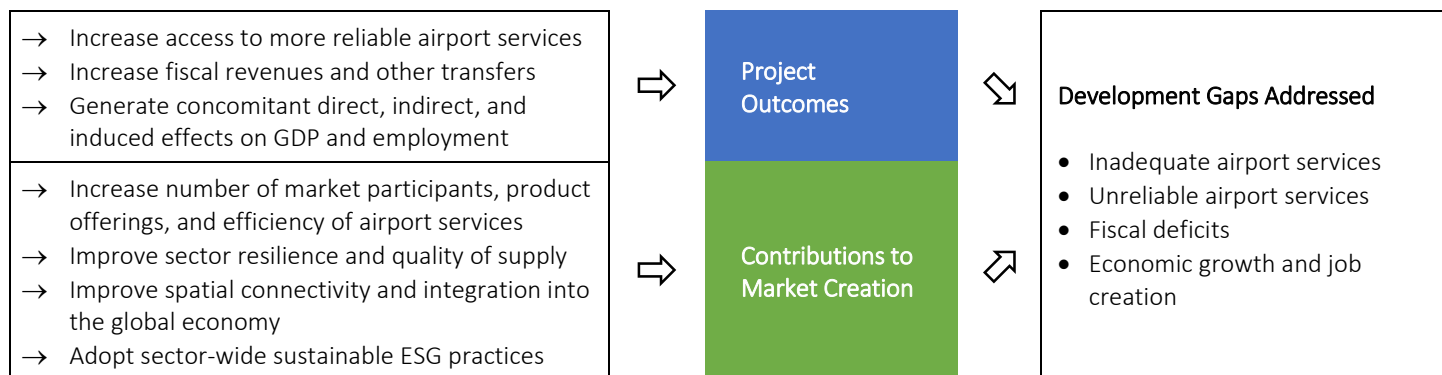


Development Impact Thesis – By connecting people and businesses to different markets, airports help facilitate a wide range of economic activity in the local and global economy: from enabling business interaction to stimulating foreign investment and encouraging trade and tourism. By facilitating tourism and trade, airports generate economic growth, provide jobs, and increase revenues from taxes. IFC’s engagement in the airport sector help beneficiary countries:



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 four market attributes (or objectives): competitiveness, resilience, integration, 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		CONTRIBUTION TO MARKET CREATION INDICATORS	
Stakeholders	<u>Access (customers)</u> <ul style="list-style-type: none"> • Air traffic movement (ATM), # • Number of passengers, # • Volume of Cargo, tons 	Competitiveness	<ul style="list-style-type: none"> • Entry of new players into the sector through a full/partial privatization • Acquisition and/or transfer of management of airport to the private sector • Introduce new technology that improves the efficiency/safety • Introduce new industry standards in operations/management and/or enforcement • Improve cost efficiency by successful restructuring and/or planning capacity • Support implementation of new tariff structures contributing to financial sustainability and competitiveness
	<u>Quality</u> <ul style="list-style-type: none"> • Passenger processing time, Seconds • Space per Passenger, Sqm • Waiting time, Minutes • Turnaround time per aircraft type, Minutes • Improved airfield infrastructures (runway, apron and taxiway), Change in category 		Resilience <ul style="list-style-type: none"> • Diversify the country’s access options to domestic and international routes • Develop new infrastructure development/upgrade that improve resilience to adverse weather conditions/natural disasters • Develop new infrastructure / systems that improve airport security • Improve cost recovery and/or financial sustainability of the airport. • Strengthen the legal/institutional framework & support implementation of reforms • Capacity building for regulatory entity with impact on KPIs
Economy-wide	<u>Fiscal Effects</u> <ul style="list-style-type: none"> • Government transfers, (taxes, concession and other fees, dividends etc.), \$ 	Integration <ul style="list-style-type: none"> • Support spatial integration by expanding access • Construction of new airport infrastructure linking a remote area to economic center • Development of shared infrastructure • Development of local supply chain and local downstream industries • Support innovative financing products with replication potential by other companies 	Sustainability <ul style="list-style-type: none"> • Adoption of new replicable climate mitigation/adaptation technology/process • Demonstration of low water-intensity technology reducing industry water use • Adoption of international best practice ESIG standards with potential demonstration • Complementary advisory component aimed at improving ESG regulatory framework, strengthening institutions for enforcement, or other
		<ul style="list-style-type: none"> • Value added, \$ • Indirect and induced employment, # • Direct employment – Operation and Maintenance, # • Direct employment –Construction, # 	

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:

Principle or Issue	Treatment Under Framework
Score of assessment	Both project and market creation effects are measured annually over the monitoring period of the investment. These effects typically outlive the project's monitoring period. Effects that can be measured and monitored during the project's monitoring period are emphasized.
Benchmarking and Normalization	Impact assessments are based primarily on the size of the deficit being addressed. This methodology gives greater weight to projects addressing large deficits and those creating missing markets. A secondary consideration is normalization to avoid disadvantaging small projects. In airport sector projects, all access indicators are scaled by the volume of invested capital. Some of the quality outcomes are benchmarked in terms of percentage improvement. Other quality indicators such as improved airfield infrastructures (apron, taxiway and runway) are benchmarked in terms of category upgrade and compliance with IATA/ICAO regulatory requirement.
Treatment of negative effects	A project's negative externalities are mentioned in the AIMM assessment only when significant enough to mitigate the overall rating. Airport sector projects could generate negative impact at project level in the following areas: (i) an increase in the airport tariff much higher than the comparative level and/or industry benchmarks, and (ii) significant environmental and social impacts including noise pollution and large-scale relocation. Fiscal liabilities are captured in fiscal effects of the project, therefore have a direct bearing on the size of this impact and the rating. Quantifiable negative environmental effects, e.g. GHG emissions, can also be included in the project's ERR calculations, if data available. At market level, a project could reduce competition when solidifying the monopoly position of a client operating in a contestable market. In addition, pervasive local content requirements that are deemed to have potential negative anti-competitive effects will be taken into consideration. The proposed rating methodology mitigates overall market impact ratings if these effects represent significant risks. A running list of key mitigating factors will be maintained by CSEDR to guide the rating process.
Qualitative Benchmarks for Market Gaps	The analysis of the current context in which a project is taking place can be either quantitative or qualitatively. Quantitative benchmarks are used where possible in conjunction with a check list of market features that define market stages. In other cases where comparison across markets on a purely quantitative basis is not meaningful a qualitative assessment is used instead. For these variables, qualitative benchmarks informed from comparison to top performers in the emerging markets groups among other qualitative considerations.

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. For this framework, access refers to the provision of reliable airport transport facilities that helps to expand the air transportation networks, rehabilitate and build airport facilities. This is measured as the number of air traffic movement (ATM), number of passengers, and volume of cargo. Quality refers to the extent the airport transport services have become more efficient, effective, and sustainable. The key measurement metrics for quality includes the passenger processing time, space per passenger, waiting time, , turnaround time per aircraft type, improved airfield infrastructures (runway, apron and taxiway), and change in category. In addition to boosting revenue from taxes, the improvements in access and reliability is expected to generate higher consumer welfare and boost productivity depending on the depth of linkages with the local economy, through indirect and induce effects on employment and growth. The stakeholder effects on government is measures through government transfers, (taxes, concession and other fees, dividends etc.) whereas the economy-wide indicators include the value added and the creation of the direct and indirect employment.

COUNTRY CONTEXT	Low Gap	Medium Gap	Large Gap	Very Large Gap
Access (Customers)	– Number of passengers carried is higher than upper middle-income average; indicative benchmark: >1,178,039 (WDI 2017 upper middle-income average]	– Number of passengers carried falls below comparable developing markets; indicative benchmark: between 420,388-1,178,039 [WDI 2017 lower middle income and upper middle-income average]	– Number of passengers carried falls below comparable developing markets; indicative benchmark: between 17,659- 420,388 [WDI 2017 low income and lower middle-income average]	– Number of passengers carried falls well below comparable developing markets; indicative benchmark: < 17,659 [Low income average- WDI 2017]

COUNTRY CONTEXT	Low Gap	Medium Gap	Large Gap	Very Large Gap
Quality (Customers)	<ul style="list-style-type: none"> – Passenger processing time/space: Optimal/over-design terminal facilities that provide sufficient space to accommodate all necessary functions comfortably; provide stable passenger flows with acceptable waiting times; denote an overall good service (comfort level) to passengers; balance economic terminal dimensions with passenger expectations – Airfield infrastructures: Runway has the most advanced level category (category III C) instrument landing system (“ILS”). Runway’s condition is excellent 	<ul style="list-style-type: none"> – Passenger processing time/space: Sub-optimal/Optimal terminal facilities that provide somewhat insufficient space to accommodate all necessary functions comfortably; stable passenger flows with acceptable waiting times; denote some degree of service (comfort level) to passengers; somewhat balance economic terminal dimensions with passenger expectations – Airfield infrastructures: Runway has a mid-level category (category III A and B) instrument landing system (“ILS”). Runway’s condition is good 	<ul style="list-style-type: none"> – Passenger processing time/space: Sub-optimal terminal facilities that provide insufficient space to accommodate all necessary functions in a comfortably; unstable passenger flows with long waiting times; lacks standard degree of service (comfort level); and balance economic terminal dimensions with passenger expectations; inadequate terminal space to accommodate passenger expectations – Airfield infrastructures: Runway has a low-level category (category II) instrument landing system (“ILS”). Runway’s condition is poor 	<ul style="list-style-type: none"> – Passenger processing time/space: Under-provided terminal facilities with very insufficient space to accommodate all necessary functions comfortably; unstable passenger flows with long waiting times; lacks standard degree of service (comfort level); and balance economic terminal dimensions with passenger expectations; terminal facilities require reconfiguration to reach optimum standard – Airfield infrastructures: Runway has a low-level category (category I) instrument landing system (“ILS”). Runway’s condition is poor
Fiscal effects	<ul style="list-style-type: none"> – Government current budget – current account balance as a percentage of GDP – Overall debt to GDP ratio - Central government debt as a percentage of G – Tax revenues as a share of GDP - country’s level of tax revenues as a percent of GDP – IMF FM identifies a positive trajectory on debt sustainability 	<ul style="list-style-type: none"> – Government current budget – current account balance as a percentage of GDP – Overall debt to GDP ratio - Central government debt as a percentage of GDP – Tax revenues as a share of GDP - country’s level of tax revenues as a percent of GDP – IMF FM identifies a neutral trajectory on debt sustainability 	<ul style="list-style-type: none"> – Government current budget – current account balance as a percentage of GDP – Overall debt to GDP ratio - Central government debt as a percentage of GDP – Tax revenues as a share of GDP - country’s level of tax revenues as a percent of GDP – IMF FM identifies a negative trajectory on debt sustainability 	<ul style="list-style-type: none"> – Government current budget – current account balance as a percentage of GDP – Overall debt to GDP ratio - Central government debt as a percentage of GDP – Tax revenues as a share of GDP - country’s level of tax revenues as a percent of GDP – IMF FM identifies a negative trajectory on debt sustainability
Economy-wide	<ul style="list-style-type: none"> – Country is in the low-income group – Country has very low labor market participation rates, including of its skilled labor force. Technical skills for the energy sector are typically imported – Share of informal employment is high 	<ul style="list-style-type: none"> – Country is in the lower middle-income group – Country has a low level of labor market participation, including of its skilled labor force. Technical skills for the energy sector are typically imported – Share of informal employment is high 	<ul style="list-style-type: none"> – Country is in the upper middle-income group – Country has above average labor market participation, with skills for the sector but some gaps exist. Evidence of development-oriented policies improving productive employment – Share of informal employment is average 	<ul style="list-style-type: none"> – Country is in the high-income group. – Country has a high level of labor market participation and a high absorption rate for its skilled labor force – Share of informal employment is low

“Core outcomes” for airport sector investments include impacts on customers, government and economy-wide impacts (value-added and employment). The rating will be driven mainly by impact on customers, payment to the government, value added and employment. Value-added and employment effects reflect the extent of linkages between the airport operation and the local economy, typically achieved through backward and forward linkages. A project need not deliver impact in all potential core impact dimensions but should do so in the intended area of focus. Although environmental impacts are considered “non-core” in airport projects, this framework will evaluate and rate any negative significant environmental impacts by the project. The core outcomes in regard to impact on customers include: (1) an increase in access of the airport service, and (2) an improvement in the quality of the airport service.

PROJECT INTENSITY	Below Average	Average	Above Average	Significantly Above Average
Access	– Yields positive access effects that are small relative to the size of the investment; this rating is issued for projects where access is a secondary objective	– Yields positive access effects that are average relative to the size of the investment	– Leads to substantial increase in number of passengers, the capacity increase is associated with a significant and quantified improvement in access; impact is delivered efficiently	– Leads to a significant increase in number of passengers, the capacity increase is associated with significant quantified access improvements; impact is delivered efficiently
Quality	– The project is not expected to generate measurable impact in this component	– Project leads an average improvement in quality/reliability of services	– Project leads to above average improvement in quality/reliability of services	– Project leads to significantly above average improvements in quality/reliability of services

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 microfinance and digital financial service operations.

PROJECT LIKELIHOOD	Operational Factors	Sector Factors
Assessment Considerations	<ul style="list-style-type: none"> • Client track record of delivering impact in the focus area • Client’s market position and product offering • Sponsor’s technical strength and support to project • Covenants assuring implementation of specific components • Project likelihood of reaching financial close at targeted level of capitalization (mostly relevant to Funds) • Presence of funded plan developing complementary infrastructure • Public partner track record in meeting contractual obligations • Realism of magnitude of anticipated impact • Negative factors affecting the project company, sponsor or the management team which detracts from likelihood • Funding and sequencing of technical assistance to address specific execution risks 	<ul style="list-style-type: none"> • Definition and realism of development impact targets • Extent of political support and social buy-in • Financial viability in the absence of subsidies • Resilience to exogenous shocks • Exposure of project development effects to exogenous shocks e.g. foreign exchange risk FX risk

Contribution to Market Creation – For the market impact assessment, a market is defined as the industry/sub-sector in which the project is taking place (excluding markets affected by the project through economic linkages). In airports, “market” refers to the air transportation sector within the country where the project located. In case of projects with regional scope (e.g. project with investments in several countries) the regional catchment area is considered. 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.

MARKET TYPOLOGY	Highly Developed	Moderately Developed	Underdeveloped	Highly Underdeveloped
Competitiveness	<ul style="list-style-type: none"> - The airport sector is fully competitive. State-run airport entities, if present, operate in competition with private-run entities - Airport sector is technologically advanced using the best technology in operations of its terminals, air traffic control and surveillance equipment etc. - Airport sector has a high level of efficiency evidenced by comparable marginal cost and tariff structure with industry benchmarks 	<ul style="list-style-type: none"> - Private sector participation in the airport sector already exists - Airport sector is in growth or 'renewal' phase, with a few assets employing technologies considered to be BAT. - There is evidence of technology updates in existing operations or adoption of cutting-edge technologies in new airport operations. - Country falls short of global best practice standards in most of operations or segments of the market 	<ul style="list-style-type: none"> - Private sector participation in airport sector limited mainly in ancillary services. Airport is operated mainly by public sector. - Airport has an outdated technology, much below BAT standards, in terms of ICT deployed used in terminal operation, bag checking areas, air traffic control and surveillance equipment, etc. - Airport tariff structure is not competitive and much higher than comparators and/or industry benchmarks. High tariffs could be a result of limited competition, operational inefficiency, or poor regulation; staffing resulting lower productivity and hence a much higher airport fee 	<ul style="list-style-type: none"> - 100% state owned; no private sector participation; all airport/s in the country are state-owned. Government exercises direct regulatory and financial oversight. - Airport has an outdated technology, much below BAT standards, in terms of ICT deployed used in terminal operation, bag checking areas, air traffic control and surveillance equipment, etc. - Airport operates at high marginal cost, due to rundown or overbuilt airport facilities, inadequate skills staff alongside overstaffing resulting lower productivity and hence much higher airport fee
Resilience	<ul style="list-style-type: none"> - Country has extensive routes to the rest of the world and all its regions are well connected via air transport services - Country is not dependent on a single airport and there is adequate redundant capacity to divert air traffic in case of disruptions in one airport or terminal - Sector may be exposed to external shocks but is structurally well prepared to effectively manage this risk - Full cost recovery is in place with both CAPEX and operational costs fully recovered. No reliance on government subsidies. - A comprehensive airport regulatory framework is in place and enforced. - Regulatory entity and other airport regulation enforcement bodies are well-equipped to implement the regulation. - There is adequate autonomy of regulatory bodies 	<ul style="list-style-type: none"> - Country has good coverage/route of connection globally. Yet, there are region/s in the country have limited access to air transport. There might also be remote areas that are not easily accessible by roads - Airport may face significant resilience risks, but some measures have already been adopted to manage these risks - Evidence of airport infrastructure investments mitigate risk of adverse weather conditions or emerging security threats - Airport infrastructure costs may be partly subsidized; however, the airport operates in commercially and face limited/no financial sustainability risk - Regulatory framework for airport exists outlining rules with respect to ownership of assets, private sector participation, competition, pricing, in addition to airport security, health, safety and sustainability rules. But, regulatory gaps arising from missing elements of the framework 	<ul style="list-style-type: none"> - Country has limited coverage/route of connection globally. There are also region/s in the country have limited access to air transport. There might also be remote areas that are not easily accessible by roads - Airport faces significant resilience risks from natural disasters and adverse weather conditions or security threats. There are limited systems and infrastructure capability to manage these risks - Airport is inefficiently managed and operated and failing to fully recover costs thereby facing financial sustainability risk - There is an incomplete airport regulation, or regulation is obsolete, inconsistent with international standard - Airport regulatory entity and other airport regulation enforcement bodies lack capacity to fully and effectively enforce the existing regulation 	<ul style="list-style-type: none"> - Country has very limited coverage/route of connection globally. There are also region/s in the country with no access to air transport There might also be remote areas that are not easily accessible by roads - Airport sector is poorly regulated, regulation is non-existent, weak or obsolete. - The sector has high exposure to exogenous shocks with no mitigation mechanisms. - Business case for climate resilience technologies or practices has not been made

MARKET TYPOLOGY	Highly Developed	Moderately Developed	Underdeveloped	Highly Underdeveloped
Integration	<ul style="list-style-type: none"> – Airport services connecting domestic & international air traffic are well developed and its airport safety standards is excellent – Well-developed airport cargo facilities to facilitate specialized exports and imports – Full integration of the airport sector into the domestic economy (well-developed local supply chain) – Airport operations are well linked to local economic hubs – Financing instruments for airport projects such as corporate bonds and commercial loans are easily utilized and recognized in the market 	<ul style="list-style-type: none"> – Airport services connecting domestic & international air traffic are developed and airport safety standards is good – Adequate gateway infrastructure; still uses face constraint in its airport cargo facilities for specialized export/imports; some linkages to the domestic economy including a developed but incomplete supply chain and some level of local value addition to the downstream industries – Project financing available by commercial banks. Yet, institutional investors have limited or no access to project finance; nascent bond market with limited corporates financing 	<ul style="list-style-type: none"> – Airport services connecting domestic & international air traffic are not well-developed, only serving fewer routes and the airport safety is worrisome – Significant capacity constraints in its airport cargo facilities for specialized exports and imports with the regional and global market – No local capacity in project development or EPC contracting for airport projects – Minimal loans to corporates are available from private banks or other intermediary investors 	<ul style="list-style-type: none"> – Airport services are highly underdeveloped with limited infrastructure and hence capacity – There is limited access to domestic and global capital markets to the airport sector

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 effects 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 timebound movements, market effects, and indicators are available. Examples of market movements include:

MARKET MOVEMENT	Marginal	Meaningful	Significant	Highly Significant
Competitiveness	<ul style="list-style-type: none"> – Support entry of a new player into the airport sector through a full and partial privatization of a state -owned airport – Support acquisition and/or transfer of management of the airport to the private player – Introduce new technology that improves the efficiency and safety of the airport services – Introduce new industry standards in airport operations and management and/or enforcement by regulator – Improve cost efficiency by promoting successful restructuring and/or planning capacity of the airport – Support implementation of new tariff structures that contribute to financial sustainability and competitiveness of the sector 			
Resilience	<ul style="list-style-type: none"> – Diversify the country’s access options to domestic and international routes (e.g. new alternative airport) – Develop new infrastructure development/upgrade that improve resilience to adverse weather conditions/natural disasters – Develop new infrastructure / systems that improve airport security – Improve cost recovery and/or financial sustainability of the airport – Strengthen the legal and institutional framework for the sector. Support the implementation of airport sector reforms. – Capacity building for regulatory entity and other regulation bodies with impact on relevant targeted performance indicators 			
Integration	<ul style="list-style-type: none"> – Support spatial integration by expanding access to airport services increasing the air traffic capacity and connectivity – Construction of new airport infrastructure linking a remote area to economic center with potential to catalyze other industries – Development of shared infrastructure – Development of local supply chain and local downstream industries. – Support innovative financing products such as Green Bonds issuance with potential for replication by other companies 			

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/regulatory 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.

MARKET LIKELIHOOD	Sector Factors	Political / Regulatory / Policy Factors
Assessment Considerations	<ul style="list-style-type: none"> • Public partner track record in meeting contractual obligations • Presence of funded plan for the development of complementary infrastructure • Extent of political support and social buy-in • Financial viability in the absence of subsidies • Coherence of specific policies and standards across borders • Availability WB support to improve sector frameworks and public institutional capacity 	<ul style="list-style-type: none"> • Presence of established and well-tested regulatory and legal framework • Existence of a capable and independent regulator • Government track record in upholding new policies (measuring risk of policy reversals) • Regulatory scope and capacity • Collaboration track record of participating countries/entities • Availability of WB technical assistance to improve policies and regulatory capacity