1 ROLE OF GOVERNMENT IN FACILITATING DEVELOPMENT OF THE BOND MARKET

1.1 Introduction

The importance of a sound and diversified financial sector, which efficiently performs the function of financial intermediation, can hardly be overemphasized. However, a general trend observed in Asian economies, as in Pakistan, has been an over-reliance on the banking system to fulfill the financing needs of the economy, with capital markets relatively slower to develop in comparison. One of the prime examples of the grave implications of a skewed financial sector in Asia was the East Asian crisis, where banks were looked upon as the predominant provider of external finance. A post-crisis reflection on events brought forth the awareness of the significance of debt markets and in particular, of bond markets, as a complementary source of finance. Moreover, the continued integration and deepening of financial markets is a significant issue for policy makers, and particularly for central banks entrusted with the formulation and implementation of monetary policy, since well-integrated and efficient financial markets are crucial in ensuring a smooth transmission of monetary impulses to the economy.

Notably, the government has a 'market-completion' role in the development of the debt market.[1] As the primary issuer of sovereign bonds of various tenors, the government effectively establishes the benchmark for the pricing of private sector debt instruments (**Box 1.1**). In doing so, it catalyzes the development of the financial system.

From a regional perspective, in comparison with financial markets in advanced economies, the Asian capital market is a collection of distinct national entities, where the relatively more developed economies are starting to integrate well with the more advanced economies. Bank deposits and government debt securities are the major growth drivers in the size of the financial sector in Asian economies. Within the overall capital markets, equity markets have grown more significantly, as shown in **Table 1.1.**

In most Asian countries, as in Pakistan, the bond market is dominated by government bonds, especially in the early stage of development (**Table 1.2**). Literature on bond market[2] development suggests several reasons for the particular process of evolution in emerging

Table 1.1 : Capital Markets in Asian Countries
percent of GDP

	Equity market capitalization				Size of LCY Bond Market (outstanding)			
	1997	**2004**	**2007**	**2009**	**1997**	**2004**	**2007**	**2009**
China	11.2	23.2	126.5	66.2	12.9	32	46	52
Indonesia	36.4	29.5	48.7	35.8	2.1	25	20	17
Korea	14.5	51.9	105.9	89.6	45.0	82	99	111
Malaysia	93	147.8	167.1	143.7	56.9	78	85	94
Pakistan*	**16.8**	**17.3**	**41.6**	**18.0**	**5.4**	**30**	**23**	**21**
Philippines	51.4	32.9	63.2	51.2	30.5	42	36	38
Thailand	15.1	67.1	84.1	64.1	7.1	40	55	65
Hong Kong	238	505.2	1281.2	1097.1	26.4	47	47	68
Singapore	111.5	185.4	278.4	243.9	24.8	70	66	80

Source: Bloomberg, ADB, ADB Asian Bonds Online and SBP staff calculations
*Includes Government Bonds (FY basis)

[1] Patel (2004).
[2] Shirai (2001) and Yoshitomi and Shirai (2001).

Box 1.1: Development of the Bond Market in Singapore - Role of the Government

The Asian crisis in 1997 highlighted the importance of deep and efficient capital markets to economic growth and stability. An overdependence on bank finance exacerbates the fragility of the financial system. A well-diversified financial system facilitates risk management and a more efficient manner of allocating resources and capital.

Prior to 1998, the bond market in Singapore was small and undeveloped. The Singapore Government ran budget surpluses and had no need to raise funds in the capital markets. Singapore Government Securities (SGS) were issued mainly to meet banks' demand for liquid assets for statutory requirements. At that time, the longest-dated SGS was only 7 years. As a result, the SGS market was relatively small and its secondary market inactive. In the absence of a liquid benchmark yield curve, the private sector was reluctant to tap the debt market, with most corporations relying on bank borrowings and equity to meet their funding needs.

Initiatives to Develop Singapore's Bond Market

In February 1998, the Monetary Authority of Singapore embarked on a series of measures to develop Singapore's bond market. Some of the objectives were:

- to create a credible government benchmark yield curve to encourage private sector issuance;
- to facilitate issuers, both domestic and international, to access both the primary and secondary markets; and to establish the physical infrastructure to facilitate clearing and settlement of SGS and corporate bonds.

Some of the measures taken included:

- enhancing the depth and breadth of the SGS market by increasing the issuance volume, increasing the number of primary dealers and extending the risk-free yield curve with regular auctions of longer-term (up to 15 years) SGS;
- lifting of size restrictions of repo trading and running of a SGS repo facility for primary dealers to cover their short positions in benchmark issues arising from their market making activities;
- broadening the quasi-government bond sector by encouraging statutory boards to issue bonds;
- upgrading the bond clearing and settlement system of the central depository.

Growth of the Singapore Bond Market

The range of measures taken to develop the SGS market have been successful in establishing a more liquid benchmark yield curve.

- As a result, the government bond market has grown substantially in size, depth and liquidity.
- The Corporate debt market also grew strongly in tandem with the government bond market.
- Measures to liberalize the non-internationalization policy of the Singapore dollar resulted in foreign issuances making up more than 11% of total corporate debt issuances.
- Singapore bond market has also seen a greater diversity of issuers in the market. Prior to 1998, property companies dominated the SGD corporate bond market, accounting for about 70% of total issuance. Now the issuer mix is more balanced. The issuers come from various industries such as engineering, manufacturing, food, logistics and transport.
- One of the significant trends has been a growth of Structured Debt Products. Under historically low yields in plain vanilla securities, the proportion of structured issues to plain vanilla issues has gradually been increasing. To facilitate the development of structured products as an alternative form of financing, guidelines on the capital treatment for credit derivatives were introduced in 2000, and guidelines on asset-backed securities for banks were introduced in 2002. To grow the investor base, investment guidelines for insurance companies were also introduced, allowing them to invest in credit derivatives for hedging and portfolio management purposes.
  - Structured debt made up almost 60% of total SGD debt issuances in 2004.
  - It included a wide range of products such as asset securitized debt, credit linked debt, equity linked debt, convertible debt and other structures.
  - This signals an increase in the level of sophistication and risk appetites of the local investor base, a necessary ingredient in developing the breadth of the debt market.
  - Asset securitized debt made up more than half the structured SGD debt issues in 2004.
- The market has also seen the introduction of principal protected credit hybrid products combining debt and equity.
- In an innovative securitization deal, the government supported the launch of an SME ACCESS Loan Scheme which will enable SMEs to tap the capital market via asset securitization. In pooling together a well-diversified portfolio of SME credits, the scheme is expected to generate some S$300 million worth of SME loans for securitization. Similar securitization of SME loans have been seen in the Japanese and Korean markets to great success as well.

Source: BIS (2006)

Table 1.2: Growth of Local Currency Bond Market in Emerging East Asian Economies
percent

	2005	2006	2007	2008	2009	2010*
Indonesia						
Total	-10.6	41.8	11.7	-19.7	42.7	13.9
Government	-11.0	44.9	10.6	-19.3	42.5	12.8
Corporate	-7.3	16.5	23.1	-23.4	44.7	24.0
Malaysia						
Total	10.5	16.5	32.2	1.0	11.0	26.6
Government	6.7	15.7	33.9	-4.9	11.6	35.5
Corporate	16.2	17.6	29.9	9.2	10.2	15.9
Singapore						
Total	4.0	19.6	22.6	4.2	18.2	17.8
Government	6.1	19.2	22.0	6.8	20.9	10.5
Corporate	1.4	20.0	23.3	1.0	14.6	28.2
Thailand						
Total	18.5	38.6	27.2	1.2	25.4	22.7
Government	19.3	31.6	30.5	0.5	25.8	25.0
Corporate	15.0	71.2	15.2	4.0	23.6	13.5

*up to September 2010.
Source: www.asianbondonline.com

economies. A few general trends observed show that individuals in such countries have a greater preference for liquid short-term bank deposits, institutional investors are underdeveloped or non-existent, few companies are sufficiently large and reputable to issue bonds and the requisite informational, legal and judicial infrastructure is not in place.

This chapter discusses the development of the bond market in Pakistan. Section 1.2 gives an overview of the debt market in Pakistan, section 1.3 gives some of the main impediments in the development of the corporate debt market, section 1.4 discusses the launch of the Electronic Bond Trading Platform by State Bank of Pakistan, while the last section concludes by suggesting the way forward for the development of the bond market in Pakistan.

1.2 State of the Debt Market in Pakistan

Similar to the trend observed in most Asian countries, the major drivers of financial assets in Pakistan are deposits and government bonds, whereas corporate bond issuances remain a miniscule portion,[3] with the total outstanding (listed) issues at Rs. 69.7 billion (0.5 percent of GDP) at end-FY10 (**Table 1.3**). Pakistan Investment Bonds (PIBs) remain the longest tenor sovereign bonds, providing the benchmark yield curve for private issuances.[4] National Savings Schemes (NSS), on the other hand, with tenors upto 10 years, provide risk-free investment options to retail and institutional investors.[5]

Two main reasons which signify the importance of the development of a vibrant debt market in Pakistan are discussed below. The first relates to the efficiency and stability of the financial system and the other to the effectiveness of monetary policy.

[3] As part of overall financial sector reforms, companies were allowed to issue "Term Finance Certificates" (TFCs) from 1995 onwards.
[4] PIBs were initially issued in 2000 in the tenors of 3, 5, and 10 years. In 2004, the benchmark yield curve was further extended with the launch of PIBs of 15 years and 20 years in an endeavor to create a sovereign benchmark yield curve for developing the mortgage industry. In 2006, the yield curve was further extended to 30 years when PIBs of this tenor were issued in December.
[5] Details in Chapter 3 in this edition of the FSR.

Table 1.3: Listed Corporate Sector Outstanding Debt
million Rupees

Year	No. of Issues	Maturity	Issuance Size	Outstanding TFCs
FY95	1	Feb-00	232.4	232
FY96	2	Jan99 –Oct 00	750.0	982
FY97	1	Dec02-Jun03	1,000.0	1,982
FY98	2	Dec 03-May04	974.3	2,957
FY99	3	Jan,03-May04	1,439.3	4,146
FY00	3	Jan,03-Jan05	897.5	4,811
FY01	11	Mar,04-Jun06	5,735.2	10,046
FY02	17	Dec,04-Jun07	10,110.5	18,814
FY03	22	Jul,06-Dec08	10,660.8	28,141
FY04	6	Nov, 06-Dec10	3,370.0	29,737
FY05	13	14-15 Mar13	15,825.0	38,259
FY06	8	Nov 10-May14	9,975.0	44,394
FY07	8	July 11-Dec14	11,200.0	47,170
FY 08	7	Feb13-Feb18	22,500.0	62,200
FY09	2	Oct-13	6,100.0	66,350
FY10	2	Aug-19	5,500.0	69,775
FY11	-	-	-	68,900

Source: S&DWH

Efficiency and Stability of the Financial System

Essentially, a viable debt market provides an alternative source of external finance to firms, usually dominated by the banking sector in emerging economies like Pakistan. Indeed, the monopoly of the banking sector is an impediment to the fundamental principle of perfect competition; it leads to inefficiency and therefore to sub-optimal outcomes in the loan market, and jeopardizes the stability of the financial system. When the banking sector has to face competition from a well developed local currency bond market, it is forced to improve the efficiency of its operations. The scenario in Pakistan is dominated by the banking sector that faces very little competition from the corporate debt market.

The short tenor of bank loans, itself a consequence of the nature of banks' deposits particularly in Pakistan,[6] leads to maturity mismatch issues in the banks' asset and liability portfolios. This essentially means that long-term funding needs are financed by a consistent roll-over of short-term loans, and in times of tight liquidity, borrowers finding themselves unable to roll over their maturing obligations might experience a credit crunch. Access to bond markets then serves the purpose of a *complimentary*, rather than the *alternative* source of finance, as propagated by the much cited example of the essential "spare tyre".[7] This is particularly true when a growing economy like Pakistan needs to raise sufficient funds for financing long-term infrastructure projects.

When firms can raise their own funds through the issuance of bonds, they are less dependent on banks and therefore are immune to the difficulties that banks might face. This also puts pressure on banks to improve their efficiency as they no longer possess captive clients. Consequently, banks can focus more on those enterprises of the economy that typically face credit constraints due to their small size, relatively new stage of development, or simply asymmetrical information.

[6] This is discussed in detail in the thematic article on "Efficiency of Financial Intermediation: An Analysis of Banking Spreads" in FSR 2006.
[7] Remarks by Alan Greenspan with reference to the East Asia financial crisis, 1999.

One inherent characteristic of bond and securities finance is the provision of better risk-sharing than banks. When securities are spread across a large number of individuals, the risk is more efficiently diversified. Better risk sharing then is an incentive for creditors to commit themselves for longer periods of time, thus facilitating the borrowers in meeting their long-term funding needs. Indeed, all this adds up to the stability of the financial system.

Transmission Mechanism of Monetary Policy

Effectiveness of monetary policy has a crucial dependence upon the behavior of long-term interest rates, which are greatly influenced by the short-term interest rates. A well developed debt market is crucial in determining the 'effectiveness' of the short-term rates and therefore for the transmission mechanism of monetary policy.

Central banks around the world usually have direct control over short-term interest rates and these are therefore their main policy instruments. When a central bank raises or reduces these rates, the market-determined long-term interest rates tend to behave accordingly. However, for this mechanism to work effectively a well-developed debt market, including both long-term government and corporate bonds, that ensures intermediation for long-term lending, is crucial. In the absence or near non-existence of such a market, it is rather challenging for a central bank to achieve its desired goal(s).

1.3 Impediments to the Development of a Corporate Debt Market[8]

Even though the corporate debt market has made some progress since the implementation of capital market reforms, it still lacks depth. Some of the impediments in its development are :

Yields on NSS Instruments

Historically, the key obstacle to the development of the corporate debt market has been the competition for long term investment alternatives from the NSS instruments, which offer zero- risk yields much higher than returns on corporate bonds. In order to align NSS rates with market-based yields on instruments of similar tenors, the yields on NSS instruments were first reduced,[9] and then pegged to the yields on the government's market-based long term bonds. In March 2000, institutional investors were barred from incremental investment in NSS. However, the policy-reversal[10] by the government to re-allow institutional investment in NSS has dampened the demand for TFCs, making it essential to keep NSS rates in line with the overall interest rate structure in the economy.

Market Psyche regarding Disclosure Requirements

A large number of business entities in Pakistan tend to be family owned and managed, and display an inherent reluctance to share or disclose information. Among other factors, this is one of the reasons why the number of listed companies decreased from 762 in 2000 to 651 in the year 2010. Over a period of time, a number of listed companies have opted for de-listing, whereas the newly listed companies are mainly privatized public sector entitles.

While a large majority of these entities avail financing facilities, they are reluctant to list themselves on the exchanges for fear of loss of control, sharing of information, disclosure requirements, requirements relating to corporate governance, etc. This is also evident from the number of corporate borrowers (including partnerships) in the e-CIB database, i.e. 21,072 as of end-September 2010, in comparison with around 56,774[11] private limited

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[8] As discussed in Chapter 3, Financial Stability Review 2006, SBP.

[9] These were reduced with effect from May 14, 1999 and this move was followed by two more cuts in NSS rates effective from January 1, 2000 and July 1, 2000 that brought down the average rate on 10-year DSCs from 15 percent to 14 percent during this period.

[10] Effective October 2006.

[11] As of end-Sept 2010.

companies registered with the SECP, showing their preference to meet their funding needs from internal resources.

This mindset does not only adversely impact the development of the corporate debt market but also has a bearing on the financing structure of the corporate sector, since borrowing from the banking sector is the most commonly used option to mobilize funds (**Table 1.4**). Ideally a corporate entity, before embarking upon borrowings from the banking sector, should assess and weigh various options to mobilize funds through new issuance of equity instruments, quasi-equity instruments like preference shares, long term debt instruments like TFCs or short term debt instruments like commercial paper. Lack of willingness to diversify the sources of capital and borrowings also impedes the growth potential of the corporate sector.

Table 1.4: Sources of Corporate Financing

Amount in billion Rupees

Year	Banks	IPO*	TFC*
CY02	525	0.1	4.7
CY03	607	2.5	19.5
CY04	873	21.7	0.0
CY05	1076	9.8	6.6
CY06	1270	3.0	3.0
CY07	1520	4.9	4.0
CY08	2016	6.9	12.6
CY09	2065	1.1	0.0

Source: SBP and KSE
* The IPOs and TFCs issued by financial institutions are not included.

High Transaction Costs

High transaction costs have been a major hindrance, especially in the initial period, when TFC issuance was discouraged by the relatively high issuance, listing and taxation costs. The listing costs are in the process of being rationalized, through combined efforts of the SECP and KSE, in addition to a rationalization of the withholding tax rates and stamp duties on these instruments. Factors related to turnaround time on documentation requirements and approvals needed from SECP are also in the process of being addressed.[12]

Illiquid Secondary Market

While the primary market of TFCs has made some progress, the secondary market is quite illiquid. This is due to a number of factors including small issue volumes, a certain reluctance among holders of instruments (due to inexperience in trading debt instruments), lack of competition, and a lack of ongoing fresh supply of sovereign instruments.

Several measures have been taken by SECP in recent years to promote the development of a vibrant debt market. For instance, SECP formed a committee of experts in 2006, to identify the issues hindering the growth of debt markets and to make suitable recommendations to provide a facilitative environment. SECP envisages that the recommendations of this committee, once fully implemented, will lead towards the growth and development of a vibrant debt capital market in the country. This will also strengthen the linkages between the SECP, the State Bank of Pakistan, and other stakeholders within the Government and the corporate sector.

1.4 Introduction of the Electronic Bond Trading Platform

It is particularly with the objective of increasing the efficiency and depth of both the primary and secondary markets of government securities with the objective of developing a secondary market for debt instruments that SBP launched the electronic bond trading platform for fixed-income securities on January 11, 2010. Previously, all securities were traded in the inter-bank market either through individual dealing terminals or through telephones, with no real-time source of information. This used to result in delayed deal

[12] Proposed Reforms to Pakistan's Debt Capital Market, presented to SECP by the Debt Capital Market Committee, April 2007.

execution, inefficient pricing mechanism, enhanced credit/liquidity risk, and unproductive utilization of liquidity available in the market.

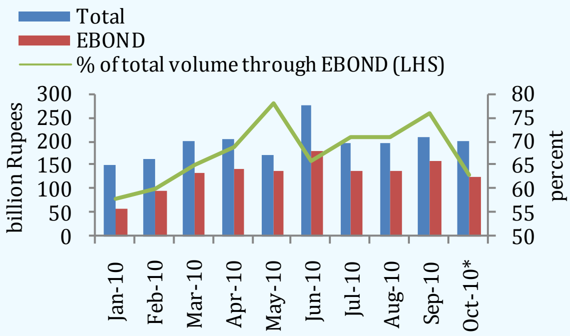
The availability of real-time information about yields and turnover will help the issuer in determining demand for its paper and make better funding decisions. It will also attract more investors to the market as the price discovery process becomes much easier resulting in liquidity enhancement and reduced liquidity premium. This will also result in the development of liquid yield curves for various market segments. Since Bloomberg subscribers pay no additional cost for this platform, they will save on broker commissions by using it more frequently which should result in narrower spreads, ceteris paribus.

With a widened investor base, banks will be able to shift government debt from their books freeing up funds for private sector credit. Overtime, it will also facilitate the development of ABS market in Pakistan as investors become more comfortable with fixed income instruments resulting in increased lending capacity for banks.

The fact that Bloomberg is offering its services in all the major financial markets in the world is another advantage of the system as it will provide international investors with an additional window on Pakistan's economy.

Available data shows that the cumulative trading of government securities through this platform reached 66 percent of the total trading volume by end-FY10, compared to a level of 58.0 percent in January FY10 (**Figure 1.1**). In its first phase, the E-bond platform currently facilitates the outright trading of government securities (for instance, T-bills, PIBs and Ijarah Sukuk) only. However in the second and third phase, other types of securities and transactions (for instance, repo, FRAs and swaps) will also be captured by the system. It is expected that with the full-fledged functioning of the E-bond system, the effectiveness of money market will increase.

Figure 1.1: Government Securities Volume (Secondary Market)



*up to October 21, 2010
Source: SBP

1.5 The Way Forward

In view of the above, this section discusses a few factors which could potentially facilitate the development of a debt market in Pakistan.

Role of Banks

The banking sector, which has a virtual monopoly on providing financing to all sectors of the economy, can play a contributing role in the development of the debt market. Banks are often among the most important issuers, holders, dealers, advisers, underwriters and guarantors in the market.[13] Given the skewed nature of their balance sheets with maturity mismatch issues, banks can issue long-term bonds for Asset Liability Management (ALM). This is particularly relevant from the perspective of financing long term projects. To further manage their risk profiles in changing interest rate environments, there are now sophisticated risk-management tools such as Interest Rate Swaps (IRS) at their disposal. Subordinated bond issuance also has the advantage for banks of being recognized as tier 2 capital, which helps them in meeting their capital adequacy requirements.

[13] As discussed in BIS Paper No. 11.

Role of SBP in promoting secondary market trading

The central bank has a crucial role in promoting secondary market trading of debt securities – by improving the effectiveness of monetary policy implementation. Efforts to reduce the volatility of short-term interest rates, while credibly signaling the policy stance, go a long way in increasing investor confidence while promoting the maturity transformation of financial intermediaries' portfolios. Moreover, stable money market rates foster repo activity and anchor the yield curve as trading develops in longer maturities.

Developing the term structure of interest rates

Development of the term structure of interest rates depends on regular issues in the primary market, increased trading activity in the secondary market, and providing ease of entry and exit to both the issuers and the investors. Regular auctions of Pakistan Investment Bonds (PIBs) since May 2006 is a step in this direction.

Developing bond markets and enhancing the capacity of public- and private-sector borrowers to issue long-dated, domestic currency denominated debt securities is high on the country's policy agenda, as is the case in both East Asia and Latin America.[14] Despite the setback to the development of the bond market due to the policy reversal on institutional investment in NSS, the recently initiated PIB auctions give an indication of the Government's inclination to develop the long-term yield curve, and thus the bond market, as in other Asian economies. This is all the more so because for the first time in the history of local bond offering, a 30 year PIB issue was floated in December 2006. Regular PIB auctions of sizable amounts will increase GoP's average debt maturity profile, which has been significantly shortened due to its reliance on short-term borrowing, contribute towards developing and extending the yield curve, and generate the requisite liquidity in the secondary market.

Developing the investor base

Among other factors, the presence of the requisite investor base is crucial for the development of both the primary and the secondary markets in debt securities. The regulatory environment should provide the right incentive framework to encourage both individual and institutional investors to invest, and trade in, debt instruments. SBP's Primary Dealer system, which includes commercial banks, DFIs and brokerage houses, helps in widening the investor base of government securities to corporates, pension funds and retail investors. A wide range of investors, with varying risk preferences, time horizons and trading motives would ensure active trading and liquidity. Moreover, the role of a reputable credit rating agency is quite significant in this respect, to instill confidence among the investors in understanding the credit risk parameters.

In conclusion, a basic set of key recommendations for emerging markets is to strengthen macroeconomic policies to provide a stable setting for both borrowing and lending, to strengthen corporate governance to ensure that firms would borrow prudently, to strengthen financial disclosure requirements to enhance the ability of potential bondholders to make prudent investment decisions, to encourage the growth of institutional investors to enhance diversification opportunities and reduce transaction costs, and to strengthen bond market infrastructure generally by creating efficient clearing and settlement, credit enhancement and custodial facilities.[15]

[14] As discussed in Eichengreen et al, (2006)

[15] As discussed in, Barry Eichengreen et al, (2006)

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