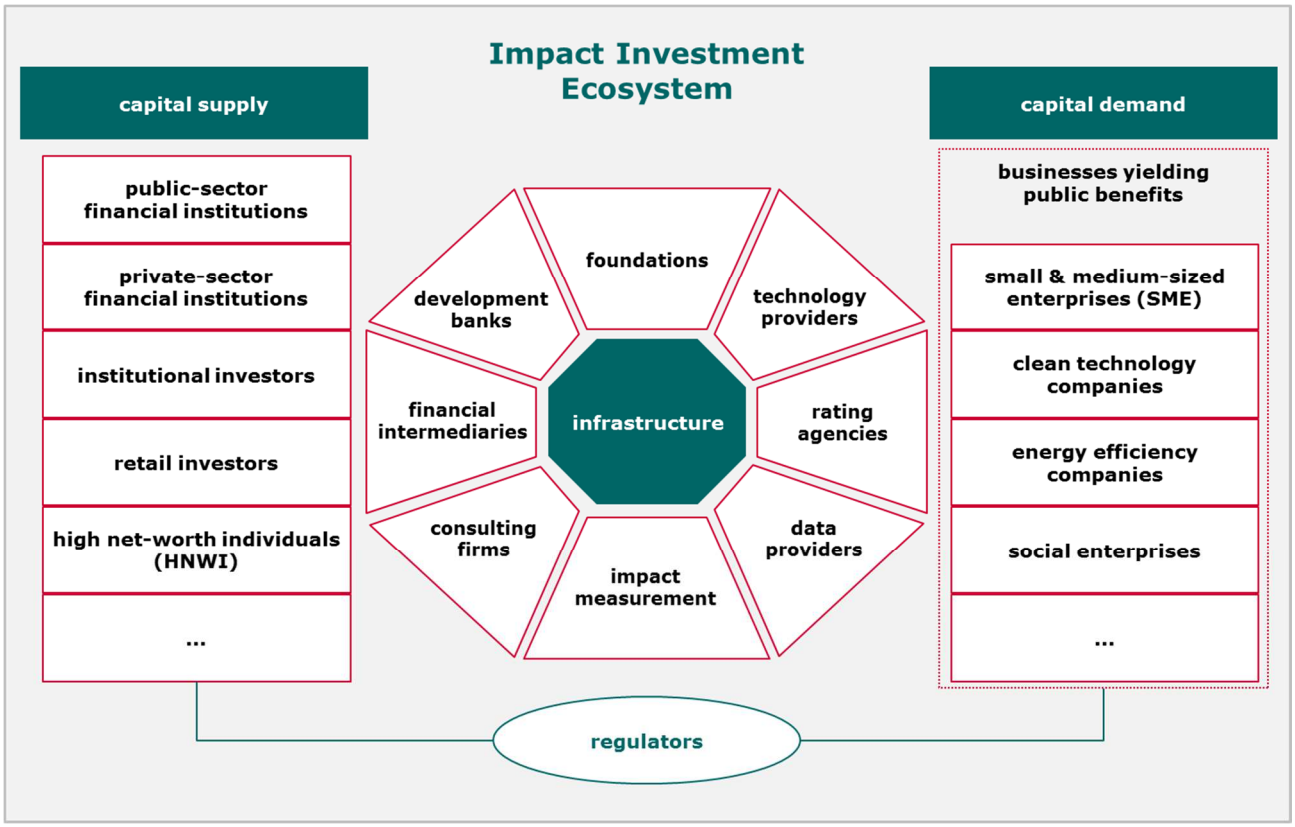


*Figure 4: impact investment ecosystem*

**Players on the capital supply side** can be public or private-sector financial institutions.

- Public-sector institutional investors in Europe: European Investment Bank (EIB) Group comprising the EIB and the European Investment Fund (EIF); European Bank for Reconstruction and Development (EBRD); German public-law development bank KfW, among others. Development finance institutions are the most prominent impact capital

providers, furnishing catalytic and anchor funding. The EIF, for instance, is a donor of the Green for Growth Fund's (GGF), supplying first-loss capital for energy efficiency and renewable energy projects in Southeast Europe.[48]

- Private-sector investors: institutional investors include banks, pension funds, insurance companies, hedge or mutual funds. One mutual fund manager operating in Europe is Triodos Investment Management (TIM) owned by Triodos Bank from the Netherlands. TIM provides capital for social economic purposes ranging from sustainable energy projects to microfinance,[49] offering equity shares from one million to ten million euros as well as loans. It also co-invests with partners.[50] Another source of private capital are so-called high net-worth individuals (HNWI). As HNWI act as individuals, they are retail investors. However, given the size of their portfolios, which exceeds one million dollars in liquid financial assets, they are often equated with institutional investors. Small retail investors, too, have started engaging in impact investment, yet need a higher level of protection of the capital they contribute.[u] Liability-driven investors such as pension funds or insurers are less active on the impact investment market.

**Protagonists on the capital demand side** are small or midsize businesses (SMB) that yield a public benefit beyond profit, among them clean technology or energy efficiency companies as well as social enterprises. They regularly measure and report their environmental or social impact. To stand out against competitors and reduce risk for investors, many social enterprises have their impact assessed by B Lab, a nonprofit organization from Pennsylvania, to be certified as "B Corps". The B stands for beneficial. B-Corp certification must be distinguished from the benefit-corporation status conferred by U.S. state law. To earn the certificate, businesses must meet B Lab's social and environmental performance, accountability and transparency criteria.[51]

**Infrastructure** facilitates the flow of capital and information among impact investors and investees. As impact investment is an emerging industry, seed funders such as Rockefeller or Calvert Foundation, and development banks have been acting as growth accelerators. Technology providers like exchanges or clearing houses have enabled the market to increase the supply of liquid capital. To furnish larger social enterprises with an access to public capital markets, Impact Investment Exchange Asia (IIX) has been cooperating with the Stock Exchange of Mauritius (SEM) to run the world's first social stock exchange.[52] London's Social Stock Exchange (SSX) was launched in 2013 to showcase social enterprises listed at LSE, thus helping investors to spot impact investment opportunities.[53] Data providers, rating agencies and impact measurement services meet the demand for accurate financial as well as social and environmental impact information. Impact Base, for instance, a database managed by GIIN, publishes information on impact funds and products.[54] B Lab, a nonprofit organization based in the U.S., rates businesses and funds pursuant to its Global Impact Investing Rating System (GIIRS), and certifies those that meet its social and environmental performance, accountability and transparency criteria. Consulting firms mediate between players in the impact investment ecosystem, and quickly accommodate market developments by devising organizational, managerial and technical solutions. Last but not least, financial intermediaries such as banks and fund managers keep up the flow of capital, bear risks on behalf of investors, cut information costs and provide payment mechanisms.[55] They also create dedicated impact investment vehicles.

**Regulators** contribute to the impact investment ecosystem's evolution by influencing all other parties either directly or indirectly. In reality, the market is, of course, more fragmented than can be modelled in a diagram, and mainly comprises niche players. Concerted action is needed to develop universal principles for the industry to operate under.

[u] Debate on whether or not impact investment is suited for retail investors is still going on. Answers depend on the financial vehicles in question. On the secondary market, there certainly are providers and products targeting retail investors: Allia, Threadneedle, climate awareness bonds, green bonds.

### 4.1.2 Function of Infrastructure in Impact Verification and Communication

A frequent issue that prevents investors from engaging in the emerging impact investment market is the question how to measure impact. In chapter 3.3.2 above, we exemplify nonprofit impact monetization. Now we examine how such public benefits are verified and reported. Infrastructure is crucial in providing such services.

To attract capital and be viable in the long run, impact businesses[v] need to prove that they yield both financial returns and public benefits. While financial performance indicators such as the IRR, accounting ratios or multiples are relatively easy to calculate, reporting nonprofit impact proves difficult. When modelling their business, social enterprises should include ways to assess and report that impact. Agenda:

- Specify impact.
- Check impact for adverse effects. As the production of biofuel, for instance, requires huge quantities of water, it makes sense only where it rains sufficiently.
- Develop impact metrics.
- Establish benchmark.
- Compare impact with benchmark.
- Standardize layout of impact report including clarifying information such as footnotes.

To help businesses report their nonprofit impact, external providers offer the following services:

1. label or rate businesses and intermediaries, develop impact metrics, set target values
2. monitor operations
3. apply measurement standards to audit actual against promised impact
4. apply reporting standards

1. To attract capital, impact businesses must prove that they yield a public benefit as well as financial returns. Growing or mature companies will find that easier than startups because they already have a track record. If their nonprofit performance meets the standards set by environmental or social certification bodies, they can apply for a green or social label, register in a database of impact companies such as GIIN's Impact Base, and thus gain visibility among investors. Labelling a startup, by contrast, can be costly as it requires more investigation and due diligence of the certification agency.

   *Problem:* Who is to bear the cost of impact labelling?

   *Suggested solution:* Growing or mature businesses should be willing and able to bear certification costs. Startups should find seed accelerators or business incubators to help them pass the rating process. Foundations could fund a startup's rating fees until it is able to sustain itself.

2. When the company has received its label or rating, presented a business plan and started raising capital, investors will want to monitor whether it keeps its promises and sticks to the plan. To help the investee score the promised goals, shareholders must encourage management action and set incentives such as bonuses. Alternatively, they can ask for collateral from the company's assets. Better than such indirect or ex-post approaches to enforcing compliance with performance goals and promises, however, is monitoring the investee's business operations.

   *Problem:* Who monitors investees on behalf of investors?

[v] Impact business or company: organization employing a for-profit or nonprofit business model to generate a societal or environmental benefit along with revenue.

*Suggested solution:* Rating or labelling agencies can monitor an investee's business performance and compliance with their credit grade. Rating is repeated yearly and verified through inspection.

3. Upon project completion, investors will want to review the outcome against what was promised. Depending on the investee's business focus, an external environmental or social audit can complement financial auditing to measure the company's compound performance. Points assigned to each aspect of performance are added up to result in an assessment score that reflects overall goal achievement. Holistic auditing helps businesses not only to prove that they meet impact investment standards but also to improve their reputation by maximizing their nonprofit as well as their operational and financial performance. Besides, undergoing a green audit lowers the risk of being held liable for environmental issues.

   *Problem*: Diversity of impact criteria among companies makes it difficult for auditors to apply a universal scorecard.

   *Suggested solution:* Assessment should be based on a generally accepted standard such as IRIS.[56] IRIS is a free public taxonomy and catalogue of metrics for defining and quantifying social and environmental as well as financial success. Metrics and guidance are differentiated by impact investment market segments. More than 5,000 organizations have been using IRIS to measure and communicate performance, and evaluate deals. Impact auditing is offered by organizations other than established financial auditors. To promote the industry's credibility, it must involve two levels.

   - First level audits the social or environmental performance of investees: does it meet impact investment standards?
   - Second level concerns impact funds: has a qualified portion of their assets, say, seventy percent, been invested in impact businesses?

4. The last step in disclosing a business' financial and nonprofit performance to stakeholders and the wider public is reporting. By enhancing a company's visibility and accountability, reporting helps attract more capital when the need arises.

   Nonprofit impact can be reported along with financial results. By referring to the scorecards used by impact auditors, investees can communicate the same results. Footnotes will help target audiences understand those numbers. GIIN, the publisher of IRIS, has been working with the Global Reporting Initiative (GRI), an international nonprofit source of sustainability reporting standards, to support the use of IRIS metrics in economic, environmental, social and governance performance reports based on GRI's G4 Sustainability Reporting Guidelines.[57] Linking GRI guidelines with IRIS metrics improves the consistency and comparability of sustainability information.

Table 5 below contrasts conventional financial auditing with complementary environmental or social performance assessment.

| Reporting and Auditing Standards for Impact Businesses | | | |
|---|---|---|---|
| | **Financial Return** | **Nonprofit Impact** | |
| | | **Green Audit** | **Social Audit** |
| **Purpose** | neutral examination of financial statement to increase readers' confidence therein, lower investor risk and thus cut the publisher's capital cost | • assessment of an investee's environmental impact<br>• help businesses operate in a more efficient and environmentally friendly manner<br>• avoid legal liability for environmental issues<br>• track use of invested capital<br>• protect investee's reputation | • analyze social performance and impact on beneficiaries<br>• report social impact to stakeholders<br>• improve communication with investors and customers to raise funds and generate business<br>• improve service<br>• enhance accountability |
| **Standards and Tools** | International Accounting Standards (IAS), International Financial Reporting Standards (IFRS), International Standards on Auditing (ISA) | • ISO 14000<br>• Dow Jones Sustainability Index<br>• Domini Social Index and Calvert Investments, too, have developed criteria to assess green performance | • social generally accepted accounting principles (SGAAP)<br>• Impact Toolkit<br>• Quality First<br>• Third Sector Performance Dashboard<br>• Outcomes Star |
| **Indicators** | conventional financial performance indicators such as ROI, IRR, balance sheet, income statement | energy efficiency, renewable-energy consumption, greenhouse gas emission, waste reduction, ... | • social return on investment (SROI) to monetize social impact<br>• other quantitative information such as number of communities served, permanent staff with disabilities, staff dedicated to social or environmental performance<br>• qualitative information including perception of change, opinions, ideas, ... |
| **Publishers** | International Accounting Standards Board (IASB), International Federation of Accountants (IFAC) | Coalition for Environmentally Responsible Economies (Ceres), International Organization for Standardization (ISO), Investor Responsibility Research Center Institute (IRRCi), Innovest Group International, Global Reporting Initiative (GRI) | Businessballs, Evaluation Support Scotland, Triangle Consulting Social Enterprise, Social Impact Tracker, GRI |
| **Auditors** | accounting firms, consultancies specialized in auditing such as PwC, KPMG, Deloitte | large accounting firms, environmental services providers, Strategic Sustainability Consulting | Social Audit Network, business funds, consultancies specialized in third sector |

| Reporting and Auditing Standards for Impact Businesses | | | |
|---|---|---|---|
| | **Financial Return** | **Nonprofit Impact** | |
| | | **Green Audit** | **Social Audit** |
| **Advantages (+) and Issues (−)** | + conventional reporting standards and auditing criteria are well-defined and widely used<br>+ broad range of measurable financial indicators<br>+ established market for providers of reporting or auditing services | − reporting standards and auditing criteria are vague and industry-specific<br>− absence of regulatory guidance on non-financial statements<br>− details on environmental impact principles remain unspecified<br>− consolidation needed: currently, at least fifty variants of green audits are available | + various initiatives to systematize reporting and auditing criteria for social businesses<br>+ many tools for impact measuring, verification and reporting available<br>− diversity of principles<br>− need to evolve SGAAP to become counterpart of financial GAAP |

*Table 5: reporting and auditing standards for impact businesses*

Table 6 below lists the credit-enhancing effects of labelling, rating, monitoring and auditing, along with the ownership of the costs of such services.

| Beneficiaries, Benefits (+) and Cost Ownership ($) of Credit-Enhancing Services | | | | | | |
|---|---|---|---|---|---|---|
| **Service** | **Investor** | | **Investee** | | **Infrastructure Provider** | |
| | **+** | **$** | **+** | **$** | **+** | **$** |
| **labelling, rating** | guidance in finding safe and attractive deals | request for additional information may be billable | recognition as trustworthy borrower | investee bears cost at mature stage | sponsor: long-term goal achievement | sponsor pays during startup phase |
| **monitoring, control** | current information on investee's operations and credit | additional monitoring is billable | ongoing provision of confirmed information enhances credibility | investee in charge for reporting any status change | reputational gain, hence more business in the future | rating agencies or banks monitor accuracy of their assessments |
| **audit of actual against promised impact** | verification of previous information | additional auditing is billable | verified reports attract more investors | investee bears cost of audit report | on investee's or investors' request, reports can be made available to customers | some providers audit at own expense to report findings in their databases |

*Table 6: beneficiaries, benefits and cost ownership of credit-enhancing services*

## 4.2 Impact versus Global Investment Market

To evaluate the impact investment market, we compare the data available on that industry with overall investment market figures such as the global assets under management (GAUM). GAUM comprises all asset classes including passive, conventional managed as well as alternative products.[58] Our comparison considers four main factors:

- market size, growth forecast, trends
- diversity of financial instruments
- investor categories
- geographic distribution

Comparing impact investment with the global investment market provides a background against which to analyze the former's current state, and to envision its future. It also reveals mutually influential trends on both markets.

### 4.2.1 Market Size, Growth Forecast, Trends

Estimating the current size and growth potential of the global impact investment market proves difficult for scarcity of publicly available information on transactions, and due to the diversity of impact investment definitions.[59]

| Source | Market Size in Billions of USD |
|---|---|
| Global Sustainable Investment Review 2012[60] | 89 (world) |
| The Impact Investor 2012[61] | 40 (world) |
| J.P. Morgan Impact Investor Survey 2014[62] | 46 (word) |
| Eurosif European SRI Study 2014[63] | 20 (Europe only) |

*Table 7: impact investment market size estimates*

| Source | Market Growth by 2020 in Billions of USD |
|---|---|
| J.P. Morgan Research Report 2010[64] | 400 |
| Monitor Institute 2009[65] | 500 |
| Calvert Foundation 2012[66] | 650 (U.S. only) |

*Table 8: impact investment market growth forecast*

We base our assessment on J.P. Morgan's Impact Investor Survey of 2014,[67] the source regarded as the most comprehensive. It analyzes data collected by GIIN among impact investors. The following figure contrasts that data with global investment market size and growth information.[68]

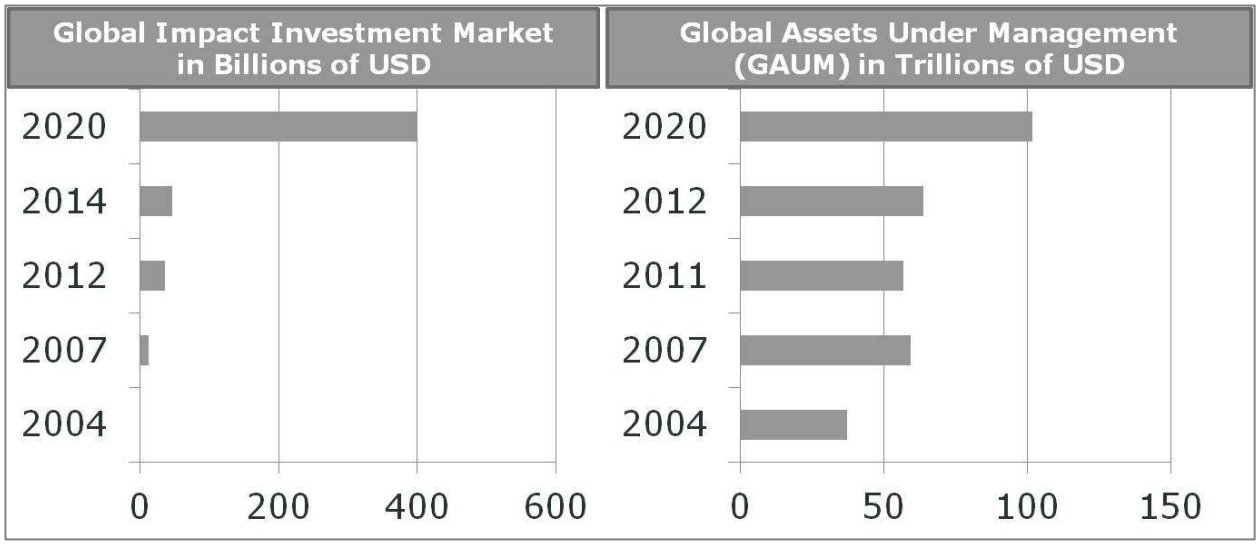


*Figure 5: size and expected growth of the impact investment market versus GAUM*

Comparing the numbers shows how small the impact investment market still is, accounting for billions, whereas the global market turns over trillions. In the aftermath of the financial crisis from 2007/8, the GAUM shrank but has been recovering at a modest rate. Its compound annual growth rate (CAGR) approximated six percent from 2012 until 2020, when the industry could be worth 102 trillion dollars.

Impact investment, by contrast, has been growing steadily since its inception in 2007. In 2014, the market totalled 46 billion dollars, its annual growth rate twenty percent.[w] From 2014 to 2020, its compound annual growth rate could amount to a remarkable 43 percent.[x] Compared with the modest growth of the global investment market, that number raises doubt. But if we look back at impact investment's CAGR from its beginnings until today, that rate approximates 73 percent.[y] Moreover, there has been a trend in the GAUM industry which seems to justify the growth expectations placed on the impact investment market. That trend is the rise of alternative assets. Private equity, for instance, has become popular among impact investors.

By 2020, PwC expects alternative assets to grow by 9.3 percent a year, faster than more traditional asset classes, to total of thirteen trillion dollars.[69] While alternative assets are not necessarily impact investments, many impact deals have been conducted by private equity funds. The expansion of that market is likely to push the number of projects they finance, including impact deals. Additionally, incentives from the public sector could contribute to the industry's growth:

- In France, companies that offer employee savings schemes must provide at least one that has five to ten percent of its capital invested in social enterprises.[70] This adds up to a 3.5-billion dollar contribution.[71]
- From April 2014 to April 2019, the British government is granting income and capital gains tax reliefs for investments in social enterprises.[72]

[w] Committed capital in 2013: 10.6 billion USD, in 2014: 12.7 billion, growth rate = (present − past value) ÷ past value = 2.1 ÷ 10.6 = 0.198 = 20%

[x] $\text{CAGR} = = \left(\frac{\text{end value}}{\text{initial value}}\right)^{\left(\frac{1}{\#\text{ of years}}\right)} - 1$

$\text{CAGR}_{2014-2020} = (400 \div 46)^{1/6} - 1 = 43\%$

[y] Assumed committed capital in 2007: 1 billion, market size in 2014: 46 billion, $\text{CAGR}_{2007-2014} = (46 \div 1)^{1/7} - 1 = 73\%$

- The Reserve Bank of India requires domestic private as well as state-owned banks to direct at least forty percent of their lending to priority sectors such as agriculture, small businesses, education or housing. For foreign banks, the requirement is 32 percent.[73]
- In 2013, the European Union introduced the European Social Entrepreneurship Fund (EuSEF) label to help investors identify funds that invest in social businesses. Fund managers may use the label to market their products across Europe.

By September 2013, almost eighty percent of impact investors were targeting market rates of return.[74] This suggests that managers of conventional funds have been rushing into the industry, voluntarily including ESG factors in their investment policies.

### 4.2.2 Diversity of Financial Instruments

Global assets under management range from traditional active and passive core products to alternative investments. Conventional instruments have been predominant, which is indicative of the industry's maturity – see figure 6 below.[75]

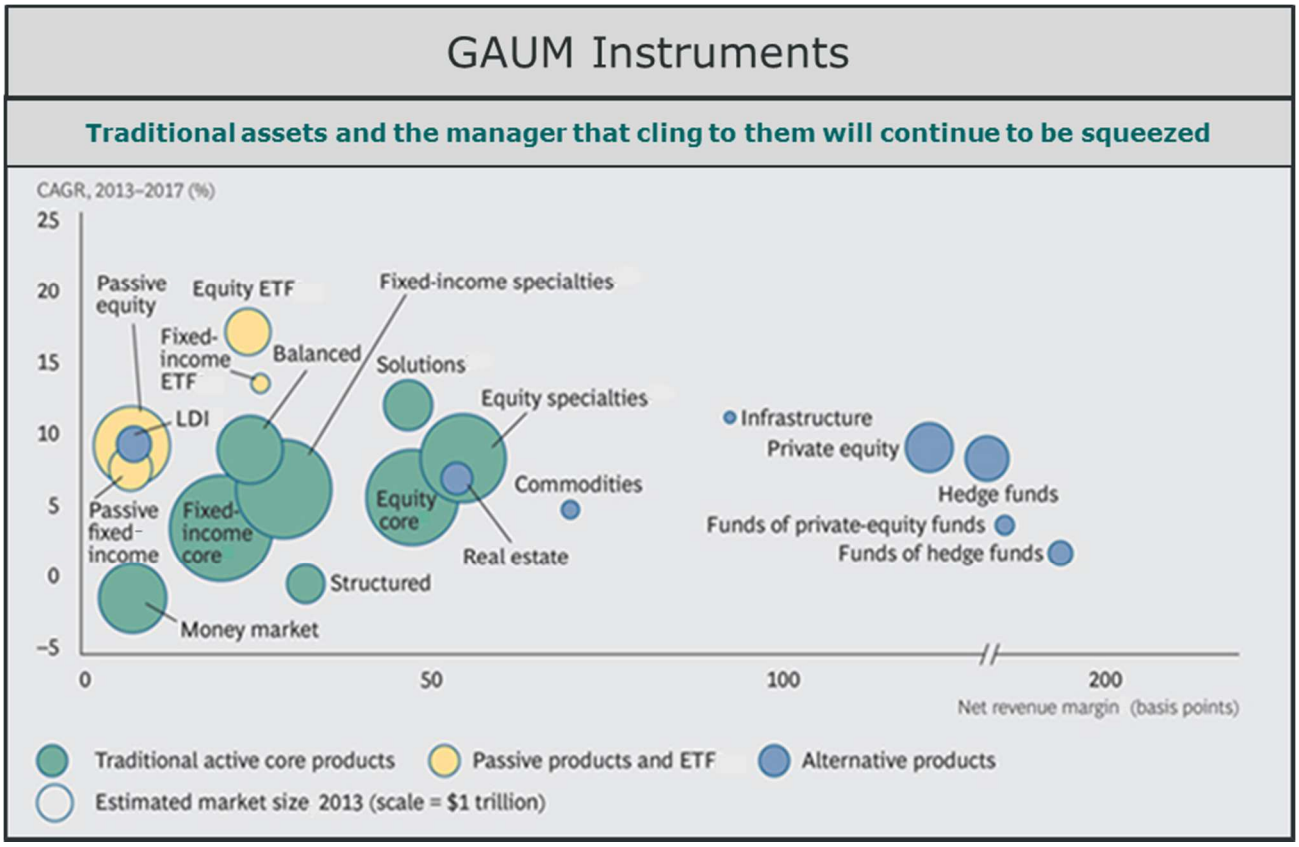


*Figure 6: GAUM instruments (source: BCG)*

As shown in figure 7 below, the main impact funding instruments are private debt or bank loans (44 percent), probably because they are relatively easy to obtain, followed by private equity (24 percent). Since there are few publicly traded companies suitable for impact investment, we assume a trend for investors to focus on privately held companies.

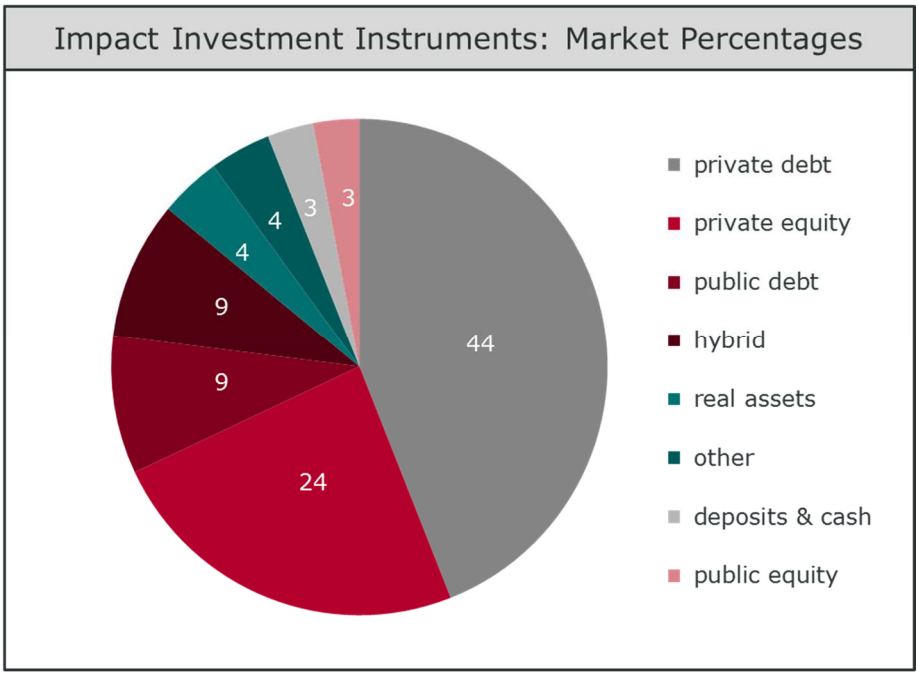


*Figure 7: impact investment instruments*

Comparing the great variety of GAUM instruments from figure 6 above with the narrower spectrum of impact investment vehicles backs up our impression that the latter market is still in an early stage of development. According to Figure 6, private equity accounts for a substantial part of alternative assets. It also makes up a large portion of impact investment. The boom of alternative assets at the expense of conventional classes expected by 2020 seems to warrant the conclusion that the impact investment industry, too, will grow due to a massive influx of capital.

### 4.2.3 Investors

Figure 8 below compares the funders involved in impact investment with those engaged in the GAUM market by percentage of capital invested.

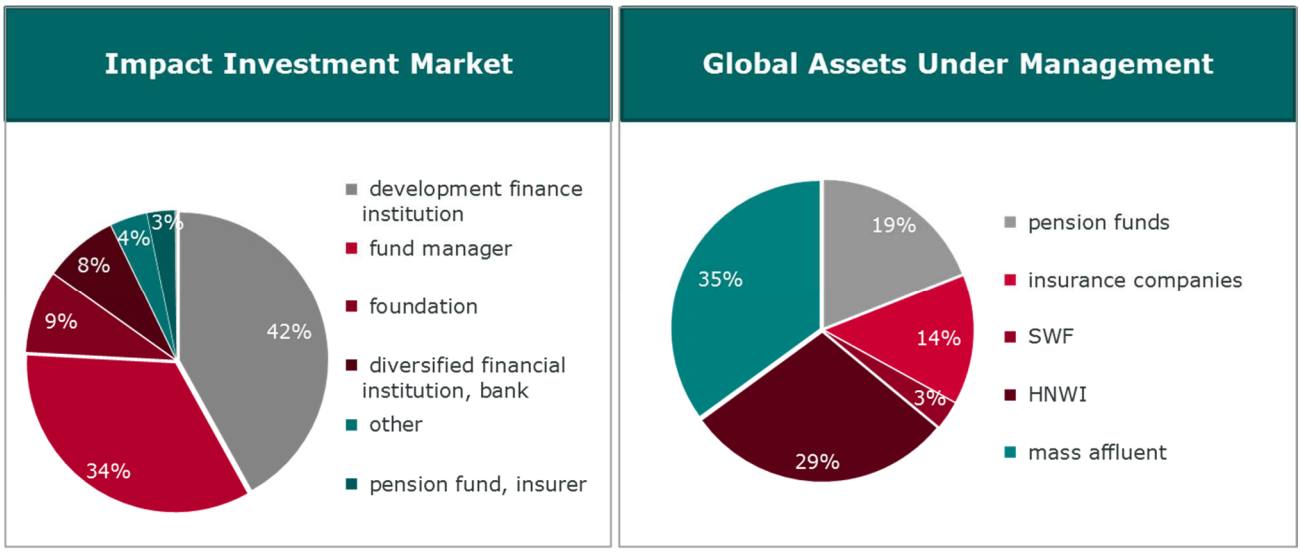


*Figure 8: impact versus GAUM investors*

Whereas the GAUM industry involves not only public and private institutional but also mass affluent retail investors, the lion's share of impact investment stems from development banks, while other institutions (pension funds, insurance companies) and retail investors play a

marginal role. That difference signals that impact investment still requires assistance from development institutions to grow and become fully functional, self-sustaining, and attractive to mainstream investors. Meanwhile, to connect impact investors with investees, an intermediary market has been developing and gaining importance.[76] Pension funds, family offices, retail investors have been involving themselves through institutions such as banks or investment funds, which is one of the reasons why their stakes in direct impact investment are low. To complement figure 8 above, which categorizes investors by capital contributed, the following chart represents the percentage of each category in the total number of institutional investors:

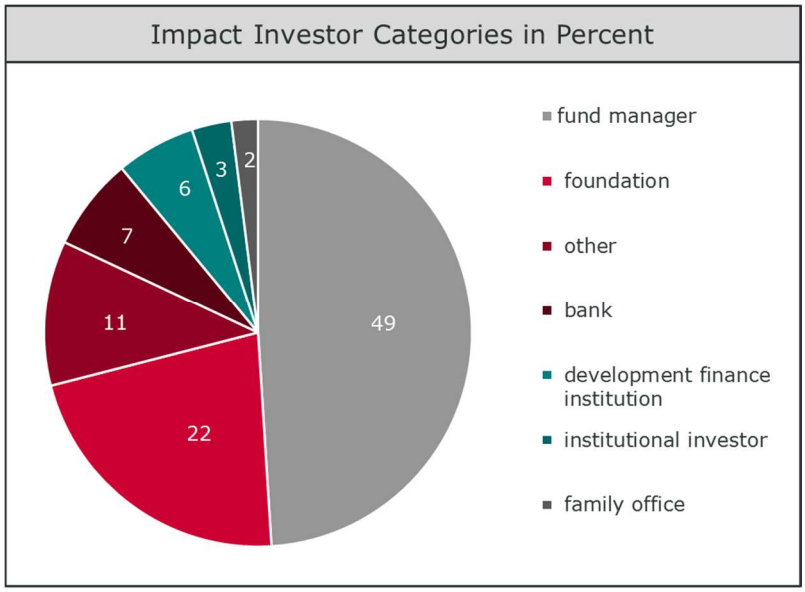


*Figure 9: percentage of categories in the total number of impact investors*

While development banks have been managing the largest share of impact assets, they constitute a mere six percent of institutional investors on that market. Investment funds account for the biggest number of impact capital providers, and are second in assets under management. One trait of impact investment is the vital role of foundations, which make up 22 percent of investors. The assets they manage, however, represent only nine percent of that market. This is mainly due to the risk associated with some impact investments. In Germany, for instance, foundations are restricted in concluding such deals.

### 4.2.4 Geographic Distribution

GAUM are spread mainly across the mature financial markets of developed countries, with capital flowing massively among them. In impact investment, by contrast, capital tends to flow from developed into developing countries, as in microfinance. Seventy percent of all impact capital has been invested in emerging markets.[77] If impact investment grows as predicted, the geographic reach of GAUM might expand to include more countries from emerging economies.

### 4.2.5 Further Aspects

To understand impact investment, it is crucial to know where the capital goes. So far, impact investors have been particularly interested in three segments of the economy:

- microfinance
- social economy
- renewable energy, energy efficiency

Microfinance and other financial services account for the highest percentage of impact investment, followed by social economy, which comprises housing, food and agriculture, healthcare, education, water and sanitation. The third largest segment is sustainable energy.[78]

Another criterion in assessing the impact investment market is the allocation of capital to businesses based on their development stage:[79]

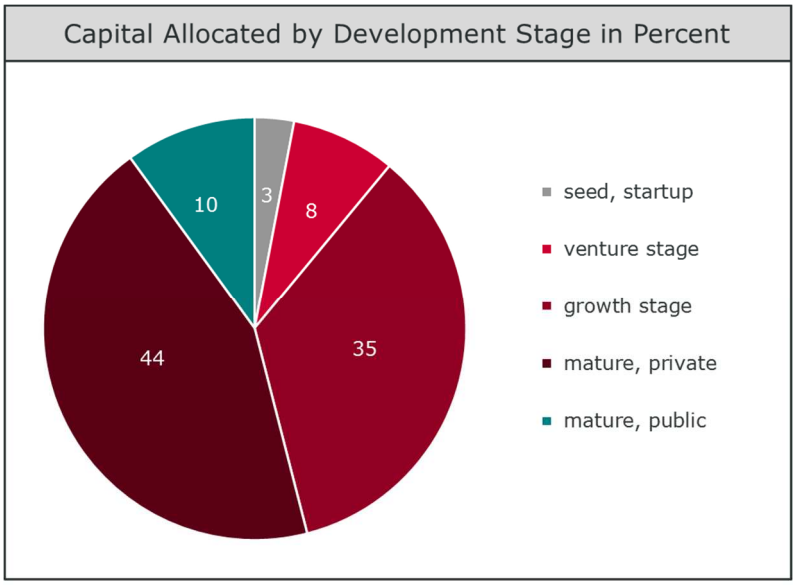


*Figure 10: allocation of impact capital to businesses by stage of development*

As shown in figure 10, most businesses receiving impact capital are at their growth or mature stage, where their development has become steady, and they are beginning to operate like established companies. They have solidified their capital structure and can produce a track record of some length. Startups, by contrast, although most in need of funding, are the companies that least attract it because their projects are risky, and commercial viability has yet to be proven. Such companies raise capital mostly through crowdfunding, foundations and venture funds. Since many impact projects are managed by startups and small businesses struggling for finance, the impact investment market is likely to soar as those companies reach more mature stages.

## 4.3 Conclusion and Opinion

Even though impact investment has made substantial progress since its inception in 2007, it is still far from being a self-sustaining, mature market. Many obstacles and a great deal of friction have been slowing down its evolution. Various trends have been supportive of the industry's expansion, but only concerted action of its stakeholders will improve results. Here are our findings at a glance.

- We have presented a high-level outline of the infrastructure of impact investment including its protagonists. However, in reality that market is much more fragmented, comprising numerous niche players. Collective efforts are necessary to develop universal principles for the industry to operate under.
- We have highlighted the importance of the market's infrastructure for impact quantification and communication, two milestones in the industry's evolution.
- We have discussed credit-enhancing third-party services such as labelling, monitoring, auditing and reporting, pointed out potential problems and suggested solutions.
- We are sceptical of estimates that see impact investment grow from 46 billion dollars in 2014 to 400 billion by 2020, which implies an annual growth of 43 percent, whereas the global investment market is expected to grow at a mere six percent a year.
- However, if governments were to extend incentives such as tax relief or a regulatory mechanism, we think that such projections could substantiate themselves. The predicted growth rate is also backed by the global investment market's current shift toward alternative

investments. As alternative investment includes impact assets, its boom is bound to boost impact deals as well.

- In impact investment, the main asset classes are private debt and private equity. Asset classes are hardly diversified. Many impact investment companies remain privately held.
- Principal capital providers are development banks and investment funds. The minor role of other institutional investors such as pension funds or insurance companies and the marginal presence of retail investors indicate that the market is not financially sustainable yet, or that there are few financially viable deals that materialize without extraneous support.
- The allocation of impact capital to businesses based on their development stage reveals a shortage of seed funding for startups. Breaking that bottleneck would help the market take off.

As environmental and societal issues abound, impact investment holds out ample opportunity for forward-looking, innovative investors to contribute to the solution of those problems at a profit. However, even though the facts and figures presented herein provide some basic insight and guidance on that market, there are reasons to take them with a grain of salt:

- absence of a generally accepted definition of impact investment impedes exact calculation and accurate statistics
- lack of reporting standards encourages arbitrary data collection and analysis
- scant reporting from private equity funds
- distortion of information for marketing purposes, and for the sake of publicity

# OUTLOOK: Evolution of Impact Investment

Impact investment is a promising attempt to apply the principles of classical economics to the solution of societal and environmental problems. Measuring and monetizing the effects of investment decisions on people and the planet to enable a more sustainable economic growth has been gaining momentum and attracting interest from potential funders, investees, government and infrastructure providers. But while holding out opportunity to reconcile economic development with the conservation of nature, impact investment also has its drawbacks. To seize the former and address the latter, all stakeholders need to pull together. More specifically, for the industry to mature, it must become more attractive not only to institutional providers of private capital such as pension funds and insurance companies but also to retail investors. Potential clients see the market's evolution stalled by the following challenges.[80]

1. Shortage of high-quality investment opportunities with track record. Few investment funds have sufficient experience working with impact businesses.
2. Dearth of innovative, scalable deals structured to accommodate investors' preferences.
3. Lack of capital across the risk-return spectrum. Government could intervene at the seed stage to improve the risk-return profiles of impact investments either through credit enhancement (guarantees, subordinated debt, first-loss capital) or tax relief.
4. To overcome early-stage development barriers and the challenges discussed above, infrastructure suppliers such as exchanges, consultants, accelerators, rating agencies or data providers need to expand and scale up.

Exchanges are pivotal in keeping impact securities liquid, and in adding assurance and safety to impact investment deals. Establishment of social stock exchanges that not only showcase publicly traded companies but also execute trades will boost both transparency and turnover on that market. In Germany, for instance, regional stock exchanges are struggling to compete with large players. By introducing impact investment platforms compliant with current listing standards, they could occupy a market niche, diversify their product range, cater to additional target groups and thus generate more business.

Consulting firms can tailor services to the needs of impact businesses, asset managers and owners. Following the example of Social Finance UK, the inventor of SIB, they could structure products and create financial innovations. Or they might specialize in helping social enterprises find investors, and develop a "blended value" business model that delivers both profit and public benefit. Others could act as mentors, technical advisers or business incubators.

Rating agencies need to come up with objective methods to assess the social or environmental performance of impact funds and enterprises. So far, the protagonists in this domain have been B Lab (see chapter 4.1.1. above) and the Luxembourg Fund Labelling Agency (LuxFLAG). Some employ proprietary scoring procedures, thus contributing to a diversity that runs counter to the market's need for a standardized approach. Only if rating agencies agree on a standardized evaluation and scoring system will investors be able to compare impact businesses and funds. Attempts at measuring the nonprofit performance of such organizations have been fragmented, too. However, the Impact Reporting & Investment Standards (IRIS) published by GIIN have been gaining recognition among investors. To align impact measurement and reporting standards, GIIN has been cooperating with the Global Reporting Initiative (GRI).

A major impediment on the impact investment industry's way to maturity is insufficient, poorly managed data on constituents such as potential investees, funds and asset classes. It is due to the absence of generally accepted impact reporting standards and terminology. Initiatives like Impact Base or the EngagedX index have been aggregating information relevant to impact

investors, but both are works in progress.[z] Academic research could yield more actionable insight. Closing the information gap would not only drive market growth. It also presents ample business opportunity for organizations that collect, analyze and distribute data, and for providers of technology that supports such efforts.

As environmental and social problems threaten to get out of hand, scholars, policy makers, entrepreneurs and investors are looking for ways to make economic growth more sustainable. We consider impact investment an efficient strategy to raise private capital to address such problems at a profit. Optimizing the roles of impact investment players in mobilizing capital, promoting developmental business models, incubating social enterprises and building investment platforms holds both profit and nonprofit potential waiting to be tapped.

Consileon has a long track record of providing organizational, operational, analytic and IT solutions to capital-market clients. We offer that expertise, complemented with up-to-date research and viable ideas for collaboration, to organizations considering participation in the impact investment industry. As a socially responsible company, we aim to turn the challenges of impact investment into opportunities by raising awareness and helping to close the gaps in its ecosystem.

[z] In June 2015 EngagedX published historic performance data on social investing in the UK. Data was obtained from high risk funds, where returns were skewed based on motivations of investors who were able to absorb losses. Currently EngagedX plans to expand the data set with more finance-first deals. (http://data.gov.uk/dataset/engagedx-dataset1-sirc-performance-data-of-social-investment-released-for-first-time)

# APPENDIX

| Most Popular and Established Impact Investment Vehicles | | | | | | | | | Examples | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Purpose** | **Issues Addressed** | **Vehicle** | **Classic Counterpart** | **Investors** | **Government Involvement** | **Beneficiaries** | **Geographic Distribution** | **Establishment** | **Providers** | **Track Record** |
| **financial inclusion** | • lend to borrowers excluded from conventional finance<br>• build wealth among BoP population<br>• tap potential of underserved low-income markets | • microfinance fund with or without government support<br>• microfinance institution<br>• bank specialized in microfinance | • loan<br>• equity<br>• bond<br>• direct guarantee<br>• counter-guarantee | institutional and retail investors | development banks and agencies lending support | • micro-entrepreneurs<br>• disadvantaged communities<br>• farmers in developing countries | • established around the globe<br>• investors mostly based in developed countries, borrowers in developing countries | • first dual-objective investment fund DMCF (Dexia Micro-Credit Fund) established in Luxemburg in 1998<br>• microfinance pioneers include Grameen Bank of Bangladesh with roots in the 1970s | • Grameen Bank<br>• Triodos Microfinance Fund<br>• European Investment Fund (EIF)<br>• Compartamos Banco in Mexico | 1) European Progress Microfinance Facility (EPMF) managed by European Investment Fund (EIF)<br>• Entrepreneur looking for microloan below 25,000 euros contacts eligible intermediary. EIF supports intermediaries with guarantees, loans and equity. Intermediaries inform applicants on requirements and procedure.<br>• Participation of EIF in portfolio expected to attract more capital from funds to push microfinance in Europe.<br>2) Triodos Microfinance Fund has acquired a 19.8 percent equity stake in Credo, a microfinance provider from Georgia targeting micro- and small enterprises, with a focus on rural development as well as on businesses that create employment and income for the poor.<br>3) Example of Failure<br>Serving more than 2.5 million clients, Compartamos Banco from Mexico is Latin America's largest microfinance bank. After its IPO, Compartamos drew fierce criticism for enriching wealthy investors with returns on equity of 53 percent generated from charging interest rates beyond 100 percent from the poor. |
| **sustainable environment** | • commitment to a long-term investment horizon to mitigate climate change by reducing carbon emissions<br>• promotion of renewable energy sources and energy efficiency | green or climate awareness bond (CAB) issued by governmental or international organization such as EIB | bond | institutional and retail investors | • central banks and other financial institutions as investors<br>• instruments mostly issued by international organizations | • alternative energy providers<br>• local community<br>• environment in general | • popular in developed countries, mostly USA, Canada, Europe<br>• expanding into developing countries | CAB first issued by EIB in 2007 | • mostly AAA-rated governmental or international institutions such as World Bank, EBRD, EIB, municipalities<br>• renewable energy and other environmental impact businesses | Climate Awareness Bond (CAB)<br>• EIB has made lending to climate action projects a priority<br>• Proceeds from CAB issued by EIB are ring-fenced to fund renewable energy or energy efficiency projects through a variety of financial instruments<br>• EIB guarantees CAB repayment at maturity |
| | | green infrastructure fund: public-private partnership (PPP), structured fund, fund of funds (FOF) | • intermediated lending<br>• direct lending<br>• bond<br>• equity<br>• mezzanine financing | institutional investors | Some FOF are joint ventures among development institutions | • alternative energy providers<br>• local community<br>• environment in general | developed economies | Among the first FOF was GEEREF (Global Energy Efficiency & Renewable Energy Fund), launched in 2008 with funding from the EU, Germany and Norway | • international institutions in cooperation with development banks such as IFC, EIB, KfW, EBRD<br>• additional capital raised from private investors<br>• examples: GEEREF, European Energy Efficiency Fund (EEEF), Global Climate Partnership Fund (GCPF) | Green for Growth Fund (GGF) initiated by EIB and KfW<br>• raises capital both from donors and from private investors<br>• refinances financial institutions that fund sustainable energy products or projects<br>• also invests directly in such projects |
| | | tax-relieved green fund | • private equity<br>• loan | institutional and retail investors | tax exemption or credits granted to institutional and retail investors contributing to green funds | • alternative energy providers<br>• local community<br>• environment in general | developed economies, especially Netherlands and Canada | first introduced in the Netherlands in 1995 | • Green fund management requires coordination among government agencies and private-sector banks<br>• Green banks or funds allocate bulk of assets to green projects<br>• institutions: ABN AMRO Groenbank, ING Groenbank, Rabo Groen Bank, Triodos Groenfonds | • Since 1995, nearly 235,000 individuals have invested over 6.8 billion euros in green funds, thus financing more than 5,000 projects<br>• Triodos Groenfond manages almost 560 million euros, investing more than 70 percent in renewable energy, sustainable farming, and green construction |
| **solution of social problems** | public sector tasks such as<br>• rehabilitation programme to reduce recidivism among former prisoners<br>• alleviate and reduce homelessness | social impact bond (SIB) | structured bond | institutional investors such as foundations, some corporate banks (Goldman Sachs) | involvement of social policy bodies as well as development banks and agencies | • social enterprises<br>• nonprofit organizations<br>• individuals<br>• community | developed countries: UK, USA, Canada, Australia, Germany, Belgium | first SIB issued by Social Finance UK in 2010 | • Social Finance UK<br>• Big Society Capital (UK independent social investment institution)<br>• government agencies | • Peterborough SIB matures in six years.<br>• Under the programme, recidivism among consecutive cohorts comprising 1,000 former prisoners each is measured.<br>• For investors to be repaid and rewarded, either of two conditions has to be met: (1) the reconviction rate in any cohort undercuts that of a control group by a minimum of ten percent. (2) The average reconviction rate across cohorts undercuts that of the control group by 7.5 percent at least.<br>• Results on the first cohort became available in 2014. The reconviction rate had dropped by 8.4 percent, missing the first condition. Second condition can still be met, but investors will have to wait for any payment until the bond matures.<br>• Risk: in 2015, the Peterborough SIB will be phased out for overlap with a new nationwide rehabilitation programme. Since most SIB contracts contain cancellation clauses, policy shifts are a risk that investors must consider.<br>• Success: proliferation of SIB across developed countries to fund child-care, healthcare or homeless assistance programmes. |
| | support social enterprises addressing societal issues such as employment, education, health, financial inclusion | • EIF Social Impact Accelerator (SIA)<br>• social impact fund of funds (FOF) | • equity<br>• loans | institutional and retail investors | FOF owned by governments | social enterprises | Europe (SIA), USA, Canada, Australia | SIA launched in 2013 | European Investment Fund (EIF) via Social Venture Fund (SVF) | Auticon<br>• SIA provides capital to SVF<br>• SVF funds Auticon, a social enterprise that trains and employs autistic adults as IT consultants<br>• Auticon receives 500,000 euros as mezzanine capital to be repaid with a return within five to six years |
| | • promote development of social economy<br>• contribute to smart, sustainable, inclusive growth | European Social Entrepreneurship Fund (EuSEF) | conventional fund | • professional investors contributing a minimum of EUR 100,000<br>• institutional investors | none | social enterprises, other social organizations | Europe | EuSEF introduced in 2014 | • Germany: BonVenture<br>• France: Phitrust Partenaires | EuSEF regulation provides a legal framework for cross-border fund raising<br>• 70 percent of fund capital must be invested in social businesses<br>• EuSEF offers fund managers a label and marketing passport for raising capital across Europe<br>• EuSEF managers will be supervised only by the authority in the member state where they are based<br>• First funds manager registered under EuSEF is BonVenture, which supports social-sector organizations based on innovative ideas and likely to sustain themselves in the long run |

*Table A: most popular and established impact investment vehicles*

| Currency | Volume in Millions of EUR | Coupon | Issue | Maturity |
|---|---|---|---|---|
| EUR | 500 | 1.25% | 10-Sep-14 | 13-Nov-26 |
| EUR | 250 | 1.25% | 18-Sep-14 | 13-Nov-26 |
| EUR | 250 | 1.25% | 12-Jan-15 | 13-Nov-26 |
| EUR | 650 | 1.38% | 18-Jul-13 | 15-Nov-19 |
| EUR | 250 | 1.38% | 09-Sep-13 | 15-Nov-19 |
| EUR | 250 | 1.38% | 05-Nov-13 | 15-Nov-19 |
| EUR | 350 | 1.38% | 20-Jan-14 | 15-Nov-19 |
| EUR | 500 | 1.38% | 25-Feb-14 | 15-Nov-19 |
| EUR | 250 | 1.38% | 04-Mar-14 | 15-Nov-19 |
| EUR | 350 | 1.38% | 22-May-14 | 15-Nov-19 |
| EUR | 600 | floating | 05-Jul-07 | 28-Jun-12 |
| SEK | 87 | 2.75% | 13-Nov-12 | 13-Nov-23 |
| SEK | 87 | floating | 24-Jul-13 | 24-Jul-20 |
| SEK | 46 | floating | 07-Aug-13 | 24-Jul-20 |
| SEK | 44 | floating | 13-Jun-14 | 24-Jul-20 |
| SEK | 113 | 3.00% | 23-Apr-12 | 23-Apr-19 |
| SEK | 71 | 3.00% | 31-Jul-12 | 23-Apr-19 |
| SEK | 59 | 3.00% | 30-Apr-13 | 23-Apr-19 |
| SEK | 103 | 3.00% | 19-Feb-14 | 23-Apr-19 |
| SEK | 83 | 3.00% | 10-Jun-14 | 23-Apr-19 |
| SEK | 52 | floating | 17-Nov-09 | 17-Feb-15 |
| SEK | 162 | 2.95% | 17-Nov-09 | 17-Feb-15 |
| SEK | 79 | 2.95% | 24-Feb-12 | 17-Feb-15 |
| USD | 794 | 2.50% | 15-Oct-14 | 15-Oct-24 |
| GBP | 601 | 2.25% | 08-Apr-14 | 07-Mar-20 |
| ZAR | 15 | 7.75% | 02-Dec-14 | 12-Mar-26 |
| ZAR | 20 | 7.75% | 12-Mar-14 | 12-Mar-18 |
| ZAR | 36 | 6.75% | 19-Nov-13 | 15-Sep-17 |
| ZAR | 17 | 6.75% | 03-Feb-14 | 15-Sep-17 |
| ZAR | 17 | 6.75% | 26-Mar-14 | 15-Sep-17 |
| ZAR | 29 | 6.75% | 16-Sep-14 | 15-Sep-17 |
| ZAR | 29 | 6.75% | 20-Nov-14 | 15-Sep-17 |
| ZAR | 8 | 7.43% | 15-Mar-10 | 17-Mar-14 |
| ZAR | 139 | 6.68% | 20-May-10 | 29-May-13 |
| CHF | 283 | 1.63% | 04-Feb-14 | 04-Feb-25 |
| AUD | 12 | 4.83% | 15-Mar-10 | 17-Mar-14 |
| AUD | 161 | 4.27% | 20-May-10 | 24-May-12 |
| BRL, JPY | 15 | 0.50% | 15-Mar-10 | 16-Mar-16 |
| BRL, JPY | 123 | 8.00% | 15-Mar-10 | 16-Mar-15 |
| TRY | 86 | 6.62% | 10-Nov-10 | 21-Nov-13 |
| JPY | 36 | PRDC | 25-Mar-14 | 25-Mar-39 |
| TOTAL | 7,607 | - | - | - |

*Table B: coupon and maturity of CAB issued by January 2015*[81]

| Investment Purpose & Vehicle | | | Assessment | | | | |
|---|---|---|---|---|---|---|---|
| **Purpose** | **Vehicle** | **Classic Counterpart** | **Strengths** | **Shortcomings** | **Financial Viability, Rate of Return** | **ESG Benefit: Stable, Measurable, Doubtful?** | **Applicability to Other Countries or Industries** |
| **financial inclusion** | • microfinance fund with or without government support<br>• microfinance institution<br>• bank specialized in microfinance | • loan<br>• equity<br>• bond<br>• direct guarantee<br>• counter-guarantee | • market-rate, risk-adjusted ROI<br>• address financial service needs of poor communities<br>• exploit untapped market potential | • Lack of reporting standards and control tools makes it difficult to monitor the nonprofit performance of an MFI<br>• Investors face currency and country risk on top of business and liquidity risk<br>• Since capital flows from developed to developing countries, investors face additional risks such as transaction costs, unawareness of economic situation or intransparency of MFI<br>• Microborrowers might run into unaffordable debt in case of poor monitoring of credit risk and spending, for instance by using loans to bridge financial gaps rather than develop their businesses | MFI can be classified into three tiers<br>• First-tier institutions operate profitably, serve a well-developed client base, have an experienced management team and are usually regulated and supervised<br>• Second tier comprises smaller, newer MFI that are profitable already or approaching profitability<br>• Third tier institutions are below investment grade, provide modest returns and tend to need subsidies or other government support | • Evaluation of nonprofit impact of MFI and microfinance funds requires reporting and benchmarking standards<br>• Reports should account for:<br>(1) number of borrower households<br>(2) number of female borrowers<br>(3) volume of loans spent productively<br>(4) repayment rate<br>(5) equal contract terms, fair treatment of all microfinance clients | • Microfinance works in many countries<br>• It may, however, be unsuited where conditions clash with standard microcredit practices. Such conditions include:<br>(1) geographically dispersed or nomadic population<br>(2) high incidence of debilitating illnesses such as HIV/AIDS<br>(3) dependence on a single economic activity or crop<br>(4) reliance on barter rather than cash transactions<br>(5) hyperinflation<br>(6) absence of law and order<br>(7) laws and regulation that pose barriers to the viability of microfinance providers, such as interest-rate caps |
| **sustainable environment** | green or climate awareness bond (CAB) issued by governmental or international organization such as EIB | bond | • pursuit of ecological along with financial purpose<br>• market rate of return, AAA credit rating | • poor project monitoring: even if investment is reported, standards are missing on how to measure impact<br>• poor marketing: since few financial advisers or fund managers have been promoting such products, many private investors are unaware of them | CAB are deemed competitive with other high-grade fixed-income instruments | • Measuring environmental impact is relatively easy as criteria can be quantified<br>• Criteria for measuring the impact of a wind farm, for instance, include greenhouse gas emission avoided as well as fossil fuel and water saved | • Green bonds have been issued in many developed countries both by international institutions and by private businesses<br>• However, data on successful projects is insufficient, as is private sector involvement |
| | green infrastructure fund: public-private partnership (PPP), structured fund, fund of funds (FOF) | • intermediated lending<br>• direct lending<br>• bond<br>• equity<br>• mezzanine financing | • dedicated fund with professional oversight<br>• sound risk-return profile through diversification<br>• government bodies provide first-loss capital to attract both institutional and retail investors | • capital hard to obtain from such funds for tough project eligibility criteria<br>• lengthy investment decision-making due to government involvement | Data on market return is unavailable. However, given that institutional investors such as pension funds or insurers have used such vehicles, it is safe to assume that they expect an adjusted market rate of return in the long run. | • Measuring environmental impact is relatively easy as criteria can be quantified<br>• Criteria for measuring the impact of a wind farm, for instance, include greenhouse gas emission avoided as well as fossil fuel and water saved | The FOF model has proved reliable. However, since it has been applied mostly to smaller projects, and requires compliance of various parties, it is difficult to transfer to other industries or countries. |
| | tax-relieved green fund | • private equity<br>• loan | • bulk of investment (70 percent) is subject-specific, mostly renewable energy (RE) or energy efficiency (EE)<br>• fund managers skilled in RE or EE | • tax relief subject to change due to industry maturity or policy shift<br>• lack of external monitoring tools<br>• huge upside and downside risk: in case of success everyone will benefit, in case of loss investors will suffer most | • interest undercuts conventional rates to enable cheap funding<br>• low interest rate offset by tax relief on dividend and interest payments | • Measuring environmental impact is relatively easy as criteria can be quantified<br>• Criteria for measuring the impact of a wind farm, for instance, include greenhouse gas emission avoided as well as fossil fuel and water saved | • funding restricted to projects likely to sustain themselves in the long run<br>• financial incentive possibly to low to some investors<br>• tax relief insufficient to some project owners<br>• applicability to other countries contingent on readiness of government and banking industry to cooperate, and on tax regime's amenability to granting relief |
| **solution of social problems** | social impact bond (SIB) | structured bond | • raises capital to finance prevention and early intervention<br>• repayment and reward contingent on project success | • no refund in case of project failure<br>• since outcome-based payment must be budgeted, SIB eat into funds available for other programmes rather than raise additional capital | • If the project succeeds, investors will collect their principal plus interest. However, pending the maturity of the first SIB, the rate of return remains unclear.<br>• If project goals are missed, investors will even lose their principal.<br>• In many countries, SIB include principal protection. | • Since repayment and reward hinge on project success in terms of social impact, the latter should be measurable<br>• Example of SIB success criterion: reduction of recidivism among short-term prisoners participating in a rehabilitation programme | • SIB have been issued in various developed countries<br>• SIB enable investors to capitalize on prevention and early intervention rather than ex-post correction<br>• For this innovative approach to survive, issuers must produce a track record apt to inspire confidence among mainstream investors |
| | • EIF Social Impact Accelerator (SIA)<br>• social impact fund of funds (FOF) | • equity<br>• loan | public-private fund of funds attracting further institutional and private investors by providing first-loss capital | capital difficult to obtain for social enterprises since public funds need more time for documentation and investment decisions | Lack of data on market return. Auticon, for instance, has a sizable social impact. Information on financial return, however, is unavailable. | • Due to rigorous project selection, public benefit is clear and stable<br>• Impact quantification tends to be easy, see Auticon example: number of employees on the autism spectrum | Model has been adopted in many developed countries |
| | European Social Entrepreneurship Fund (EuSEF) | conventional fund | • Regulatory framework simplifies cross-border fundraising and supports investment decisions<br>• EuSEF label and marketing passport help fund managers raise capital EU-wide from investors interested in social undertakings | • strict eligibility criteria<br>• rigid compliance rules<br>• restrictions on project funding<br>• other funds may be equally successful | Data on market return is unavailable. Funding social business is a long-term investment that will take time to bear fruit. | Given EuSEF's focus on social business, an overall public benefit can be assumed. However, since numbers and satisfaction levels have changed, quantifying results remains difficult. | • Uniform regulation facilitates EU-wide application<br>• Other developed countries could adopt similar policies |

*Table C: assessment of impact investment vehicles*

# ACRONYMS

| Acronym | Referent |
|---|---|
| B Corp | beneficial corporation, a private label certifying the nonprofit impact of for-profit businesses (to be distinguished from the *benefit* corporation status conferred by U.S. state law) |
| BoP | base (or: bottom) of the pyramid |
| CAB | climate awareness bond |
| CAGR | compound annual growth rate |
| CAPM | capital asset pricing model |
| CI | conventional investment |
| EBRD | European Bank for Reconstruction and Development |
| EE | energy efficiency |
| EEEF | European Energy Efficiency Fund |
| EI | ethical investment |
| EIB | European Investment Bank |
| EIF | European Investment Fund |
| ESG | environmental, social, governance |
| Euribor | Euro Interbank Offered Rate |
| EuSEF | European Social Entrepreneurship Fund |
| EuVECA | European Venture Capital |
| GAUM | global assets under management |
| GGF | Green for Growth Fund |
| GIIN | Global Impact Investing Network |
| GIIRS | Global Impact Investing Rating System |
| GRI | Global Reporting Initiative |
| HNWI | high net-worth individual |
| II | impact investment |
| IRIS | Impact Reporting & Investment Standards |
| IRR | internal rate of return |
| LOHAS | lifestyles of health and sustainability |
| MFI | microfinance institution |
| RE | renewable energy |
| RI | responsible investment |
| ROI | return on investment |
| SI | social investment |
| SIB | social impact bond |
| SMB, SME | small & medium-sized (or: midsize) businesses/enterprises |
| SRI | socially responsible investment |

# GLOSSARY

| Term | Definition |
|---|---|
| alternative investment | Generic term referring to asset classes other than those deemed conventional such as stocks, bonds or money-market instruments. Alternative investment includes hedge funds, private equity, commodities, real estate or art, among others. Since they are less liquid than conventional assets, they imply a long-term investment horizon. Because of their low correlation with public stock and bond markets, alternative assets can help investors diversify their portfolios. For want of standardization, however, they are more difficult to add to a portfolio, and their valuation can be a challenge. |
| base (or: bottom) of pyramid (BoP) | Metaphor referring to the largest and poorest socio-economic group, estimated at three billion people spending less than 2.50 dollars a day. Their basic needs such as potable water, food, sanitation, health, education and access to organized financial services unmet, those living at the BoP cannot contribute to society to the best of their ability. |
| classical economics | School of thought, exemplified by Adam Smith's writings from the 18th century, which holds that economies function most efficiently when everyone is allowed to pursue their self-interest in an environment of free and open competition. However, such environments often fail to address negative externalities of economic activity. |
| climate awareness bond (CAB) | Fixed-income debt security issued by the EIB to fund renewable-energy or energy-efficiency projects. CAB are rated and priced as other EIB bonds of equal size and maturity. |
| conventional (or: traditional) investment | Conventional or traditional investment refers to the purchase of classic financial instruments such as stocks, bonds or money-market products with an expectation of capital appreciation, dividends or interest earnings. Such assets are highly liquid, yield a risk-adjusted return and strongly correlate with market return. |
| environmental impact | Direct or indirect beneficial or adverse effect of a social or economic development project on nature. Environmental benefits range from systematic water conservation, through greenhouse gas reduction, to saving scarce resources. Environmental damage includes pollution and resource depletion. |

| Term | Definition |
|---|---|
| ESG factors | ESG stands for environmental, social, governance, the three basic criteria by which capital market participants judge an investee's nonprofit performance. E-criteria comprise a business' influence on climate change, pollution, biodiversity or resource scarcity. Pollution prevention, for instance, avoids costs such as damages and fines, while resource efficiency increases profitability.<br>S-criteria refer to employee relations, community involvement, human rights, minority participation, and the involvement of harmful products or services such as tobacco or weapons. A work environment that values diversity, health and safety, labour-management relations and human rights keeps morale and productivity at high levels, reduces staff turnover and absenteeism, and promotes innovation.<br>G-criteria concern strategies and tactics that managers apply to empower themselves at the expense of investors. Executive compensation and board accountability, among others, can be instrumental in aligning management's interests with those of shareholders, and in reducing reputational risk. By including ESG factors in their investment analysis and decisions, investors can improve the performance of their portfolios in the long run. |
| ethical investment | Provision of capital in line with the investor's religious, social, environmental or other ethical principles. Ethical investment excludes industries that contribute to violence and suffering by vending arms, tobacco or alcohol, for instance. While ethically motivated investors do not sacrifice profit for philanthropic impact directly, they forego high returns yielded by excluded industries. |
| expected return | A stock's expected rate of return represents the mean of a probability distribution of possible returns on that stock. |
| fair trade | Organized social movement that helps producers in developing countries to charge fair prices, and seeks greater equity in the trade relations between advanced and developing economies. It aims to reduce poverty, pushes the ethical treatment of workers and farmers, and promotes environmentally sustainable production. |
| financial inclusion | Provision of access to basic financial services and products ranging from deposits, payment and transfer, through credit, to insurance, at affordable cost and regardless of a client's income or social status. As financial inclusion requires a minimum of financial skills and product knowledge, it must be complemented by consumer education campaigns. |
| green audit | External inspection of an organization's compliance with environmental legislation and regulation. It includes an examination of the company's impact on the environment, and an assessment of the financial advantages and disadvantages of adopting a more environmentally sound policy. |

| Term | Definition |
|---|---|
| green bond | Fixed-income debt security issued by governments, multinational banks or real-sector businesses to fund projects that advance green growth, for instance by contributing to a low-carbon, climate-resilient economy. Launched by development institutions such as the World Bank, and by a few private-sector organizations, most green bonds have been rated AAA. Their proceeds are usually ringfenced for investment in programmes or assets targeting climate change mitigation or adaptation to global warming, such as renewable-energy plants. |
| impact investment, impact investing | Investment in an organization or fund with the intention to generate a positive measurable social or environmental impact alongside a financial return. This definition conveys five main traits:<br>• profit is an objective<br>• nonprofit impact is intentional<br>• impact is measurable<br>• impact is a net positive change<br>• impact and profit are equally important<br>The terms impact *investment* and impact *investing* are used interchangeably. |
| Impact Reporting & Investment Standards (IRIS) | Catalogue of generally accepted performance metrics that serves as universal language to measure and report social, environmental and financial success. As the use of such metrics spreads, investors will be able to aggregate and compare performance data from across the impact finance industry. |
| inclusive growth | Economic growth that advances opportunity to participate and contribute on all levels of society. Inclusive growth could be a key to rapid, sustained poverty reduction. |
| microcredit | Extension of small loans to borrowers who lack collateral, steady employment and a verifiable credit history. Microcredit aims to facilitate entrepreneurship and alleviate poverty. Most microloans mature in less than a year. |
| negative screening | Assessment of a business model for effects that would disqualify it for conscientious investment. Negative screening seeks to avoid capital flow into so-called sin industries such as tobacco, alcohol, gambling or arms, thus reducing harm without pushing fundamental reforms. |
| positive screening | Assessment of a business model for a measurable potential to solve environmental or social problems that would make the business eligible for impact investment. |
| private equity | Asset class comprising stock of businesses that are not listed. Private equity is typically raised to fund product development, expansion, acquisition, restructuring, or to strengthen a balance sheet. It is an illiquid asset that usually entails a long holding period to allow for the turnaround of a distressed company, or for a liquidity event such as an IPO or divestiture. |

| Term | Definition |
|---|---|
| public equity | Investment in a public company through stock or mutual fund shares. Public equity is liquid, its ownership dispersed, its valuation relatively easy. |
| renewable energy (RE), energy efficiency (EE) | RE and EE are the twin pillars of sustainable energy. RE and EE technology serves to reduce dependence on fossil fuels, mitigate climate change, and secure the provision of energy for generations to come. |
| responsible investment | Often used interchangeably with sustainable investment. Responsible investors base their decisions not only on profit expectation but also on environmental, social and corporate governance (ESG) factors. |
| sin industry | Any industry whose products are deemed ethically problematic for contributing to violence and suffering, including weapons, tobacco, alcohol and gambling. Business models of sin industries clash with the aims of ethical or socially responsible investment. |
| small and medium businesses (SMB) or enterprises (SME) | Collective term comprising three magnitudes of staff and turnover according to the European Commission: micro (staff below ten, annual turnover within two million euros), small (staff from 10 to 49, turnover within ten million) and midsize (staff from 50 to 249, turnover within 50 million). Such businesses are the principal source of entrepreneurial skill, innovation and employment. Many SMB encounter difficulty in raising capital, particularly during their startup stage. |
| social audit | Evaluation of a firm's effect on society based on factors such as operating procedures and code of conduct. Its goal is to measure, analyse, report and, ultimately, improve the impact of an organization’s economic activity on particular social groups or on society at large. A social audit may be initiated by a firm seeking to strengthen its cohesiveness or polish its image. |
| social economy | Third economic sector next to private business and government, comprising nonprofit organizations, cooperatives, and other for-profit enterprises that strive to serve society both economically and socially by promoting employment, social security, cohesion, regional or rural development, environmental or consumer protection, among others. Social enterprises are mostly small or midsize. While they tend to see profit primarily as a means to meet societal goals, they contribute substantially to inclusive prosperity. In Europe, above all, they represent a significant portion of the economy, providing a wide range of products and services, and generating millions of jobs. |
| social impact | Beneficial or adverse effect of a business model on the lives of individuals or on society as a whole. Social benefit is a systematic, stable improvement of a societal concern such as job, food, housing, health or education security, or civil rights. Negative social impact ranges from child labour, through health issues and increased crime rates, to inequality. |

| Term | Definition |
|---|---|
| social impact bond (SIB) | Not really a bond since it does not offer a fixed rate of return, and repayment hinges on the achievement of specified social outcomes. In terms of risk, a social impact bond resembles a structured product or equity investment. Under the SIB model, capital is raised from private investors to fund a social project. The issuer, usually a government agency, commits a proportion of the savings that result from improved social outcomes to rewarding investors. Example: A regional labour office enters into a pay-for-success contract with an intermediary and a social-service provider targeting an increase in youth employment. The intermediary raises capital from private investors for the service provider to operate the programme. If the services succeed in boosting youth employment, the government will repay investors, else the latter will lose their capital. |
| socially responsible investment (SRI) | Investment strategy that considers public benefits along with competitive long-term financial returns. Some sources use the term in the sense of ethical investment, referring to an attempt at harm reduction by screening companies before including them in an investment portfolio (negative screening). Others apply it broadly to include more ambitious approaches such as basing investment decisions on ESG factors, or impact investing. |
| sustainable investment | Used on a par with SRI. Investment strategy that seeks to balance the needs of the planet and its people with profit. Sustainable investment aims to fund sustainable development. |

# REFERENCES


[1] ONElife Tour 2015 (http://www.effectpartners.com/onelifetour/the-lohas-market/).
[2] McKinsey Quarterly, October 2013. Winning the $30 Trillion Decathlon (http://www.mckinsey.com/insights/strategy/winning_the_30_trillion_decathlon_going_for_gold_in_emerging_markets).
[3] International Monetary Fund, January 2014. World Economic Outlook Update (http://www.imf.org/external/pubs/ft/weo/2014/update/01/).
[4] UN-Water, March 2014. World Water Day (http://www.unwater.org/fileadmin/user_upload/worldwaterday2014/documents/press_release_wwd2014.pdf).
[5] Deloitte, January 2014. Big Demands and High Expectations (http://www2.deloitte.com/content/dam/Deloitte/global/Documents/About-Deloitte/gx-dttl-2014-millennial-survey-report.pdf).
[6] GreenBiz, February 2015. Environment as Economic Threat (http://www.greenbiz.com/article/environment-economic-threat-business-risk-sustainability).
[7] World Economics. Global Growth Tracker (http://www.worldeconomics.com/papers/Global%20Growth%20Monitor_7c66ffca-ff86-4e4c-979d-7c5d7a22ef21.paper).
[8] NASA. Global Climate Change (http://climate.nasa.gov).
[9] FAO 2012. The State of Food Insecurity in the World (http://www.fao.org/docrep/016/i3027e/i3027e00.htm).
[10] World Bank Data (http://data.worldbank.org/indicator/SI.POV.DDAY/countries/1W?display=graph).
[11] Unicef, WHO, World Bank, UN DESA Report 2014. Levels and Trends in Child Mortality (http://www.data.unicef.org/fckimages/uploads/1410869227_Child_Mortality_Report_2014.pdf).
[12] UNDP Human Development Report 2006. Beyond Scarcity (http://hdr.undp.org/sites/default/files/hdr_2006_summary_en.pdf).
[13] World Bank. Global Findex Database 2014 (http://www.worldbank.org/en/programs/globalfindex/overview).
[14] Abacus, February 2014. Impact Investment Profile: M-KOPA (http://abacuswealth.com/impact-investment-profile-m-kopa/). M-KOPA company overview (http://solar.m-kopa.com/about/company-overview/).
[15] Interactive Investor, November 2010. Socially Responsible Investing on the Increase (http://www.iii.co.uk/articles/13371/socially-responsible-investing-increase).
[16] Stanford Social Innovation Review, summer 2007. Microfinance Misses Its Mark (http://www.ssireview.org/articles/entry/microfinance_misses_its_mark/).
[17] World Resources Institute (WRI), International Finance Corporation, World Bank Group, September 2015. The Next 4 Billion. (http://www.wri.org/sites/default/files/pdf/n4b_executive_summary_graphics.pdf).
[18] Emma Critchley, Imperial College London, September 2013. Halving CO2 emissions by 2050: New report says it will cost $2 trillion a year. (http://www3.imperial.ac.uk/newsandeventspggrp/imperialcollege/newssummary/news_19-9-2013-11-35-32).
[19] McKinsey Global Institute, January 2013. Infrastructure Productivity.
[20] Principles for Responsible Investment (http://2xjmlj8428u1a2k5o34l1m71.wpengine.netdna-cdn.com/wp-content/uploads/1.Whatisresponsibleinvestment.pdf).
[21] GIIN. About Impact Investing (http://www.thegiin.org/cgi-bin/iowa/resources/about/index.html).
[22] Stanford Social Innovation Review, August 2013. Unpacking the Impact in Impact Investing (http://www.ssireview.org/articles/entry/unpacking_the_impact_in_impact_investing).
[23] Wharton Social Impact Initiative, December 2014. Does Social Impact Demand Financial Sacrifice? (https://socialimpact.wharton.upenn.edu/impact-story/social-impact-demand-financial-sacrifice/).
[24] Ingrid Matthäus-Maier, October 2008. Microfinance Investment Funds: Leveraging Private Capital for Economic Growth and Poverty Reduction (book).
[25] Kiva. About Microfinance (http://www.kiva.org/about/microfinance#I-II).

[26] responsAbility Microfinance Market Outlook 2014 (http://www.responsability.com/funding/data/docs/en/1872/rA-Microfinance-Market-Outlook-2014.pdf).
[27] Kiva. About Microfinance (http://www.kiva.org/about/microfinance#III-II).
[28] responsAbility. Microfinance Works (http://www.responsability.com/funding/data/docs/en/1563/Disscussion-Paper-Microfinance-works.pdf).
[29] OECD Publishing, September 2011. The Role of Pension Funds in Financing Green Growth Initiatives (http://www.oecd.org/finance/private-pensions/49016671.pdf).
[30] WealthManagement.com, August 2011. Save the Earth, Buy Green Bonds (http://wealthmanagement.com/fixed-income/save-earth-buy-green-bonds).
[31] Bank of America Newsroom, August 2014. The World Bank Issues a 10-Year Step-Up Callable Green Bond for Merrill Lynch Wealth Management Clients (http://newsroom.bankofamerica.com/press-releases/corporate-and-investment-banking-sales-and-trading-treasury-services/world-bank-issue).
[32] European Investment Bank, April 2010. Issuance of "Climate Awareness Bonds" (http://www.eib.org/investor_relations/press/2010/2010-067-issuance-of-climate-awareness-bonds.htm?lang=en).
[33] Bloomberg New Energy Finance (BNEF) 2014 Green-Bonds League Tables, January 2015 (http://about.bnef.com/landing-pages/2014-bnef-green-bonds-league-tables/).
[34] EIB CAB Factsheet (http://www.eib.org/investor_relations/documents/eib-cab-factsheet.htm).
[35] World Bank, January 2015. Green Bonds Are Changing Investor Expectations & Making Sustainable Investing Easier. (http://www.worldbank.org/en/news/feature/2015/01/22/green-bonds-changing-investor-expectations-three-trends).
[36] European Energy Efficiency Fund. Financing Terms (http://www.eeef.eu/financing-terms.html).
[37] European Energy Efficiency Fund. Shareholder Structure (http://www.eeef.eu/shareholder-structure.html).
[38] McKinsey, May 2012. From Potential to Action: Bringing Social Impact Bonds to the US (http://www.socialfinanceus.org/sites/socialfinanceus.org/files/McKinsey_Social_Impact_Bonds_Report.pdf).
[39] Juvat (www.juvat.org/pdf/juvat_augsburg_dt.pdf).
[40] Emma Tomkinson, August 2014. Social Impact Bond in Augsburg (http://emmatomkinson.com/2014/08/20/social-impact-bond-sib-in-augsburg-germany/).
[41] GIIN. About Impact Investing (http://www.thegiin.org/cgi-bin/iowa/resources/about/index.html).
[42] Stanford Social Innovation Review, fall 2013. When Can Impact Investing Create Real Impact? (http://www.ssireview.org/up_for_debate/article/impact_investing).
[43] Wharton Social Impact Initiative, December 2014. Does Social Impact Demand Financial Sacrifice? (http://socialimpact.wharton.upenn.edu/impact-story/social-impact-demand-financial-sacrifice/).
[44] Stanford Social Innovation Review, fall 2013 (http://www.ssireview.org/up_for_debate/article/impact_investing).
[45] Wharton Social Impact Initiative, December 2014 (http://socialimpact.wharton.upenn.edu/impact-story/social-impact-demand-financial-sacrifice/).
[46] Rupert Evenett. Introducing "Implied Impact" and "Implied Social Return" (http://rupertevenett.com/2013/03/01/introducing-implied-impact-and-implied-social-return-a-top-down-contribution-to-impact-assessment-and-capital-pricing-for-social-investment/).
[47] IESE Business School 2011. In Search of Gamma (http://www.iese.edu/en/files2/foc.pdf).
[48] Green for Growth Fund, Southeast Europe (http://www.ggf.lu/about-green-for-growth-fund/investorsdonors).
[49] Triodos Investment Management. Impact Investment (https://www.triodos.com/en/investment-management/impact-investment/).
[50] Triodos Investment Management. Renewable Energy (https://www.triodos.com/en/investment-management/impact-investment/looking-for-funding/renewable-energy/why-triodos/).
[51] Certified B Corporations. Attract Investors (http://www.bcorporation.net/become-a-b-corp/why-become-a-b-corp/attract-investors).
[52] Asia IIX. Mission (http://www.asiaiix.com/mission).
[53] Social Stock Exchange. FAQ (http://socialstockexchange.com/faqs/).
[54] Impact Base (http://www.impactbase.org).
[55] World Economic Forum 2013. From the Margin to the Mainstream (http://reports.weforum.org/impact-investment/).
[56] IRIS. Introduction (https://iris.thegiin.org/introduction).
[57] IRIS. Corporate Sustainability Reporting (https://iris.thegiin.org/gri-metrics).

[58] Boston Consulting Group. Global Asset Management 2014 (https://www.bcgperspectives.com/content/articles/financial_institutions_global_asset_management_2014_steering_course_growth/?chapter=2).
[59] University of Sydney Business School, October 2013. Impact Investments: Perspectives for Australian Superannuation Funds (http://sydney.edu.au/business/__data/assets/pdf_file/0005/186863/bus10006_superannuation_report_2013_WEB.pdf).
[60] GSIA 2012. Global Sustainable Investment Review (http://gsiareview2012.gsi-alliance.org).
[61] The Impact Investor (research project), October 2012. A Market Emerges (http://www.pacificcommunityventures.org/uploads/reports-and-publications/The_Six_Dynamics_of_Impact_Investing_October_2012_PCV_CASE_at_Duke_ImpactAssets.pdf).
[62] J.P. Morgan, May 2014. Spotlight on the Market: the Impact Investor Survey (http://www.thegiin.org/assets/documents/pub/2014MarketSpotlight.PDF).
[63] Eurosif 2014. European SRI Study (http://bit.ly/1r2ftQQ).
[64] J.P. Morgan, November 2010. Impact Investments: an Emerging Asset Class (https://www.rockefellerfoundation.org/report/impact-investments-an-emerging-asset-class/).
[65] Monitor Institute, January 2009. Investing for Social and Environmental Impact (http://www.monitorinstitute.com/downloads/what-we-think/impact-investing/Impact_Investing.pdf).
[66] Calvert Foundation, June 2012. Gateways to Impact (http://www.gatewaystoimpact.org/images/gatewaystoimpact.pdf).
[67] J.P. Morgan, May 2014. Spotlight on the Market (http://www.thegiin.org/assets/documents/pub/2014MarketSpotlight.PDF).
[68] PwC 2014. Asset Management 2020: a Brave New World (http://www.pwc.com/gx/en/asset-management/publications/pdfs/pwc-asset-management-2020-a-brave-new-world-final.pdf).
[69] PwC 2014. Asset Management 2020.
[70] Habitat et humanisme (http://www.habitat-humanisme.org/national/epargne-salariale).
[71] Stanford Social Innovation Review, October 2013. Financial Revolution? Yes We Can (http://www.ssireview.org/blog/entry/financial_revolution_yes_we_can).
[72] GOV.UK. Social Investment Tax Relief (https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/389925/investors-guide.pdf).
[73] PCV Insight, January 2011. Impact Investing: a Framework for Policy Design and Analysis (http://www.pacificcommunityventures.org/uploads/reports-and-publications/Impact_Investing_Policy_Full_Report.pdf).
[74] World Economic Forum news release, September 2013. Bringing Impact Investing from the Margins to the Mainstream (http://www.weforum.org/news/new-report-bringing-impact-investing-margins-mainstream).
[75] Boston Consulting Group. Global Asset Management 2014: Steering the Course to Growth (https://www.bcgperspectives.com/content/articles/financial_institutions_global_asset_management_2014_steering_course_growth/?chapter=2).
[76] J.P. Morgan, May 2014. Spotlight on the Market (http://www.thegiin.org/assets/documents/pub/2014MarketSpotlight.PDF).
[77] J.P. Morgan, May 2014. Spotlight on the Market.
[78] J.P. Morgan, Spotlight on the Market.
[79] J.P. Morgan, Spotlight on the Market.
[80] J.P. Morgan, Spotlight on the Market.
[81] EIB CAB Factsheet (http://www.eib.org/investor_relations/documents/eib-cab-factsheet.htm).