



Park Bonds

A new mechanism to secure the long-term financing of Protected Area networks

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Abstract:

Park Bonds are a new type of green financial instrument intended to fund conservation by offering a Triple-A credit rating to investors and a low (below 2 per cent) coupon rate. They could be issued by an International Trust Fund for Protected Areas (ITFPA), either hosted by a Multilateral Development Agency such as the World Bank or the Global Environment Facility (GEF), or set up as an ad hoc institution. Conservation projects would not have to generate income to repay the Park Bonds, as currently proposed with Forest Bonds or Green Bonds, but rather the ITFPA, tasked with promoting ethical financing. The remaining interest (after coupon payment) would be distributed to the international network of Conservation Trust Funds (CTFs) for PA financing. Park Bonds would allow the creation of a new and ambitious funding stream for conservation projects, while offering investors high credit worthiness and fixed-income investment opportunities with major positive environmental impacts and substantial potential for expansion.

Introduction

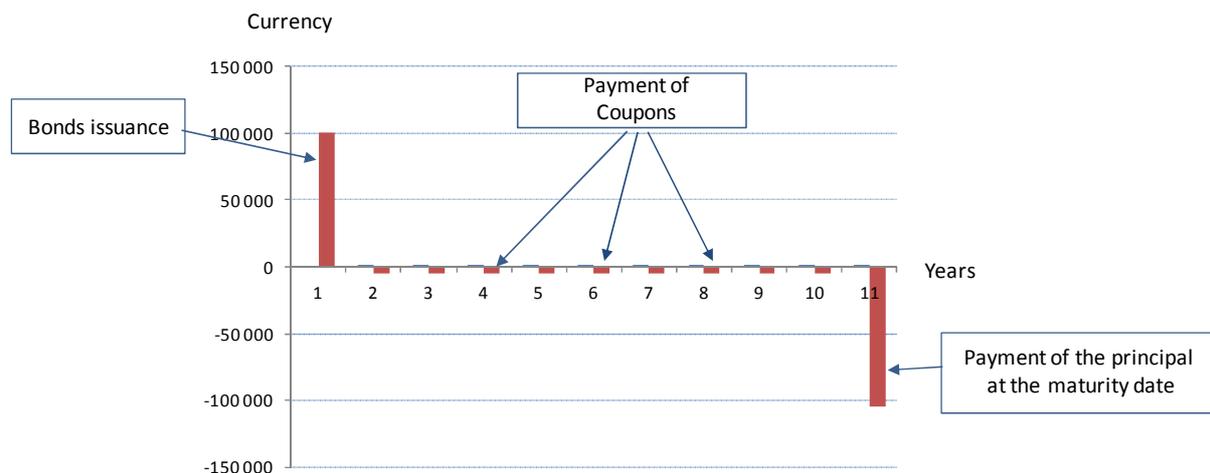
Conservationists agree that new forms of sustainable financing of Protected Areas (PAs) and PA networks are needed to fill in the conservation funding gaps observed in most countries around the world. While increasing Official Development Assistance (ODA) and identifying additional governmental funding should remain top priorities, there is also a consensus that the public sector alone is unlikely to raise enough funds to preserve the environment, and that engagement with the private sector is necessary. New strategies need to be explored to link international finance and conservation. A recent paper entitled *Conservation Finance: Moving Beyond Donor Funding Toward an Investor-Driven Approach* correctly mentioned that "there is a significant appetite to invest in conservation; however, investable, simple and understandable conservation asset classes that satisfy a clear investment objective are underdeveloped". In fact, despite the current recession in many countries, the world as a whole is not short of funds. Reports show that insurers, pension funds and sovereign-wealth funds have "over USD 50 trillion to invest [...] the main concern of investors is a shortage of suitable projects".

Creating responsible financial products in favor of biodiversity protection is an achievable goal. Provided they are presented with a convincing scheme, institutional investors could well be interested in investing in new financial products dedicated to biodiversity. This paper presents the advantages and drawbacks of two existing environmental assets – Forest Bonds and Green Bonds – in order to argue the case for a new type of environmental asset targeting the conservation of Protected Areas: Park Bonds.

1. Existing environmental bonds: reasons for success or failure

A bond is a financial instrument that allows the bond issuer to borrow finance from the private capital markets. It is a debt security, in which the issuer owes the holders a debt and, depending on the terms of the bond, is obliged to pay back interest (the coupon) and to repay the principal¹ at a later date (the maturity). Coupons are usually payable at fixed intervals (e.g. semi-annual, annual). A bond is a form of loan: the holder of the bond is the lender (creditor), the issuer of the bond is the borrower (debtor), and the coupon is the interest. Bonds provide the borrower with external funds to finance long-term investments².

Figure 1: Example of 10-year bonds, with coupons of 5%



Source: Author

Over the past few years, two main types of environmental bond have been created with varying degrees of success ranging from limited to reasonable: Forest Bonds and Green Bonds.

Forest Bonds, which are of potential interest to impact and institutional investors, were designed by the Global Canopy Programme (GCP) in 2011.³ The broad scope of these bonds is to conserve or sustainably manage the forest. For instance, Forest Bonds might be issued to promote reduced impact logging in a given tropical country. Depending on the concept, the issuer can either be a state or a multilateral development bank, and, in order to pay the Forest Bond coupons, the issuer is intended to generate revenue either from forest-based or non-forest-based activities. Even though the idea of Forest Bonds is laudable, it should be emphasized that they have not yet proven to be successful: so far no Forest Bonds have been issued owing to several key problems.

Forest Bonds could theoretically be issued by those governments that are seeking financial support for their PA networks, but country risk⁴ tends to be high in tropical-forested countries and this in turn pushes the rate of interest up. As a consequence, the coupon rates for 10-year government bonds vary greatly from one country to another, and tend to be prohibitive in developing countries where conservation is most at stake. Identifying a secure business model is relatively easy where annual coupons are only 0.88 per cent, as observed in Switzerland; it is much more difficult to come up with

¹ The “principal” is the amount borrowed separate from interest

² O’Sullivan, A. and Sheffrin, S.M. (2003) *Economics: Principles in action*, Upper Saddle River, New Jersey: Prentice Hall.

³ Cranford, M., Parker, C. and Trivedi, M. (2011) *Understanding Forest Bonds: A Guide To Raising Up-Front Finance for Tropical Forests*, Oxford: Global Canopy Programme.

⁴ According to Investopedia, the country risk is “a collection of risks associated with investing in a foreign country. These risks include political risk, exchange rate risk, economic risk, sovereign risk and transfer risk, which is the risk of capital being locked up or frozen by government action. Country risk varies from one country to the next. Some countries have high enough risk to discourage much foreign investment.”

a convincing scheme when coupon rates reach 12.54 per cent (Brazil), 6.27 per cent (Colombia), 7.86 per cent (Indonesia), 11.44 per cent (Kenya) or 8.17 per cent (South Africa).⁵

The alternative to sovereign bonds envisioned by the GCP is to have Forest Bonds issued by a relevant multilateral development bank or backed by commitments from donor countries (guarantees). Such a scheme would indeed keep Forest Bonds coupons at a reasonable level. Nevertheless, even if these were kept below, for instance, 2 per cent per year, paying back the bonds would still remain a challenge. The use of non-forest-based mechanisms to pay the coupons (for instance, tax-backed bonds) is not yet sufficiently secure to attract investors. Similarly, forest-based revenue would hardly be sufficient to cover the required coupon level while maintaining a low default risk.⁶

The challenge in coming up with a business model to pay back the coupons and principal has not yet been adequately addressed. The GCP is currently discussing these issues and is hoping to come up with a type of Forest Bond that will enable forest preservation while being suitable for investors. The moderate success of Forest Bonds shows that using bonds in the environmental sector is not straightforward. That said, the relative success of Green Bonds offers some hope.

Green Bonds, also called Climate Bonds and first offered by the World Bank in 2008, have recently gained momentum. Green Bonds offer a new source of finance for low-carbon development and, as defined by Heike Reichelt, Head of Investor Relations and New Products at the World Bank, “*Green Bonds are a plain vanilla fixed income product that offers investors the opportunity to participate in the financing of green projects that help mitigate climate change and help countries adapt to the effects of climate change [...]*”.⁷ Green Bonds make it possible to mobilize the initial investment needed to launch green projects; generally, the first source of coupon repayment will be the cash flow generated by the asset (usually infrastructure). For instance, a hydropower project or a solar plant can be financed through Green Bonds, with the coupon paid out of the cash flow generated by the projects themselves.

Most Green Bonds issued to date have focused on climate issues, whereby the proceeds of the bonds go towards climate change mitigation projects. The returns on Green Bonds are in line with the mainstream market: the last issue of the World Bank, in March 2014, offers a yield of 2.25 per cent with a maturity of 2020.⁸ With the mobilization of over USD 5.3 billion through 61 Green Bond transactions in 17 currencies, the World Bank’s Green Bond program is the most important of its kind in the world, and has enabled the financing of projects located in middle-income countries such as Mexico (solar energy and transportation), India (urban transport) and Colombia (waste management). Other supranational development agencies, including the European Investment Bank, the Asian Development Bank, the Nordic Investment Bank and the African Development Bank are now offering similar financial instruments. The total value of Green Bonds issued to date is approximately USD 13 billion. It is the objective of the World Bank President Jim Yong Kim to double the global market for Green Bonds to USD 20 billion by September 2014, and to reach at least USD 50 billion by the time of the UN climate negotiations in Paris in December 2015.⁹

Figure 2: Selected large Green Bonds issuances according to their credit rating

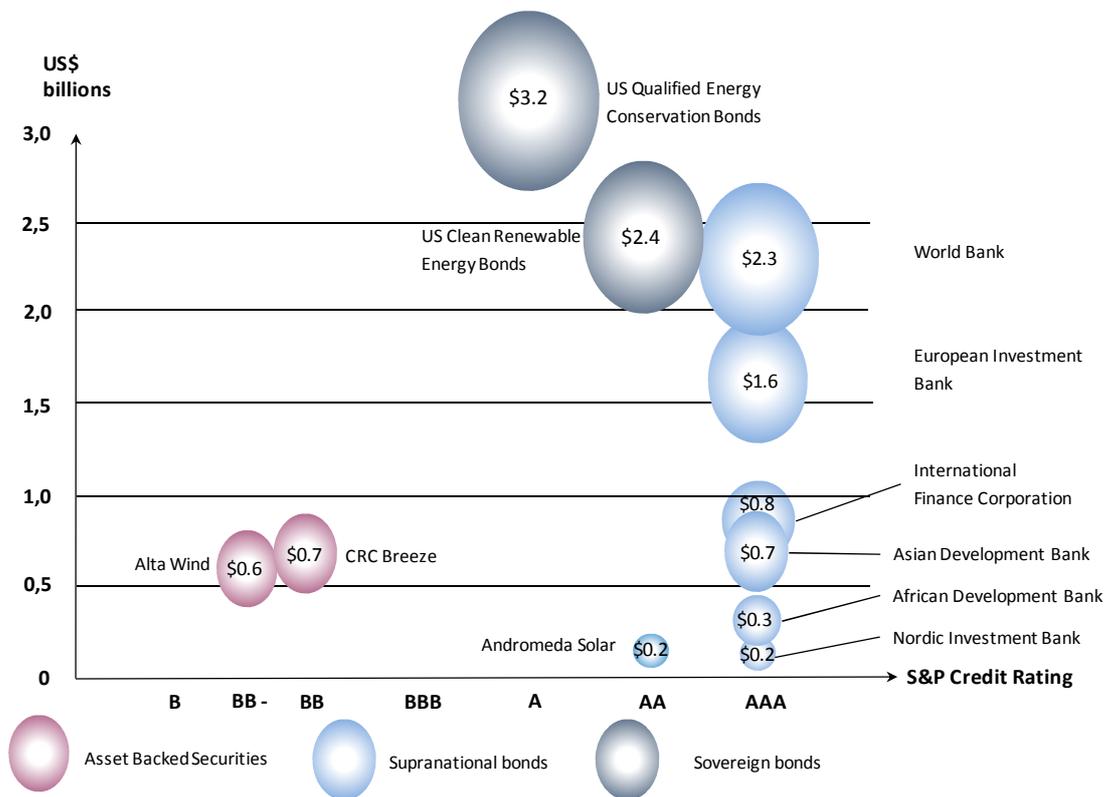
⁵ Other example of 10-year government bond interest rates: Australia: 4.02%; Canada: 2.39%; Chile: 4.90%; China: 4.65%; Euro Area: 0.98%; France: 2.02%; Germany: 1.51%; India: 8.94%; Japan: 0.61%; Mexico: 6.11%; Netherlands: 1.86%; Nigeria: 14.11%; Peru: 5.94%; Russia: 8.93%; Thailand: 3.59%; UK: 2.61%; USA: 2.62%; Vietnam: 8.43% (source: www.tradingeconomics.com/bonds, [accessed 14.04.2014]).

⁶ The Default Risk is the risk that the issuer of a bond may be unable to make timely principal and interest payments.

⁷ Reichelt, H. (2010), ‘Green Bonds: a model to mobilise private capital to fund climate change mitigation and adaptation projects’, in *The Euromoney Environmental Finance Handbook*.

⁸ To see a list of Green Bonds issuances to date (issue date, volume, coupon and maturity date), see <http://treasury.worldbank.org/cmd/htm/GreenBondIssuancesToDate.html> [accessed 14.04.2014].

⁹ ‘Growing the Green Bond Market to Finance a Cleaner, Resilient World’, Feature Story, 2014, www.worldbank.org



Source: Climate Bonds Initiative / OECD 2011

As shown in the picture above, Green Bonds have mostly been issued by multilateral development banks offering Triple-A credit ratings or by sovereign institutions offering at least an A rating. High credit worthiness seems to be a prerequisite for ensuring environmental bonds do well. For instance, the World Bank Green Bonds have been successful because the bank offers a guarantee that the payment of coupons and principal are not linked to project performance. In other words, investors in Green Bonds benefit from credit quality, so they do not have to take on project or country risk. In the case of many types of Green Bond already issued, investors can also select the financial characteristics of the bonds (currency, size, coupon, maturity). Interestingly, the “Green Bond Principles”¹⁰ designed in 2014 by J.P. Morgan clearly state that, besides renewable energy and energy efficiency, biodiversity conservation is also among the green projects eligible to benefit from Green Bonds proceeds. Nevertheless, biodiversity has not yet been the main focus of any Green Bonds issuance, probably because generating a steady and secure cash flow from conservation projects remains complex.

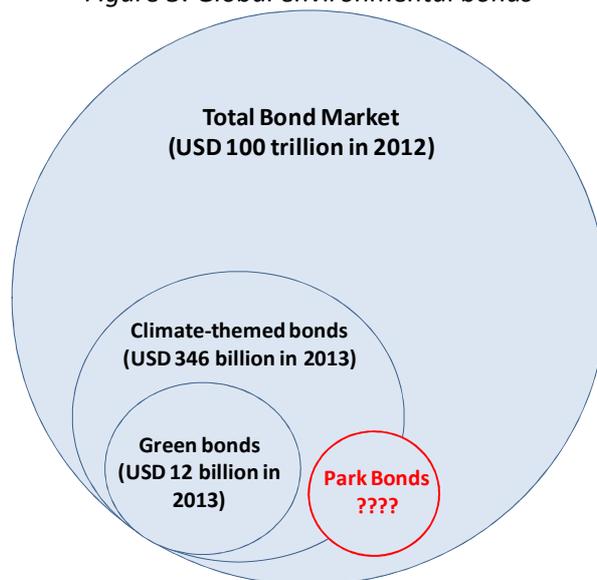
The analysis of Forest Bonds and Green Bonds shows that, in order to be successful, environmental bonds need either to be issued by institutions or government that have a high credit rating, or to benefit from a default risk guarantee that will assure bond holders that their investment is safe. That way low coupon rates can be offered, making it easier to set up a viable business model. Accordingly, a high issuer credit rating and a low coupon rate are likely to be the two prerequisites to ensure the success of any new environmental bond dedicated to conservation. Even if Park Bond coupons could be set at a reasonable 2 per cent per year, the question remains as to how they would be repaid, and it is likely that any bonds focusing on biodiversity conservation would need to propose a specific business model. This is the subject of the next section.

¹⁰ Green Bond Principles, Voluntary Process Guidelines for Issuing Green Bonds, 2014 (http://www.jpmorganchase.com/corporate/Corporate-Responsibility/document/Green_Bonds_Principles.pdf)

2. Why Park Bonds?

Provided that a credible scheme can be proposed, pension funds, sovereign wealth funds, private banks and even retail banks could be interested in investing in a risk-free financial asset dedicated to biodiversity. Ethical financing is growing fast, and there is clearly scope for biodiversity initiatives to benefit from this trend. As detailed in the previous section, Green Bonds have been more successful than Forest Bonds because they have mainly been issued by International Financial Institutions (IFI), most of which offer a Triple-A rating. This makes them a very safe investment and allows them to offer a relatively low coupon rate. **Park Bonds** with similar low-risk features, exclusively aimed at supporting PA Networks, could be created and promoted internationally.

Figure 3: Global environmental bonds



Source: Author, based on *Sustainable Prosperity, 2012* (figure not to scale)¹¹

How could additional investment achieved through Park Bonds generate the necessary financial returns to repay investors? Apart from some ecotourism investment in certain key protected areas, at present only a few very large-scale investments in conservation projects are likely to have the capacity to generate the amount of annual cash flow required to pay back the coupons with a low level of risk. For this reason, this paper suggests that the repayment of Park Bonds should not be “biodiversity-based”,¹² but rather paid by a newly established International Trust Fund for Protected Areas (ITFPA). The ITFPA, which could be hosted by the World Bank or the GEF, or set up as an ad hoc institution, would be tasked with investing in financial markets focusing primarily on ethical financing: the capital raised would, to a reasonable extent, be invested in Socially Responsible Investments (SRI), Impact Investments and Green Bonds.

By investing the capital raised according to a very safe investment strategy, the ITFPA could produce a steady income that would allow for the payment of annual coupons, while generating additional interest on top which could be directed to the international network of Protected Areas and other conservation activities of international relevance. This paper suggests that interest generated by the ITFPA could be distributed to the existing network of Conservation Trust Funds¹³ (CTFs), which tend

¹¹ As defined by HSBC and the Climate Bond Initiative in “Bonds and Climate Change, the state of the market in 2013”, climate-themed bonds are not officially flagged as green but they are linked to climate change solutions.

¹² A “biodiversity-based payment” would imply that the conservation projects benefiting from the investment would have to generate enough income to pay back the bond coupon, and this is likely to represent too great a risk to attract institutional investors.

¹³ “CTFs raise and invest funds to make grants to non-governmental organizations (NGOs), community based-organizations (CBOs) and governmental agencies (such as national parks agencies). CTFs are financing mechanisms rather than implementing agencies. They can also serve as mechanisms for strengthening civil society and for making government PA

to offer a good level of transparency and efficiency. CTFs meeting “quality standards”¹⁴ should be the first to benefit from such support.

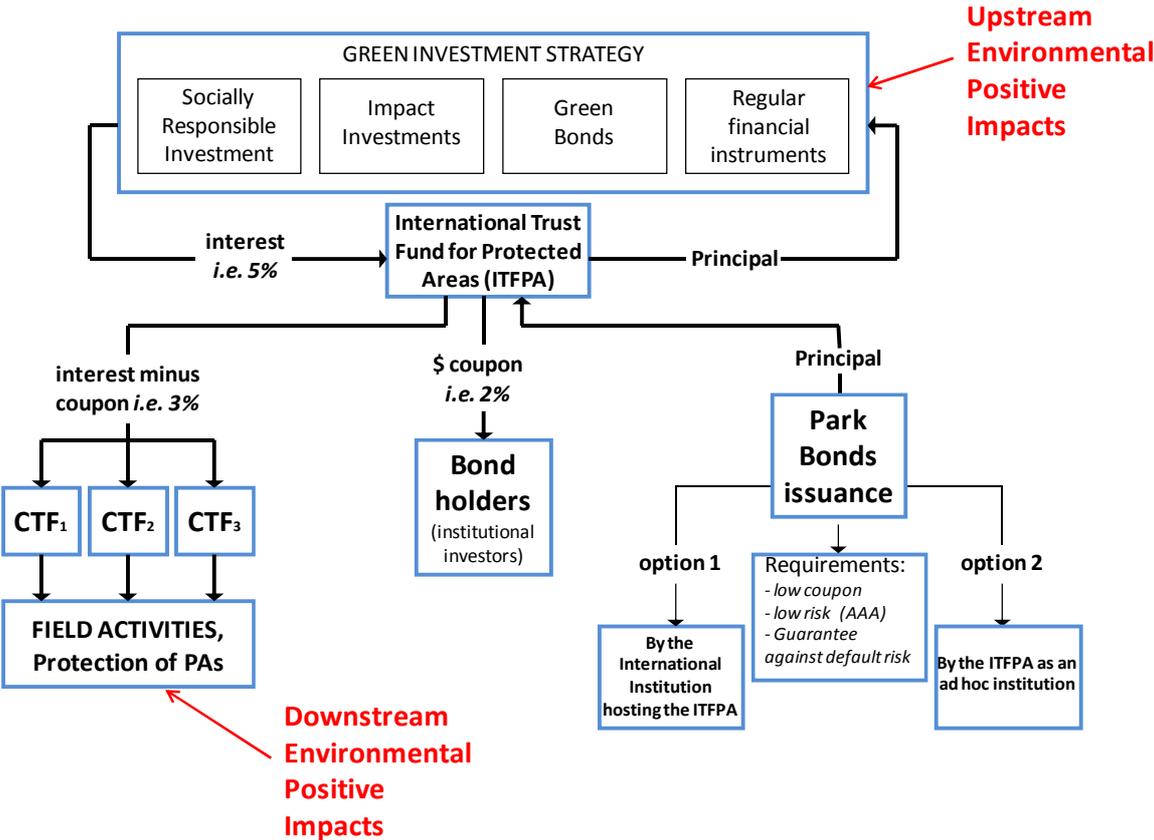
In order to attract investors, investing in the ITFPA should be extremely safe and benefit from a “guarantee” that any Park Bond interest and principal will be paid in the case of the issuer defaulting owing to eventualities such as insolvency. Certain governments from among the most advanced economies might be willing to offer such a guarantee in exchange for hosting the ITFPA and playing an active role in the Ethical Finance sector.

Park Bonds are therefore defined as a fixed income product that offers investors the opportunity to participate in the financing of conservation projects through the capitalization of an International Trust Fund, interest from which will be distributed to bond holders and identified beneficiaries.

Main features of Park Bonds

Issuance	International Trust Fund for Protected Areas (ITFPA), either as an independent body or hosted by a supranational institution
Maturity	10 years or more
Coupon	Possibly under 2%
Credit quality	AAA credit rating of issuer, or guaranteed by countries with high credit ratings
Currency	Most likely US Dollars, Euros or Pounds Sterling

Figure 4: General functioning of Park Bonds



Source: Author

management agencies more transparent, accountable and effective. CTFs can be characterized as public-private partnerships, and in most cases at least half of the members of their governing boards are from civil society. In addition to funding conservation projects, CTFs provide technical assistance and grants to strengthen the institutional capacity of grantees. CTFs have also served as catalysts for the creation of new partnerships with private businesses for the conservation and sustainable use of biological resources” (Spergel, B. and Taieb, P. (2008), *Rapid Review of Conservation Trust Funds*, pp.i–ii, Conservation Finance Alliance (CFA). Prepared for the CFA Working Group on Environmental Funds).

¹⁴ Quality Standards for CTFs are currently being designed by Conservation Finance Alliance, a network of volunteer members promoting sustainable financing for biodiversity conservation worldwide.

According to the diagram in Figure 4, for every USD 1 billion of Park Bonds issued, USD 30 million would be provided annually to the network of CTFs. This amount might seem rather low but, if attractive enough, the mechanism could easily be multiplied by 10 or more. It should be noted that the 2 per cent coupon rate is only indicative: several Green Bonds have been issued and successfully marketed with coupons of less than 1 per cent.

This new proposal has several **positive aspects** to recommend it:

- The ITFPA would allow the scale of investment needed to attract institutional investors: owing to the large portfolios they manage, they are unable to focus on small-scale investments.
- Park Bond issuances would be easy to track. The ITFPA (or the institution hosting it) would be in charge of both issuing them and paying the Park Bond holders (coupons and principal). This would make it straightforward for institutional investors to understand the Park Bond mechanism, associated risks and guarantees.
- If successful, Park Bonds offer enormous potential to fill the conservation funding gap.
- Networks of existing CTFs would have a mechanism to raise funds collectively, targeting big international investors.
- “Land Grabbing” is not a risk in this model. All activities funded by Park Bonds will be the subject of an agreement between given beneficiary governments and CTFs. Consequently, the Park Bond holders will not have any direct influence on the activities run by CTFs in the field. Reciprocally, CTFs will need to be absolutely transparent regarding the way interest is used, so that potential bond buyers are clear as to the impact of their investment.
- Given its double positive impact (upstream with Socially Responsible Investments, Impact Finance and other ethically responsible financial products; downstream with the distribution of remainder interest to individual CTFs), such a proposal is likely to satisfy investors and the international community.
- Different types of Park Bond transactions could be developed to further enhance their impact; various types could be offered to the financial markets, covering for example:
 - the entire network of participating CTFs;
 - Latin American CTFs;
 - African CTFs;
 - Marine Protected Areas.

The success of the above proposal depends on several points:

- ✓ The ability to offer a guarantee that Park Bonds will be repaid. Certain governments might be willing to offer such guarantee in exchange for hosting the ITFPA. The World Bank is also able to offer such guarantees.
- ✓ International acknowledgement of the positive role played by CTFs (preferably including their recognition by the Convention on Biological Diversity (CBD). The huge potential impact of Park Bonds, and the fact that a reasonable proportion of the capital raised would be invested in SRI, should add weight to the argument.
- ✓ The ability to obtain an official letter of endorsement from each country where CTFs operate, to assure bond holders that there are no sovereignty issues at stake and that any funds

received will not substitute, but rather add to, existing governmental support to PA networks.

- ✓ The board of each participating CTF should officially approve this new type of financing.
- ✓ Bond holders should not be allowed to influence, or interfere in, the way interest is used. Each CTF should be able to use the interest either to increase its endowment fund or to cover urgent needs in PAs (e.g. through a sinking fund).
- ✓ Investors should be given the complete picture of results obtained by the mechanism:
 - full financial transparency (publication of financial audits, not only from the ITFPA, but also from each beneficiary CTF);
 - full environmental transparency (publication of periodic environmental assessments);
 - as necessary, other reports to satisfy compliance with international quality standards for the good governance and management of CTFs.

Conclusion

As of today, many PA networks rely too much on governmental financing and Official Development Assistance, which have proved to be insufficient. Together with the development of Innovative Financial Mechanisms and domestic green taxes, Park Bonds would enable a new type of resource mobilization involving international finance, offering great potential to fill the current biodiversity funding gap. Park bonds are an ambitious concept that will only materialize if the idea wins the backing of important stakeholders (e.g. World Bank, CBD, key governments). However, as expressed by Simon Stuart, Chair of the International Union for Conservation of Nature (IUCN) Species Survival Commission: *"As long as we continue to suffer from a monumental lack of ambition in the conservation movement, we shall have, at best, isolated local successes against a backdrop of continuing deterioration. We have to break out of our traditional mindset if we are to succeed."*¹⁵

The idea of Park Bonds as described in this paper is at an early stage of development and faces several challenges, not least obtaining commitments from one or more advanced economies or international organizations that they will provide a Park Bond guarantee. Given that similar guarantees were offered to rescue the banking system in the depths of the financial crisis, negotiating these for environmental purposes seems to be an achievable political goal. The setting up of an International Trust Fund for Protected Areas (ITFPA) represents an interesting and ambitious means of enabling financial instruments dedicated to conservation and raising funds from institutional investors. The Park Bond concept is among the first attempts to link up institutional investors with ethical finance and conservation. If given a chance, it has the potential to substantially transform the conservation finance framework.

¹⁵ See "The Debate", available online on IUCN's website