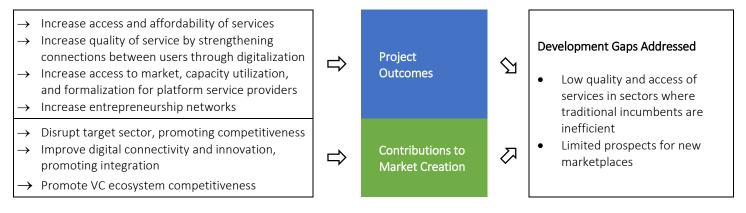


## AIMM Sector Framework Brief Sector Economics and Development Impact Department International Finance Corporation

**Venture Capital – Direct Investment**July 2019

**Development Impact Thesis** – IFC's VC operations take direct equity stakes in start-ups or early stage companies to promote new and innovative service delivery models. These models are based on digital technology or on digital platforms, which increase access and quality for users and promote sector competitiveness by disrupting traditional incumbents or creating new marketplaces. IFC provides financing and advisory services for VC investments which:



**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, stakeholders and environmental 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.

VC investments occur across a number of sectors and products. The development assessment will be undertaken considering the relevant AIMM sector framework, in conjunction with elements from the VC Direct Investment Framework as illustrated below.

PROJECT OUTCOME INDICATORS	CONTRIBUTION TO MARKET CREATION INDICATORS	
In addition to sector-specific indicators from relevant sector framework (see table below)  Access (customers) Growth in customers (%) Transactions per customer (#) Growth in product volume/sales (%) Growth in under-served population reached (%) Number of under-served regions/cities reached (#)  Affordability (customers) Reduction in price (compared to incumbent) (%)  Stakeholders  Stakeholders  Cuality (customers) Reduction in transaction and processing times due to reduced bottlenecks Digitization of supply chain Service standards compared to global standards Change in product variety/customization ICT training for users – not a core indicator  Suppliers Growth in service providers (%) Growth in service providers from under-served segments (%) Increased capacity utilization (%) Improved payment schedule and access to digital financial services	In addition to sector-specific indicators from relevant sector frabelow)  Effect on industry the digital business operates in:  Market Structure  Improved market wide efficiency  Market entry  Innovation  Foster development of new (digital) channels and products in Demonstrate new/improved (digital) processes and business providers  Demonstrate the viability to serving periphery markets, rura customers  Business Practices  Standards relative to best practice  Beyond Industry (in the broader economy/digital economy/VC  Expansion of the digital economy by bringing more custome or Demonstration of digital platform models in the economy Demonstration of the VC ecosystem/digital entrepreneurshing below the product of the product of the VC ecosystem/digital entrepreneurshing below the product of the product of the VC ecosystem/digital entrepreneurshing below the product of the product of the VC ecosystem/digital entrepreneurshing below the product of the product of the product of the VC ecosystem/digital entrepreneurshing below the product of the product of the VC ecosystem of the VC eco	in the market s models among service al areas, or underserved ecosystem) rr and businesses

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
Primary use	<ul> <li>IFC's VC direct investments are equity investments, typically of limited size, that IFC makes in early stage digital companies. These investments focus on a wide variety of sectors, some of which are highlighted below, with new verticals likely to develop over time:</li> <li>Edtech – could include investments in innovative education service delivery models or job platforms in developing countries.</li> <li>Healthtech – could include investments in apps connecting doctors and patients as well as new health service delivery models enabled by technology.</li> <li>Cleantech – could include investments in innovative products in clean energy such as battery storage and distributed generation.</li> <li>E-logistics – could include investments in logistics platforms in last-mile delivery, intra-city and long-haul delivery of goods as well as ride-hailing platforms.</li> <li>B2B Marketplaces and Enterprise Tech – could include investments connecting suppliers and customers of raw materials/packaging/etc.</li> <li>Applied IT/Sandbox – could include investments in big data, geospatial imagery, analytics satellites and emerging technologies.</li> </ul>
Conjunction use with sector specific frameworks	The VC direct investment framework is to be used, when appropriate, in conjunction with sector-specific AIMM frameworks. The VC framework will not tailor to each sector individually given varying approaches. Instead a standalone 'VC - direct investment framework' has been created that can be used on its own or in conjunction with other AIMM sector frameworks. For certain projects (especially those that are product-based innovations or platforms in power, education, healthcare or agriculture), the sector-specific AIMM frameworks should be used first and then supplemented with the VC framework if appropriate. For sectors such as, E-logistics, B2B marketplaces or other emerging or niche verticals the VC framework can suffice.  The VC framework considers 'stakeholder' as the main project outcome and 'Competitiveness' and 'Integration' to be the main market outcomes. Other outcomes can be referenced from sector-specific frameworks if relevant to the project.
Access & efficiency gains	Along the project dimension, the main outcomes that will drive the rating will be access and efficiency gains for users. Access and quality (efficiency) are the primary development outcomes of VC investments.
Competitiveness	Along the market dimension, competitiveness in the sector is anticipated to be the primary market creation outcome since most VC projects are small and/or in niche areas and may not, on their own, be able to have large integration effects (developing the digital economy and/or the broader VC ecosystem). It is expected that only some projects may have such far-reaching market creation ability. Another example of when a project could generate sizeable integration is if there is little or no VC investment in the country and the project is the first ever institutional VC investment; the premise being that the first VC investments in a country are likely to be more ecosystem building than a repeat investment.
Negative externalities	Due to the disruptive nature of VC investments, some negative externalities are expected. VC projects may displace intermediaries, other service providers, and/or other actors in parts of the value chain. These effects will be appraised as far as possible as part of the assessment; in general, the overall efficiency gains to customers/suppliers are likely to outweigh some of these effects.

**Project Outcomes** – The key stakeholders are expected to be both customers and suppliers, both of whom are connected to the platform. Customers can vary depending on the sector the VC project operates in; some examples include: large enterprises, SMEs, students, patients, individuals seeking ride-hailing services, etc. Service providers may be independent workers who are low-income and operate informally; while this will vary based on the sector of the project, some examples include: farmers, drivers, SME merchants, doctors, teachers, etc. The development impact to both stakeholders is inter-linked as platforms tend to have network effects. That is, more value is created as the platform is more widely used.

The development gap is an estimate of the development challenge that is being addressed by the project and provides context for the project's development outcomes. The gap is sector- or segment-specific and is benchmarked against all emerging market countries. The gap assessment uses data collected by IFC from various public sources. The table below illustrates an application of some gap indicators and their benchmarking – however each investment will primarily consider the gap in the sector of which the service is part, and supplement with the information below if needed. Given the innovative nature of typical VC businesses, the gap ranges on affordability and quality/efficiency reported below may not apply to specific circumstances. Apart from gap indicators that are naturally bound, all gap indicators are normalized to be scale-free (e.g. relative to GDP or to total population).

COUNTRY CONTEXT	Low Gap	Medium Gap	Large Gap	Very Large Gap
Access	<ul> <li>Product is readily available at the market price</li> </ul>	<ul> <li>Product available at premium prices, quality deficiencies, and/or constraints to access</li> </ul>	Product minimally available and with substantial constraints to access	- The product/service is not available
Affordability	Country prices are some of the lowest in the region and the region's prices are lower than emerging markets average	<ul> <li>Prices are below emerging markets average</li> </ul>	Prices are in line with emerging markets average	Prices are above emerging markets average
Quality/Efficiency	<ul> <li>The product is better in its quality/efficiency/cost standards compared to emerging markets (in top third of sector indexes)</li> <li>Unemployment is below 4% &amp; informal employment is less than 30%</li> <li>Value added at factor cost per employee in the economy is \$16,500 and above</li> <li>The ICT for B2B and B2C transactions activity level is high within the market (&gt;80th percentile.)</li> <li>Used the internet to buy something online in the past year (% age 15+) is &gt;80th percentile.</li> </ul>	<ul> <li>The product is average in its quality/efficiency/cost standards compared to emerging markets in 2nd third of sector indexes)</li> <li>Unemployment between 4% - 8% &amp; informal employment is between 30% - 50%</li> <li>Value added at factor cost per employee in the economy is between \$7,800 to \$16,500</li> <li>The ICT for B2B and B2C transactions activity level is moderate within the market (41st-80th percentile.)</li> <li>Used the internet to buy something online in the past year (% age 15+) is 41st-80th percentile.</li> </ul>	<ul> <li>The product is significantly lower in its quality/efficiency/cost standards compared to other emerging markets (in bottom third of sector indexes)</li> <li>Unemployment is between 8% - 18% &amp; informal employment is between 50% and 80%</li> <li>Value added at factor cost per employee in the economy is between \$3,000 to \$7,800</li> <li>The ICT for B2Band B2C transactions activity level is low within the market (11th-40th percentile.)</li> <li>Used the internet to buy something online in the past year (% age 15+) is 11th-40th percentile.</li> </ul>	<ul> <li>Product/service has one of the highest costs of all emerging markets</li> <li>Unemployment rate is above 18% &amp; share of informal employment is above 80%</li> <li>Value added at factor cost (at US\$ 2010 prices) per employee in the economy is below US\$3,000</li> <li>The ICT for B2Band B2C transaction activity level is almost none-existent (&lt;11th percentile.)</li> <li>Used the internet to buy something online in the past year (% age 15+) is &lt;11th percentile.</li> </ul>

The core outcomes for VC operations include improvements in Access (for customers and service providers), Affordability and Quality of services. These are the main drivers of the overall project outcome potential:

- 1) Access: VC projects increase access to both customers and service providers by aggregating them onto one platform and improving their ability to connect with one another. Some projects improve reach into previously underserved regions, which grows the number of customers and service providers in the market.
- 2) **Affordability**: VC projects can change traditional cost structures through various process innovations; this is expected to result in more affordable services/products, which can also help service larger market or bring more people (especially the underserved) into the sector.
- 3) **Quality**: VC projects improve efficiency of services by using their digital platforms to reduce bottlenecks in supply chains, enable transactions between customers and service providers to happen faster (cutting time) and more transparently, and provide greater product customization and variety.

Given the variety of sectors covered, the dynamic and innovative nature of VC investments, and the dependence of the growth data on the investment stage of the company (e.g. access outcomes will grow at different rates depending on the maturity of the business), project intensity is assessed using a combination of benchmarks coming from different sectors. Recognizing that this variability and the degree of innovation of some of these projects require an ad-hoc approach to assessing intensity, the below table provides a set of benchmarks that may apply, which are typically complemented with an analysis of other project and market-specific data.

PROJECT INTENSITY	Below Average	Average	Above Average	Significantly Above Average
Access (customers)  Access to services for users Growth in volume of goods sold  Access to under-served regions or segments Increased size of market (by expanding geographic reach or other means)  Access to customers for service providers Increased incomes Increased capacity utilization Improved payment schedule	<ul> <li>Additional customers or connections/interactions: Less than 5x increase in customers over 5 years OR &lt;25,000 customers added over 5 years OR capture &lt;5% of market share</li> <li>Change in product distribution: &lt;2x increase in volume/sales</li> <li>Additional underserved customers reached: less than 10%</li> </ul>	<ul> <li>Additional customers or connections/interactions: 5-7x increase in customers over 5 years OR 25,000-50,000 customers added over 5 years OR capture 5-7% of market share</li> <li>Change in product distribution: 2-4x increase in volume/sales</li> <li>Additional underserved customers reached: 10-25%</li> <li>Access to new markets: Binary (N)</li> </ul>	<ul> <li>Additional customers or connections/interactions: 7-10x increase in customers over 5 years OR 50,000-75,000 customers added over 5 years OR capture 7-10% of market share</li> <li>Change in product distribution: 4-6x increase in volume/sales</li> <li>Additional underserved customers reached: 25-50%</li> <li>Access to new markets: Binary (Y)</li> </ul>	- Additional customers or connections/interactions: >10x increase in customers over 5 years OR >75,000 customers added OR capture >10% of market share  - Change in product distribution: >6x increase in volume/sales  - Additional underserved customers reached: more than 50%
Affordability  • Cheaper costs for services	<ul> <li>Project reduces the product/service's price, relative to current incumbent price or relevant comparator by &lt;5%</li> </ul>	<ul> <li>Project reduces the product/service's price, relative to current incumbent price or relevant comparator by 5-10%</li> </ul>	<ul> <li>Project reduces the product/service's price, relative to current incumbent price or relevant comparator by 10-20%</li> </ul>	<ul> <li>Project reduces the product/service's price, relative to current incumbent price or relevant comparator by &gt;20%</li> </ul>
Quality  Reduction in supply chain bottlenecks Faster transaction time Increased product customization and variety Improved service standards	<ul> <li>No reduction in third parties within the supply chain</li> <li>The project will not digitize any part of the supply chain</li> <li>No change in quality</li> <li>No new product/service or customization added</li> </ul>	<ul> <li>The project reduces some bottlenecks in one part of the supply chain</li> <li>One part of the supply chain is digitized, but the majority remains offline</li> <li>Improvement in standards consistent with general sector trend</li> <li>Either customization to a single existing product/service or 1 new product/service added</li> </ul>	<ul> <li>The project reduces bottlenecks and the use of third parties across the entire supply chain, improving local/national standards significantly</li> <li>The majority of the supply chain has been digitized</li> <li>Improvement in product quality to global standards</li> <li>Customization to a few products/services and a few new product/services added</li> </ul>	- The project reduces bottlenecks and the use of third parties across the entire supply chain; in line with global standards - The entire supply chain has some level of digitization to enhance efficiency - Improvement in product quality to set new global standards - Data analytics heavily used to understand customer preferences; provides customization to multiple products

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 VC direct investments.

PROJECT LIKELIHOOD	Operational Factors	Sector Factors
Assessment Considerations	<ul> <li>Stage of VC investment (for example, seed stage projects may be riskier than Series C)</li> <li>Demonstrated ability to scale</li> <li>Expansion into new regions or new verticals</li> <li>Internet/mobile adoption in the region</li> <li>Level of competition in the market</li> </ul>	Specific regulatory risks and/or infrastructure bottlenecks that may prevent success  Supporting government policies and programs (e.g. pushing the Digital Economy agenda as a priority, pushing ICT usage, etc.)  Presence of state-owned incumbents  Concerted effort within a common WB/IFC strategy (e.g. Digital Economy strategy)

**Contribution to Market Creation** – This assesses the degree to which a project induces market or systemic changes through catalytic effects and focuses on five attributes, of which two (competitiveness and integration) are expected to be more critical for VC operations. The VC AIMM framework only covers Competitiveness and Integration.

The core market the VC framework addresses is the real sector that the project is disrupting (e.g. logistics, education, healthcare, etc.). This is the market referred to under competitiveness. Under integration, the framework will also consider the 'Digital Economy' which refers to the larger e-commerce and digital market in the economy and the 'VC ecosystem' which represents the level of entrepreneurship and venture capital penetration in the country.

A project need not result in market-level effects. Typically, it takes multiple coordinated and well-planned interventions (more than one project, repeat clients, investment plus advisory, some WB/MIGA activity, etc.) to have market impact. Market-level impact implicitly considers past and ongoing WBG investments that affect the likelihood or magnitude of market creation impact expected from the project. The scope is restricted to WBG interventions directly linked to the IFC investment being evaluated. Market creation impacts represent systemic/catalytic shifts in the structure or functioning of a market whose lifetime is not necessarily linked to the project. Effects that can be measured and monitored during the project's monitoring period are emphasized.

The table below focuses on core market attributes that IFC investment projects typically affect. IFC's detailed guidance note includes more information on how IFC investment projects may contribute to changes in the other market attributes.

MARKET TYPOLOGY	Highly Developed	Moderately Developed	Underdeveloped	Highly Underdeveloped
Competitiveness	<ul> <li>Market Structure: Prices are transparent and not considered a significant barrier to access. Market is distributed across a number of actors and competitive. (e.g. market is well distributed with strong private sector participation: state share is less than 20% or independent informal sector provides less than 20% of services)</li> <li>Market Entry: Entry of significant players into the market (e.g. platforms with high levels of technological capabilities are expected to enter)</li> <li>Innovation: Market has a high level of product differentiation and tailoring. Channels, business models and payment services offered are highly digitized</li> <li>Business Practices: Sector is operating in line with global best practice or standards</li> </ul>	<ul> <li>Market Structure: Prices are somewhat transparent but still represent a significant barrier to access for a portion of customers (e.g. SMEs or smaller merchants still find it hard to access services). Market is somewhat concentrated, or some level of fragmentation exists, which leads to inefficiencies (e.g. state share or monopolistic share is 20-50% or independent informal sector provides between 20-50% of services)</li> <li>Market Entry: Moderate entry of new players into the market (e.g. some platforms are expected to emerge)</li> <li>Innovation: Service providers and beginning to improve processes and business models</li> <li>Business Practices: Sector is not considered operating at best practice but with no critical shortfalls and rapidly aspiring improvement</li> </ul>	<ul> <li>Market Structure: Services are expensive and/or not transparent. Price is considered a barrier to access for most customers. Market is dominated by a monopoly or market is highly fragmented and plagued with intermediaries, which leads to costs that are higher than average (e.g. state share or monopolistic share is 50-70% or independent informal sector provides between 50-70% of services)</li> <li>Market Entry: No entry of new players into market. Significant barriers to entry for new providers</li> <li>Innovation: Market offers basic sector service. Service providers are mostly cashbased, lack service differentiation and have minimal ICT/digital usage (primarily offline)</li> <li>Business Practices: Sector is recognized as mostly below average practice</li> </ul>	<ul> <li>Market Structure: Market is nascent/non-existent and is only beginning to develop or services are mainly state owned or monopolistic (&gt;70% of market)</li> <li>Market Entry: No entry of new players into market. High barriers to entry for new providers.</li> <li>Innovation: No digital adoption into the sector and business processes are highly outdated. No transparency and high levels of corruption</li> <li>Business Practices: Sector is recognized to be in the bottom quartile of all emerging markets in terms of business practices and is below its regional average</li> </ul>
Integration	<ul> <li>Digital Economy: Scope and dynamism of the digital economy is relatively advanced. Country ranks between 1 to 21 in the Digital Evolution Index (DEI)</li> <li>VC Ecosystem: Strong and well-connected entrepreneurship ecosystem with availability of talent, good pipeline of startups, some strong success stories and a good regulatory environment and good risk appetite; country ranks between 34 and 1 on the Global Entrepreneurship Index (GEI).</li> </ul>	<ul> <li>Digital Economy: Scope and dynamism of the digital economy is average. Country ranks between 20 to 41 in the Digital Evolution Index (DEI)</li> <li>VC Ecosystem: A developing entrepreneurship ecosystem with availability of talent, fair pipeline of startups, and a few success stories. Regulatory environment and risk appetite still not well developed: Country ranks between 68 and 35 on the Global Entrepreneurship Index (GEI).</li> </ul>	<ul> <li>Digital Economy: Scope and dynamism of the digital economy is minimal.</li> <li>Country ranks between 40 to 60 in the Digital Evolution Index (DEI)</li> <li>VC Ecosystem:         <ul> <li>Entrepreneurship ecosystem in nascent but emerging: country ranks between 102 and 69 on the Global Entrepreneurship Index (GEI).</li> </ul> </li> </ul>	- Digital Economy: Virtually no digital economy. Country not ranked in Digital Evolution Index (DEI), has minimal to no ecommerce and mobile penetration in the country is in the bottom percentile of all emerging countries  - VC Ecosystem: Minimal entrepreneurship ecosystem: Country ranks between 137 and 103 on the Global Entrepreneurship Index (GEI).

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. The most important effects are:

MARKET MOVEMENT	Marginal	Meaningful	Significant	Highly Significant
Competitiveness	The key components of competitiveness are increasing competition levels in the market through increased market wide efficiency, new entry, fostering the development of new (digital) channels and products in the market, demonstrating new and/or improved (digital) processes and business models among service providers and increasing service standards.			
Integration	Beyond the real sector market that is considered under Competitiveness above, the framework will also look at 'integration' which may be achieved by: (i) increasing the wider digital economy by bringing more business online or building enabling infrastructure and (ii) developing the VC ecosystem by increasing the dynamism of digital entrepreneurship in the country and bringing in more institutional venture capital funding.			

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 / Policy Factors	
Assessment Considerations	<ul> <li>First mover advantage</li> <li>Potential resistance to formalization from trade associations and other market players</li> <li>Ability of platform to be adopted (price elasticity of service)</li> </ul>	Government capacity and support to implement policies and program commitments in the wider digital space (e.g. policies to support startups)     Capacity of businesses to absorb the digital services     Macroeconomic and/or regulatory risk	