Indexes Sprout Up as Green Bonds Take Root

Green bonds fund assets and activities that address critical climate change issues. Although diminutive in size compared with the overall bond market, the green bond market exploded in 2014, and multiple indexes were launched. Labeled green bonds are structured and rated in the same way as non-green bonds but carry the risk of "greenwashing"—the risk that a bond’s proceeds fund an activity that lacks direct and positive environmental impact.

The bond market might seem an unlikely vehicle for affecting climate change, yet that is the motivation behind the burgeoning investor demand for green bonds. Green bonds are being used to fund costly projects aimed at renewable energy, climate adaptation, lower emissions, and energy efficiency, particularly for developing countries. Most of the necessary projects to effect positive climate change are infrastructure related, and the $100 trillion fixed-income market has the capacity to supply capital in the scale and tenor needed. This article examines the budding green bond market and factors for investors to consider when evaluating green bonds and assessing the new indexes.

MITIGATING CLIMATE RISKS THROUGH GREEN BONDS

Green bonds are relatively new, but using the bond market to fund similar projects is not, points out Sean Kidney, CEO and cofounder of Climate Bonds Initiative (CBI), a not-for-profit organization dedicated to promoting the rapid transition to a low-carbon economy and the growth of a large, liquid climate-themed bond market. “What we are doing in climate-themed finance is not really special,” Kidney says. “It is exactly the same solution that we’ve used for the last 50 or 100 years to build policy priority infrastructure. It works. The difference is that there are new reasons to do it, new priorities—and there’s an urgency. There’s a real urgency.”

The urgency stems from the projection that failing to contain global temperature increases to less than two degrees Celsius over the next 20 years will result in catastrophic weather events, according to the International Energy Agency (IEA). Such disruptive events are expected to cause significant losses in agriculture as well as in food and water supplies. The IEA estimates that approximately $53 trillion in investment is required by 2035 to achieve a low-carbon economy, although achieving progress within the next 5 to 10 years is critical. At the September 2014 United Nations Climate Summit, more than 100 global government leaders and 800 leaders in commerce pledged bold action for climate-change initiatives.

Some large institutional investors and governments are using green bonds to help reduce costly risks associated with climate change. The insurance industry, whose portfolios directly bear the risk of insuring adverse weather events, is expected to double its climate-themed investments within the next year and to increase them tenfold within five years. In its 2014 Green Initiative Task Force Report, the California State Teachers’ Retirement System (CalSTERS) cited the need for climate-related risk management to combat water scarcity that has led to recent droughts, fires, and higher energy costs. CalSTERS increased its investment in green bonds by 300% in 2014.

Since the European Investment Bank (EIB) issued the first green bond in 2007, the market has racked up impressive annual growth rates, albeit from a very low base. Market capitalization grew approximately 400% from 2013 to 2014. Sweden was an inaugural investor in the green bond market. “The green bond space has exploded during the last year,” says Ole-Petter Langeland, head of fixed-income securities at Second Swedish National Pension Fund (AP2). As multiple index providers launched
benchmark indexes, 2014 became a watershed year for green bond indexes as well as issuance. Still, at about $40 billion in market cap, green bonds make up less than 0.5% of the approximately $100 trillion bond market. Investors’ biggest challenges at the moment include gaining access to these bonds, which are in high demand, and finding the right shade of green.

**SHADES OF GREEN: THE RISK OF GREENWASHING**

Green bonds were first issued by the EIB, the World Bank, and the International Finance Corporation to obtain low-cost funding for climate-themed projects via their AAA rating. Supranationals and sovereigns continue to dominate issuance, but the market now includes a range of issuers and types of instruments. “There are US municipal issues, Canadian provinces, German lenders, Dutch banks, the city of Guttenberg, a real estate company in Sweden,” says Langeland. He notes that until late 2013, available investments were fairly similar in maturity, currency, and issuer. During the past year, however, the market has become broader and more diversified. “It is becoming possible to create a portfolio that is structured much more like a traditional bond portfolio,” Langeland says.

A primary factor underlying the market’s growth has been the development of industry guidelines for issuing green bonds. In early 2014, a consortium of banks collaborated to draft the Green Bond Principles (GBP), which provide guidelines on the process of issuing labeled green bonds. These guidelines have proved useful in promoting the green bond model to the corporate bond sector. The principles cover the use of green bond proceeds, the process for project evaluation and selection, management of proceeds, and ongoing reporting. They do not determine what constitutes a green asset or activity; the issuer makes that decision.

Labeled green bonds are a small subset of climate-themed bonds, a $500 billion segment of the bond market focused on financing the transition to a low-carbon global economy. Most of the climate-themed bond universe consists of unlabeled issues, primarily in the transport (rail) and energy sectors. At present, there is no industry standard definition of what is “green,” and discretionary application of the GBP creates a unique risk for green bond investors—the risk of “greenwashing.” According to the CBI, greenwashing occurs when a bond’s proceeds are used to fund projects with little or no positive environmental impact. “There is a risk of dilution of the standards, which would erode confidence,” Kidney says. “People need to believe that their money really is making a difference. I am on record of calling at least one, possibly two bonds, of being a good try but a bit too pale.”

As more definitive standards emerge, issuers will better understand the criteria necessary for a bond to be truly green. Until then, an issuer who sells a greenwashed bond runs reputational risk, and investors who fall prey to such bonds could become disillusioned. Investors themselves have different opinions on whether a bond is emerald green or pale green. For example, a bond issued by a nuclear power company operating in a developed country may not be considered green by all investors, even though nuclear power is low carbon. Similarly, the climate impact of a green asset varies depending on its location: A wind farm in Texas does not have the same impact as one in India, notes one market participant.

CBI is developing a set of environmental integrity standards that, when met, will certify a bond as a “climate bond.” To become certified, an issuer must link the bond to a low-carbon asset or activity and obtain verification by an approved independent provider. Standards currently exist for wind and solar energy investments. Kidney explains the difference between the GBP and the CBI standards: “The Green Bond Principles are not standards. They are broad guidelines for the industry,” he says. “They promote the idea of reporting and transparency, and they promote the idea that the green bond is about the asset, not about the company—which has been a vital contribution to market development. The Climate Bond Standards complement the principles with a rigorous, climate science–based approach to definitions.”

**GREEN INDEXES SPROUT**

As of November 2014, four index providers have launched green bond indexes. These indexes provide transparency to the rapidly changing market and serve as a barometer of its growth as it evolves in diversity of issuers, types of bonds, maturity, credit ratings, and sectors. The market is too new, however, for the indexes to fully function as asset class benchmarks. These indexes are not fully investable, for instance, and their limited performance history and rapidly changing composition yield little information for risk metrics and return expectations. Although performance history is available for the S&P Green Bond Index dating to 2009, the market was initially homogeneous and its composition
has since changed dramatically. Corporate bonds made up about a quarter of the market’s capitalization as of mid-2014, but in 2013, only one green corporate bond existed.

Differences among indexes in market value, duration, and other bond characteristics result mainly from the selection criteria used to determine what constitutes green. Characteristics and sector weightings will fluctuate as the green bond market changes with issuance. Similar to the labeled bonds, the indexes themselves differ in their degree of greenness. The S&P Green Bond Index, for example, has a universe of 165 constituents, compared with Barclays MSCI Index's 49 constituents. Vishal Arora, CFA, director of fixed-income index research and design at S&P Dow Jones Indices, says that because green bonds are a new asset class, the index's objective was to capture as many bonds as possible to provide investors with a comprehensive benchmark. Arora says that in time, subsets of the index can be created by applying size, quality, and duration buckets to make it investable. “That will be the next logical step in helping to create more specific indices that meet investor demand,” he notes. CBI believes fully investable indexes might not be realized for a few years.

S&P populates its index with bonds that are “flagged” green by CBI, whereas Bank of America (BofA) Merrill Lynch’s index consists of green-labeled bonds. Barclays MSCI says it applies an independent, research-based methodology to cull bonds that do not meet its environmental, social, and governance (ESG)-based criteria. In its monthly rebalancing statement, Barclays MSCI lists bonds it has rejected for failing to meet its inclusion criteria. Examples include a bond rejected because the green bond proceeds will finance new manufacturing facilities and a bond that will use a portion of proceeds to pay a dividend to the parent company for general corporate purposes.

A distinguishing feature of the green bond indexes is their multicurrency nature. The predominant currencies are the euro, the US dollar, and the Swedish krona. Although the indexes’ base currency is the US dollar, local currency movements clearly affect index returns for nondomestic investors. Performance for the first 10 months of 2014 for the BofA Merrill Lynch Green Bond Index was 6.21% in local currency and -0.87% in US dollars. For investors who avoid currency risk, Barclays MSCI offers US-dollar-denominated and euro-denominated sub-indexes.

As of mid-2014, the labeled green market was roughly 70% government related, 26% corporate issues, and 4% securitized issues. Most securities in this market are rated AAA, reflecting the large percentage of issuance by supranationals and sovereigns. The high concentration of AAA rated issues dominates index performance. Corporate bonds in the labeled green bond indexes are rated investment grade. Apart from choosing the right shade of green, investors face no particular risks from labeled green bonds that are distinct from those of other bonds. “There is nothing different in the credit rating than for any ordinary bond. There’s nothing special about how you calculate risk,” says Kidney. “The difference here is that funding is going only to green projects.”

The green bond indexes offered by BofA Merrill Lynch, Barclays MSCI, and S&P are similar in theme, but the S&P Green Project Bond Index, which consists solely of project bonds, differs markedly. Most project bonds are unlabeled but have a direct cash flow link between the bonds and the funded assets, in contrast to the “use of proceeds” requirement for labeled green bonds, which claims compliance with funding associated with green or climate-related environmental benefits. “The use of proceeds requirement doesn’t specify the type or the nature of the project,” Arora notes, “whereas green project bonds comprise financing of infrastructure and related projects that directly mitigate greenhouse gas emissions based on their primary revenue-producing activities. These bonds finance wind, solar, and other clean and efficient energy assets, with cash flows from such assets active as the primary source of repayment of bonds.”

Because infrastructure projects tend to be long lived, project bonds also differ from most labeled green bonds in tenor. About half of the bonds in the Green Project index have maturities of 20 years or longer, exposing investors to substantial interest rate risk. Unlike the labeled green bond universe, project bond repayment depends on a specific asset rather than a corporate balance sheet, which leads to lower credit ratings. About 40% of the project bonds in the index have a below-investment-grade rating. Table 1 compares the four green bond indices offered by BofA Merrill Lynch, Barclays MSCI, and S&P Dow Jones.

Relative to broad market fixed-income indexes, which contain thousands of securities, green bond indexes are tiny. Apart from the Project Bond index, the durations of the labeled green bond indexes are somewhat shorter than that of the Barclays Aggregate Bond Index at 5.57 years as of 31 October 2014. Yields are much lower—the Aggregate has a yield of 2.24%—reflecting
the high sovereign/supranational sector weighting; but overall credit quality is in the AA range. Currently, an investor’s best use of these indexes may primarily be information gathering. Whereas most fixed-income investors choose among benchmark indexes according to desired risk exposures, investors in green bonds may find that their preferred benchmark index will be the one that most closely reflects their view of green.

CONCLUSION

For institutions exposed to weather-related risks, the appeal of green bonds lies in their use as an investment vehicle that can potentially bring about positive climate change. The emergence of industry guidelines and standards has provided a necessary initial framework for identifying green bonds, and the arrival of indexes has been a key factor in defining the opportunity set and providing transparency to this emerging market.

Despite investor enthusiasm, the green bond market faces some headwinds, primarily the risk that greenwashing will weaken investor support. Universally accepted standards for what is green, such as the science-based criteria being formulated by CBI, will provide further definition and clarity. In time, rating agencies may issue green ratings along with credit ratings.

Investor demand for green bonds has consistently outpaced supply, which presents another risk: Managers may be unable to construct fully diversified green bond portfolios, and investors may end up overpaying for a green bond mandate. Investors will need to weigh management fees and expenses to ensure they are not paying green fees for plain vanilla substitutes.

REFERENCES


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