



The manufacturing sector framework ensures consistent AIMM assessments of IFC's investment projects in the manufacturing sector by articulating the development impact thesis, describing core development outcomes, and specifying relevant AIMM indicators.

Manufacturing

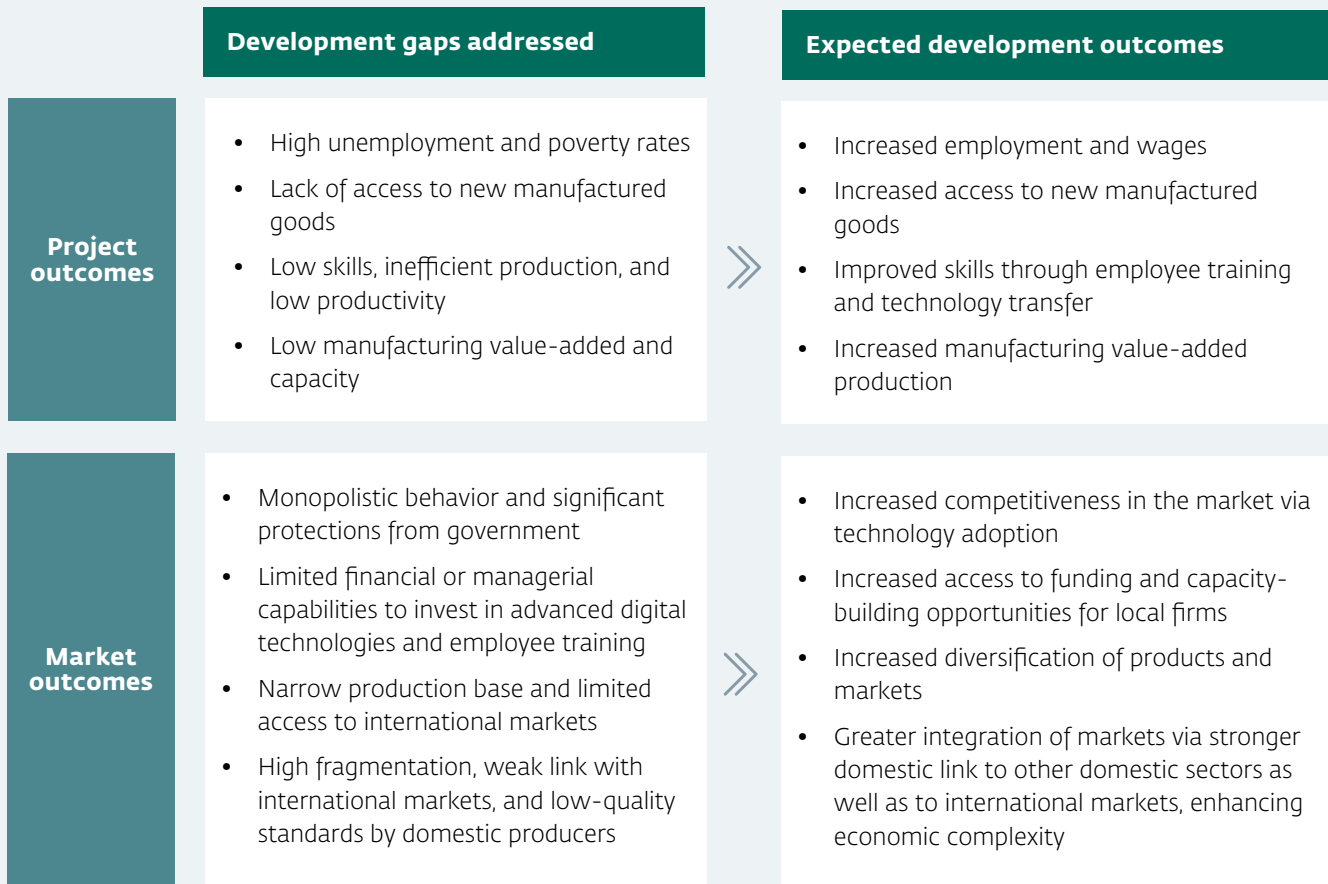
Development Impact Thesis

Manufacturing contributes to increased productivity through the adoption of modern management practices, automation, and advanced technologies, as well as through the integration of production activities and services that form sophisticated economic networks. IFC's vision in manufacturing is to "unlock the value of manufacturing for development." Through manufacturing, economies become more complex as industrialization and value-addition deepen, driving economic transformation and sustained growth.

Manufacturing generates linkages through capacity building, technology transfer and purchases from suppliers, and sales to distributors. As a result, higher-skilled employment is created and sustained not only in manufacturing but also in other sectors. Local production of goods that were previously imported can strengthen the fiscal position of governments by generating tax revenue and contribute to an improved trade balance by generating net foreign exchange or savings. This boosts economic growth and reduces poverty through indirect and induced job generation. Consumer welfare can further benefit from manufactured goods that are more accessible in local markets, more affordable, and of higher quality. Figure 1 illustrates the typical development gaps addressed by IFC's manufacturing projects.

Figure 1

Development Gaps Addressed and Expected Outcomes



Core Development Outcomes

The Anticipated Impact Measurement and Monitoring (AIMM) rating methodology assesses project and market outcomes. While manufacturing projects benefit a wide range of stakeholders, the key beneficiaries include consumers and domestic suppliers, with additional positive effects for the environment and the economy. The core project outcomes of manufacturing projects include improving consumers' access to manufactured products through greater supply and better quality, enhancing domestic suppliers' revenues and capabilities through training and technological transfer, and generating broader economy-wide effects such as value-addition, economic diversification, net foreign exchange generation, and employment.

The AIMM framework uses three market attributes to assess market outcomes—competitiveness, resilience, and sustainability. Manufacturing projects usually assert a competitiveness claim if they have a specific focus on innovation in business models, production practices or technologies, and entry into new markets. Projects may contribute to resilience when they focus on diversification or the introduction of technologies and production processes resilient to shocks and stresses. Finally, sustainability claims are asserted when the project involves innovations that aim to transform or improve the systems and structures in a manner that causes or contributes to improved environmental or social sustainability.

Key Inputs and Building Blocks of AIMM Assessments

Project Outcomes

When assessing potential project outcomes, AIMM begins by analyzing the development challenge that a project seeks to address in the sector or segment of interest—the development gap. The sector or segment-specific development gap is benchmarked against all emerging markets and developing economies using specific core development gap indicators and data collected by IFC from various public sources. The benchmarking methodology groups countries based on their gap levels per indicator: Small, Medium, Large, or Very Large. The project is placed in the appropriate band based on the data available for the country.

The next step is the assessment of the extent to which the project is expected to contribute to addressing the gap—the project intensity. The assessment of the project intensity is based on specific standard indicators, shown in Table 1, designed to collectively estimate the extent to which the project is effective in assessing the abovementioned gaps. It is assessed along a four-bucket continuum: Below Average, Average, Above Average, or Significantly Above Average.

The core project outcomes of IFC's manufacturing projects may be in the form of stakeholder, economy-wide, and environmental effects.

Stakeholder effects: IFC's investment projects can pursue different development objectives to directly affect target stakeholders. Key beneficiaries from manufacturing projects include customers and domestic suppliers. Examples of core development gap indicators used for manufacturing projects are: (i) The World Bank's Logistics Performance Index, and (ii) the product supply-demand gap.

Economy-wide effects: Manufacturing projects also generate broader economy-wide effects such as value-addition, economic diversification, net foreign exchange generation, and employment. Gap indicators include: (i) Unemployment rate; (ii) share of informal (non-agricultural) employment; and (iii) manufacturing value added per capita.

Environmental effects: Some manufacturing projects may, in addition to stakeholder and economy-wide outcomes, generate environmental effects in various ways, such as producing low-

carbon cement, fertilizers, packaging, non-woven fabrics, aviation biofuels, and so on. For environmental impacts, examples of core gap indicators include: (i) Sector share of country emissions, and (ii) greenhouse gas (GHG) growth rate adjusted by emissions intensity.

The AIMM system combines the development gap and intensity assessment to arrive at the project outcomes rating of the project (Marginal, Moderate, Strong, or Very Strong).

Table 1

Gap and Intensity Indicators for Core Project Outcomes in Manufacturing Projects

	Gap indicators	Intensity indicators
Stakeholder effects	<p>Customers (improved access in select cases)</p> <ul style="list-style-type: none"> • Product supply-demand gap • Efficiency of product distribution network <p>Suppliers</p> <ul style="list-style-type: none"> • Share of imports in intermediate consumption in manufacturing 	<p>Customers (improved access in select cases)</p> <ul style="list-style-type: none"> • Sales to underserved groups • Reduction in demand-supply gap <p>Suppliers</p> <ul style="list-style-type: none"> • Domestic purchases, including from small and medium-sized enterprises (SMEs) • Number of suppliers, including SMEs • Technical assistance to suppliers
Economy-wide effects	<ul style="list-style-type: none"> • Unemployment rate • Share of informal employment • Market value added per capita • Net exports 	<ul style="list-style-type: none"> • Value-added multiplier • Employment multiplier • Direct employment • Foreign exchange revenues
Environmental effects	<ul style="list-style-type: none"> • Sector share of country emissions • GHG growth rate adjusted by emissions intensity 	<ul style="list-style-type: none"> • Carbon intensity • Efficacy of GHG reduction

Market Outcomes

To measure the project's contribution to market catalytic effects, AIMM assesses the stage of the market's development and the type of market effects expected from the project.

The characterization of the stage of market development is based on elements specific to the sector. Table 2 highlights aspects of competitiveness that characterize the market's stage of development in the manufacturing sector. A similar approach has been developed for the other market attributes that IFC projects have the potential to affect, namely market resilience and sustainability. Table 2 highlights aspects of competitiveness that characterize the manufacturing market's stage of development.

Table 2

Characterization of Market Development Stage in the Manufacturing Framework for Competitiveness

Highly underdeveloped markets	Underdeveloped markets	Moderately developed markets	Highly developed markets
<p>Contestability</p> <p>Market has at most one large player with monopolistic behavior and/or significant protection from government.</p>	<p>Contestability</p> <p>Market has at least one large player with some level of monopolistic behavior and protection from government.</p>	<p>Contestability</p> <p>Market has at least one large player with no monopolistic behavior observed.</p>	<p>Contestability</p> <p>Market has a few large players with no monopolistic behavior or no oligopolistic collusion observed.</p>
<p>Productive know-how and integration into value chains</p> <p>Firms in the target market of interest do not exhibit the particular know-how and the productive capabilities required for localized production.</p>	<p>Productive know-how and integration into value chains</p> <p>Firms in the target market only engage in less sophisticated activities such as assembly (electronics) or cut-make-trim (textiles), without short-term prospects of transitioning to higher value-added activities.</p>	<p>Productive know-how and integration into value chains</p> <p>A few firms show signs of moving toward higher value-added manufacturing processes.</p>	<p>Productive know-how and integration into value chains</p> <p>Firms have already moved to higher value-added and sophisticated manufacturing processes that are complex and technology-intensive.</p>
<p>Productivity</p> <p>Firms do not have the financial or managerial capabilities to invest in advanced digital technologies or improve the quality of input (physical capital or training their employees). Firms experience ongoing efficiency and capacity utilization challenges.</p>	<p>Productivity</p> <p>Firms have already moved to higher value-added and sophisticated manufacturing processes that are complex and technology-intensive.</p>	<p>Productivity</p> <p>Large domestic players in the target market are implementing digital technologies and/or have the financial and managerial capabilities to access advanced technologies. These same few firms have the resources to invest in the quality of inputs, including physical capital and training of workers.</p>	<p>Productivity</p> <p>Firms are equipped with advanced technologies or have the financial/managerial capabilities to access necessary technologies. Furthermore, firms invest continuously in preserving and improving the quality of their inputs, including physical capital and training their workers. The country is well-integrated into global value chains for a given industry/product, with a considerable share in the global markets or in its export destinations.</p>
<p>Quality and diversification</p> <p>Quality standards offered by domestic producers are significantly lower compared to international producers, where firms in the market of interest lack the managerial capabilities to implement practices for quality planning, control, and monitoring across phases of production.</p>	<p>Quality and diversification</p> <p>Internationally accepted quality standards are only implemented by multinational companies, and they are the only firms that exhibit the managerial capabilities to implement practices for quality planning, control, and monitoring across phases of production.</p>	<p>Quality and diversification</p> <p>Internationally accepted quality standards are only implemented by a few leading players or multinational companies that exhibit managerial capabilities to implement practices for quality planning, control, and monitoring across phases of production.</p>	<p>Quality and diversification</p> <p>The market average is in line with international quality standards. Market is characterized by firms that can plan for quality, quality control, and monitoring across phases of production.</p>

The assessment of the catalytic effects that a project is expected to generate in this market context is anchored on the degree of innovation and scalability. It is ranked on a four-point scale (Modest, Sustaining, Deepening, and Transformational).

Innovation refers to the implementation of new or significantly improved products, practices, processes, and organizational methods compared to existing norms in the market. Scalability encompasses the visibility of the innovation in the market, and the ability for innovation to be scaled given the market conditions in which the project operates (such as policy environment, demand conditions, competitive dynamics, and the capacity of other market players). The degree of innovation may be assessed as Low, Medium, or High, and that of scalability as either Low or High. The type of market catalytic effect is determined

by the combination of the degrees of innovation and scalability (Table 3).

Depending on the claim, indicators that are often used include:

- Number of firms adopting or competing with the innovation introduced by the project (novel product, business model, practice, or technology).
- Share of manufacturing value added in GDP.
- Volume of manufactured products exported by the country.¹

The AIMM system combines the market stage and the type of catalytic effects to arrive at the market outcomes rating of the project (Marginal, Moderate, Strong, or Very Strong).

Table 3

Assessment of Market Catalytic Effects

		Degree of innovation		
		Low	Medium	High
Degree of scalability	Low	Modest	Sustaining	Deepening
	High	Sustaining	Deepening	Transforming

¹ The data for these indicators is obtained from secondary sources of data or market intelligence.

Risk Assessment

AIMM incorporates risk assessments to account for uncertainties that may hinder a project's ability to realize its expected project and market outcomes. Projects facing material risks to achieving expected development outcomes receive a Qualified rating, while those with moderate risks—or where material risks have been adequately mitigated—receive an Unqualified rating. Table 4 presents examples of risk factors often considered for manufacturing projects.

Table 4

Examples of Relevant Risk Factors for Manufacturing Projects

Risk factor	Example
Operational factors	<ul style="list-style-type: none"> Operational capacity of client. Track record of executing entity. Financial strength of executing entity. Track record of technology or process used. Familiarity with the local market. Use of new or unproven technology.
Sector factors	<ul style="list-style-type: none"> Presence of enabling infrastructure (physical and soft infrastructure). Presence or absence of barriers to entry in the relevant market where there exists a monopoly, oligopoly, or monopsony. Barriers to formality and consolidation for highly fragmented market. Dynamism of the sector in terms of adaptability or capacity to change. Relevant price trends.
Macroeconomic factors	<ul style="list-style-type: none"> Overall economic growth projections. Impact of the macroeconomy on the sector.
Policy factors	<ul style="list-style-type: none"> Enabling environment such as laws and incentives. Specific regulatory risks. Social and political stability. Capacity to respond to shocks.

Scoring Adjustment

AIMM uses a scoring adjustment mechanism to explicitly recognize projects that make a material contribution to addressing negative climate and environmental effects through mitigation or adaptation efforts, and those that make a significant contribution to economic inclusion and expansion of economic opportunities to underserved groups. Projects that meet the eligibility criteria for the scoring adjustment (linked to the level of ambition embedded in their expected results) are awarded additional points to their overall AIMM score.