

Discussion paper

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Steps for investors and a call for action

Practical thinking on investing for development

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The case for market-level impact

Developing countries face an estimated \$2.5 trillion annual financing gap preventing them from achieving the Sustainable Development Goals.¹ Multilateral development banks (MDBs) and Development finance institutions (DFIs) are making it a priority to mobilise private capital to bridge this gap. Beyond much-needed capital, it is also essential to improve how markets in developing regions function. This requires not only financial investment but also intentional efforts to change the behaviour of commercial investors, companies, public institutions, and consumers.

The development finance community is increasingly focused on designing private sector investments that improve the lives of individuals impacted by supported companies and also create *market effects* that influence broader private market behaviour. MDBs and DFIs are evolving beyond traditional investment models centred on individual projects and are increasingly looking at the underlying structures and dynamics that can catalyse transformative shifts.² Investors are right to be ambitious about the change they want to see, while also remaining humble on the routes to success and the effects that they can claim.

This working paper results from a collaboration with impact professionals from BII, EBRD, IDB Invest, IFC and it invites like-minded investors to build a shared language for defining, claiming, and measuring market effects in private sector impact investing. It ends with a call to action, urging impact investors to think about how they can work more intentionally and effectively to drive market-level changes.

We outline four high-level steps for investors to incorporate market effects into their impact assessments. These steps are not operational guidelines but can guide investors as they design investments and assess their impact. The aim is to spark dialogue within the impact investing community, without representing the official position of any institution.

Market effects are just one of the levers to drive systemic change. Systemic change goes beyond market dynamics and MDBs and DFIs often draw from a wider set of policy and advisory tools to achieve such transformations. Driving systemic change typically demands a broader perspective, active involvement from public institutions and civil society, and a diverse mix of capital (including non-investment capital), not only from MDBs or the private sector but also and largely from public sector and philanthropies. While we acknowledge the complexity and many dimensions of systemic change, this paper addresses how private sector investments can influence market structures and behaviours.

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This paper outlines four high-level steps for investors to incorporate market effects into their impact assessments.

- 1 Gross fixed capital formation in low-and middle-income countries is around \$12 trillion per year (World Bank data for 2022: Gross fixed capital formation, current \$). MDBs and DFIs indicatively invest around \$150-200bn per year, of which around one-third is towards the private sector.
- 2 For an overview of how MDBs, DFIs and private impact investors consider market-level changes in their impact assessment see: Bassem Nemeh, Umberto Marengo, Lorenzo Ciari, Market Effects in Development Finance's Impact Assessment, EUI, STG, Policy Paper (2024), available here: https:// cadmus.eui.eu/handle/1814/76803
- 3 Steve Waddell & Friedemann Polzin, Systems Change Isn't One Thing. Financing Should Reflect That, Stanford Social Innovation Review, 21 October 2024, available here: https://ssir.org/articles/entry/systems-change-financing-change

What are market effects in impact investing?

Investors use various terms to describe the market effects of an investment. We propose to define market effects as **changes that investors intentionally aim to create beyond the direct stakeholders of the invested project.** They do so by explicitly defining a theory of change that describes how the project aims to influence market participants with no immediate relationship to the invested entity, such as government bodies, consumers, regulators, or competitors. These effects typically involve shifts in behaviours, market structures, or decision-making processes that can be credibly linked to the investment. Examples include introducing a new standard that competitors are compelled to adopt, replicating a productivity-enhancing process, or additional private investments into new technologies or product structures (e.g., public-private partnerships, unsecured loans in a given market).

Market-level effects can be achieved with investment as well as non-investment tools. Some investors, in particular MDBs, typically complement capital with non-investment tools like policy, regulatory or technical advisory, and these play a critical role in long-term success. With investment tools, investors can aim to change market systems by supporting:

- (a) A cluster of investments in the same value chain or sector ecosystem⁴ (vertical approach)
- (b) A cluster of investments in the same asset class (horizontal approach)
- (c) A single investment into a strategic participant.6

Some market-level effects take time to materialise and several investments over time are typically needed to demonstrate a significant market change. Other market changes can occur more quickly, for instance when new technologies or business models are introduced that can be replicated at low cost or barriers to entry are lower (e.g. the rapid adoption of telecoms solutions in emerging markets). The choice of the most suitable mix of interventions will depend on the business models, market conditions, and on the investors' appetite.

Market-level effects are also different from additionality, which is a project-specific dimension. Additionality addresses whether the investor is providing a financial or non-financial "contribution beyond what is available in the market and should not crowd out the private sector." Additionality is not a measure of market effects as intended in this paper.



Market effects are changes that investors intentionally aim to create beyond the direct stakeholders of the invested project.

⁴ Ecosystem means a range of participants in the same sector e.g. electric vehicle (EV) charging columns, EV manufacturing or components, or the use of EV for different business purposes. Value chain means the participants involved in the full lifecycle of a product or process, including material sourcing, production, consumption, and disposal/recycling processes.

⁵ The platform may also choose to expand vertically or horizontally.

⁶ Multilateral Development Banks' Harmonized Framework for Additionality in Private Sector Operations, 2018, p. 3, available here: https://www.ifc.org/en/insights-reports/2018/201809-mdbs-additionality-framework



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Four steps to design and assess investments for market-level changes

We recommend four high-level steps for investors when assessing interventions aimed at delivering market-level changes. These steps offer guidance but they are not intended as prescriptive standards.

Step 1: Identify unmet needs and root causes of market underdevelopment

We recommend that investors explicitly identify the critical development needs that, in their view, a market fails to meet and the root causes of market underdevelopment. Common examples of underdevelopment include limited access to services, products, technologies, or skills, as well as the inability of market participants to account for externalities (i.e., market failures). The following recurring factors hinder market functionality. These factors are not mutually exclusive and often occur simultaneously. This list is intended as a guide to identify common causes, not as an exhaustive catalogue.

- First mover(s) disadvantage or coordination failures. Markets often struggle to develop because of:
 - The costs of developing a new product, especially when the subsequent entry of competitors is likely to erode returns on that investment (this includes typically research and development (R&D) costs but also the costs of testing a new regulatory framework).
 - The costs and complexity of establishing a new supply chain where followers will subsequently benefit from the leaders' pioneering work.
 - The costs of developing the demand and of competing against existing products.
 - Coordination failures, when success requires a set of investments to be undertaken by separate actors, but each actor is unwilling to invest because of the risk that others will not act as needed.



Typical causes of market underdevelopment include first movers disadvantage, coordination failures, regulatory uncertainty, structural costs, barriers to entry and skills.

These disadvantages apply to first movers but, depending on the pace of market development, they may also apply to the immediate followers as typically markets take time and a long-term successful track record to change.

- Regulatory uncertainty is one of the main issues for market development
 as firms and investors will refrain from operating in certain markets or
 use certain financing mechanisms (e.g., public-private partnerships) where
 there is not sufficient confidence in the robustness, long-term stability,
 and enforceability of the regulatory framework.
- High structural costs entails that some services or products are nor
 delivered because they are not sufficiently profit generating with existing
 technology and business models, however they could become financially
 sustainable with the introduction of a new model (e.g., telehealth).
- Barriers to entry like dominance or monopoly, can be an obstacle to a wellfunctioning market and impede new firms to compete on quality and price of products.
- **Lack of skills** poses a barrier to economic development in markets where human capital is growing but still scarce and labour mobility is constrained.

Step 2: Define the market

We recommend that investors explicitly establish in advance the specific scope of the market they want to change. This scope should be consistent with the critical development needs identified in Step 1. To identify and define the market scope, investors can look at the following:

- Product/technology space: the actual product or technology it wants to see used or consumed, including substitutes.
- Geography: where the products and services are to be used or consumed.
- Users: the individuals or firms intended to use these products or services.

Positive externalities can also occur beyond the market where the invested firms operate. Therefore, the relevant market should **include all firms aware of the project as well as sufficiently motivated and capable to implement changes** in response to the project supported by the investor.

Step 3: Define market change channels and consider potential negative effects

We recommend that investors clearly identify the market change channels they want to create. MDBs and DFIs use various frameworks to describe the qualities of a functioning market and the pathways by which they can enhance market functionality.

Projects designed to have market effects should **identify the channels they hope to activate, and the concrete project features expected to trigger such channels**, such as for example new products or policy changes.



Projects should identify the market change channels they hope to activate and how projects will trigger them.

⁷ For example, up until 2023, the International Finance Corporation's Anticipated Impact Measuring and Monitoring (AIMM) system identifies five qualities of a functioning market (Competitiveness, Resilience, Integration, Inclusiveness, Sustainability) and measures market-level outcomes accordingly. Similarly, the European Bank for Reconstruction and Development (EBRD) impact framework identifies five qualities of a market (Competitiveness, Resilience, Inclusive/Green, Integrated, Well-governed) and assesses each project based on at least two of these qualities.

Broadly speaking, there are four main channels by which investments may change markets.

- 1. Enhancing competition. This may be achieved through product or service innovation, improved management, cost reductions, and efficiencies that encourage market participants to continue improving their products and services. Change can occur in different ways, and the following are some of the most common:
 - a. Supporting the entry of new participants can change the market structure and drive competitive pressure.
 - b. Supporting an existing participant in doing something that triggers replication through competitive pressures. This does not change the market structure but deepens the markets and enhances welfare.
 - c. Supporting a dominant incumbent to modify its behaviours to reduce barriers to entry. This creates conditions for market structure changes and opens opportunities to increase competition.

While project outcomes in terms of decreasing price or increasing quality can be the first step for initiating a virtuous cycle of competition, they do not necessarily translate into systemic changes of the market. If any such stakeholder effects do not induce lasting changes in the behaviour of other firms, this should be considered project-level impact, not a market change.

- **2. Providing demonstration.** This can be achieved by pioneering a new business model or proving the viability of a market that is not yet mature.
 - a. Pioneering demonstration materialises where investments take risks and pioneer new business models in untested markets with no existing incumbents. Typically, these investments are the first (or second) movers and often incur higher starting costs and uncertainty. Other market participants can then crowd-in and replicate the model by benefiting from the reduced risks or costs. In some cases, this replication can happen quickly (e.g., energy storage), while in others it can take longer for others to enter the market. In this case, as the demonstration channel does not occur through competitive pressure, the market considered for demonstration may be broader. The signpost for success may be other businesses replicating the model, and market participants reaching a critical mass.
 - b. Market maturity demonstration materialises when the viability of a market has yet to be convincingly demonstrated by the pioneers. For example, the African forestry industry still has not really demonstrated how it can be done profitably, but if you invest today, you are not the first to try. The effect on other market participants is strongest when backing a first mover, which others then copy. This effect eventually weakens, although we know continuous proof of success is required for a market to truly mature. Signposts of success typically include increased commercial capital investment and consumer surplus.
- 3. Building skills and capacity: this pathway recognises the importance of human capital and product innovation in allowing markets to function and deepen. These investments build capability and skills in workers or suppliers who then move on to work for or start rival firms. They also help the development of new products that enter the supply chain of another firm. This effect is strongest where the market is nascent and then weakens over time as the market deepens and the skills gap becomes less of a bottleneck to the market.



Product innovation, improved management, cost reductions and efficiencies can encourage other market participants to improve their offer.



Demonstration can be achieved by pioneering a new business model or proving the viability of a not yet mature market.

4. Improving the enabling environment: investments can improve the operation of the enabling environment which will allow other businesses to enter the market. While it is more complex for private investors to act on this pathway, we recognise the importance of interventions like regulation to affect market behaviours. One way in which investors can contribute to this pathway is by proving out elements of regulation or a structure, for example when investing in the first public-private partnership in a country or sector.

For each of these channels, we recommend investors make an explicit assumption of how material they can be in delivering the expected market-level effects, and the likelihood of the channel being successful in driving such change. Not all investments need to have a market change objective. Project-level impact may be a sufficiently strong rationale for investing.

We also recommend that investors assess the potential negative effects of their investments on the functioning of the market. These effects may include:

- Anti-competitive effects. When investors support a dominant player in
 a given market monopolisation can potentially inhibit long run market
 development by, for example, enabling market practices that prevent the
 entry of new competitors or the expansion of existing ones. Assessing
 dominance requires analysing barriers to entry, buyer power and dynamic
 effects, particularly in the case of state-owned enterprises.
- State-subsidies and protectionism. When investors support participants that benefit from subsidies or protective measures (e.g., tariffs, quotas and subsidies, or other policies such as local content requirements) these should be considered in the impact assessment. Subsidies and protectionist measures are already normally assessed in Economic Rate of Return analyses. Investors should also consider holistically whether they are supporting a market that could function once such policies are removed or phased out.
- Concessional finance. In line with the principles of blended finance,⁸ institutions should always consider the distortive potential of subsidisation and then consider the distortive potential of subsidies, such as when firms with access to subsidies put competitors out of business, or when subsidised firms establish price points that are not commercially viable and hence prevent the entrance of commercial participants.

Step 4. Decide in advance what success looks like and measure it

We recommend that investors complement the narrative discussed above with a clear measurement framework. While market effects are more complex to measure and attribute than project-level outcomes, it is usually possible to define at the outset what market changes should be observed. For example, while it may be difficult to claim with confidence that the growth of a specific market resulted from an investment, investors can note that their attempt to create a market was not successful if the market did not grow. Lack of or imperfect attribution should not stop investors from developing metrics and targets. Typical metrics could include:

Market-level outcomes (e.g., market-level prices, service penetration, service quality): while a number of factors can affect market-level outcomes, these typically indicate whether a market is moving in the right direction. This can be especially useful for nascent markets or for projects predicted to have large effects on a market. Market outcomes include competitiveness and other market qualities such as resilience or sustainability.

Consider potential negative market effects including anti-competitive behaviours, subsidies, protectionism.

Lack of or imperfect attribution should not stop investors from developing metrics and targets.

⁸ See the "Enhanced Blended Concessional Finance Principles for DFI Private Sector Operations" in DFI Working Group on Blended Concessional Finance for Private Sector Projects, 2023, p. 28, available here https://www.ifc.org/content/dam/ifc/doc/mgrt/2023-03-dfi-bcf-joint-report.pdf

- Replication of similar investments (e.g., entry of other participants undertaking similar ventures or materialisation of similar investments).
- Replication of standards, technologies and behaviours introduced by the project.

Different metrics can be identified given the potential for market evolution to take different routes within the same impact channel.⁹

Having identified a metric or set of metrics, we recommend investors clearly identify baselines for these metrics and seek to develop a view on the target for each metric. Historic performance or expectations of market participants can help in setting targets.

Lastly, investors should describe and expected timeline for success. While market effects can take more time to materialise that project outcomes, especially in cases when replication is asserted, it is equally important the timeline is not too long, to avoid diluting the analysis as a result of other factors affecting markets.

It is important to recognise that delivering market changes is complex. Investors should therefore be comfortable that a number of these interventions may fall short of the expected market effects, or that market evolve in unexpected directions.

⁹ See for example a recently published approach to measure demonstration effects: Risk control, Innovative Deals in Development Finance: Originate to Demonstrate, 2024, available here https://www.mobilistglobal.com/wp-content/uploads/2024/09/Research-Report_Innovative-Deals-in-Development-Finance_September-2024.pdf





A call for action

Developing countries need more capital, but this will not be enough without better functioning market systems. Investors should be ambitious on their objectives and humble about the scale of their claims. Changing markets is difficult but impact investors can create transformational change by using their investments to change how markets function.

Recognising that systemic market change requires coordinated efforts among all stakeholders – public and private investors, firms, governments, and industry bodies – we call upon impact investors to explore new ways to build public knowledge platforms and share experiences about delivering market changes.

These platforms can bring together stakeholders to identify areas in key sectors where market development and changes are most needed, applying a collaborative approach capable of having a transformational impact.



We call upon impact investors to explore new ways to build public knowledge platforms.

Case studies



BII - Gridworks

In 2019, British International Investment (BII), committed up to \$200 million in equity to set up Gridworks, an energy transmission and distribution platform company operating a portfolio of assets across East and Southern Africa.

In most sub-Saharan countries, government-run utilities handle energy Transmission and Distribution (T&D) networks but they are not run in a commercially viable way. Instead, they depend on government subsidies, leading to underinvestment and unreliable energy access. The market for privately, or partially privately funded T&D struggles in the sub-Saharan region due to high risks and low returns as well as first mover disadvantage (high degree of transaction costs, time, and effort it takes to agree on a publicprivate partnership structure).

The demonstration effect of successfully funding T&D projects delivering commercial returns can show the financial viability of T&D investment. Success in areas such as mini-grids and off-grid power generation, combined with closing successfully projects and deploying private capital should increase private sector appetite for investment and help finance providers such as commercial banks and other DFIs to better understand the sector.

In the medium-term, success would be first demonstrated by the implementation of sustainable projects by Gridworks (direct impacts) and, over time by Gridwork's ability to attract funding from other financial and strategic partners as shareholders in the platform.

In the long-term, success could also be the emergence of other specialised private T&D network managers, and changes in the regulatory environments in countries where Gridwork has developed major projects, such as for example in Uganda, thereby promoting further private sector investment.



IDB Invest - Creating a new industry in Paraguay

The Paracel project consists of the construction of a vertically-integrated greenfield pulp mill, renewable eucalyptus plantation, and biomass power generation project located in Concepción, Paraguay. The total project cost is \$4.9 million, of which \$3.4 million will be financed through long-term DFI financing, Export Credit Agencies (suppliers), and commercial loans. IDB Invest is leading the DFI tranche and contributing \$200 million. It is the largest private investment ever in Paraguay.

The project aims to increase forestry and industry value-added production, foster exports and supply chain growth, and create high-skilled jobs. When operating at maximum capacity, the total value of production will represent around 4 per cent and 13 per cent of Paraguay's gross domestic product (GDP) and export values, respectively. The project is expected to have a peak of 8,000 temporary jobs during the construction phase and will create 1,200 permanent formal jobs. Annual regional purchases of wood and other goods and services (including domestic purchases in Paraguay) will reach approximately \$500 million.

The main cause of market underdevelopment is pioneer/first mover disadvantage. While the Paracel project is still in the implementation stage, it is expected to develop the country's first pulp mill, creating an entire new industry and export product.

By creating a new industry and using new technologies, Paracel will be a transformational project with a powerful **demonstration effect** for private sector investment in this industry and value chain. It is expected to deliver market-level effects through agglomeration/localisation economies. 'Big push' investments such as this can spark an agglomeration process, whereby firms in the industry cluster, building mutually beneficial relationships by sharing infrastructure and other resources. Firms and workers also benefit from a larger, more specialist labour pool, allowing for better matching of labour skills and business needs. Firms can also learn about new technologies and business practices more readily in a larger market. Ultimately, this can raise firm efficiency and productivity industry-wide, contributing to broader local and regional market development.



for Reconstruction and Development

EBRD - Egypt Green Hydrogen S.A.E.¹⁰

EBRD has provided a \$80 million equity bridge loan to Egypt Green Hydrogen S.A.E, a company domiciled in Egypt. The loan is for developing and operating the first green hydrogen production facility in the country. The project finances the construction of a 100-megawatt (MW) electrolyser, which will be powered by renewable energy, and the related facilities and civil works.

The project will support the production of green hydrogen of up to 15,000 tons per year, which will be sold to an Egyptian fertiliser company to substitute some of the grey hydrogen used to produce green ammonia. The project is expected to deliver CO2 savings of more than 130,000 tons annually.

The causes of market underdevelopment are mainly linked to **first mover** disadvantages as well as business model and regulatory uncertainties. The markets for green hydrogen and green ammonia are still at a nascent stage, with green hydrogen being significantly more expensive to produce than grey hydrogen.

This innovative project comes with a substantial policy dialogue component. Correspondingly market-level effects are expected to be delivered through demonstration effects and an improvement of the enabling environment. Green hydrogen and offers the potential to decarbonise hard-to-abate sectors in the transition towards net-zero emissions. Pilot projects such as this one – the first of its kind in Egypt – help prove the concept and facilitate deployment at commercial scale. The project is accompanied by policy dialogue, specifically: (a) support to the Egyptian government in drafting a national hydrogen strategy; and (b) an Ammonia Technology Roadmap developed by the EBRD in conjunction with the International Energy Agency and the International Fertilizer Association. As a result, the project is expected to significantly improve the enabling environment, paving the way for the development of green hydrogen and ammonia in Egypt and supporting the decarbonisation of the fertiliser sector.

As commercial operations have not started, there is no evidence of market effects achieved yet.

10 Project details are available here: https://www.ebrd.com/work-with-us/projects/psd/53558.html

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