

Promoting Impact by Creating Markets: Management and Measurement



By Issa Faye and Luyen Tran

This 100th EM Compass note explains why it is important to “create markets” to promote development, and how development finance institutions and impact fund managers can draw on IFC’s Anticipated Impact Measurement and Monitoring system to assess the contribution of their investments to both market creation and project outcomes.

As the largest global development institution focused on the private sector in developing countries,¹ IFC has a rich history of creating markets through its mandate of “encouraging the growth of productive private enterprise.”² IFC’s founding vision was to use its own investments as catalysts to mobilize private investment in markets where private capital had not been available on reasonable terms. IFC then added advisory services to complement its investment activities. These two tools—investment and advisory services—have since evolved and significantly contributed to IFC’s six decades of experience in creating and developing markets.³

IFC’s renewed strategy for market creation—In 2017, IFC renewed and significantly stepped up its strategic focus on market creation with a more deliberate approach that prioritized interventions with the greatest potential to develop new markets and bring systemic change to underperforming markets. Under its current strategy, IFC began to systematically identify binding constraints to market development at the country and sector levels, and then develop investment strategies combined with market development through institutional and governance reform embedded in World Bank policy advice and lending. By doing so, IFC now aligns its investments more closely with its advisory services and leverages

the World Bank’s strengths on policy, which reinforces its capacity to undertake “upstream” activities that can pave the way for market creation and downstream investments. So, why this focus on market creation, and why now?

The Importance of Market Creation in Narrowing Development Gaps

A persistent \$2.5 trillion annual financing gap remains a barrier to achieving the Sustainable Development Goals (SDGs).⁴ With diminishing fiscal space and the burdens of financing current social and economic demands, governments over the past decade have acknowledged the central role that private finance must play in narrowing the SDG financing gap. The pandemic has made the challenge even greater and the need for private sector involvement even more urgent.

Creating markets is critical to catalyzing private finance at scale, to move from billions to trillions and achieve the SDG targets (Box 1).⁵

Well-functioning markets are critical to economic development—When they work well, markets incentivize firms to compete, giving rise to self-reinforcing, productivity-boosting innovation and specialization that benefits society, resulting for instance in lower prices. On the

About the Authors

Issa Faye, Director, Sector Economics and Development Impact, Economics and Private Sector Development, IFC. His email is ifaye@ifc.org.

Luyen Tran, Chief Development Impact Officer, Sector Economics and Development Impact, Economics and Private Sector Development, IFC. His email is ltran2@ifc.org.

BOX 1 When Economic Success leads to Societal Progress—The Promise of “Billions to Trillions”

Businesses realize that unmet societal needs, not just economic needs, define markets. Consequently, business success occurs alongside societal progress. Risk-return considerations increasingly take into account, for instance, the need to ensure sustainability throughout supply chains, and the benefits of increasing the customer base to include unserved customers at the base of the pyramid. Other attributes of successful markets—competitiveness, integration, and resilience—also help scale solutions to work toward the SDGs. More and more examples of business solutions to development challenges are surfacing to demonstrate how private business can deliver profit and development impact simultaneously. A growing class of international investors are making investments to generate measurable positive social or environmental impact alongside a financial return.

Source: World Bank Group – IMF, 2015. “From Billions to Trillions: Transforming Development Finance – Post-2015 Financing – Multilateral Development Finance, No. 36.

other hand, inefficient markets with limited competition, perhaps as a result of weak regulatory guardrails or limited administrative and entrepreneurial capacity, can severely hamper developmental outcomes. Market failures also shape the future of an economy: they deter investment, weaken business sentiment, and disrupt policies. This can set back a country’s economic trajectory, exacerbate gender inequality and environmental damage, and impair markets’ ability to withstand financial and environmental shocks.

By systematically targeting and supporting the creation of well-functioning markets, IFC and other development finance institutions (DFIs) can achieve development impact well beyond the confines of individual investment projects. Since DFI annual investment volumes, even collectively, are small compared to overall investments in emerging markets, adopting a strategic, coordinated, catalytic approach is core to DFIs’ mandates. IFC therefore sees its role as a facilitator within a broader context that involves many other actors, supporting investments that generate and then build on systemic improvements in the structure and functioning of markets.

Managing for (Creating Markets) Impact

Traditionally, the development impact methodologies that DFIs have used have focused on project outputs or outcomes. This approach needed to be adjusted and expanded in order to capture market-level effects—not only *ex post*, but at the time of the investment decision.

In order to more effectively measure the development impact of its investment and advisory projects, IFC launched its Anticipated Impact Measurement and Monitoring (AIMM) system in 2017. An *ex-ante* project assessment and monitoring tool, the AIMM framework draws on evaluation best practices, research findings, and consultations with other development finance institutions. The framework has helped operationalize IFC’s strategy (“IFC 3.0”) by providing the analytical approaches to assess not only the direct and indirect effects of IFC’s interventions, but also the systemic changes that accrue from a purposeful investment to support the development of a market.

The AIMM system incorporates several novel approaches to measuring development impact of investment and advisory projects.

- It assesses development impact along two dimensions: project outcomes that reflect direct and indirect effects linked to the intervention, and contributions to market creation that reflect catalytic effects that the intervention could potentially trigger within its relevant market.
- It incorporates both country context and project design features to arrive at an overall estimate of a project’s potential to generate development impact.
- It expands the standard focus on direct stakeholder effects by including economy-wide effects, which are estimated based on the most relevant economic modeling techniques. In so doing, it considers a range of environmental effects beyond greenhouse gas emissions (for example, water efficiency, biodiversity, and adaptation).

The AIMM system draws on a reservoir of sector-specific framework guidance notes for data and analytical input. These are “living documents” that are continuously expanded and refined. Currently, there are 25 sector frameworks with around 200 indicators to assess the extent of development challenges that countries face (e.g., rate of informal employment, share of small enterprises that lack sufficient funding, etc.) and 600 indicators that seek to measure outcomes associated with IFC’s interventions (e.g., number of smallholder farmers reached, share of population with access to electricity, etc.). For each of these elements, IFC has created normalized benchmarks (where possible) to

assess impact contributions using available data, evidence, and technical expertise within IFC, the World Bank, and other recognized external sources, including partner development finance institutions.⁶

The monitoring of outcomes is also an essential component of the AIMM system, as it links ex-ante assessments with the learning and accountability function embedded in IFC's existing results measurement system. Each development outcome claim in an IFC project is explicitly tied to one or more monitoring indicators that are regularly tracked during portfolio supervision. By tracking these indicators, the AIMM system links project ratings with real-time results measurement findings. Project monitoring thus enables IFC and private investors to set ambitious yet achievable targets, track and report on progress, and generate an inventory of lessons from portfolio developments to improve the selection and design of future projects.⁷

Measuring expected market outcomes—The AIMM system characterizes IFC activities that contribute to creating markets through four drivers of systemic change, referred to as “channels” for promoting markets that are more competitive, resilient, integrated, inclusive, and sustainable:

- **Market enabling**—Through its upstream work and coordination with World Bank policy support for sector reforms, IFC helps create the frameworks within which markets can function, including policy, regulation, platforms, and financial and other interventions that help optimize how market incumbents are organized and how market participants compete on a more level playing field for customers. A recent example is IFC's work in the establishment and deployment of wholesale wireless networks (Red Compartida) in Mexico.⁸ Launched from newly-enacted constitutional reforms that establish Internet access as a right for all, Red Compartida (“shared network”) allowed new entrants to compete in Mexico's wireless network market while forgoing the traditional yet prohibitive costs of building mobile network infrastructure from the ground up. Not only does this lay the foundation for a more level playing field in the Mexican telecoms sector, Red Compartida also offers wireless connectivity to more than 90 percent of Mexico's population (over 110 million people) and should achieve full wireless coverage upon completion. The new, affordable Internet coverage is expected to trigger market entry by digital entrepreneurs, facilitate the creation of smart cities, and improve rural access to banking, health, and education services.
- **Fostering innovation**—IFC also fosters innovation by supporting new products, processes, standards, and

financing instruments. Innovative solutions can increase productivity and enhance market competition and trade competitiveness, thereby contributing to market creation. An example is Bank South Pacific (BSP), the largest retail and commercial bank in Papua New Guinea. To develop its retail and SME businesses, the bank used the power of FinTech to develop digital financial services that allow it to reach customers in remote locations without having to develop an expensive branch network.⁹ IFC supported the effort with funding and advisory services, providing advice on project rollout, developing an agent network, and promoting mobile banking. Within a year, BSP added more than 100,000 new users for its mobile banking initiative. FinTech investments have also created markets for financial inclusion by disrupting the traditional financial intermediation industry and providing new financial delivery models for the poor and the vulnerable.¹⁰

- **Generating demonstration and replication effects**—IFC interventions can help demonstrate the commercial viability of new markets to investors. These interventions include providing support to a new entrant in the market, assisting an incumbent launching a new product in an already established market, or helping a client issue a new financing instrument to mobilize capital. Demonstration effects can be observed over time when similar competing products are launched, or through the scaling of a product or financial instrument. This was evident in the Eastern African Submarine Cable System (EASSy), where IFC developed a unique financing structure that generated important demonstration effects for the entire East Africa region, including a catalytic effect in the development of a separate submarine cable in the region.
- **Enhancing skills, capacities, and governance structure at firm level**—Finally, through its advisory service offerings and parallel World Bank policy support, IFC helps build capacity and create standards that open new market opportunities. Firm governance, finance, and corporate capabilities are critical to the creation of markets. IFC's role in enhancing the skills, capacities, and governance at the firm level was evidenced in various case studies, including an IFC investment and advisory project that improved the governance structure of an investee microfinance institution in Peru, and thus contributed to market creation and financial inclusion objectives.

The Relevance of IFC's AIMM System to the Work of Impact Fund Managers

Impact fund managers have long recognized the importance of cataloguing and quantifying the impact of their investments.

Doing so helps inform prospective investors of the specific contribution that certain investments make to the investor's priority social and environmental objectives. The challenge has been how to do this in a credible and cost-effective way. IFC's AIMM system offers several insights that impact fund managers can leverage to strengthen their impact measurement and monitoring practices. Four are described here.

How can investors use existing IFC sector frameworks and rating exercises to measure and monitor impact?

IFC's AIMM sector frameworks provide a range of outcome indicators that impact fund managers can reference to assess how well their investments are achieving their intended goals. More broadly, work currently underway across different forums, including through the steering group of the Operating Principles for Impact Management and the group of multilateral and bilateral development institutions collaborating on the Harmonized Indicators for Private Sector Operations (HIPSO), is identifying ways to operationalize different facets of this challenge.

These indicators are not only sector specific; many have the added virtue of being harmonized with indicators employed by other development finance institutions and impact fund managers. When paired with the relevant country gap measures, the tracking indicators employed in these sector frameworks can provide a credible basis upon which impact fund managers can assign both ex-ante and portfolio supervision impact scores.

How can impact fund managers draw on the AIMM framework to gauge country context?

One of the most consequential elements of the AIMM system is its incorporation of country context in impact assessment. This practice acknowledges that impact contributions are relative and depend on prevailing circumstances.¹¹

For example, an investment that delivers 300 jobs will make a more consequential contribution to poverty reduction when those jobs are delivered in a low-income country with high unemployment, rather than in an upper-middle income country near full employment. IFC's development of country gaps in over two dozen sector-specific frameworks can be used by impact managers to assess an investment's relative contribution to development impact by contextualizing the investment's outcomes (jobs created, farmers reached, kilometers of roads paved, etc.) so that there is a common understanding of how important such effects are to the development agenda. In fact, the new JPMorgan Development Finance Institution, launched in January 2020, assesses the impact of its investments based on rating approaches developed by IFC.¹²

How can the AIMM framework's market typologies help investors define the current state and potential of a market?¹³

The AIMM sector frameworks assess market development gaps by mapping existing markets into a typology of market "stages." That is, in order to assess how an IFC investment can improve the structure and functioning of a market, IFC economists first need to establish how advanced the market is.

While the work of assessing changes in market structure and functioning continues to evolve at IFC, knowing where a market sits in its development is consequential to the assignment of an impact rating. For example, generating a given amount of systemic change in a highly underdeveloped market seems more consequential than doing so in a moderately developed market. Therefore, the investment in the underdeveloped market could generally rate higher in terms of impact potential under the framework. In the future, and as convergence on the measurement of direct and indirect effects on stakeholders emerges, impact fund managers may want to analyze how their interventions may catalyze systemic changes in market structure and functioning. By using market typologies found in sector frameworks, impact fund managers are able to contextualize their contributions to market development.

This may motivate investors to allocate more of their investments to those sectors that are least developed, especially if their impact investor base seeks greater development impact potential for systemic market changes. IFC has broad ambitions for expanding the development of market typologies across all sectors in which it has investments. IFC invites those investors with specific knowledge about the development of a market to collaborate on developing a database of market typologies across all emerging markets and developing countries.

How can impact fund managers better understand and use the AIMM framework's data and analytical building blocks, including in relation to market creation?¹⁴

For more information on the AIMM framework, IFC has made available a variety of resources to the public on its website. These can be found at the following links:

- [An overview of the AIMM framework¹⁵](#)
- [AIMM sector frameworks¹⁶](#)

In addition, IFC's Sector Economics and Development Impact department periodically offers workshops on the AIMM system as well as tailored engagements with interested parties on development impact measurement and monitoring approaches.¹⁷

Conclusion

With well-functioning markets so critical to economic development, an impact management system like IFC's AIMM framework offers impact fund managers a useful tool to assess their investments' contributions to more competitive, resilient, sustainable, integrated, and inclusive markets. By supporting positive changes in the structure and functioning of markets, impact fund managers—through their purposeful investments—have the capacity to improve access to products and services, generating positive financial and societal returns beyond the impact of individual investments. IFC welcomes greater collaboration with impact fund managers in this context and stands ready to support our shared ambition of creating markets that support inclusive and sustainable growth.

ACKNOWLEDGMENTS

The authors of this note are grateful for the guidance provided by Hans Peter Lankes during the period that IFC's Anticipated Impact Measurement and Monitoring (AIMM) was established. Mr. Lankes is Visiting Professor in Practice, Grantham Research Institute on Climate Change and the Environment, London School of Economics, London, UK; he served as Vice President, Economics and Private Sector Development, IFC, until January 2021. The authors would also like to thank the

following colleagues for their review and suggestions: within Economics and Private Sector Development, IFC: Issa Faye, Director, Sector Economics and Development Impact; Neil Gregory, Chief Thought Leadership Officer; Camilo Mondragon Velez, Principal Research Economist, Sector Economics and Development Impact; Arthur Karlin, Consultant, Blended Finance; Friedemann Roy, Advisor to the Vice President, Economics and Private Sector Development, IFC; Thomas Kerr, Manager, Partnerships, Communications and Outreach, IFC; Wen Kang Chow, Research Assistant Economics and Private Sector Development, IFC; and Thomas Rehermann, Senior Economist, Economics and Private Sector Development, IFC.

Please see the following reports and selected EM Compass Notes on the role of markets in development in emerging markets: *Artificial Intelligence in Emerging Markets—Opportunities, Trends, and Emerging Business Models* (report, September 2020); *Reinventing Business Through Disruptive Technologies - Sector Trends and Investment Opportunities for Firms in Emerging Markets* (report, March 2019); *How Technology Creates Markets - Trends and Examples for Private Investors in Emerging Markets* (report, March 2018); *Accelerating Digital Connectivity Through Infrastructure Sharing* (Note 79, February 2020); *Creating Domestic Capital Markets in Developing Countries: Perspectives from Market Participants* (Note 77, Jan 2020); *The Role of Artificial Intelligence in Supporting Development in Emerging Markets* (Note 69, July 2019).

¹ IFC. n.d. "About IFC." https://www.ifc.org/wps/wcm/connect/CORP_EXT_Content/IFC_External_Corporate_Site/About+IFC_New/

² IFC Articles of Agreement

³ See for a detailed history of IFC at its 60th anniversary: IFC. 2016. "The First Six Decades – Leading the Way in Private Sector Development."

⁴ United Nations. n.d. "UN Secretary-General's Strategy for Financing the 2030 Agenda." <https://www.un.org/sustainabledevelopment/sg-finance-strategy>

⁵ IFC. 2015. "From Billions to Trillions: Transforming Development Finance Post-2015 Financing for Development: Multilateral Development Finance."

⁶ IFC. 2020. "IFC AIMM Workshop." <https://web.cvent.com/event/ca67f290-b27a-42eb-bc3e-1deb14f79762/summary?locale=en-US&ci=UNa1SZePHkq7YMbqvsCfeA>

⁷ IFC. n.d. "Anticipated Impact Measurement and Monitoring." https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/development+impact/aimm

⁸ IFC. 2018. "Reshaping Mexico's Telecom Industry with Connectivity for All." https://www.ifc.org/wps/wcm/connect/news_ext_content/ifc_external_corporate_site/news+and+events/news/impact-stories/reshaping-telecom-industry-mexico

⁹ For more information, please see: IFC. n.d. "Introducing Mobile Banking to Papua New Guinea." <https://www.ifc.org/wps/wcm/connect/067b39c9-0963-4b42-ab6a-a94309a8fa38/BSP+Case.pdf?MOD=AJPERES&CVID=mGp3gF8>

¹⁰ See website "Fintech at IFC": https://www.ifc.org/wps/wcm/connect/industry_ext_content/ifc_external_corporate_site/infrastructure/priorities/telecoms_media_technology/fintech

¹¹ IFC. 2019. "AIMM General Guidance Note - Project Assessment and Scoring Guidance Note." March 2019. <https://www.ifc.org/wps/wcm/connect/45565802-1b1c-4697-a4cf-45d675dd5640/AIMM-General-Guidance-Note-Consultation.pdf?MOD=AJPERES&CVID=mDqGyqA>; see also: IFC. 2020. "Measuring Up". Section within IFC Annual Report 2020, pp. 89-96. <https://www.ifc.org/wps/wcm/connect/0d16e9f4-8f28-4422-9477-22c7c318856e/IFC-AR20-Measuring-Up.pdf?MOD=AJPERES&CVID=nljioQJ>

¹² See: <https://www.jpmorgan.com/content/dam/jpm/cib/complex/content/news/2020-dfi-announcement/pdf-1.pdf>

¹³ IFC. 2019. "IFC's Anticipated Impact Measurement and Monitoring (AIMM) System: Project Assessment and Scoring Guidance Note." <https://www.ifc.org/wps/wcm/connect/45565802-1b1c-4697-a4cf-45d675dd5640/AIMM-General-Guidance-Note-Consultation.pdf?MOD=AJPERES&CVID=mDqGyqA>

¹⁴ IFC. 2019. "IFC's Anticipated Impact Measurement and Monitoring (AIMM) System: Project Assessment and Scoring Guidance Note." <https://www.ifc.org/wps/wcm/connect/45565802-1b1c-4697-a4cf-45d675dd5640/AIMM-General-Guidance-Note-Consultation.pdf?MOD=AJPERES&CVID=mDqGyqA>

¹⁵ See for details IFC's website about AIMM: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/development+impact/aimm

¹⁶ See for details: https://www.ifc.org/wps/wcm/connect/topics_ext_content/ifc_external_corporate_site/development+impact/aimm/measuring-impact/measuring-impact. See also IFC. 2020. "IFC Annual Report 2020," pp. 89-96; and also https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Development+Impact/aimm/EIAF/

¹⁷ For more details see: https://www.ifc.org/wps/wcm/connect/Topics_Ext_Content/IFC_External_Corporate_Site/Development+Impact/Contacts/

Additional Selected EM Compass Notes Previously Published by IFC Thought Leadership

FEBRUARY 2021

Note 99: Blended Concessional Finance and COVID-19

JANUARY 2021

Note 98: Private Credit in Emerging Markets

Note 97: How Artificial Intelligence Can Help Advance Post-Secondary Learning in Emerging Markets

DECEMBER 2020

Note 96: Innovation, Investment, and Emerging Opportunities in Today's Textile and Apparel Value Chain

Note 95: How the Tourism Sector in Emerging Markets is Recovering from COVID-19

NOVEMBER 2020

Note 94: Deep Tech Solutions for Emerging Markets

Note 93: Impacts of COVID-19 on the Private Sector in Fragile and Conflict-Affected Situations

OCTOBER 2020

Note 92: How Natural Capital Approaches Can Support Sustainable Investments and Markets

SEPTEMBER 2020

Note 91: Artificial Intelligence and Healthcare in Emerging Markets

Note 90: Lessons for Electric Utilities from COVID-19 Responses in Emerging Markets

AUGUST 2020

Note 89: Social Bonds Can Help Mitigate the Economic and Social Effects of the COVID-19 Crisis

Note 88: What African Industrial Development Can Learn from East Asian Successes—The Role of Complexity and Economic Fitness

JULY 2020

Note 87: AI Investments Allow Emerging Markets to Develop and Expand Sophisticated Manufacturing Capabilities

JUNE 2020

Note 86: Leveraging Big Data to Advance Gender Equality

Note 85: Artificial Intelligence Innovation in Financial Services

MAY 2020

Note 84: Leveraging Inclusive Businesses Models to Support the Base of the Pyramid during COVID-19

Note 83: What COVID-19 Means for Digital Infrastructure in Emerging Markets

Note 82: Artificial Intelligence in Agribusiness is Growing in Emerging Markets

APRIL 2020

Note 81: Artificial Intelligence in the Power Sector

MARCH 2020

Note 80: Developing Artificial Intelligence Sustainably: Toward a Practical Code of Conduct for Disruptive Technologies

Note 80a: IFC Technology Code of Conduct—Progression Matrix—Public Draft—Addendum to Note 80

FEBRUARY 2020

Note 79: Accelerating Digital Connectivity Through Infrastructure Sharing

Note 78: Artificial Intelligence and the Future for Smart Homes

JANUARY 2020

Note 77: Creating Domestic Capital Markets in Developing Countries: Perspectives from Market Participants

DECEMBER 2019

Note 76: Artificial Intelligence and 5G Mobile Technology Can Drive Investment Opportunities in Emerging Markets

NOVEMBER 2019

Note 75: How Artificial Intelligence is Making Transport Safer, Cleaner, More Reliable and Efficient in Emerging Markets

OCTOBER 2019

Note 74: Bridging the Trust Gap: Blockchain's Potential to Restore Trust in Artificial Intelligence in Support of New Business Models

Note 73: Closing the SDG Financing Gap—Trends and Data

SEPTEMBER 2019

Note 72: Blended Concessional Finance: The Rise of Returnable Capital Contributions

Note 71: Artificial Intelligence: Investment Trends and Selected Industry Uses

AUGUST 2019

Note 70: How Insurtech Can Close the Protection Gap in Emerging Markets

JULY 2019

Note 69: The Role of Artificial Intelligence in Supporting Development in Emerging Markets

JUNE 2019

Note 68: Basic Business Models for Banks Providing Digital Financial Services in Africa

APRIL 2019

Note 67: The Case for Responsible Investing in Digital Financial Services

MARCH 2019

Note 66: Blended Concessional Finance: Governance Matters for Impact

Note 65: Natural Gas and the Clean Energy Transition

FEBRUARY 2019

Note 64: Institutional Investing: A New Investor Forum and Growing Interest in Sustainable Emerging Markets Investments

JANUARY 2019

Note 63: Blockchain and Associated Legal Issues for Emerging Markets

Note 62: Service Performance Guarantees for Public Utilities and Beyond—An Innovation with Potential to Attract Investors to Emerging Markets

NOVEMBER 2018

Note 61: Using Blockchain to Enable Cleaner, Modern Energy Systems in Emerging Markets

Note 60: Blended Concessional Finance: Scaling Up Private Investment in Lower-Income Countries

OCTOBER 2018

Note 59: How a Know-Your-Customer Utility Could Increase Access to Financial Services in Emerging Markets

Note 58: Competition Works: Driving Microfinance Institutions to Reach Lower-Income People and the Unbanked in Peru

SEPTEMBER 2018

Note 57: Blockchain Governance and Regulation as an Enabler for Market Creation in Emerging Markets

JULY 2018

Note 56: A Practical Tool to Create Economic Opportunity for Low-Income Communities

JUNE 2018

Note 55: Peru's Works for Taxes Scheme: An Innovative Solution to Accelerate Private Provision of Infrastructure Investment

MAY 2018

Note 54: Modelo Peru: A Mobile Money Platform Offering Interoperability Towards Financial Inclusion

APRIL 2018

Note 52: Crowding-In Capital: How Insurance Companies Can Expand Access to Finance

JANUARY 2018

Note 48: Increased Regulation and De-risking are Impeding Cross-Border Financing in Emerging Markets

OCTOBER 2017

Note 47: From Farm to Fork: Private Enterprise Can Reduce Food Loss Through Climate-Smart Agriculture

Note 46: Precision Farming Enables Climate-Smart Agribusiness

SEPTEMBER 2017

Note 45: Beyond Fintech: Leveraging Blockchain for More Sustainable and Inclusive Supply Chains

Note 44: Blockchain in Financial Services in Emerging Markets—Part II: Selected Regional Developments

Note 43: Blockchain in Financial Services in Emerging Markets—Part I: Current Trends

AUGUST 2017

Note 42: Digital Financial Services: Challenges and Opportunities for Emerging Market Banks

JULY 2017

Note 41: Blockchain in Development—Part II: How It Can Impact Emerging Markets

Note 40: Blockchain in Development—Part I: A New Mechanism of "Trust?"

Note 39: Technology-Enabled Supply Chain Finance for Small and Medium Enterprises is a Major Growth Opportunity for Banks

MAY 2017

Note 38: Can Blockchain Technology Address De-Risking in Emerging Markets?

APRIL 2017

Note 37: Creating Agricultural Markets: How the Ethiopia Commodity Exchange Connects Farmers and Buyers through Partnership and Technology

Note 35: Queen Alia International Airport—The Role of IFC in Facilitating Private Investment in a Large Airport Project

MARCH 2017

Note 34: How Fintech is Reaching the Poor in Africa and Asia: A Start-Up Perspective

Note 33: Creating Markets in Turkey's Power Sector

FEBRUARY 2017

Note 32: Private Provision of Education: Opportunities for Emerging Markets

Note 31: Improving Emerging Markets Healthcare Through Private Provision

JANUARY 2017

Note 30: Masala Bond Program—Nurturing A Local Currency Bond Market

IFC
2121 Pennsylvania Avenue, N.W.
Washington, D.C. 20433 U.S.A.

ifc.org/ThoughtLeadership



Creating Markets, Creating Opportunities

MAR 2021