

DIASPORA BONDS: TAPPING THE DIASPORA DURING DIFFICULT TIMES

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India and Israel have raised over US\$35 billion by tapping into the wealth of their diaspora communities. These diaspora bonds represent a stable and cheap source of external finance, often when countries lost access to international capital markets. For diaspora investors, these bonds offer the opportunity to help their country of origin while also providing an investment opportunity. The potential for diaspora bonds is significant for many countries with large diasporas abroad. However, diaspora bond issuance from countries with weak governance and high sovereign risk may require support for institutional capacity building and credit enhancement from multilateral or bilateral agencies. Haiti, for instance, could raise several hundred million dollars by issuing diaspora bonds provided a guarantee structure is created to build trust in the country's public institutions.

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1. Introduction

In the current environment of a crisis of confidence in debt markets, many countries are encountering difficulty in obtaining private financing using traditional financial instruments. The scarcity of capital threatens to jeopardize long-term growth and employment generation in developing countries, which tend to have limited access to capital even in the best of times. Official aid alone will not be adequate to bridge near- or long-term financing gaps. Ultimately, it will be necessary to adopt innovative financing approaches to target previously untapped investors. Diaspora bonds are one such mechanism that can enable developing countries to borrow from their expatriate (diaspora) communities.¹

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¹ See, in particular, Chapter 3 in [Ketkar and Ratha \(2009a\)](#). A broader discussion of innovative market-based financing mechanisms is provided in [Ketkar and Ratha \(2009b\)](#).

A diaspora bond is a debt instrument issued by a country — or potentially, a sub-sovereign entity or even a private corporation — to raise financing from its overseas diaspora. Israel annually since 1951 and India on three occasions since 1991 have raised over US\$35 billion using these bonds. The rationale behind the Government of Israel's issuance of diaspora bonds has been different from that of the Government of India's. The Government of Israel has offered a flexible menu of diaspora bonds since 1951 to keep the Jewish diaspora engaged. Furthermore, the Jewish diaspora has often paid a large price premium, thereby providing a significant “patriotic” discount in borrowing costs. The Indian authorities, in contrast, have used this instrument for balance of payments support, to raise financing during times when they had difficulty in accessing international capital markets. The members of Israeli and Indian diaspora have found such bonds attractive because of the opportunities such bonds provide for effective risk management. Furthermore, diaspora communities may have a “home bias” toward their country of origin and be willing to purchase diaspora bonds.

While India and Israel have been at the forefront in issuing diaspora bonds, many other nations also have large diaspora communities in the world and could benefit by issuing such bonds. These bonds could be a potentially important and innovative source of financing for development and is worthy of more detailed examination. The paper is organized as follows. In Sec. 2, we begin by briefly elaborating on the rationale for origin countries to issue, and for diaspora communities to purchase, diaspora bonds. We then compare and contrast in Sec. 3 the Israeli and Indian approaches to the issuance of diaspora bonds and draw lessons for potential issuers of diaspora bonds. While several countries have declared their intention to tap diaspora wealth, the actual issuance of diaspora bonds has been rather limited. We take up in Sec. 4 the reasons for this state of affairs and put forward a few ideas on alleviating the current binding constraints. In Sec. 5, we highlight the potential role this financing vehicle can play in providing financial help to the earthquake-ravaged Haiti. Finally, we conclude in Sec. 6 with a summary of findings and direction of future research.

2. Rationale for Diaspora Bonds

Diaspora bonds can be an attractive vehicle for countries to secure a stable and cheap source of external finance. Since patriotism is the principal motivation for purchasing diaspora bonds, they are likely to be in demand in fair as well as foul weather. Indeed, the purchase of bonds issued by Israel rose during the six-day war in 1967. Similarly, India was able to raise funds from its diaspora in the wake of the balance of payments crisis in 1991 and again following the nuclear explosion in 1998 when the country faced sanctions from the international community. Also, as discussed further below, the diaspora may provide a “patriotic” discount in pricing these bonds. The Israeli experience, and to a lesser extent the Indian experience, are in keeping with this hypothesis.

Yet another factor that might play into the calculus of the diaspora bond-issuing nation is the favorable impact it would have on the country's sovereign credit rating.

By making available a reliable source of funding that can be availed in good as well as bad times, the nurturing of the diaspora bond market improves a country's sovereign credit rating. Credit rating agencies believe that Israel's ability to access the worldwide Jewish Diaspora for funding has undoubtedly supported its sovereign credit rating.² But the rating agencies do not view this source of funding as decisive in determining Israel's credit rating. Standard and Poor's (S&P), for example, cites Israel's inability to escape painful adjustment program in the 1980s in reaching this conclusion.³ In other words, the availability of financing from the Jewish diaspora did not allow Israel to avoid a crisis rooted in domestic mismanagement. While the Jewish diaspora investors have stood by Israel whenever the country has come under attack from outside, they have not been as supportive when the problems were homegrown.

While concurring with the above assessment, Moody's analysts also point out that the mid-1980's economic adjustment, which brought down inflationary expectations and the 2002/2003 structural reforms have improved Israel's economic fundamentals such that the country has sharply reduced its dependence on foreign financing. Furthermore, diaspora bonds and the US government guaranteed debt make up the bulk of Israel's total external indebtedness. As a result, Israel's ability to issue diaspora bonds is now much more important in underpinning Israel's sovereign credit rating than it was in the 1980s when the country had a much larger financing requirement.

India's access to funding from its diaspora did not prevent the rating agencies from downgrading the country's sovereign credit rating in 1998 following the imposition of international sanctions in the wake of the nuclear explosions. Moody's downgraded India from Baa3 to Ba2 in June 1998 and S&P cut the rating from BB+ to BB four months later in October 1998 (S&P 2002). But the excellent reception which Resurgent India Bonds in 1998 and India Millennium Deposits in 2000 received in difficult circumstances has raised the relevance of diaspora funding to India's creditworthiness. Unlike Israel, however, India has not made diaspora bonds a regular feature of its foreign financing. Instead, diaspora bonds are used as a source of emergency finance. While not explicitly stated, India has tapped this funding source during times of balance-of-payments difficulties. India's ability to do so is now perceived as a plus.

Why would investors find diaspora bonds attractive? Patriotism is one explanation for investors purchasing diaspora bonds. The discount from market price at which Israel, India and Lebanon have managed to sell such bonds to their respective diaspora is reflection of the charity implicit in these transactions. Up to the end of the 1980s, Israel sold bonds with 10 to 15 year maturities to Jewish diaspora in the United States

²In a report dated March 13, 2009, Standard and Poor's said: "We do not... expect Israel to face significant or sustained difficulties in securing external financing." Among the reasons: "We... expect Israel to make use of its additional borrowing flexibility provided by the loan guarantee program with the US and the Israel Bonds Corporations (sic)." Similarly, in an overview issued March 18, 2009, Fitch cited Israel Bonds as "a reliable source of external financing". In January Moody's stated: "the (Israeli) government has a critical resource for external liquidity — the Israel Bonds program".

³Conversation with S&P's credit analyst David Beers.

(and Canada to a lesser extent) at a fixed rate of roughly 4 percent without any reference to changes in US interest rates. US 10-year yields over the same time period averaged 6.8 percent, implying a significant discount to market. It is only in the 1990s that interest rates paid by Israel started to rise in the direction of market interest rates. While Indian diaspora offered little patriotic discount, it is important to note that they provided funding when the ordinary sources of finance had disappeared following the balance of payments crisis in 1991 and the nuclear testing in 1998.

Beyond patriotism, however, several other factors may also help explain diaspora interest in bonds issued by their country of origin. The principal among these is the opportunity such bonds provide for risk management. A significant risk associated with diaspora bonds is that the issuing country may be unable to make debt service payments in hard currency. But its ability to pay interest and principal in local currency terms is perceived to be much stronger. This is an attractive feature of such bonds for diaspora investors. Typically, diaspora investors have current or contingent liabilities in their home country and hence may not be averse to accumulating assets in local currency. Consequently, they view the risk of receiving debt service in local currency terms with much less trepidation than purely dollar-based investors. Similarly, they are also likely to be much less concerned about the risk of currency devaluation. (The State Bank of India officials we interviewed were quite explicit in stating that the Indian diaspora knew SBI to be rupee-rich and hence never questioned its ability to meet all debt service obligations in rupees.)

Furthermore, the well documented home-bias which keeps investors' portfolios heavily concentrated in their home country assets (see [French and Poterba, 1991](#); [Tesar and Werner, 1998](#); [Ahearne et al., 2004](#)) is likely to apply to the case of diaspora investors. Since restrictions on international capital flows driving home-bias have lost much of their relevance in recent years, analysts have focused on alternative hypotheses. One such hypothesis contends that home investors have superior access to information about domestic firms or economic conditions ([Pastor, 2000](#); [Brennan and Cao, 1997](#); [Portes et al., 2001](#)). For members of the diaspora, such informational asymmetry may actually imply superior knowledge of firms and economic conditions in their countries of origin. In addition, diaspora members may have a comparative advantage in acquiring information about their countries of origin as [Van Nieuwerburgh and Veldkamp \(2009\)](#) have argued. All this may lead to a country-of-origin as opposed to country-of-destination bias in the portfolios of diaspora investors and provide yet another reason for their willingness to purchase diaspora bonds.

Yet other factors supporting purchases of diaspora bonds include the satisfaction that diaspora investors gain from contributing to the economic development of their home country. Diaspora bonds offer investors a vehicle to express their desire to do "good" in their country of origin through investment. Furthermore, diaspora bonds allow investors the opportunity to diversify their assets away from their adopted country. Finally, diaspora investors may also believe that they have some influence on policies at home, especially on bond repayments. Whether such influence is real or

imaginary is irrelevant. Diaspora members will be motivated to purchase diaspora bonds as long as they believe to have influence on policies.

3. Israeli versus Indian Issuance of Diaspora Bonds

Israel’s diaspora bonds differ from India’s in several ways (Table 1). Israel views its diaspora as a reliable source of external capital, and has tapped their wealth and goodwill year after year on a regular basis. India, however, has used diaspora funding only opportunistically.

While the Government of Israel established the Development Corporation for Israel (DCI) to issue diaspora bonds, India relied upon the government-owned State Bank of India (SBI). Israel has always viewed DCI’s diaspora bond issuance as a catalyst for economic development and growth. Over US\$26 billion in proceeds from such issuance has been used in transportation, energy, telecommunications, water resources, and other essential infrastructure projects. In contrast, India has turned to SBI to raise funding from Indian diaspora in times of weakness in the balance of payments. Thus, the SBI has tapped diaspora for funding on three separate occasions – India Development Bonds (IDBs) following the balance of payments crisis in 1991 (US\$1.6 billion), Resurgent India Bonds (RIBs) following the imposition of sanctions in the wake of the nuclear testing in 1998 (US\$4.2 billion), and India Millennium Deposits (IMDs) in 2000 (US\$5.5 billion).

The 4 percent coupon as well as the yield on DCI’s fixed-rate bonds from 1951 to 1989 was often far below the yields on 10-year UST notes. Thus, the Jewish diaspora initially provided a large patriotic discount to DCI. But the patriotic discount has dwindled in recent years. This is perhaps owed to the fact that younger Jewish investors are seeking market-based returns. More importantly, the decline in patriotic discount is also due to the availability of other Israeli bonds which trade in the secondary market and provide alternative avenues for acquiring exposure to Israel (Rehavi and Asher, 2004). In contrast to the Jewish diaspora, Indian investors provided

Table 1. Comparison of diaspora bonds issued by Israel and India.

Israel	India
Annual issuance since 1951	Opportunistic issuance in 1991, 1998, and 2000
Development oriented borrowings	Balance of payments support
Large though declining patriotic discount	Small patriotic discount, if any
Fixed, floating rate bonds and notes	Fixed rate bonds
Maturity 1 to 20 years with bullet repayment	Five year with bullet maturity
Targeted towards but not limited to diaspora	Limited to diaspora
Direct distribution by Development Corporation for Israel (DCI)	State Bank of India (SBI) distribution in conjunction with int’l banks
Registered with U.S. SEC	No SEC Registration

Source: Authors.

little overt discount — interest rates and yields on the SBI-issued bonds were about the same as comparably rated US corporate bonds. But the fact that the Indian diaspora purchased these bonds when India had lost its access to international capital markets suggests that the Indian diaspora in reality offered a large discount.

Another noteworthy difference between the Israeli and Indian approaches to diaspora bonds is the variety of instruments that were made available to the respective diaspora. SBI's diaspora bonds were non-negotiable fixed-rate bonds with a five-year maturity. The minimum investment amount was US\$2000. While the DCI also offered non-negotiable bonds, it provided a large menu of options — fixed and floating rate bonds and notes in denominations ranging from a low of US\$100 to a high of US\$1 million with maturities ranging from 1 year to 20 years. This is due in large measure to Israel's desire to build ties with the Jewish diaspora that go beyond raising development finance.

Yet another difference also stands out. The DCI marketing efforts were targeted towards but not limited to the Jewish diaspora. The SBI, in contrast, restricted access to RIBs and IMDs to investors of Indian origin. There are several possible explanations for limiting the size of the market. First, restricting the RIB and IMD sales to the Indian diaspora may have been a marketing strategy introduced in the belief that Indian investors would be more eager to invest in instrument that are available exclusively to them. Second, the SBI perhaps believed that the Indian diaspora investors would show more understanding and forbearance than other investors if India encountered a financial crisis. Having local currency denominated current or contingent liabilities, the Indian diaspora investors might be content to receive debt service in rupees. A third explanation rests on the know-your-customer (KYC) argument: the SBI concluded that it knew its Indian diaspora investor base well enough to feel comfortable that the invested funds did not involve money laundering.

A final difference between the Israeli and Indian approaches to diaspora bonds has to do with the US Securities and Exchange Commission (SEC) registration. The DCI decided to seek SEC registration. But India went out of its way to avoid SEC registration even though it meant losing access to the retail US investor base. Generally, high costs, stringent disclosure requirements and lengthy lead times are cited as the principal deterrents to SEC registration. But these were probably not insurmountable obstacles for SBI. Indeed, SBI officials pointed to the plaintiff-friendly US court system in relation to other jurisdictions as the principal reason for eschewing SEC registration. Perhaps an argument can be sustained, as in [Chander \(2001\)](#), to make the US SEC registration optional. Investors who value such registration highly will then be prepared to pay a price premium while unregistered bonds will fetch lower prices (higher yields). In other words, the law and forum would then become another attribute of the security, which will influence its market price. Giving investors the choice-of-law and forum can be supported on efficiency grounds. Proposals giving such a choice to investors were floated toward the end of the 1990s ([Romano, 1998](#); [Choi and Guzman, 1998](#)). But markets were roiled since then by the collapse of Enron and MCI, and more recently by the Madoff scandal, signaling that markets are not always

working in the best interest of investors. In view of this, it is highly unlikely that the US SEC or the US Congress would in the near future relax regulations and permit international investors to opt out of US laws and courts. The inability to register with the SEC may selectively limit the ability of some developing countries in placing diaspora bonds.

While the DCI's and SBI's diaspora bonds were quite different in many ways detailed above, one common thread in their success was the in-house marketing capability. DCI sold its bonds directly to the Jewish diaspora. Currently, there are about 200 DCI employees in the United States who maintain close contacts with Jewish communities in the various regions of the country so as to understand investor profiles and preferences.⁴ They host investor events in Jewish communities with the express purpose of maintaining ties and selling bonds. SBI's presence in the United States helped marketing of RIBs. Furthermore, where the Indian diaspora was known to favor specific foreign banks, such as the Citibank and HSBC in the Gulf region, the SBI outsourced to them the marketing of RIBs and IMDs. Not having their own marketing and distribution channels may, however, hamper the efforts of other countries in issuing diaspora bonds.

4. Potential for Diaspora Bonds

Since highly-skilled migrants in the rich countries are likely to be the principal purchasers of diaspora bonds, Table 2 lists 25 developing countries ranked by the presence of their diaspora in the OECD countries. Column 3 of Table 2 also presents the total stock of migrants from these countries in the world at large. The presence of millions of Mexican nationals in the United States is quite well known. The Philippines, India, China, Vietnam, and Korea from Asia; El Salvador, Dominican Republic, Jamaica, Colombia, Guatemala, and Haiti from Latin America and the Caribbean; and Poland from Eastern Europe have significant diaspora presence in the United States. Diaspora presence is also significant in other parts of the world, e.g., Korean and Chinese diaspora in Japan; Indian and Pakistani diaspora in the United Kingdom; Turkish, Croatian and Serbian diasporas in Germany; Algerians and Moroccans in France; and large pools of migrants from India, Pakistan, the Philippines, Bangladesh, Indonesia and Africa in the oil-rich Gulf countries.

But for diaspora investors to purchase hard currency bonds issued by their countries of origin there has to be a minimum level of governability. Absence of governability, as reflected in civil strife, is clearly a big negative for diaspora bonds. While this requirement would not disqualify most countries in the Far East and many in Eastern Europe, countries such as Cuba, Haiti and Nigeria (and several others in Africa), which have large diasporas abroad but have low levels of governance may be found wanting. Israeli and Indian experience also shows that countries will have to register their

⁴Conversation with officials at Israel's Ministry of Finance.

Table 2. Countries with large diasporas abroad (sorted by high-skilled migrants).

		High-Skilled Emigrant Stock (Thousand)	Total Emigrant Stock (Thousand)
1	Philippines	1,126	3,631
2	India	1,038	9,987
3	Mexico	923	11,503
4	China	817	7,258
5	Vietnam	506	2,225
6	Poland	449	2,316
7	Iran, Islamic Rep.	309	970
8	Jamaica	291	1,038
9	Russian Federation	289	11,480
10	Ukraine	246	6,082
11	Colombia	234	1,969
12	Pakistan	222	3,416
13	Romania	176	1,244
14	Turkey	174	4,403
15	Brazil	168	1,135
16	South Africa	168	713
17	Peru	164	899
18	Dominican Rep.	155	1,069
19	Haiti	153	834
20	Nigeria	149	837
21	Egypt, Arab Rep.	149	2,399
22	Serbia	148	2,298
23	Morocco	141	2,719
24	Lebanon	138	622
25	El Salvador	128	1,129

Source: High-skilled migrants abroad in high-income OECD countries as of 2000 from [Docquier and Marfouk \(2004\)](#); and total migrants abroad in 2005 from [Ratha and Shaw \(2007\)](#).

diaspora bonds with the US SEC if they want to tap the retail US market. The customary disclosure requirements of SEC registration may prove daunting for some countries. Some of the African and East European countries and Turkey with significant diaspora presence in Europe, however, will be able to raise funds on the continent where the regulatory requirements are relatively less stringent than in the United States. Arguably, diaspora bonds could also be issued in the major destination countries in the Gulf region and in Singapore, Hong Kong, Malaysia, Russia, and South Africa. All in all, the potential for developing countries to issue diaspora bonds is large.⁵ As many as eleven countries are currently believed to be thinking about this

⁵[Ratha et al. \(2008\)](#) estimate that countries in Sub-Saharan Africa could potentially raise US\$5–10 billion annually by issuing diaspora bonds to tap into the wealth of the diaspora abroad and the flight capital held by its residents.

financing vehicle. These include Ethiopia, Ghana, Grenada, Jamaica, Liberia, Morocco, Nepal, Philippines, Rwanda, Sierra Leone, and Sri Lanka.

The actual issuance of diaspora bonds, however, remains meager to date. A number of factors contribute to this outcome. First, there is limited awareness about this financing vehicle. Governments and other entities are often deterred by the complexities of bond instruments. Lacking the capacity to undertake bond issuance, they take the easy way out of depending upon national banks to generate local and foreign currency deposits (LCDs and FCDs) from diaspora investors. While FCDs attract foreign currency inflows, these can be withdrawn at any time. This is certainly true of demand and saving deposits. But even time deposits can be withdrawn at any time by forgoing a portion of accrued interest. Therefore, FCDs are likely to be much more volatile, requiring banks to hold much larger reserves against their FCD liabilities, thereby reducing their ability to fund investments. All bonds, including those targeted at the diaspora, in contrast, are long-term (until maturity) in nature. Hence, the proceeds from such bonds can be used to finance investment with some predictability. In view of this, many developing country policymakers would certainly benefit from technical assistance aimed at improving their understanding of structuring bond offerings, registering them with regulatory agencies such as the US SEC, and whether or not such instruments need to be rated by rating agencies. Not only are potential issuers uninformed about diaspora bonds, market players and regulators in the developed destination countries are also unfamiliar with these bonds.

Second, many countries still have little concrete appreciation of the capabilities and resources of their respective diaspora. As a recent World Bank survey by Plaza (2009) pointed out, few governments have a complete mapping of their diaspora. Data on diaspora are mainly based on those who register with embassies. But such registration is incomplete, at best. Furthermore, there is little coordination at the embassy/consular level when dealing with diaspora. As a result, many governments do not know where their diaspora are located. They also have little knowledge of how much their diaspora earn, save and invest. But this is now beginning to change. With remittances becoming an increasingly important source of development finance, countries are now becoming more and more interested in tracking their diaspora. Countries are also moving towards giving their diaspora dual citizenship.

A third constraint on diaspora bond issuance comes from the failure of many potential issuers to plan ahead. Indeed many potential issuers resort to whatever instruments are at hand at the last minute of need. Furthermore, many also abandon their plans for using new financing mechanisms as soon as the financing gap goes away. This seems to have happened in the Philippines and Sri Lanka, for example. The Central Bank of Sri Lanka was contemplating issuance of diaspora bonds until recently. But the possibility of raising US\$1 billion by selling plain vanilla bonds has persuaded the authorities to abandon diaspora bonds.

As pointed out before, diaspora investors must have confidence in the government of their home country if they are to purchase bonds issued by their countries of origin.

Thus countries that have a hostile diaspora are unlikely to succeed in raising financing through diaspora bonds. Also countries with political insecurity and weak institutional capacity would find it hard to market diaspora bonds unless credit enhancements are provided by more creditworthy institutions. While patriotism motivates diaspora to provide funding at discounted rates, they must have confidence that the funds would be used productively. Such confidence can be generated by creating appropriate structures for the productive use of the proceeds from diaspora bonds. For instance, proceeds from diaspora bonds can be earmarked for specific projects favored by the diaspora. A number of examples come to mind such as community infrastructure, housing, medical facilities, modernization of airports and railways, extension of transport infrastructure to smaller cities, and tourism development. At a smaller scale, diaspora investors may also find it attractive to purchase bonds whose proceeds are to be used to fund microfinance institutions. Of course, it is not enough to simply earmark proceeds from diaspora bonds to specific projects, it is also paramount to establish appropriate transparency, accountability, and governance necessary to enforce contracts.

5. Diaspora Bonds for Haiti

We take up in this penultimate section the constraints on Haiti's ability to issue diaspora bonds and put forward ideas to overcome these constraints. Given Haiti's massive financing requirements in the wake of the recent earthquake, one crucial question is: where will the money come from? Obviously, support needs to be made available in the immediate future. Also the level of funding has to be predictable over time in order to maintain what will be a long and expensive rebuilding process. International assistance from governments, multilateral institutions and private foundations is essential, but tapping the wealth and goodwill of the people of the nation living abroad can also be very effective. In the near-term, the Haitian diaspora is likely to contribute to both humanitarian relief and development through increased remittances to families. It can also contribute to the country's rebuilding effort through investment in reconstruction diaspora bonds.

According to official statistics ([Ratha, 2010](#)), about a million Haitians are currently living overseas, and about half of them are in the United States. Newspapers often report that a million Haitians live in the neighboring Dominican Republic. Haiti receives between US\$1.5 and 1.8 billion in remittances each year, over one-half of the country's national income ([Ratha, 2010](#)). In a laudable measure that will benefit Haitians more than any other aid and assistance, announced just three days after the devastating earthquake in Haiti, the United States granted temporary protected status (TPS) for 18 months to Haitians already in the US. The TPS would allow some 100,000 to 200,000 Haitians currently residing in the US without proper documents to live and work in the US legally, without fear of deportation ([US Department of Homeland Security Press release on January 15, 2010](#)). It would also allow them to send money home quickly and efficiently through formal remittance channels.

Remittances to Haiti this year will surge, as they have done wherever and whenever there has been a crisis or natural disaster. If the TPS results in a 20 percent increase in the average remittance per migrant, we would expect an additional US\$360 million remittance flow to Haiti in 2010. If the TPS were to be extended once beyond the currently stipulated 18 months — an extension is almost certain to happen, judging by the history of TPS extensions for immigrants from El Salvador, Honduras, Nicaragua, Somalia and Sudan — additional flows to Haiti would exceed a billion dollars over three years. Beyond remittances, the TPS will also enhance the ranks of Haitian diaspora in the United States, facilitating the issuance of diaspora bonds.

If the million plus Haitian diaspora were to invest US\$500 each in diaspora bonds, it would add up to millions of dollars. The incentive for such investments by Haitians would come partly from patriotism and partly from higher returns. A 5 percent tax-free dollar interest rate, for example, could attract a large number of Haitian investors who are getting close to zero interest rate on their deposits. Regarding the question of whether Haitian immigrants are too poor to invest in diaspora bonds, consider this fact from the Current Population Survey of the US: nearly one-third of legal Haitian immigrants in the US earned more than US\$60,000 in 2009. In comparison, less than 15 percent of immigrants from Mexico, Dominican Republic and El Salvador in the US had this level of household income. A quarter of Haitian immigrants, especially women, are reportedly in the relatively higher paying health care and education sectors and only a small number are in the construction sector. Not only Haitians, but also foreign individuals interested in helping Haiti, even charitable institutions, are likely to be interested in these bonds. That would further expand the pool of potential investors in Haiti's diaspora bonds.

Lack of trust in public institutions including the government, is likely to be one major obstacle to Haitians and others purchasing diaspora bonds issued by the Haitian government. Haiti was a weakly governed state before the recent earthquake further eroded confidence in its ability to deliver. Such concerns can in part be overcome by establishing a Haiti Reconstruction Authority (HRA) in partnership with the United Nations or other internationally reputable organizations.⁶ The HRA could then raise funds by issuing diaspora bonds. That alone may not suffice in overcoming the lack of investor confidence in Haiti. In all likelihood, these bonds would require credit enhancement from multilateral or bilateral donor agencies. Our preliminary calculations suggest that a US\$100 million grant from official or private donors to guarantee such bonds (say, for 10 years, on an annual rolling basis) could generate US\$600 million of additional funding for Haiti.⁷ Such a guarantee structure could also raise the rating on these bonds to investment grade, reducing interest rates from over 15 percent

⁶Jean-Germain Gros (2010) has proposed the creation of such an HRA with a much broader mandate to govern Haiti over the next few years. What we have in mind is an HRA, much like Israel's DCI, with a limited responsibility for reconstruction. Unlike DCI which works closely with Israel's Ministry of Finance, the HRA would be accountable to United Nations.

⁷This calculation draws on Gelb and Ratha (2009).

to potentially 5 percent. Marketing of such diaspora bonds in the US would, however, require a temporary exemption from SEC regulations (see next section).

6. Conclusions

This paper discusses the rationale and potential for issuing diaspora bonds as instruments for raising external development finance, mostly drawing on the experiences of Israel and India. The Government of Israel has nurtured this asset class by offering a flexible menu of investment options to keep the Jewish diaspora engaged since 1951. The Indian authorities, in contrast, have used this instrument opportunistically to raise financing during times when they had difficulty in accessing international capital markets (for example, in the aftermath of their nuclear testing in 1998). Although thus far, only state-owned entities have issued diaspora bonds, there is no reason why private sector companies cannot tap this source of funding. While India's SBI succeeded on one occasion in the past in bypassing US SEC registration, that is unlikely to happen again in the near future. US investors are unlikely to be allowed to choose the law and forum governing bond contracts. Finally, factors that facilitate the issuance of diaspora bonds include having a sizeable and wealthy diaspora abroad, and a strong and transparent legal system for contract enforcement at home. Absence of civil strife is a plus. In addition, earmarking proceeds from diaspora bonds for specific projects should also help improve their marketability. While not a pre-requisite, presence of national banks and other institutions in destination countries would facilitate the marketing of bonds to the diaspora.

In the specific context of Haiti, diaspora bonds can be a useful source of funding to rebuild the country's earthquake ravaged economy. But given the Haitian government's poor track-record in governance, overseas Haitian investors' willingness to purchase diaspora bonds will hinge critically on the endorsement and involvement of more trustworthy partners. The United Nations or other international organizations can lend credibility to the agency in charge of issuing diaspora bonds for reconstruction activities. That may have to be complemented with explicit credit enhancement of these bonds by multilateral or bilateral donors.

There is also a need for clarity on regulations in the host countries that allow or constrain diaspora members from investing in these bonds. A pertinent question in this context is, should these bonds be non-negotiable, or should there be efforts to develop a secondary market for these bonds? An argument can be made for the latter on the ground that tradability in the secondary market would improve the liquidity and pricing of these bonds.

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