CHAPTER 7
Sustainability, Ethical Financing and Green Bonds
The World Bank has long embraced the concept of sustainability in its operations, adopting a concept that was at the heart of the United Nations Millennium Development Goals and has driven the overall development philosophy in the new century.

The World Bank based its work on three pillars of sustainable development—economic growth, environmental stewardship, and social inclusion—that can carry across all sectors of development, from cities facing rapid urbanization to agriculture, infrastructure, energy development and use, water availability, and transportation.

In keeping with this focus, the World Bank Treasury partnered in mid-2005 with France’s postal system, La Poste, to offer its customers a retail deposit backed by an International Bank for Reconstruction and Development (IBRD) bond. The communication around the sale of the deposit, which had a minimum investment size of 500 euro, focused on its purpose—to fund the sustainable development work of the

World Bank. This was the first World Bank debt product marketed around social responsibility. The deposit had a five-year term and paid a fixed coupon that stepped up every six months. The bond was followed by a similar product in Germany the next year. World Bank Treasury partnered with Dresdner Bank to offer Euro-denominated bonds to retail investors. The two-year bonds paid a 3.5 percent coupon and were offered in lots of 1,000 euros. Communication again focused around the World Bank’s sustainable development mandate that investors were supporting through their investment.

In late 2007, the World Bank launched its first tranche of ECO3 Plus notes. The six-year, Euro-denominated notes paid an annual coupon of 3 percent, plus an additional amount linked to the performance of an equity index—Dutch bank ABN AMRO’s ECO Price Return Index—comprising stocks of companies engaged in alternative energy, water, and waste management projects, as well as the production of catalysts used to reduce environmental pollution.

The debt issue was accompanied by a communication campaign aimed at raising investor awareness and stimulating demand for socially responsible debt products. The notes were offered throughout ABN AMRO’s branch network in the Netherlands, Belgium, and Luxembourg, and additional tranches were offered in Switzerland and Germany. “Experience has shown us that investors are indeed interested in sustainability and green investments, but they also expect a good return,” Frans Kuijlaars, Senior Vice President and Head of Benelux Sales, ABN AMRO Markets, said at the time. “We believe that you should not have to give up return to make green investments.”

The same year, World Bank Treasury partnered with Nikko Asset Management to launch what was called...
the “World Supporter Fund” in Japan. The fund, which was developed in close coordination with its initial distributor, Chiba Bank, was the first investment trust composed entirely of IBRD bonds denominated in a variety of emerging market currencies. “The World Supporter Fund provide retail investors a unique opportunity to invest directly in a diversified, liquid and professionally managed multi-currency fund without having to take on the credit risk or worry about the management of the currency allocation,” said World Bank Treasury’s Head of Funding, Andrea Dore. The currencies in which the bonds were denominated included the Brazilian real, Hungarian forint, Indian rupee, Mexican peso, Turkish lira, Russian ruble, and South African rand, as well as the US dollar and the euro.

Three years later, the World Bank again partnered with Nikko Asset Management to launch an investment trust composed of IBRD Green bonds. The fund again highlighted the World Bank’s mission to promote sustainable development and eliminate extreme poverty.

In 2008, the World Bank issued in the Japanese market its first aptly named “Cool Bonds,” or CO2-linked bonds, which were tied to a United Nations-approved program aimed at reducing carbon emissions. Payments on the $25 million bonds were linked to Certified Emissions Reduction credits (CERs) issued under the Clean Development Mechanism, a trading scheme that allowed countries to invest in clean energy projects in mostly developing countries. Holders of CERs could either sell them for profit or use them to meet emissions targets under the Kyoto Protocol. The five-year bonds, lead managed by Daiwa Securities SMBC, initially paid a coupon of 3 percent before switching to a coupon linked to the future performance of CER market prices and the actual-versus-estimated delivery of CERs generated by a hydropower plant in China’s Guizhou province. A second Cool Bond issue later that year was underwritten by Mitsubishi UFJ Securities and linked to a bio-energy project in Malaysia.

The same year, the World Bank partnered with Westpac to issue a four-year bond in the New Zealand market that focused attention on the World Bank’s development mandate. Like the earlier issues with La Poste in France and Dresdner in Germany, the bond was marketed to investors based on both the economic and social returns of the issue.

Green Bonds

World Bank Treasury began to respond to growing investor concerns about climate change and the damaging impact of greenhouse gas emissions as well as investor interest in ethical finance for development goals and the alleviation of poverty. In 2008, the World Bank launched the Strategic Framework for Development and Climate Change to help stimulate and coordinate public and private sector activity to combat global warming, and that year the IBRD issued the first labeled green bond.

Like all World Bank debt products, the bonds funded projects that were designed to improve local economies and alleviate poverty. But the proceeds of these bonds were specifically dedicated to tackling climate change problems in developing countries, which often were hit the hardest by the effects of a warming planet and rising seas.

“The growth in demand for green bonds is a testament to IBRD’s innovation and creativity in the market since issuing the first green bond in 2008. These milestone transactions—and many over the years—reflect the World Bank’s broader leadership in leveraging the capital markets to create impact where it makes the greatest difference, all the while setting the highest standards for execution and transparency.”

John M. Flint, Group Chief Executive, HSBC
The first green bond was a 2.325 billion Swedish kronor 3½ percent six-year issue, lead managed by Sweden’s SEB (Skandinaviska Enskilda Banken AB). It was designed in response to specific desire by a group of Scandinavian pension funds to support the World Bank’s efforts in climate change mitigation and adaptation. The projects offered by the World Bank were those supporting the transition to low-carbon and climate-resilient development and growth in client countries.

Examples of the World Bank’s eligible mitigation projects for green funding included solar and wind installations and funds for new technologies that permit significant reductions in greenhouse gas emissions and greater efficiency in transportation, including switching fuel. Adaptation criteria included protection against flooding, reforestation and watershed management, and implementation of stress-resistant agricultural systems. The green bond program was the first to introduce an external assessment of the green bond framework and effectiveness of the eligibility criteria toward lowering the projects’ impact on climate. This so-called second opinion, in IBRD’s case given by Norway’s climate change think tank CICERO, created a precedent that the green bond market has emulated and that continues to act as a valuable resource for investors. The program also set a precedent in transparency, with dedicated, annual reporting on how the bond proceeds were used.

Many investors understood that such “ethical” financial market products could simultaneously achieve respectable returns and focus on having a positive impact on society. Led by the World Bank and other multilateral institutions, the market for Green Bonds grew from a niche market to a mainstream source of finance. The World Bank issued its first structured Green Bonds, known as Green Growth Bonds, in July 2015. This involved a 50 million euro 10-year issue linked to the performance of the Ethical Europe Equity Index, composed of companies that were selected based on the sustainability of their businesses. BNP Paribas structured and lead managed the issue. Additional tranches of Green Growth Bonds were issued in Asia and the United States, for an aggregate amount of more than $500 million.

In the decade since the inaugural issue of its plain vanilla green bond in 2008, IBRD has already issued $11 billion equivalent in such bonds through more than 160 transactions in 19 currencies. Green bonds have been issued by government utilities, international agencies, corporations, and banks. Outside the green bond market, the World Bank has also seen market participants take an active role in insisting that their investments have a greater focus on sustainability and protecting the environment.

In 2016, the World Bank issued its first green Shogun bond, a $100 million issue lead managed by Mitsubishi UFJ Morgan Stanley Securities and sold to Japan Post Insurance Company.

As of 2017, the green bond market represented less than 1 percent of the overall fixed income, but it acts as a powerful catalyst to create more sustainable capital markets. “Green bonds have catalyzed an evolution in the bond markets toward more transparency around the use of proceeds,” said Helie Reichelt, World Bank Treasury’s Head of Investor Relations and New Products. “Investors are still looking for liquid products with competitive risk-adjusted returns, but we see that investor behavior is changing as more investors are also interested in putting their money to work for projects that have a positive measurable impact on society.”

World Bank Treasury has been engaging with investors and other issuers to create harmonized frameworks that help provide the type of impact information that investors are looking for. The World Bank’s first Green Bond Impact Report that was shared with investors for comment in 2014 and published in 2015 has been recognized by the market as a standard and model for impact reporting.

Beyond Green

The year 2015 was a watershed moment for development. First, in July 2015, global leaders agreed that we needed to move from billions to trillions in terms of the funding that is available for development. In September 2015, the Sustainable Development Goals (SDGs) were agreed upon. And in December 2015, the Paris Agreement on climate change was signed.

Arumna Oteh, who took over as World Bank Treasurer in 2015, carried forward the torch for sustainable and responsible investment opportunities, making sustainability her mission and a key focus across World Bank Treasury. For decades, the World Bank incorporated environmental, social and governance (ESG) principles into its operations and decision-making and ownership practices, arguing that that approach yielded better results and helped build a more sustainable world and more resilient global financial system.

“The World Bank’s mission of eliminating poverty and inequality in a sustainable manner helps connect investors with projects that help them do good and...
do well, while investing in our bonds which are triple-A. In fact in many cases you make better returns with companies that give special attention to environmental, social issues and governance," said Oteh. Her goal was "to move from the successes that had been achieved with green bonds to something much broader and to replicate that success with sustainability."

In March 2017, the World Bank announced the first-ever bonds explicitly linked to achieving the United Nation's SDGs. The bonds, arranged by BNP Paribas and made available throughout the year to private investors in Belgium, Italy, and Switzerland, directly linked returns to the stock market performance of companies in the Solactive Sustainable Development Goals World Indices. The index includes 50 companies that are recognized industry leaders on disclosure frameworks, reporting templates, and risk analysis to integrate sustainability considerations into fixed-income portfolios, including for sovereigns and triple-A. In fact in many cases you make better returns with companies that give special attention to environmental, social issues and governance.

Catastrophe Bonds

Natural disasters (such as hurricanes, earthquakes, and tsunamis) and other types of extreme weather events (such as droughts and floods) put lives at risk and threaten economic stability and growth in many member countries of the World Bank. Since the mid-1990s, catastrophe bonds (commonly called “cat bonds”) have become an increasingly popular way for entities to obtain insurance coverage above and beyond what is available to them in the conventional insurance market. Investors receive coupons that replicate insurance premiums, and if an insured event occurs, the investors lose some, or all, of their principal, with that money being paid to the sponsor as an insurance payout. World Bank Treasury created a number of instruments to make this market available to the World Bank's members.

Since 2007, World Bank Treasury has steadily developed its capabilities in partnering with members to proactively transfer a portion of their natural disaster risk to the insurance and capital markets. World Bank Treasury’s early transactions in this area were a series of swaps it intermediated for the Caribbean Catastrophe Risk Insurance Facility, a multicity risk pool set up for the Caribbean region. In total, these swaps provided more than $200 million of insurance coverage against earthquakes and hurricanes to the risk pool.

Building from these early catastrophe swap transactions, World Bank Treasury expanded into the catastrophe bond market. Its first foray was in 2008 with the establishment of the MultiCat Program, a catastrophe bond issuance platform that gave governments and other entities in the World Bank’s member countries access to international capital markets to insure themselves against the risk of natural disasters. The program requires a member counting user to establish a special purpose vehicle issuer of a catastrophe bond, with World Bank Treasury acting as arranger of such a bond issue.

Mexico became the first country to use the MultiCat Program, in a 2014 issue of a $290 million three-year catastrophe bond divided into three tranches, covering earthquakes and Atlantic and Pacific hurricanes. Mexico returned to the program again in 2015 to roll over the 2009 transaction. The partnership between Mexico and the World Bank, under its MultiCat Program, has allowed us to efficiently transfer a pool of catastrophe risk—earthquake and hurricane—to the market for the first time, and we are very satisfied with the results achieved, said Alejandro Werner, Mexico’s Vice Minister of Finance, said at the time.

In 2014, World Bank Treasury followed up the success of the MultiCat Program by creating the Capital-at-Risk Notas program, under which the World Bank could issue catastrophe bonds on behalf of other entities as part of its own funding program, eliminating the need to establish a special purpose issuer. This innovation streamlined the issuance process and opened the door to a significant increase in activity.

When we issue a cat bond for the benefit of one of our member countries, we are acting as an insurer for that country against certain prescribed natural disasters. However, the World Bank does not retain that insurance risk. Rather, we hedge ourselves by obtaining mirroring insurance from the capital markets in the form of a bond issue. So, at one time and through one instrument, we’re providing valuable insurance to our member country and we’re getting good funding from the market,” said Michael Bennett, Head of Derivatives and Structured Finance at World Bank Treasury.

The first catastrophe bond issued in 2014 under the Capital-at-Risk Notas program was a $30 million three-year issue linked to earthquake and hurricane risks in 16 Caribbean countries, lead managed by GC Securities, with Swiss Re and Munich Re acting as advisors. At the same time as the issuance, the World Bank entered a swap that mirrored the terms of the bond with the Caribbean Catastrophe Risk Insurance Facility. The proceeds of the bond were kept on the World Bank’s balance sheet. If a natural disaster of the magnitude specified in the bond contract occurred, the World Bank would pass the proceeds to the Caribbean Catastrophe Risk Insurance Facility through the swap. If no such disaster occurred, investors would receive the principal when the bond matured.
Madelyn Antoncic, an economist imbued with a strong sense of risk management from her time at Goldman Sachs, Barclays Capital, and Lehman Brothers, promoted such ingenious solutions to development finance problems during her time as World Bank Treasurer from 2011 to 2015. In 2013, World Bank Treasury structured and executed a complex $450 million transaction with Uruguay’s National Administration of Power Plants and Electrical Transmissions (UTE), the state-owned hydroelectric power company, under which the company was insured for 18 months against drought and high oil prices that had caused major financial problems for the company in the past. "In 2012, Uruguay had a pretty significant drought and at that time they were close to 85 percent hydroelectric power generated. So, they had to raise prices for the consumers, they had to raise debt, they had to have a deficit in their budget. So, we ended up doing this transaction which was in swap form," Antoncic said.

The World Bank’s work on insurance transactions and the development of the Capital-at-Risk Notes program, she said, was "one of the things that I’m really most proud of because this really set the groundwork for being able to hedge against and mitigate the risk of any type of event." By mid-2018, World Bank Treasury had delivered $3.9 billion in catastrophe risk transactions for both IBRD and IDA clients. Almost $2 billion were executed from July 1, 2017 to mid-2018, highlighting the increasing desire of countries to take advantage of this useful instrument for protection against natural disasters.

Under Oteh’s leadership, the suite of offerings expanded to cover more risks, more countries, and various instruments, including local currency swaps. These transactions included a $360 million three-year cat bond issued in 2017 that provided protection to Mexico against losses from major earthquakes and hurricanes (the $150 million earthquake tranche of which was triggered in full by an earthquake that occurred just a few months after issuance); a 2017 catastrophe risk insurance transaction in the local currency with an aggregate coverage of the Philippine peso equivalent of $206 million against losses from major typhoons and earthquakes to 25 participating local provinces in that country; as well as the largest sovereign catastrophe risk transaction ever executed, a $1.36 billion joint cat bond issue for the countries of the Pacific Alliance (Chile, Colombia, Mexico, and Peru) issued in early 2018. "We are leveraging Mexico’s leadership in developing risk insurance mechanisms against natural disasters and the World Bank’s innovative use of private sector instruments to transfer risk to the capital markets," said Oteh.
Pandemic Bonds

In 2015, with Oteh as Treasurer, World Bank Treasury turned its attention to another catastrophic threat that disproportionately affected developing nations—pandemics. The 2014 Ebola outbreak was first reported to the World Health Organization in March, but it was not until October of that year that sizable amounts of international aid money were put to work to contain it. The scale of the Ebola outbreak, in which more than 11,000 people died, was such that some $7 billion ended up being committed by donor countries. If even a fraction of that had been available more quickly, it might have been possible to mitigate the crisis. The delayed response was a wake-up call to international institutions like the World Bank, which led the way in seeking a solution in the capital markets to one of the greatest threats facing developing nations.

According to Oteh, “The Ebola crisis, no doubt, resulted in more lives and higher economic losses than would have been the case, had the world moved more quickly to tackle the crisis. In response, the World Bank focused on developing relevant innovative solutions including leveraging the insurance and capital markets to create a standby facility that would ensure quicker action in future.”

The World Bank, supported by Japan, Germany and the World Health Organization, developed the Pandemic Emergency Financing Facility (PEF), a quick-disbursing financing mechanism designed to provide a surge of funds to enable a rapid response to a large-scale disease outbreak. On June 28, 2017, the World Bank issued the first set of bond transactions.

Another innovative instrument the World Bank Treasury has used to raise funds are sukuk. As asset-backed trust certificates, sukuk function similarly to conventional bonds but comply with the Islamic prohibition against earning returns based on interest.

In 2014, the World Bank structured and arranged a $500 million sukuk issuance for the International Finance Facility for Immunisation (IFFIm). This transaction, known as the “vaccine sukuk,” significantly diversified IFFIm’s investor base by involving Islamic investors from the Middle East and Asia for the first time. The issue was led managed by Standard Chartered Bank, Barwa Bank of Qatar, CIMB of Malaysia, NCB Capital of Saudi Arabia, and National Bank of Abu Dhabi (a predecessor of First Abu Dhabi Bank).

The vaccine sukuk was the largest debut sukuk ever issued by a supranational entity, and it marked the first time most sukuk investors had ever considered investing in something that provided both economic and social returns. The sukuk paid a competitive rate of return while supporting immunization programs in the poorest countries in the world.

For Islamic investors, IFFIm’s vaccine sukuk was both ethical in terms of its structure (in that it complied with the Sharia) and ethical in terms of its use of proceeds. This type of ethical sukuk product was completely new at the time we launched the deal and was extremely well-received by the sukuk investor base,” said Michael Bennett, who worked on the transaction as Head of Derivatives and Structured Finance in World Bank Treasury.

IFFIm’s vaccine sukuk won numerous awards, including the ‘Achievement in Transformational Finance’ award from the Financial Times and the ‘Social Impact Deal of the Year for 2014’ award by the Islamic Finance News.

The vaccine sukuk was followed by a similar issue for $200 million the next year.
The bonds and derivatives provided coverage for outbreaks of six different viruses, including pandemic influenza, filovirus (including Ebola), and the coronavirus, which is linked to severe acute respiratory syndrome (SARS). It was the first time that World Bank bonds were used to finance efforts against infectious diseases and the first time that pandemic risk in low-income countries was transferred to the capital markets. The establishment of the PEF was driven from the top of the institution by the World Bank Group’s President, Jim Yong Kim, a physician who worked in the public health field in developing countries for many years. Kim personally priced and closed the pandemic bonds from World Bank Treasury’s trading floor.

“With this new facility, we have taken a momentous step that has the potential to save millions of lives and entire economies from one of the greatest systemic threats we face,” Kim said. He further stated, “We are moving away from the cycle of panic and neglect that has characterized so much of our approach to pandemics. We are leveraging our capital market expertise, our deep understanding of the health sector, our experience overcoming development challenges, and our strong relationships with donors and the insurance industry to serve the world’s poorest people.” According to Kim, “This creates an entirely new market for pandemic risk insurance.”

Furthermore, Oteh noted, “This transaction was oversubscribed. Investors are very excited about this asset class. Insurance companies are very excited about this asset class, so we do think we’ve created a market where we are going to see many more future deals.”

Bill Winters, Group Chief Executive, Standard Chartered
Markets can and do act as enablers of socioeconomic development. Since our first bond transaction in July 1947, we have continued to leverage the capital markets to address key development challenges.”

Arunma Oteh, World Bank Treasurer
Mulan Bond

China has had one of the fastest sustained growth rates of any major economy in history, and it became the largest contributor to world economic growth in the years after the 2008 global financial crisis. China became the third-largest shareholder in the World Bank after the United States and Japan and an important contributor to International Development Association.

In January 2011, the World Bank joined other major international companies and institutions that were tapping into China’s growing capital, issuing its first bond denominated in renminbi in the Hong Kong market. The 500 million renminbi ($76 million equivalent) 2-year fixed rate note offered investors a semiannual coupon of 0.95 percent.

The World Bank’s former Global Head of Capital Markets, Doris Herrera-Pol, called it a “landmark transaction,” and said: “It is a privilege for us to have this opportunity that establishes the institution as a premier issuer in the fastest growing capital market in the world.”

The World Bank followed up in 2016 by issuing its first Mulan Bond in the Chinese domestic market under a 2 billion SDR (special drawing rights) program approved by the People’s Bank of China. The lead bookrunner of the 500 million SDR ($700 million equivalent) 0.49 percent three-year issue was the Industrial and Commercial Bank of China. Lead underwriters were China Construction Bank and China Development Bank.

The World Bank named the market “Mulan,” after a legendary female Chinese warrior, Hua Mulan, who took her aging father’s place in the army even though women were not allowed to fight at that time. She was very successful and highly regarded for her skills. The story of Mulan is globally recognized, and it highlights the issue of gender equality, one of the World Bank’s key strategic priorities and a key factor in achieving the World Bank’s twin goals.

“We are honored to support China in its efforts to internationalize its capital and currency markets through the launching of a SDR bond issue and the new Mulan market,” said World Bank Treasurer Arunma Oteh.