

Bonds for Trees: A Good Idea Hoping to Become Real

A Commentary on *Unlocking Forest Bonds: A High-Level Workshop on Innovative Finance for Tropical Forests* and *Understanding Forest Bonds: A Guide to Raising Up-Front Finance for Tropical Forests*

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The two reports spearheaded by the Global Canopy Programme (GCP), *Unlocking Forest Bonds: A High-Level Workshop on Innovative Finance for Tropical Forests* and *Understanding Forest Bonds: A Guide to Raising Up-Front Finance for Tropical Forests*, provide an excellent introduction to forest bonds on a conceptual level. While there is significant overlap in content between the two articles, they complement each other and serve as a working proposition that forest bonds—which do not currently exist in the market—could serve a role in financing rainforest protection and conservation efforts. The articles should not, however, be considered a manual or “blueprint” for how to structure and issue forest bonds. The mechanical details of issuing forest bonds, such as fees, choice of distribution channels, securities filings, and road shows are not included. Rather, the two reports serve more as high-level guides to familiarize forest stakeholders with forest bonds as a financing option and to generate interest among potential investors in such instruments.

The underlying thesis behind *Understanding Forest Bonds* and *Unlocking Forest Bonds* is that forest stakeholders can draw upon the large global pool of private debt capital to provide the financing needed to support forest-friendly projects and efforts. In that regard, *forest bonds*, as conceived by the authors, should not be confused with *timber or timberland bonds*. The impetus of a *forest bond*, as put forward by the two reports, is to pursue a greater social good—such as reducing deforestation, maintaining water quality, promoting biodiversity, and sequestering atmospheric carbon. In contrast, *timber or timberland bonds* are issued in pursuit of generating a financial return for the private timberland owner. A standout example of a timber bond is the \$800 million timber-backed commercial mortgage pass-through certificates issued by Timber Star in October of 2006—an effort undertaken in conjunction with the firm’s acquisition of 900,000 acres of timberland in the United States from International Paper Company.

What is commendable about the two reports is that they provide a clear and well-reasoned explanation and assessment of the functional and theoretical underpinnings of forest

bonds. The advantages and disadvantages of the various types of forest bonds for different needs and scenarios are explained in easily understood language that is devoid of confusing Wall Street lingo. In short, one does not need to be a finance professional to grasp the content of the reports.

Extending Beyond the Rainforest

While the Global Canopy Programme's reports target tropical forests, there is a great deal of transferability to other types of forests and even non-forest ecosystems. Many of the topics addressed in reference to employing fixed income instruments to fund "green" projects are not exclusive to tropical forests, but have broad applicability to virtually any natural system or asset. Why not a fishery bond? Or a wetlands bond? Any natural environment that benefits from an infusion of capital to support sustainable development or conservation values can take advantage of bond financing. From that standpoint, readers who are interested in *green bonds* and *impact investments* in general can stand to benefit from reading these reports.

It Is Not All Green: A Dose of Reality about Forest Bonds

Since the goal of *Unlocking Forest Bonds* and *Understanding Forest Bonds* is to promote and raise the awareness of forest bonds, the reports are, by nature, positive in tone. While there are many good ideas promoted in both works, a dose of realism is recommended.

First, the market potential for forest bonds would likely be limited for quite a number of years. Timberland bonds (which we refer to as bonds issued from private entities owning industrial timberland) take up a very small segment of the global fixed-income market. In the United States, which is the world's largest timber market, total public debt issuance by timberland-based real estate investment trusts (REITS) is less than \$8.5 billion. Aside from timber REITs, there are virtually no other timber or timberland-based bonds in the U.S. market today. However, the authors of the reports cited an estimate from the Commission on Climate and Tropical Rainforests of the need for US\$30 billion annually for funding just to halve the deforestation rate (*Unlocking Forest Bonds*, 5, 25). If timberland bonds covering the world's most valuable timber resource amount to less than \$9 billion, it would be a challenge to raise capital on the scale of tens of billions of dollars annually from the issuance of forest bonds in developing economies.

The second issue that would temper the potential of forest bonds is that many tropical forest nations face a dilemma. These emerging nations need financing from forest bonds to finance the infrastructure needed for preserving and protecting a sustainable forest system. Yet, it is that lack of infrastructure, as well as a lack of markets, that prevents a

developing tropical forest economy from generating the type of stable revenues that bond investors demand. In other words, forest stakeholders can claim that the bonds they issue can be paid through, for instance, eco-tourism, agro-forestry crops, micro-lending to forest communities, biodiversity payments, or credits from Reducing Emissions from Deforestation and Forest Degradation programs (REDD+), but such assurances cannot be demonstrated without the needed funds that the bonds can bring. The irony is that cases that would benefit most from forest bonds are cases that entail high levels of risk—which is anathema to bond investors.

A third and final concern that could limit the appeal of forest bonds is the dearth of quality funding options to support bond payments in the current global economic environment. Many industrialized nations face tight budgets, which will most likely affect their global aid programs. Official development assistance (ODA) from developed countries may therefore not be as enthusiastic about backing forest bonds. Furthermore, internal funding by tropical forest nations also poses challenges. On page 23 of *Understanding Forest Bonds*, the authors propose that “government could institute policies, or use policies in place to generate revenues from forest-degrading or forest-using actors (e.g., through stumpage fees, biodiversity, or user fees).” However, such policies could be politically unpopular, as they would result in cash being pulled from the local economy to pay mainly foreign investors.

The other option is to pay the bond with forest-based revenue sources, such as markets for ecosystem services. On page 15 of *Understanding Forest Bonds*, the authors write, “Revenue can be generated from the underlying forest investment through direct markets for forest diversity and ecosystem services or indirect markets where the value of biodiversity and ecosystem services is linked to other types of markets.” However, ecosystem services, while attractive in theory, are hard to effectively monetize in emerging markets. They commonly lack the depth and dependability that would be the basis of a quality credit rating that such bonds need. To place this in context, the total value of biodiversity offset and compensation markets in the United States, including wetlands mitigating banking and species habitat banking, total \$1.5 to \$2.5 billion per year. This is the lion’s share of the \$1.8 to \$2.9 billion of known annual biodiversity payments made globally (Becca Madsen, Nathaniel Carroll, and Kelly Moore Brands, *State of Biodiversity Markets Report: Offset and Compensation Programs Worldwide*. 2010). If biodiversity offset markets amount to less than half a billion a year outside of the United States, one must have very modest expectations for emerging nations interested in monetizing ecosystem services to generate enough revenue to finance forest bonds in the range of hundreds of millions or billions of dollars.

A Future for Forest Bonds

For these reasons, it is no surprise that forest bonds have yet to emerge within the fixed income asset space. Nevertheless, momentum has been generated in the last few years for *green* bonds and there is a growing interest in *impact investments*. It is only a matter of time before forest bonds become a reality. I agree with the core message GCP shares in their two reports: bonds have a pertinent and valuable role to play in recruiting private capital to fund environmental forest projects. Chosen wisely in the right situations, forest bonds can advance the social, economic and environmental goals of the forest bond issuer and offer profit (and green credentials) to the investor.

Biography

Chung-Hong Fu is a founding member and partner of Timberland Investment Resources, a timberland investment management organization based in Atlanta, Georgia. He leads the firm's economic research efforts and helps set investment strategy and analysis. He began his career at Temple-Inland Forest Products Corporation, serving as a forest economist. Before his current role at Timberland Investment Resources, Hong served as Senior Investment Analyst for Global Forest Partners.

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