Converting Emerging Markets to Green Finance: Amundi and the IFC

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Abstract

By the end of 2019, the International Finance Corporation (IFC) had been funding a range of environmental projects for several decades, raising approximately \$25 billion for this purpose. Recently, much of this effort was focused on climate mitigation and adaptation projects in emerging markets. While these markets carried certain risks for investors, they also offered promising opportunities: IFC had identified about \$29 trillion of investment opportunities in emerging markets that could be partially funded by bonds issued for a particular environmental purpose, known as "green bonds." What was needed, then, was a method of funding that supported and opened up emerging markets for greater investment, stimulating not only global demand for green bonds but also the supply of green bonds in these markets. With this goal in mind, together, IFC and asset manager Amundi had launched the Amundi Planet Emerging Green One (EGO) fund in March 2018. The fund was the largest green bond fund targeting emerging markets to date, and it already seemed to be delivering excellent results. But would its unique focus and innovative financial structure continue to pay off? What lessons could it offer about climate-smart financing going forward? Were there any factors or limitations that could affect its success? This case considers these questions from the perspectives of two driving forces behind the EGO fund: its architect, IFC Chief Investment Officer Jean-Marie Masse, and Amundi's Co-Head of Institutional Clients Coverage, Frédéric Samama.

Part A: Innovation and the Capital Markets

Introduction

December 2019: Frédéric Samama, Co-Head of Institutional Clients Coverage at Amundi, was working late in his Paris office. His tiredness lifted, however, as he reviewed the 2019 financial data in front of him. The data pertained to Amundi's ground-breaking green bond fund focused on emerging markets, the Amundi Planet Emerging Green One (EGO) fund. Initiated by, and launched in partnership with, the International Finance Corporation (IFC), EGO aimed to increase emerging markets' capacity to fund climate-smart investment.

The more he read, the more Samama knew he had been right about the product's merits. "This product is a way to create a bridge between pools of green savings and the needs of green infrastructure in emerging markets," he had told prospective investors before its March 2018 launch. "It's very innovative." Yet, he knew that like all innovations, the EGO fund was not without risk. Amundi, with its massive asset base and decades of experience in emerging markets, had been chosen as fund manager to mitigate this risk. Samama wanted to ensure that he and his team did everything possible to safeguard the fund's ongoing success.

Half-way around the world, in Washington, D.C., the fund's architect, IFC Chief Investment Officer Jean-Marie Masse, was also reflecting on EGO. The idea behind the Amundi–IFC partnership and the fund itself had been to increase the green bond market—a goal of Masse's that "was years in the making." Today, the fund was the largest green bond fund targeting emerging markets to date, but Masse wanted to scale it even further.

Both Samama and Masse were turning over the same questions in their minds: Would EGO's unique focus and innovative financial structure continue to pay off? How could it grow to its maximum potential? What lessons could it offer about climate-smart financing going forward? Several indicators showed that the time to invest in sustainable, climate-friendly development was now. IFC and Amundi were determined to stay at the forefront of these new opportunities.

Climate Change and the Need for Sustainable Finance

Supranational funding organizations were devoting increasing resources to climate change, geared toward funding projects for both mitigation and adaptation projects. Mitigation projects were those that yielded a range of positive climate impacts, such as reduced greenhouse gas generation, water conservation, and preservation of natural capital to reduce deforestation, coastal erosion, and topsoil loss. Adaptation projects were those concerned with adapting physical, social, and economic infrastructure to the impacts of climate change, which included higher temperatures, increased weather uncertainty, rising sea levels, increased river flooding, and infrastructure damage. The full costs of climate change were staggering, and all signs indicated they would only increase in the coming years. Moreover, many of the countries suffering the worst effects of climate change were also among the world's poorest. There was a dual need to fund climate-smart investments worldwide, and to channel capital from developed markets to less developed markets for this particular purpose; in short, the market was primed for green bonds.

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¹ Ruth Hupart, "Cracking Open the Green Bond Market," World Bank Blogs, March 28, 2019, accessed February 27, 2020, https://blogs.worldbank.org/climatechange/cracking-open-green-bond-market-what-s-next.

The Green Bond Market

Since their introduction in 2008, bonds issued for a particular environmental purpose—known as "green bonds"—had quickly become a popular form of financing climate-related projects. In most respects, green bonds were indistinguishable from "vanilla" bonds of the same issuer. The only difference between the two categories could be found in the use of proceeds section in the legal documentation accompanying a bond issue. For most vanilla bonds, the use of the proceeds to be raised was discussed in non-specific language, usually indicating "general corporate purposes." In contrast, green bonds typically outlined very specific targeted objectives, often relating to environmental issues.

Green bonds fulfilled certain objectives for both investors and issuers. For investors, company management teams provided them with the targeted objectives of the green bond, which were subsequently validated by independent third parties in terms of both quality and effectiveness. For issuers, green bonds increasingly provided a vehicle, and an identifiable group of investors, for raising funds for certain dedicated purposes. In fact, some companies had actually expanded their investor base by issuing green bonds.

Green bond issuance grew robustly from 2008 to 2018. While still representing a very small portion of the global bond market, it had reached a record level in 2019 (US\$250 billion²) and was set to rise even higher in the near future (see Table 1 below).³

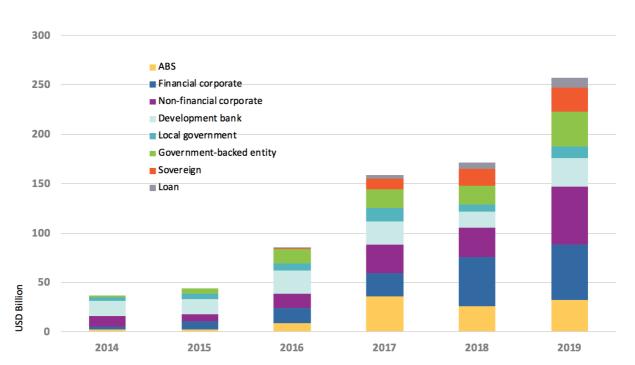


Table 1: Green bond issuance growth

Source: Climate Bonds Initiative. Data as of December 31, 2019.

Green Bonds in Emerging Markets: A Possible Solution in Problem Areas

Emerging markets (EMs) were more exposed than others to potential climate risks. These climate vulnerable countries were facing economic losses as they struggled to manage the costs of not only

² All case figures are in U.S. dollars unless otherwise noted.

³ Moody's Corporation, 2018.

the accelerating physical impacts of climate change, but also an increasing fiscal burden. The major credit rating agencies had discussed climate risks as being potentially material to sovereign ratings. Research indicated that, due to climate change, interest rates on vulnerable countries' government debt were already higher than they would otherwise be. This effect had a broad impact on national measures of the cost of capital.

National governments had to develop programs that would preserve physical and economic resilience to minimize these costs. Governments seeking to borrow internationally needed to monitor the fiscal factors that could affect their country's sovereign credit profile; this was particularly true for the large number of climate vulnerable countries that were not in a position to issue international sovereign debt (i.e., because they lacked an investment-grade credit rating or were limited in further issuance by their current debt levels). Improved resilience would not only help safeguard sovereign credit profiles, but also had the potential to increase the rate of return for investment. Clearly, there were broad economic, fiscal, and social benefits to be gained by building resilience to climate change.

Green bonds had been put forward as a possible option to fund infrastructure upgrades as well as a variety of other adaptation and mitigation investments in EM countries. Indeed, green bonds represented a very attractive option for those countries that were able to issue international debt. For example, Fiji and Kenya both issued sovereign green bonds in 2017, and China continued to issue both domestic and international green bonds. By March 31, 2019, EMs (including China) accounted for nearly one-fifth of green bond issuance overall. However, for the reasons outlined above, there was a perceived need to move away from sovereign issuance and to develop and expand local capital markets to fund climate risk adaptation projects. At the same time, many EM countries were unable to issue international debt or constrained from issuing further amounts. For these countries, such debt issuance would require external support for the costs incurred.

This problem was a pressing one for IFC, which had been funding both environmental projects and EMs for several decades.

The International Finance Corporation

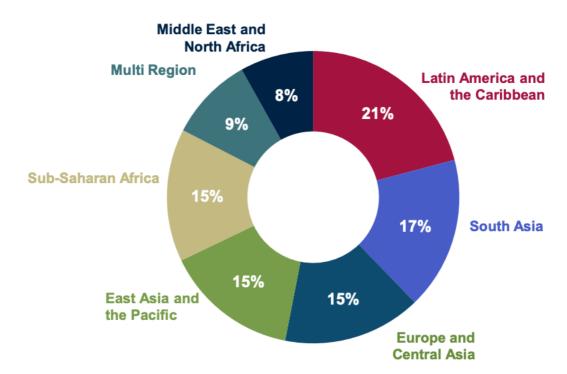
Created in 1956 as the private sector arm of the World Bank Group, IFC was one of the mechanisms designed to fund economic and political reconstruction and development in the aftermath of the Second World War. In 2019, IFC was owned by its 185 member countries and remained the largest supranational institution focused on the development of the private sector in a wide range of countries.

Unlike the World Bank, which largely funded projects through national governments, IFC focused almost entirely on private sector development in EMs. Like other supranational lending organizations, however, IFC was designed to provide loans to various entities—in IFC's case, non-governmental entities. In many cases, IFC actually helped create these entities within countries as part of its funding efforts. As a result, IFC was deeply involved in economic and financial policy formation and implementation, particularly in the development of domestic financial markets in countries lacking appropriate regulatory mechanisms.

IFC raised funds for its programs through international debt markets. Like the World Bank, IFC carried the highest possible rating (AAA) from all of the major credit rating agencies, largely because of the strong backing of national governments. The organization was a regular bond issuer in international credit markets. Its own investment account (not including collateral investments from other entities) stood at \$58 billion at the end of calendar year 2019. During the 2019 fiscal year (ending June 30, 2019), IFC invested in 269 projects globally, at a cost of \$29 billion (including \$10 billion from other investors).

As of June 30, 2019, IFC's outstanding debt totalled around \$54 billion, while its investment portfolio spanned about 125 countries and 2,000 companies. The five largest country exposures represented around 33% of total exposure. The regional breakdown can be seen in Figure 1, below.

Figure 1: IFC regional committed portfolio diversification



Source: International Finance Corporation, IFC Debt Capital Market Solutions, 2019 (figures as of June 2019).

IFC's History with Green Bonds and Emerging Markets

For several decades, IFC had been funding a range of environmental projects, raising approximately \$25 billion for this purpose. In this respect, its mission paralleled those of other supranational lenders, including the World Bank. Recently, much of this effort was focused on climate mitigation and adaptation projects. In line with this focus, IFC had been an active issuer in the green bond market, and as of September 30, 2019, had issued over \$10 billion of green bonds.

Notably, however, IFC had identified about \$29 *trillion* of investment opportunities in EMs that could be partially funded by both green and non-green bonds. When he first conceived of the structure that became EGO, Jean-Marie Masse had been seeking for a method of funding that supported and opened up these markets for greater investment, stimulating not only global demand for green bonds but also the supply of green bonds in EMs.

A New Solution to Policy Problems

In line with Masse's idea, IFC decided to try to create a product that would address some of the issues relating to EM green bonds. Like other supranational lenders, the organization often raised funds for entities that were unable to raise funds on their own; however, IFC wanted to transfer as much of this process as feasible to local markets and organizations. For this transfer to work, local markets would need to develop their own green financing policies and mechanisms (and/or accelerate them if they already existed). Theoretically, the end result would be better functioning "green markets" across a range of EMs. In some cases (such as China), these markets were already well developed. But in many other cases, only the rudiments of a green financing market existed.

The 21st Conference of the Parties in Paris to the UN Framework Convention on Climate Change (COP 21) endorsed green finance—and particularly green bonds—as an effective tool for transitioning to a lower carbon economy globally. With this stimulus, IFC undertook to develop a product for "greening" financial markets in EMs. The new fund would be set up specifically to help countries without well-developed green finance programs to develop such programs, by investing in EM green bonds to be issued by those countries' financial institutions in domestic capital markets (most EM green bonds were already issued by EM financial institutions).

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The process had several components:

- Develop the structure of the product;
- Choose co-investors, including other supranational lenders (e.g., the European Investment Bank), pension funds, insurance companies, and asset managers;
- Establish a Technical Advisory Council of relevant scientists and other professionals to advise on the suitability of the projects chosen for funding; and
- Select a fund manager.

The final component was crucial. IFC needed a fund manager that could serve as a powerful partner in its new strategy—one with strong EM debt investment capabilities. A request for proposal was sent to 16 asset managers, 11 of whom responded. Ultimately, IFC chose Amundi. Masse was confident that IFC had made the right choice in this area, stating,

The retention of Amundi as fund manager of the EGO Fund was a rigorous, highly selective process, and we hope that what we have done will inspire others to scale up their activities in support of green bonds issuances in emerging markets as well.⁴

Amundi

Amundi was a French asset management company with around \$1.7 trillion under management in 2018, making it one of the biggest investment managers (by assets under management) in the world. Amundi was committed to climate-smart investment and had already taken several bold initiatives in this direction: it helped develop some of the first low-carbon indexes, had a growing suite of green products, and was a founding member of the Portfolio Decarbonization Coalition (PDC), which was launched in 2014 with the aim of reducing greenhouse gas emissions.

The Amundi Planet Emerging Green One

The foundations of the Amundi Planet EGO fund had been laid years before, when Masse realized the potential for a win-win situation in which "investors in Europe [could] get a good yield, and people in [EMs could] finance their projects." This concept came to fruition in March 2018, when IFC and Amundi announced the successful launch of the fund in a joint press release:

The formation of the Amundi Planet EGO [brings] together a large diversified network of institutional investors across Europe and the Middle East. The long timescale and large size of the fund, which will actively invest in EM green bonds issued by financial institutions through to 2025, is expected to significantly increase the scale and pace of climate finance in EMs by crowding in capital from investors and creating new markets.⁶

The Deal Structure

There was a general consensus that much of the process underlying adaptation and mitigation project spending needed to involve private investors—but the vehicles for such investment were rarely investor friendly where EMs were concerned. Consequently, IFC had determined that the issuing structure needed to leverage its strong balance sheet to reduce the risk for both investors (thereby making investment more attractive) and the EM base receiving the deal proceeds. As a triple-A rated

⁵ Kim Hansson, "Converting Emerging Markets to Green Finance One Bond at a Time," NordSIP, August 2, 2019, accessed February 27, 2020, https://nordsip.com/2019/08/02/converting-emerging-markets-to-green-finance-one-bond-at-a-time/.

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⁴ Hupart, op. cit.

⁶ "IFC and Amundi Successfully Close World's Largest Green Bond Fund," Amundi company website, March 16, 2018, accessed March 11, 2020, https://www.amundi.lu/professional/Local-Content/News/IFC-and-Amundi-successfully-close-world-s-largest-green-bond-fund.

entity, IFC had little difficulty in meeting its credit obligations. Contrastingly, potentially high-yield EM borrowers were likely to have such difficulties, especially if the focus of their borrowing was for local projects funded through local banks.

Thus, in designing the deal structure, IFC had two main aims:

- First, it was looking for a deal structure that would allow it to expand its funding of green projects in EMs. While EMs' need for climate change mitigation and adaptation funding had long been clear, policies to facilitate this process lagged behind. This delay was largely due to the risk profiles of most of these countries, which prohibited them from raising sovereign debt at an affordable rate on their own. Moreover, sovereign issuance represented a significantly higher percentage of green bond issuance in EMs than in developed markets; in fact, the majority of green bonds in EMs had been issued by sovereign governments, not private entities.
- IFC's second aim was to increase investor participation in EMs by making it easier for investors—particularly European investors—to finance EM projects. This aim required that projects be aggregated, a long-standing model for supranationals. However, it also involved an additional level of risk amelioration, such that investors would feel more comfortable with the EM projects they were funding.

EGO reduced risk by using a structure that included several tranches, allowing IFC to absorb losses associated with credit risks through investment in a junior tranche. A first loss tranche structure with the following features was developed for IFC's stake and for various levels of credit exposure:

- Of the more than \$1.42 billion initially raised, IFC's stake was \$256 million.
- The total size was projected to rise to \$2 billion over the life of the issue.
- The senior tranche was 90% of the eventual portfolio.
- The mezzanine and junior tranches were 10%, designed to absorb the first loss of any investment (6.25% junior tranche in euros, and 3.75% mezzanine tranche in U.S. dollars.)
- Over time, the senior tranche would be cashing out, at which point the size of the junior tranche would increase up to 20% of outstanding assets (all assets were in U.S. dollars).
- The average credit rating of the invested green bonds (sovereign level) would be BB+, and the overall portfolio would have the same rating.
- The fund would only invest in EM debt securities listed on a regulated market carrying a credit rating from a recognized credit rating agency.
- Sovereign green bond investment would be capped at 30% of the total fund.

The model also envisioned strengthening domestic green finance capabilities by driving the project funding down to local banking institutions. The intention was to address the problem of limited issuance capabilities in the EM private sector by facilitating the development of local green finance markets, thereby also reducing the long-standing dependence on sovereign EM green bond issuance. In addition, IFC agreed to provide services to Amundi (in its capacity as fund manager) under a Service Agreement to help deploy the fund into its ultimate targeted green bond investment universe.

IFC and Amundi management hoped that the structure of this sizable (eventually \$2 billion) financing would provide a model for future green bond issuance that would involve some degree of risk transfer to issuers with strong financial profiles. As the largest EM green bond fund to date, EGO seemed to offer a promising solution to the challenges of (a) excessive EM reliance on sovereign green bond issuance for addressing EM climate issues, and (b) providing a more balanced risk exposure for investors.

Project Selection, Verification, and Reporting

A fundamental attribute of green bonds was that most had procedures for indicating to bond buyers that the projects to be funded met some externally defined "green" criteria. Yet, since its inception, there had been considerable controversy over what exactly constituted a "green bond." One attempt to deal with these concerns was the Green Bond Principles, a set of four principles that virtually every corporate green bond issuer, and most significant green bond investors, had agreed to observe.

The verification of these green criteria was normally conducted by a third party specializing in such verification, or by one of the major accounting firms with expertise in a relevant area. A second level of

verification could also indicate that the issuer was indeed meeting the objectives laid out at the time of issuance; this verification was almost always provided by the issuer's auditors.

Projects chosen for EGO funding were to be monitored by both the local funding agency and by an independent third-party reviewer. In addition, an IFC-managed and donor-funded technical assistance program called the Green Bond-Technical Assistance Program (GB-TAP) was created to stimulate and advise on the supply of green bonds to be issued by local financial institutions in targeted markets over a seven-year period (i.e., the life of the issue). EGO's focus on climate-friendly investment was also explicitly clarified in Amundi's Investment Guidelines (see Exhibit 1, below).

Exhibit 1: Excerpt from the EGO Investment Guidelines

The fund's mission is to help stimulate the issuance of green bonds in EMs, deepening local capital markets and expanding financing for climate investments. It aims to educate EM players about green bonds and embed best practice in line with the Green Bond Principles. The Fund aims to play a transitional role in transforming the bond market practices in EMs through addressing market shortfalls and with its robust [environmental, social, and governance] investment criteria, influencing the market development over the seven-year investment period.

The fund will target financial institutions as potential issuers, as [we] believe they are best placed to select green projects within the markets they cover. The rationale is that by sending financial institutions the signal that the fund is willing to buy their green bonds, they will be in favour of financing more green projects. The fund also aims to play an important role in helping to boost climate finance, in terms of channelling capital from the developed to the developing world.

Source: Amundi Planet—Emerging Green One ESG Charter, Appendix II to Investment Guidelines, Emerging Green One, a sub-fund of Amundi Planet, SICAV-SIF, February 2018.

Looking to the Future

Samama, Masse, and their respective teams were thrilled about EGO's success to date. The financial community finally seemed to be recognizing both the urgent challenges and the novel opportunities posed by climate change. But with EGO less than two years into its fund life, several questions remained: How would the fund perform over its duration? Were there any factors or limitations that could affect its continued success? With industries and environments alike experiencing unprecedented levels of volatility, addressing these global-scale issues would require enormous ongoing investment—in every sense of the word.

Part B: Market Reaction

EGO's Performance

As of the time of writing (March 2020), by any traditional measure, the Amundi Planet EGO fund continues to be a resounding success. The issue is heavily over-subscribed, and arrangers had little difficulty in placing the \$1.42 billion initially issued. IFC remains a triple-A rated supranational financial institution with excellent access to capital markets. The fund is still on its seven-year journey to being 100% EM green bond holdings. As of December 2019, green bonds represented 31.75% of total assets, above the predicted target for this point.⁷

IFC was able to bring in a wide range of investors—such as the European Investment Bank (EIB), the European Bank for Reconstruction and Development (EBRD), and Proparco—as additional cornerstone investors. Proparco, a development finance institution partly owned by the French Development Agency and private shareholders, is the largest investor in the mezzanine tranche. The investor pool also included private investors, such as pension funds (Alecta, AP3, AP4, APK Pensionkasse, APK Vorsorgekasse AG, ERAFP, MP Pension), insurance companies (Crédit Agricole Assurances, LocalTapiola General Mutual Insurance Company), and asset managers. This pool is expected to grow over the next seven years.

EGO's performance has also been gratifying to investors, particularly the junior US\$ tranche, suggesting that the project selection process is on track (see Figure 2, below).8 However, it is worth noting that a substantial portion of the invested funds is in EM bonds at present, and not necessarily EM green bonds. It will be critical to see how this planned shift over the coming years affects EGO's performance.

Figure 2: Performance evolution (rebased to 100) from 01/03/2018 to 31/12/2019



Source: Amundi Asset Management, Amundi Planet—Emerging Green One—Senior USD Factsheet, December 31, 2019.

⁷ Amundi Asset Management, Amundi Planet—Emerging Green One—Senior USD Factsheet, December 31, 2019.

Looking Forward

Given EGO's success to date, it seems likely that this format may be explored and replicated in the future, by IFC and also by other supranational organizations looking to fund green projects in EMs. However, whether this format takes off will depend on several factors. Two, in particular, stand out:

- First, the program of selecting appropriate local projects is still nascent. IFC has identified a
 number of projects to date for potential funding, and the range of projects is expected to ramp
 up strongly. While IFC, Amundi, and the range of advisors on the Technical Advisory Council
 have exercised their relative expertise in project selection, there are still several years of this
 process remaining. The eventual success of these projects, will help determine whether this
 model proves a durable one for green bond issuance by supranational agencies.
- Second, the financial model outlined in the case, while relatively straightforward in terms of
 structured products, depends on the currently proposed stop-loss facility being sufficient over
 the life of the bond issue. This will depend (to some extent) on the relative success of the
 local projects and of the local financial institutions in project selection and monitoring. The
 concern may remain valid for several years, or at least until there is a demonstrated track
 record of project success.

Finally, a fundamental limitation of this green funding is that it is currently realizable only in countries that have a current sovereign credit rating. The decision to limit this model to such countries presumably reflects a belief that they are in a position to develop green capital markets on the back of existing credit markets. However, many EM countries are too poor to even have sovereign bond ratings. Of the 48 countries in the Climate Vulnerable Forum (which is comprised of the poorest countries most exposed to physical climate risks), less than half have sovereign bond ratings, and even fewer have outstanding sovereign debt. Whether the model embodied in the current deal can be made applicable to a wider range of EM countries remains to be seen.

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⁹ Climate Change and the Cost of Capital in Developing Countries: Assessing the Impact of Climate Risks on Sovereign Borrowing Costs, 2018.

Acknowledgements

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