Diaspora Bonds as a New Funding Vehicle for Developing Countries

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and

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Abstract

A diaspora bond is a debt instrument issued by a country – or potentially, a sub-sovereign entity or a private corporation – to raise financing from its overseas diaspora. Israel and India have raised $35-40 billion using these bonds. Drawing on their experiences, this paper discusses the rationale, methodology, and factors affecting the issuance of diaspora bonds for raising external development finance. 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. 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. Diaspora bonds are often sold at a premium to the diaspora members, thus fetching a "patriotic" discount in borrowing costs. Besides patriotism or the desire to do good in the investor's country of origin, such a discount can also be explained by the fact that diaspora investors may be more willing and able to take on sovereign risks of default in hard currency as well as devaluation as they may have local currency liabilities and they may be able to influence the borrower's decision to service such debt. In terms of process, India was able to bypass U.S. SEC registration in the past. But that appears unlikely for the foreseeable future since U.S. investors are unlikely to be allowed to choose the law and the forum governing bond contracts. Finally, having a sizeable diaspora, especially first-generation migrants, is understandably an important factor affecting the issuance of diaspora bonds. Countries with strong and transparent legal systems for contract enforcement are likely to find it easier to issue such bonds. Absence of civil strife is a plus. While not a pre-requisite, presence of national banks and other institutions in destination countries facilitates the marketing of bonds to the diaspora.

I. Introduction

In this paper, we examine the Israeli and Indian track records to draw generalized conclusions about the viability of diaspora bonds as a development financing instrument. The rise of various diasporas and their economic status in their adopted countries are fast becoming a source of pride as well as financial resources for developing countries. If seeking remittances is a way of tapping into diaspora income flows on a regular basis,[1] issuance of hard-currency-denominated bonds to the diaspora is a way of tapping into the latter's wealth accumulated abroad.

Diaspora bonds are not yet widely used as a development financing instrument. As discussed below, Israel since 1951 and India since 1991 have been on the forefront in raising hard-currency financing from their respective diaspora. Bonds issued by the Development Corporation for Israel (DCI), established in 1951 to raise foreign exchange resources from the Jewish Diaspora, have totaled well over $25 billion. Diaspora bonds issued by the government-owned State Bank of India (SBI) have raised over $11 billion to date. The Government of Sri Lanka has also sold Sri Lanka Development Bonds (SLDBs) since 2001 to several investor categories including non-resident Sri Lankans raising a total of $580 million to date.[2] South Africa is reported to have launched a project to issue the Reconciliation and Development (R&D) bonds to both the expatriate and domestic investors (Bradlow 2006). Although the Lebanese government has had no systematic program to tap its diaspora, anecdotal evidence indicates that the Lebanese diaspora has also contributed capital to the Lebanese government.[3]

Diaspora bonds are different from foreign currency deposits (FCDs) that are used by many developing countries to attract foreign currency inflows.[4] Diaspora bonds are typically long-dated securities to be redeemed only upon maturity. FCDs, in contrast, can

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[1] Remittance flows to developing countries have increased steadily and sharply in recent years to reach an estimated $338 billion in 2008 (Ratha et al. 2009).

[2] As per the Central Bank of Sri Lanka press release of September 13, 2006, the last issue of SLDBs for $105 million was sold through competitive bidding on September 12, 2006 at an average yield of LIBOR+148.5 basis points.

[3] Indirect evidence may be that the Lebanon's government bonds are priced higher than the level consistent with the country's sovereign credit rating.

[4] A Bloomberg search of FCD schemes identifies well over 30 developing countries. Moody's and Standard and Poor's have foreign currency short-term debt ratings for 60 and 68 developing countries respectively.

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. Diaspora bonds, in contrast, are a source of foreign financing that is long-term in nature. Hence, the proceeds from such bonds can be used to finance investment.

Diaspora bonds may appear somewhat similar to the Islamic bonds. But unlike diaspora bonds, Islamic bonds are governed by Islamic laws (Sharia) that forbid paying or receiving interest, and are structured as asset-backed securities of medium-term maturity that give investors a share of the profit associated with proceeds from such issuance. The international Islamic bond market is divided into sovereign (and quasi-sovereign) and corporate Sukuk markets. The Bahrain Monetary Agency was the first central bank to issue Islamic bonds with three and five year maturities in 2001. The German State of Saxony-Anhalt was the first non-Muslim issuer of Sukuk bonds when it tapped the global Islamic debt market in 2004 for EUR100 million. Qatar Global Sukuk for $700 million has been the largest issue of Islamic bonds to date with a seven-year maturity. Two factors have contributed to the recent rapid rise in Islamic bond issuance: growing demand for Sharia-compliant financial instruments from Muslim immigrant and non-immigrant populations around the world, and the growing oil wealth in the Gulf region (El Qorchi 2005).

The diaspora purchases of bonds issued by their country of origin are likely to be driven by a sense of patriotism and the desire to contribute to the development of the home country. Thus, there is often an element of charity in these investments. The placement of bonds at a price premium allows the issuing country to leverage the charity element into a substantially larger flow of capital. To the investors, diaspora bonds provide opportunity to diversify asset composition and improve risk management.

The plan of the paper is as follows. In the next two sections, we examine the experiences of diaspora bond issuance by Israel and India. In Section IV, we elaborate why diaspora bonds are attractive to the issuers and the investors. In Section V, we discuss minimum conditions for the issuance of diaspora bonds, and identify several

potential issuers. We conclude in Section VI with a summary of findings and discussion of future research.

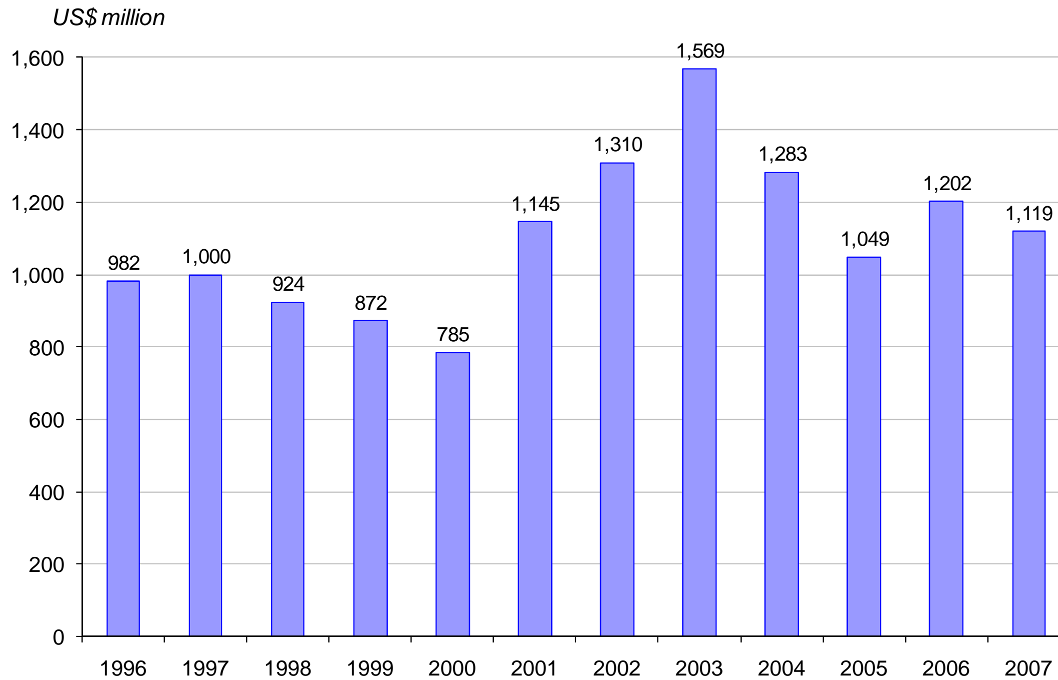
II. Israeli Experience

The Jewish diaspora in the United States (and to a lesser extent Canada) has supported development of Israel by buying bonds issued by the Development Corporation for Israel (DCI). The DCI was established in 1951 with the express objective of raising foreign exchange for the state from Jewish diaspora abroad (as individuals and communities) through issuance of *non-negotiable* bonds. Israel views this financial vehicle as a stable source of overseas borrowing as well as an important mechanism for maintaining ties with diaspora Jewry. Nurturing of such ties is considered crucial as reflected in the fact that the DCI offerings of diaspora bonds are quite extensive with multiple maturities and minimum subscription amounts that range from a low of $100 to a high of $100,000. The diaspora is also valued as a diversified borrowing source, especially during periods when the government has difficulty in borrowing from other external sources. Opportunity for redemption of these bonds has been limited and history shows that nearly all DCI bonds are redeemed only at maturity. Furthermore, some $200 million in maturing bonds were never claimed.[5]

The Israeli Knesset passed a law in February 1951 authorizing the floatation of the country's first diaspora bond issue known as the Israel Independence Issue, thereby marking the beginning of a program that has raised over $25 billion since inception (Figure 1). In May 1951, David Ben-Gurion, Israel's first prime minister, officially kicked off the Israeli diaspora bond sales drive in the United States with a rally in New York and then undertook a coast-to-coast tour to build support for it. This first road show was highly successful and raised $52.6 million in bond sales. The DCI bonds currently make up roughly one-third of the government's outstanding external debt.

[5] Chander, Anupam "Diaspora Bonds and US Securities Regulation: An interview", Business Law Journal, University of California, Davis, School of Law, May 1, 2005.

Figure 1: Total bond sales in Israel



Source: Bank of Israel

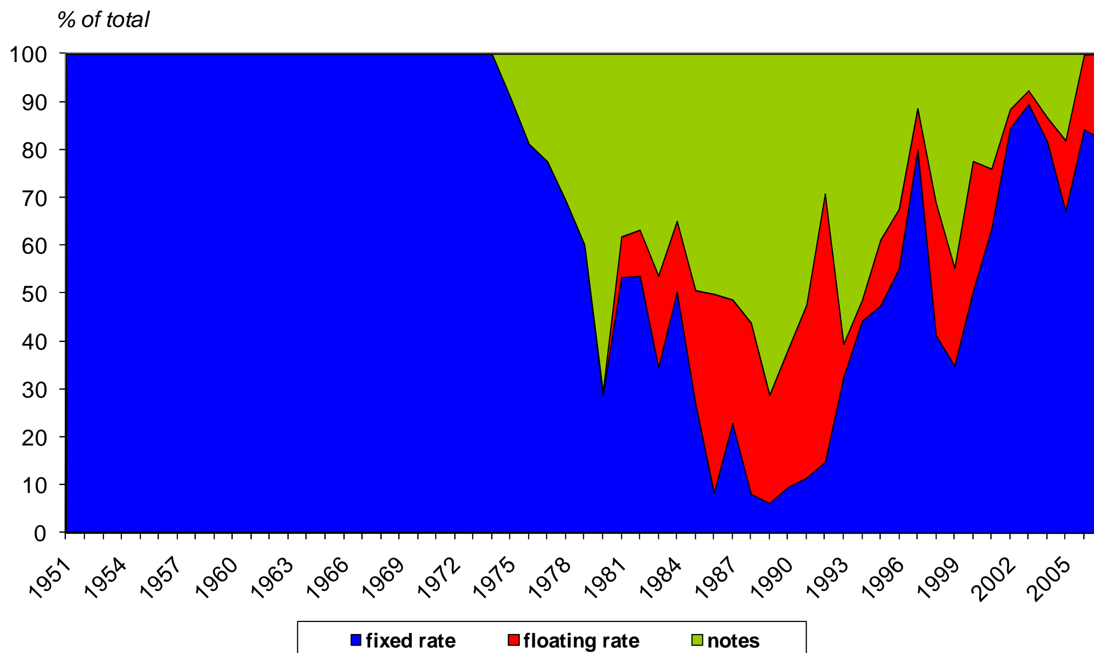
The history of DCI bond issuance reveals that the characteristics of such bond offerings have changed with time. Until the early 1970s, all DCI issues were fixed-rate bonds with maturities of 10 to 15 years (Table 1). In the mid-1970s, DCI decided to target small banks and financial companies in the United States by issuing 10, 7 and 5 year notes in denominations of $150,000, $250,000 and $1,000,000 at prime-based rates. Subsequently, the DCI changed its policy and began to re-target Jewish communities rather than banks and financial companies. The DCI also sold floating rate bonds from 1980 to 1999. The minimum amount on floating rate bonds was set at $25,000 in 1980 and reduced to $5,000 in December 1986. The maturity terms on these bonds were set at 10 to 12 years and interest rate was calculated on the basis of the prime rate. Of the total DCI bond sales of $1.1 billion in 2007, fixed rate bonds comprised 82 percent and floating rate bonds 18 percent (Figure 2).

Table 1: Bond Offerings in Israel

Bond Type	Dates	Maturity	Minimum	Rate Basis
Fixed rate	1951-80	10-15 yrs	N/A	4.0
Fixed rate	1990 on	10 yrs	N/A	Mkt. based
Fixed rate – EDI	1993	10 yrs	$25,000	Mkt. based, 6-month
Fixed rate -- Zero Coupon	1993	10yrs	$6,000	Mkt based, at redemption
Fixed rate – Jubilee	1998	5-10 yrs	$25,000	Mkt. based, 6-month
Notes	Mid-1970s	10 yrs	$150,000	Prime based
		7 yrs	$250,000	
		5 yrs	$1,000,000	
Floating rate	1980-1992	10-12 yrs	$25,0000, $5,000	Prime based
Floating rate	1993-99	10 yrs	$5,000	Prime based
Floating rate	Since End 1999	10 yrs	N/A	Libor based

Source: Bank of Israel

Figure 2: Bond Sales by Type in Israel

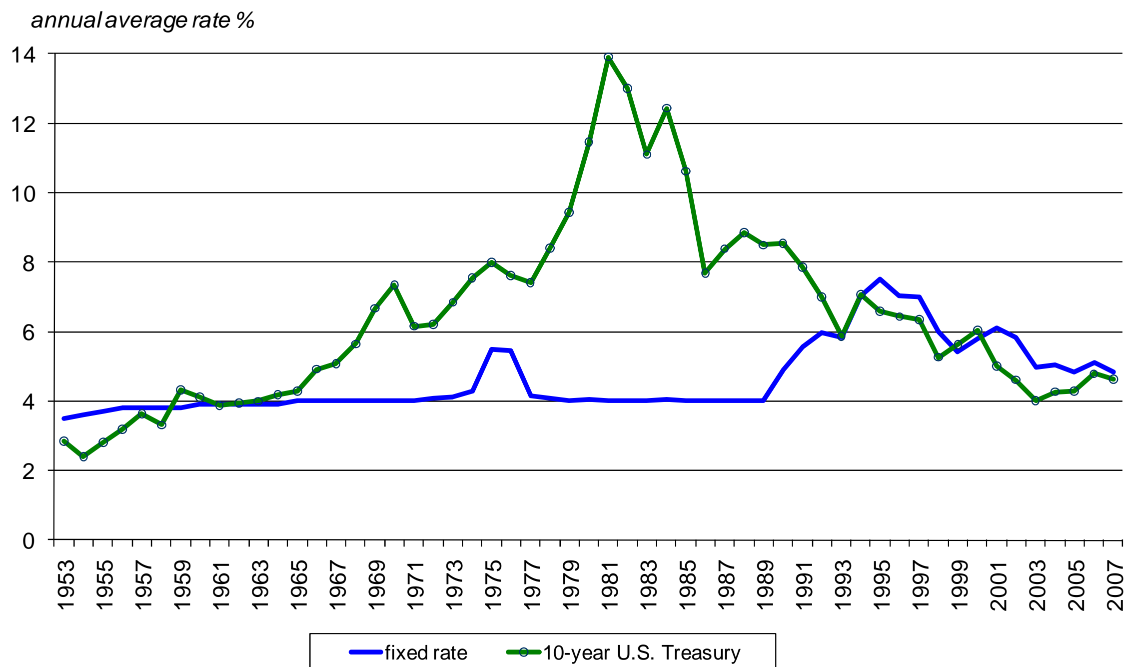


Source: Bank of Israel

Currently, Israel uses proceeds from bond sales to diaspora Jewry to finance major public sector projects such as desalination, construction of housing, and communication infrastructure. The Ministry of Finance defines DCI's annual borrowing policy in accordance with the government's foreign exchange requirements. The Finance

Ministry periodically sets interest rates and more recently other parameters on different types of DCI bonds to meet the annual borrowing target. Still, the Israeli government does not consider borrowings from diaspora Jewry as a market-based source of finance. Accordingly, it does not seek credit ratings on these bonds from rating agencies such as S&P and Moody's.

Figure 3: Discount on Israel DCI bonds compared to US Treasury



Source: Bank of Israel and U.S. Federal Reserve

Comparison of interest rates on fixed-rate DCI bonds versus those on 10-year UST notes shows the large extent of discount offered by the Jewish diaspora in purchasing these bonds. Interest rates on DCI fixed-rate bonds averaged about 4 percent from 1951 to 1989. While the 10-year UST rates were lower than 4 percent only from 1951 to 1958, they have been higher than 4 percent since. Of course, as the UST rates kept on rising rapidly in the 1980s and buying DCI bonds at 4 percent implied steep discounts, demand for the fixed-rate issues waned in favor of floating rate debt (Figures 2 and 3). The sharp decline in US rates since 2002 has, however, re-kindled investor interest in fixed-rate DCI bonds. Note that the degree of patriotic discount has dwindled in recent years and rates on fixed-rate DCI bonds have exceeded 10-year UST yields.

This is perhaps owed to the fact that younger Jewish investors are seeking market-based returns. But more importantly, the decline in patriotic discount is also due to the Ministry of Finance developing alternative sources of external financing such as negotiable bonds guaranteed by the U.S. Government, non-guaranteed negotiable bonds and loans from banks. These instruments, which trade in the secondary market, provide alternative avenues for acquiring exposure to Israel. Consequently, interest rates on DCI bonds have to be competitive; in fact a tad higher than those on the above alternative instruments given that DCI bonds are non-negotiable (Rehavi and Asher 2004).

The 50 plus year history of DCI bond issuance reveals that the Israeli government has nurtured this stable source of external finance that has often provided it foreign exchange resources at a discount to the market price. Over the years, the government has expanded the range of instruments available to Jewish diaspora investors. The pricing of these bonds has also recognized the changing nature of the target investor population. In the early years, the DCI sold bonds to diaspora Jewry, principally in the United States, having a direct or indirect connection with the Holocaust and hence willing to buy Israeli bonds at deep discount to market. But the old generation is being replaced by a new, whose focus is increasingly on financial returns. Accordingly, the DCI bond offerings have had to move in recent years towards market pricing.

No commercial/investment banks or brokers have been involved in the marketing of Israeli diaspora bonds. Instead, these bonds are sold directly by DCI with Bank of New York acting as the fiscal agent. 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. They host investor events in Jewish communities with the express purpose of maintaining ties and selling bonds.

III. Indian Experience

The Indian government has tapped its diaspora base of non-resident Indians (NRIs) for funding on three separate occasions – India Development Bonds (IDBs) following the balance of payments crisis in 1991 ($1.6 billion), Resurgent India Bonds (RIBs) following the imposition of sanctions in the wake of the nuclear explosions in

1998 ($4.2 billion), and India Millennium Deposits (IMDs) in 2000 ($5.5 billion). The conduit for these transactions was the government-owned State Bank of India (SBI). The IDBs provided a vehicle to NRIs to bring back funds that they had withdrawn earlier that year as the country experienced a balance of payments crisis. The IDBs and subsequently the RIBs and IMDs paid retail investors a higher return than they would have received from similar financial instruments in their country of residence. India also benefited because the diaspora investors did not seek as high a country risk premium as markets would have demanded. While this may have reflected different assessments of default probabilities, a more plausible explanation resides in investors of Indian origin viewing the risk of default with much less trepidation.[6]

Table 2: Diaspora bonds issued by India

Bond Type	Amount	Year	Maturity	Minimum	Coupon
India Development Bond	$1.6 bn	1991	5 years	Not available	
USD					9.50%
GBP					13.25%
Resurgent India Bond	$4.2 bn	1998	5 years		
USD				2,000*	7.75%
GBP				1,000**	8.00%
DM				3,000*	8.25%
India Millennium Deposits	$5.5 bn	2000	5 years		
USD				2,000*	8.50%
GBP				2,000*	7.85%
EUR				2,000*	6.85%

** plus multiples of 1,000; ** plus multiples of 500*
Source: State Bank of India

The IDBs, RIBs and IMDs all had five-year bullet maturity. The issues were done in multiple currencies – US dollar, British pound, Deutsche Mark/Euro. Other relevant characteristics of the offerings are set out in Table 2. Unlike the Jewish diaspora, the Indian diaspora provided no patriotic discount on RIBs and only small one on IMDs. When RIBs were sold in August 1998 to yield 7.75 percent on U.S. dollar-denominated bonds, the yield on BB-rated U.S. corporate bonds was 7.2 percent. There was thus no

[6] We take up this point again in explaining SBI's decision to restrict the access to RIBs and IMDs to investors of Indian origin.

discount on the RIBs. As for the IMDs, the coupon was 8.5 percent while the yield on the comparably rated U.S. corporate bonds was 8.9 percent for a 40 basis points discount. In any case, Indian diaspora bonds provided little if any discounts.

From a purely economic perspective, the SBI's decision to restrict access to RIBs and IMDs to investors of Indian origin appears a bit odd. Why limit the potential 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 and/or contingent liabilities, the Indian diaspora investors might be content to receive debt service in rupees. In addition to the above reasons, however, the KYC (know-your-customer) reason offered to us by SBI officials appears convincing. The SBI concluded that it knew its Indian diaspora investor base well enough to feel comfortable that the invested funds did not involve drug money.

Table 3: 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
Maturities from 1 to 20 years with bullet repayment	Five year with bullet maturity
Direct distribution by DCI	SBI distribution in conjunction with int'l banks
Targeted towards but not limited to diaspora	Limited to diaspora
SEC registered	No SEC registration
Non-negotiable	Non-negotiable

India’s diaspora bonds differ from Israel’s in several ways (Table 3). First, Israel views diaspora Jewry as a permanent fountain of external capital, which the DCI has kept engaged by offering a variety of investment vehicles on terms that the market demanded over the years. India, however, has used the diaspora funding only opportunistically.

Second, the SBI has restricted the sales of its diaspora bonds only to investors of Indian origin. Israel, in contrast, has not limited the access to only the diaspora Jewry. Finally, while the DCI has registered its offerings with the U.S. Securities and Exchange Commission (SEC), the SBI has opted out of SEC registration.

The question of SEC registration

As Chander (2001) points out, the SBI decision to forego SEC registration of RIBs and IMDs raises several interesting issues. As for the RIBs, India managed to sell them to Indian diaspora retail investors in the United States without registering the instrument with the SEC. It made the argument that RIBs were bank certificates of deposits (CDs) and hence came under the purview of U.S. banking rather than U.S. securities laws. Indeed, the offer document described the RIBs as “bank instruments representing foreign currency denominated deposits in India.” Like time CDs, the RIBs were to pay the original deposit plus interest at maturity. RIBs were also distributed through commercial banks; there were no underwriters. While the SEC did not quite subscribe to the Indian position, the SBI still sold RIBs to US-based retail investors of Indian origin. But it was unable to do so when it came to the IMDs, which were explicitly called deposits. Still, the SBI chose to forego U.S. SEC registration. Instead of taking on the SEC, the SBI placed IMDs with Indian diaspora in Europe, the Gulf States and the Far East.

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. Costs of registration could not have exceeded $500,000; an insignificant amount compared to large size of the issue and the massive size of the U.S. investor base of Indian origin to which the registration would provide unfettered access. The disclosure requirements also should not have been a major constraint for an

institution like the SBI, which was already operating in a stringent regulatory Indian banking environment. The relatively long lead-time of up to three months was an issue and weighed on the minds of SBI officials, especially when RIBs were issued in the wake of the nuclear explosions and sanctions. But SBI officials pointed to the plaintiff-friendly U.S. court system in relation to other jurisdictions as the principal reason for eschewing SEC registration. As Roberta Romano explains "in addition to class action mechanisms to aggregate individual claims not prevalent in other countries, U.S. procedure – including rules of discovery, pleading requirements, contingent fees, and the absence of a 'loser pays' cost rule – are far more favorable to plaintiffs than those of foreign courts." (Romano 1998) Finally, high priced lawyers also make litigation in the United States quite expensive. A combination of these attributes poses a formidable risk to issuers bringing offerings to the U.S. market (Chander 2001).

India's decision to forego SEC registration implied the avoidance of both U.S. laws and U.S. court procedures. Chander (2001) presents four reasons why an issuer involved in a global offering might seek to avoid multiple jurisdictions. First, compliance with the requirements of multiple jurisdictions is likely to escalate costs quite sharply. Second, the substantive features of the law may be unfavorable or especially demanding for particular type of issuers or issues. Countries, for example, have differing definitions of what constitute securities. Third, compliance with the requirements of multiple jurisdictions can delay offerings because of time involved in making regulatory filing and obtaining regulatory approvals. While the pre-filing disclosure requirements under Schedule B of the Securities Act in the United States are very limited, a market practice has developed to provide a lot of detailed economic and statistical information about the country, possibly to avoid material omissions. Putting together such information for the first time can prove daunting. Finally, the application of multiple regulatory systems to a global offering can potentially subject the issuer to law suits in multiple jurisdictions.

Perhaps an argument can be made, as in Chander (2001), that investors be allowed to divest themselves from U.S. securities law in their international investments if they so choose. This approach could be generalized by giving investors the choice-of-law and forum, which is a principle recognized by U.S. courts for international transactions. 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 provided that rational and well-informed investors populate the market. Proposals giving such a choice to investors were floated towards the end of the 1990s (Romano 1998, Choi an 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 SEC or the Congress would in the near future relax regulations and permit international investors to opt out of U.S. laws and courts.

In the meantime, however, more and more investors have been voting with their feet and adopting laws and courts of a country other than the United States. In the late 1990s, the U.S. exchange listed capital markets attracted 48% of all global Initial Public Offerings (IPOs). The U.S. market share in global IPOs fell below 6 percent in 2005/06 when 33 out of 35 largest IPOs took place outside the United States (Committee on Capital Markets Regulation – CCMR – Interim Report 2006).[7] Several factors have contributed to the decline in the competitiveness of U.S. capital markets in recent years including high costs of implementing Section 404 of the Sarbanes-Oxley Act, the rising class action settlement costs (from $150 million on average in 1995 to $3.5 billion in 2005), and six-times higher directors' and officers' insurance rates in the United States in comparison to Europe (CCMR Interim Report 2006). Chinese companies often cite over-regulation in the U.S. capital markets as the principal concern that leads them to issue stocks outside the United States (Murray 2006). In the short term, however, countries wishing to raise capital from diaspora investors will have to register their offerings with the U.S. SEC if they wish to have access to the retail U.S. diaspora investor base. If they opt to eschew SEC registration, they will then lose their ability to sell in the retail U.S. market.

[7] The Committee on Capital Markets Regulation (CCMR) is an independent and bipartisan group comprised of 23 leaders from the investor community, business, finance, law, accounting, and academia. On November 30, 2006, the Committee issued its interim report, highlighting areas of concern about the competitiveness of U.S. capital markets and outlining 32 recommendations in four key areas to enhance that competitiveness. For more information on this high-powered committee see www.capmktsreg.org.

IV. Rationale for Diaspora Bonds

Rationale for the issuer

Countries are expected to find diaspora bonds an attractive vehicle for securing 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.[8] Also, the diaspora is expected to provide a "patriotic" discount in pricing these bonds. The Israeli and to a lesser extent the Indian experience is clearly in keeping with this hypothesis.

The patriotic discount, which is tantamount to charity, raises an interesting question as to why a country should not seek just charitable contributions from their diaspora instead of taking on debt associated with the diaspora bonds. Seeking handouts may be considered politically degrading in some countries. More importantly, diaspora bonds allow a country to leverage a small amount of charity into a large amount of resources for development.

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. Rating agencies believe that Israel's ability to access the worldwide Jewry for funding has undoubtedly supported its sovereign credit rating.[9] But S&P does not view this source of funding as decisive in determining Israel's credit rating. S&P cites Israel's inability to escape painful adjustment program in the 1980s in reaching this conclusion. 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

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[8] Indeed, the purchases of bonds issued by Israel's DCI rose during the six-day war. Similarly, India was able to raise funds from its diaspora in the wake of the foreign exchange crisis in 1991 and again following the nuclear explosion in 1998 when the country faced debilitating sanctions from the international community.

[9] In a report dated March 13, 2009, Standard & 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 U.S. 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.'

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 2002/03 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 U.S. 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 1980's when the country had 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 to BB from BB+ in October 1998. But the excellent reception which RIBs and IMDs 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 forays. Instead, diaspora bonds are used as a source of emergency finance. While not explicitly stated, India has tapped this funding source whenever the balance of payments has threatened to run into deficit. The country's ability to do so is now perceived as a plus.

Rationale for the investors

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's DCI sold bonds with 10 to 15 year maturities to Jewish diaspora in the United States (and Canada to a lesser extent) at a fixed rate of roughly 4 percent without any reference to changes in U.S. interest rates. U.S. 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 the DCI started to rise in the direction of market interest rates.

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 provides for risk management. The worst-case default risk associated with diaspora bonds is that the issuing country would 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, and therein lies the attractiveness of such bonds to 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 SBI 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, and Ahearne, Griever and Warnock 2004) is likely to be much weaker for 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, and Portes et al. 2001). But for immigrants, such informational asymmetry may actually imply superior knowledge of firms and economic conditions in their countries of origin. In addition, immigrants may have a comparative advantage in acquiring information about their countries of origin.[10] All this may lead to a country of origin as opposed to country of destination bias in the portfolios of immigrants and provide yet another reason for diaspora investors' willingness to purchase diaspora bonds.

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[10] For the development of such an informational choice model, see Van Nieuwerburgh and Veldkamp 2009).

Still other factors supporting purchases of diaspora bonds include the satisfaction that investors reap from contributing to economic growth in 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 and somewhat speculatively, diaspora investors may also believe that they have some influence on policies at home, especially on bond repayments.

V. Conditions and Candidates for Successful Diaspora Bond Issuance

The sizeable Jewish and Indian diaspora in the United States, Europe and elsewhere have contributed to the success of Israel and India in raising funds from their respective diaspora. Many members of these diaspora communities have moved beyond the initial struggles of immigrants to become quite affluent. In the United States, for example, Jewish and Indian communities earn among the highest levels of per capita incomes. In 2000, the median income of Indian-American and Jewish households in the United States was $60,093 and $54,000, respectively, versus $38,885 for all U.S. households.[11] Like all immigrants, they are also known to save more than the average U.S. savings rate. As a result, they have sizable amount of assets invested in stocks, bonds, real estate and bank deposits.

Many other nations have large diaspora communities in the high-income OECD countries (Table 4).[12] The presence of tens 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

[11] National Jewish Population Survey (NJPS) of 2000/01 and the U.S. Census Bureau.
[12] Data on migration stocks tend to be incomplete and outdated. Recent efforts to collect bilateral migration data in major migration corridors are summarized in Ratha and Shaw (2007).

Moroccans in France; and large pools of migrants from India, Pakistan, the Philippines, Bangladesh, Indonesia and Africa in the oil-rich Gulf countries.

Table 4: Countries with large diasporas in the high-income OECD countries

		High-skilled emigrant stock (thousand)	High-skilled emigrant stock (% of population)	Emigrant stock (% of population)	Governance indicator
1	Philippines	1,126	1.49	2.22	-0.52
2	India	1,038	0.10	0.17	0.09
3	Mexico	923	0.94	6.56	-0.48
4	China	817	0.06	0.13	-0.47
5	Vietnam	506	0.64	1.61	-0.45
6	Poland	449	1.16	2.94	0.32
7	Iran, Islamic Rep.	309	0.48	0.83	-0.76
8	Jamaica	291	11.24	26.30	-0.55
9	Russian Federation	289	0.20	0.39	-0.84
10	Ukraine	246	0.50	1.51	-0.60
11	Colombia	234	0.55	1.33	-0.71
12	Pakistan	222	0.16	0.42	-0.81
13	Romania	176	0.79	2.51	-0.29
14	Turkey	174	0.26	2.92	0.07
15	Brazil	168	0.10	0.22	-0.41
16	South Africa	168	0.38	0.61	0.19
17	Peru	164	0.63	1.35	-0.77
18	Dominican Republic	155	1.88	7.08	-0.66
19	Egypt, Arab Rep.	149	0.22	0.38	0.02
20	Serbia and Montenegro	148	1.82	8.78	-0.81
21	Morocco	141	0.51	3.93	-0.10
22	Lebanon	138	4.07	9.15	-0.36
23	El Salvador	128	2.03	10.67	-0.37
24	Hungary	124	1.22	3.12	0.70
25	Trinidad and Tobago	120	9.37	18.35	-0.07
	Cuba	*333*	*2.99*	*7.76*	*-1.14*
	Haiti	*153*	*1.92*	*4.93*	*-1.62*
	Nigeria	*149*	*0.13*	*0.20*	*-1.38*

Source: Governance data from Kaufman, Kraay and Mastruzzi; high-skilled migrants abroad in high-income OECD countries as of 2000 from Docquier and Marfouk (2004).

But for diaspora investors to purchase hard currency bonds issued by their countries of origin, it would seem that 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 governability may be

found wanting. Israeli and Indian experience also shows that countries will have to register their diaspora bonds with the U.S. SEC if they want to tap the retail U.S. 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.

The Israeli track record reveals how the patriotic discount is the greatest from first generation diaspora than from subsequent generations. Thus, the DCI secured large elements of charity in bonds issued in the immediate wake of the birth of the nation. As the Jewish diaspora with intimate connection to the Holocaust dwindled over time, the DCI pricing of diaspora bonds moved closer to the market. This is likely to be even more important where the diaspora ties are based on country of origin rather than religion. The second and subsequent generation country diaspora can be expected to have much weaker ties to their ancestral countries. This suggests that more than the aggregate size of the diaspora, the strength of the first generation immigrants with close ties to the home country would be a better yardstick of the scope for diaspora bonds. Also skilled migrants are more likely to invest in diaspora bonds than unskilled migrants.

While not a pre-requisite, the sale of diaspora bonds would be greatly facilitated if the issuing country's institutions such as the DCI from Israel or its banks had a significant presence to service their diaspora in the developed countries of Europe and North America. Such institutions and bank networks would be much better positioned to market diaspora bonds to specific diaspora individuals/communities. Clearly, the presence of Indian banks in the United States helped marketing of RIBs. Where the Indian diaspora was known to favor specific foreign banks, such as the Citibank and HSBC in the Gulf region, the SBI out-sourced to them the marketing of RIBs and IMDs.

VI. Conclusion

This paper discusses the rationale, methodology, 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). While thus far, only state-owned entities have issued diaspora bonds, there is no reason why private sector companies can not tap this source of funding. In terms of process, the issuers of diaspora bonds were able to bypass U.S. SEC registration in the past; but that may not happen in the near future as U.S. investors are unlikely to be allowed to choose the law and the forum governing bond contracts. Finally, factors that facilitate—or constrain—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. While not a pre-requisite, presence of national banks and other institutions in destination countries facilitates the marketing of bonds to the diaspora.[13]

It has been difficult to gather facts and data on diaspora bonds although anecdotally a number of countries are believed to have issued such bonds in the past (e.g., Greece after World War II). One difficulty that confounds data gathering is the confusion between diaspora bonds and foreign currency deposits, and some times between diaspora bonds and local currency deposits. Exhorting the diaspora members to deposit money in domestic banks is different from asking them to purchase foreign currency denominated bonds in international capital markets. Indeed, as we pointed out above, diaspora bonds are also different from Islamic bonds even though both are targeted to investors belonging to a specific group rather than to all investors. There is a need for better data gathering, including on pricing of these bonds, and on the cyclical characteristics of the flows associated with these bonds.

[13] A number of countries, including Ethiopia, Ghana, Grenada, Jamaica, Liberia, Morocco, Nepal, Philippines, Rwanda, Sierra Leone and Sri Lanka are believed to be exploring the possibility of issuing diaspora bonds at present.

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 respect is, should these bonds be non-negotiable, or should we make an effort 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 liquidity and pricing of these bonds.

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