Development Impact Thesis — Manufacturing leads to productivity increases through adoption of modern management practices, automation and technology use, connection of activities in production, and services that create sophisticated economic networks. IFC’s vision in manufacturing is to ‘unlock the value of manufacturing for development to strengthen economic complexity’. IFC provides financing and advisory services in the manufacturing sector to:

- Increase access to new manufactured goods
- Facilitate technology transfer and skills
- Create higher skilled employment and wages
- Support value-added production

- Increase competitiveness and diversification
- Promote greater integration of markets, via building stronger domestic linkages to other sectors, and enhancing economic complexity

Development Gaps Addressed

- High poverty rates
- Inequality
- Low manufacturing value-added and capacity
- Low productivity and inefficient production
- Low economic complexity

Rating Construct — All AIMM sector frameworks include detailed guidance notes that help define project outcomes and contributions to market creation, aggregating to an overall assessment of development impact.

- For project outcomes, stakeholder effects are the key components for which industry-specific benchmarks define the context in which an IFC operation seeks to drive changes. This gap analysis is combined with a separate set of impact intensity estimates that specify the expected results using predefined indicators.

- For contributions to market creation, industry-specific market typologies define stages of development for five market attributes (or objectives): competitiveness, resilience, integration, inclusiveness, and sustainability. These market typologies, when combined with estimates of how much an intervention affects the development of a market attribute, provide the foundation for IFC’s assessment of an intervention’s market-level potential for delivering systemic changes.

### PROJECT OUTCOME INDICATORS

**Stakeholders**
- Customer access
  - Change in product distribution and/or sales, including to an underrepresented segment of the population (SMEs)
- Customer affordability
  - Change in product price relative to comparator price
- Quality and effectiveness effects
  - Change in quality, product sophistication, and variety, including to underserved segment of population
- Improvement in customer yields
- Technical assistance to customers, including from an underrepresented segment

**Effects on employees**
- Purchases from and/or technical assistance (tech transfer) to local suppliers, SMEs
- Change in number of local suppliers, SMEs
- Quality (wage premium)
- Job quality
- Skills / know-how, safety
- Representation of women (in leadership, management and total employment)
- Project targets employing underserved groups (including women, low income)
- Absence of negative effects from hazardous waste and pollution from facilities
- Effort on the government
- Scale and direction of net economic transfers (taxes, royalties, subsidies, etc.)

**Economy-wide**
- Value added and/or employment effects
- Net foreign exchange earned / share of manufactured exports

**ENVIRONMENT**
- GHG emission reduction
- Energy use per unit of production
- Water use per unit of production

### CONTRIBUTION TO MARKET CREATION INDICATORS

**Competitiveness**
- Changes in market structure
  - Market structure through composition, entry and exits
- Price response
  - Price change
- Changes in product offering and innovation
  - Quality and standards
  - Adoption of new technology
  - Changes in regulation
  - Market change in institutional frameworks
- Effects on domestic supply volatility and shortage resilience
- Firms adopt technologies, planning, approaches that build business resilience to shocks and stresses
- Input intensity of energy and dependency on natural resources
- Effects on trade links (Global Value Chains - GVCs)
  - International trade volume and diversity of exports
- Effects on domestic links (Domestic Supply Chain)
  - Expanding market geographic reach and deepening domestic supply chain

**Resilience**
- Economic complexity
  - Industry creation or expansion
- Inclusiveness
  - Inclusion - Access or wide-spread inclusive income generating opportunities
  - Diversity - Access or wide-spread opportunities for diverse groups

**Integration**
- Sustainability
  - Adoption of sustainability practices (e.g. ESG standards, climate smart technology, practices)
  - Conducive legal/regulatory framework to foster sustainability
  - Broad capacity and supporting institutions
IFC’s Environmental and Social Performance Standards define IFC clients’ responsibilities for managing their environmental and social risks. While for most IFC investments, meeting Performance Standards reflects improved environmental and social performance, effects from implementation of the standards are only claimed in the AIMM framework where a clear counterfactual can be established and where the investment intent is to improve environmental or social outcomes.

**Sector Specific Principles or Issues** – The following principles will be applied for projects rated under this framework:

<table>
<thead>
<tr>
<th>Principle or Issue</th>
<th>Treatment Under Framework</th>
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<tbody>
<tr>
<td><strong>Complexity</strong></td>
<td>There is a strong positive relationship between the complexity of a country’s manufacturing sector and its level of GDP growth. However, many IFC client countries have only achieved low levels of manufacturing development and economic complexity. Economies that can produce a diverse range of products, using complex production processes and well-integrated in value chains are considered to have high economic complexity. These economies are home to a great diversity of productive know-how and are able to generate broader economic linkages. Measuring a project’s contribution to increasing complexity in a country will be assessed qualitatively by comparing inputs such as the country’s stage of manufacturing development (low, mid or high ECI ranking), the level of sophistication of the manufacturing (i.e. product, process and value chain sophistication) in a relative context, and knowhow/skills/technology transferred, with the project etc. IFC’s Economic Fitness model will also be applied, when applicable, to quantitatively assess the complexity gain and feasibility based on a country’s progression network.</td>
</tr>
<tr>
<td><strong>Treatment of negative effects</strong></td>
<td>A project’s negative externalities are evaluated in the AIMM assessment only when they are significant enough to temper the overall rating.</td>
</tr>
<tr>
<td><strong>Land governance</strong></td>
<td>For certain projects that require a significant amount of natural resources (e.g. cement), the land required may be high. Special attention shall be paid to land governance as it will affect the sustainability of development outcomes.</td>
</tr>
<tr>
<td><strong>Factory working conditions</strong></td>
<td>The factory working space that is common to manufacturing projects may expose workers and communities to multiple physical or health risks. Through factors such as market pressures, weak regulations or enforcement failures, factory conditions may generate significant negative effects. The ability of countries to enforce regulations to safeguard workers vary. IFC’s value is likely to be high in settings where regulatory and enforcement gaps are present.</td>
</tr>
<tr>
<td><strong>Climate and resource consumption</strong></td>
<td>Resource manufacturing can be both an energy-intensive and resource-intensive activity which can be carbon-intensive. While this is an unavoidable part of building foundational industries manufacturing base materials, the significant generation of pollutants (GHG emissions and other effluents) may adversely affect the sustainability of development outcomes. Significant GHG emissions have bearing on the project’s economic analysis and a carbon price must be integrated into the economic analysis for projects with annual GHG emissions over 25,000 metric tons carbon dioxide equivalent (CO2e) for all manufacturing projects. Another potentially negative outcome is the intensity of resource use. This can include the use of large amounts of water in some large-scale industrial projects. To the extent that the cost of such usage is not entirely internalized, resulting in negative externalities.</td>
</tr>
<tr>
<td><strong>Market distortion</strong></td>
<td>In certain country contexts, the establishment of large foundational industries (e.g. steel, aluminum, refineries) may result in state-owned enterprises (SOEs) involvement in the sector given the large capital investment required and the importance of such materials for economic development. In an effort to protect SOEs from competition, policies such as subsidies, local content requirement and non-tariff barriers may be deployed by the state. These policies typically end up creating an unlevel playing field and bolstering inefficient firms. Special attention shall be paid to projects or sectors dominated by SOEs as it could affect the sustainability of development outcomes.</td>
</tr>
<tr>
<td><strong>Scope of assessment</strong></td>
<td>Project level effects are measured annually over the monitoring period of the investment. It is understood that for manufacturing projects, these effects typically outline the project’s monitoring period. Project level effects are delivered over the “life of the project” defined as the economic life of the assets. Market creation effects are measured less frequently (every three to five years) because market creation effects, on the contrary, represent shifts in the structure or operation of a market whose lifetime is not necessarily linked to the project’s and the process is more gradual. For AIMM purposes, effects that can be measured and monitored during the project’s monitoring period are emphasized.</td>
</tr>
<tr>
<td><strong>Benchmarking</strong></td>
<td>Anticipated development impact rating is primarily based on the size of the market gap being addressed. This methodology gives greater reward to projects addressing large deficits and those creating missing markets or opening up new opportunities to link to missing markets. Support to underserved markets is consistent with IFC’s aspirations to put itself in a leadership role in the “billions to trillions” effort, by leveraging its resources to expand and create markets where private capital has been less forthcoming. A secondary consideration in the rating scale is impact per million dollars invested (total project cost, rather than size of IFC financing). This benchmark ensures that deficits are addressed efficiently. The scaling of development impact by project cost also ensures that small but well-targeted projects are not penalized. In the manufacturing sector, most project indicators (e.g. number of new distributors), product quality (e.g. introduction of new innovative products to market), and affordability outcomes (e.g. reduction in price of products to end customers) are benchmarked in terms of percentage improvements.</td>
</tr>
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</table>

**Project Outcomes** – The AIMM system considers the extent of the development gap and uses a gap analysis to classify project contexts according to the size of the deficit/gap being addressed. For each indicator, the size of the gap is measured in relation to development goals associated with the sector. Contexts are classified into very large, large, medium or low gap, for each performance dimension. Development gaps are defined using a combination of qualitative and quantitative benchmarks, which leaves room to consider context-specific attributes that drive investments in the sector.
“Core outcomes” are defined as the main and most typical outcomes seen in projects within a sector. Core outcomes are expected to be seen in most projects within the sector and are central to the theory of change. For the manufacturing sector, core outcomes include effects on consumers, domestic suppliers, as well as associated economy-wide effects. Non-core outcomes are not expected to materialize across all projects but could be significant and affect the AIMM rating where they do. As a sector, there is a particular emphasis on sustainability of manufacturing projects through lower greenhouse gas emissions, efficient energy use and sustainable use of natural resources such as water. Where applicable, these outcomes can become major drivers of project outcomes assessment and influence their long-term sustainability. The associated indicators include the introduction of modern and more efficient technologies and new skills, which may lead to reduction in greenhouse gas emissions, and lower resource consumption such as reducing water use and energy consumption. An IFC operation’s project-level impact is assessed based on the magnitude of its effects in relative terms: i.e., using a normalization rule that provides an indication of the intensity of impact (e.g., impact per dollar invested). The table below is an illustration of the outcome intensity assessment categories.

<table>
<thead>
<tr>
<th>PROJECT INTENSITY</th>
<th>Below Average</th>
<th>Average</th>
<th>Above Average</th>
<th>Significantly Above Average</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access</strong></td>
<td>No increase in number of distributors / retailers</td>
<td>&lt;10% increase in number of distributors / retailers</td>
<td>10%-20% increase in number of distributors / retailers</td>
<td>&gt;20% increase in number of distributors / retailers</td>
</tr>
<tr>
<td></td>
<td>&lt;10% of the additional distributors / retailers reached are SME</td>
<td>10%-20% of the additional distributors / retailers reached are SME</td>
<td>20%-50% of the additional distributors / retailers reached are SME</td>
<td>&gt;50% of the additional distributors / retailers reached are SME</td>
</tr>
<tr>
<td></td>
<td>First quartile of sales to assets ratio distribution of comparators</td>
<td>Second quartile of sales to assets ratio distribution of comparators</td>
<td>Third quartile of sales to assets ratio distribution of comparators</td>
<td>Fourth quartile of sales to assets ratio distribution of comparators</td>
</tr>
<tr>
<td></td>
<td>&lt;10% of the additional sales reach underrepresented groups</td>
<td>10%-20% of the additional sales reach underrepresented groups</td>
<td>20%-50% of the additional sales reach underrepresented groups</td>
<td>&gt;50% of the additional sales reach underrepresented groups</td>
</tr>
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</table>
The AIMM methodology considers the uncertainty around the realization of the potential development impact being claimed, making a distinction between the potential outcomes that a project could deliver and what could be realistically achievable in the project’s development context. The table below presents the key types of risk factors for manufacturing operations.

**Contribution to Market Creation** – For the assessment of market creation outcomes in manufacturing projects, the market is the sub-sector in the national economy. For example, suppose the project is the financing of a cement producing company in Country X. While cement is a traded manufactured good and could be exported to many countries, the relevant market for the purpose of Market Creation assessment is the specific good market in Country X. However, some projects may entail a market that extends beyond the boundaries of a country, possibly due to the fact that the global supply of the manufactured good is produced by a small number of firms. This would include high-tech projects under the Light Manufacturing category such as the manufacturers of semi-conductors or vehicle parts. Market typologies provide the building blocks in the AIMM system to construct a narrative for how much an IFC intervention is advancing a market objective. These typologies provide a description of the market gap based on various stages of development for a given sector from least developed to most advanced and enable the location of the market before and after IFC’s intervention. The table below summarizes the characterizations of the market for the three most important market attributes.
The market component rating is based on the current market stage and movement along the market typologies. For each relevant market outcome, the individual market creation assessment will identify where the magnitude of the movement falls in the movement spectrum and will support one of the following movement options: “Marginal”, “Meaningful”, “Significant” or “Highly Significant”. In general, most individual projects are not expected to make a significant and immediate systemic market change, unless the project is a pioneer in a non-existent or nascent market. Instead, most projects are expected to have incremental impacts on the market. In other words, it takes more than one intervention to move a market to the next stage. This means that integrated and concerted efforts are often needed to generate substantial market effects. For example, cumulative World Bank Group efforts over time will have a stronger effect on markets than non-integrated and non-concerted interventions. Where a project is explicitly part of a programmatic approach, the expected movement induced by the program should be the basis for the assessment where time-bound movements, market effects, and indicators are available. Examples of market movements include:

The market likelihood adjustment follows the principles for the likelihood adjustment for project outcome potential. In general, the likelihood assessment includes sector-specific, as well as broad country risks that may prevent potential catalytic effects from occurring, plus political economy or policy/legislative risks that may constrain market systemic change. Due to the diversity of market creation attributes and channels, most of the likelihood factors are expected to be sector, or intervention specific.
<table>
<thead>
<tr>
<th>MARKET LIKELIHOOD</th>
<th>Sector Factors</th>
<th>Political / Regulatory / Policy Factors</th>
</tr>
</thead>
</table>
| **Assessment Considerations** | • Presence or absence of barriers to entry in the relevant market where there exists a monopoly or an 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 | • Level of openness of the economy to imports and exports  
• Presence or absence of appropriate national policies, legislation or regulations.  
• Government capacity to implement policies and program commitments and track record  
• Medium term macroeconomic outlook, and capacity to respond to shocks  
• Social/economic/political stability |