ISSUES IN THE DEVELOPMENT OF LONG TERM BOND MARKET IN PAKISTAN

Syed Maqbool-ur-Rehman

Abstract

A well developed bond market is essential for economic development. Unfortunately, in Pakistan, the bond market lacks depth and breadth, despite considerable efforts made during the financial sector reforms in the early 90s. Federal Reserve ex chairman, Alan Greenspan remarked that the developed bond market acts as a spare tire for the economy. This paper will take stock of the developments in the financial markets over the last two decades. It will identify key issues impeding the development of the long term bond market in Pakistan and produce a set of policy recommendations for a well functioning and thriving bond market in Pakistan.

Keywords: Financial markets, development, reforms, interest rates, maturities, liquidity, trading, cutoff yield, auction, secondary market.

JEL Classification: G 100

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Introduction

Well developed financial markets contribute positively towards economic development as these provide long term sources of finance to business, government and society. Efficient financial markets (a) reduce risk involved in financial transactions by pooling and diversifying risk factors; (b) lower the cost of financial intermediation by exploiting benefits from economies of scale and economies of scope; (c) mobilize savings and channelize these funds into investment activities; (d) optimize the allocation of resources available in the economy.

This paper aims to review the evolution of the financial markets in Pakistan over the last two decades. This examination has been segregated into pre-reform and post reform era as these markets evolved during this period. We have taken stock of the initiative taken by the regulators to resolve some issues identified by the researchers in the past and the resultant effect on the development of these markets. Finally, some unresolved issues (list of do more) impeding the course of development of long term sources of finance are highlighted to gain attention of the policy makers.

Historical perspective of bond market

The concept of long term bond market dates back to the era when industrialization started in the United States. After obtaining the contract of rail road development network in the U.S, Sr. Rockefeller forced the counties to subscribe to the long term bond that aimed to finance the giant infra structure project or remain without market access. Threat worked as no one wanted to lag behind. Government also provided tax incentives to the subscribers for creating the right environment for the development of bond market. As a result, within the passage of three hundred years, the bond market in the United States did not only become the largest in terms of size but also the
richest in varieties that it offers to its participants. With few exceptions, longer dated bonds more than 30 years were almost never issued by the Corporations in the U.S. However, firms such as Walt Disney, Coca Cola, ABN Amro and Bell South issued 100 years bond to lock in the low interest rates. Current record of longest maturity bond however rests with Safara Republic Holdings SA which in October, 1997 sold bonds for 1,000 years (Essentials of Corporate finance, 3rd edition by Stephen A. Ross).

**Pakistani bond market**

**Pre Reform Period**

There was no money market in Pakistan prior to 1990. Government securities (GTDR’s) were offered on tap for maturities ranging 3, 6 & 12 months at fixed rates. Usually, surplus financial institutions invested in these securities. Deficit units in the financial sector had options to either resort to inter bank call market or discount the government securities (GTDR’s) from the SBP to square their positions. Occasionally, tenders were called for the subscription to the GOP loans and Provincial Loans for fixed tenure, return and amounts to meet the budgeted expenditure of these governments. In 1985, Bearer national fund bond, Bearer dollar certificates were issued to channelize huge undocumented funds.

**Post Reform Period**

Funds Managers Association (FMA) came into being and served as regulatory and advisory body under the auspices of the central bank for the development of money market in Pakistan. Twelve brokerage licenses were issued and rules of engagements were drawn for an enabling money market. Lending and borrowing rates were largely market driven with discount rate used as the benchmark ceiling rate for interbank money market transactions. Most transactions in money market were conducted on telephone. Settlement of these transactions was to be done manually either by runners or money market brokers.
Pakistan debt market owes its existence to the structural reforms initiated by the Government of Pakistan in the banking sector in early 90’s. It provided a platform for the development of bond market. Two main types of government securities were put on auction for different maturities namely; STFBs for 3- months, 6- months and 12 months and Federal investment bonds for 3,5, and 10 years at fixed semiannual coupons of 13, 14 and 15%, respectively. First auction of FIBs was conducted in March 1991 and the last in June 1998. After the introduction of auctions for government securities, SBP decided to extend a 3-Day Repo Facility against T-bills to provide cash accommodation needed by the banks. After the abolition of credit-deposit ratio (CDR), open market operations (OMOs) were conducted in January, 1995 to keep interest rates in the market at desired levels. Initially, few OMOs were unsuccessful as the rates quoted by the participants were not representative of the rates prevailing in the market. However, subsequent learning process enabled both SBP and the banks to adapt to the market mechanism. SBP also introduced depository for government securities in the form of Subsidiary General Ledger Account (SGLA). This allowed market participant to bid for scrip less securities in place of paper securities that required proper discharge for liquidation and were cumbersome to handle. Selective Primary dealers were appointed to participate in auction of government securities in the year 2000. These dealers were to act as market makers for government securities. Competitive and non competitive bid concept was a welcome step in the right direction. The difference in this pattern of bidding was created to accommodate the aggressive and passive bidders. Aggressive bidders submit multiple bids at varying yields while passive bidders will get the government paper at the cut off yield of the auction. SBP replaced FIBs with PIBs and started the auction for 10 year paper after a gap of two years. The issuance provided the market with 10 year yield curve benchmark. This was further extended when SBP decided to issue PIBs of 15 and 20 years in January, 2004. The momentum of extending the benchmark yield curve continued when PIB 30 years was issued.
After around two decades, government securities market has matured considerably in Pakistan in comparison to corporate bond market. The following initiatives have been taken by the central bank in the last two years which will create more depth and breadth in the government securities market in the time to come.

**High volatility in overnight interest rates**

Money market witnessed high volatility in overnight interest rates over the last two decades which was worrisome and destabilizing for the growth of the market. State bank of Pakistan in August, 2010 introduced an interest rate corridor whereby banks were allowed to enter into Repo transaction with SBP at the floor 300 basis point lower than the ceiling rate which was SBP reverse repo rate for lending. This timely step reduced volatility in the overnight repo rate which is evident when measured by the standard deviation. Before the implementation of interest rate corridor standard deviation observed in overnight repo rate was 1.1 which was subsequently declined to 0.5(figure 1). This low volatility in short-term money market interest rates will not only increase the effectiveness of monetary policy but also result in better liquidity management and smooth functioning of financial markets.

**Trading in the secondary market**

Since inception the Repo and outright deals in the secondary bond market were conducted mostly on telephone. The procedure was time consuming thus inefficient. Besides, it provided no real time information to the market participants about the trades that had taken place; prices and volumes transacted, issues and maturity of the instruments traded. This used to result in delayed deal execution, inefficient pricing mechanism, enhanced credit/liquidity risk, and unproductive utilization of liquidity available in the market. This was considered an impediment in the development of the long term bond market by many researchers in the past. To overcome these inefficiencies in the secondary market, SBP launched the electronic
bond trading platform in collaboration with Bloomberg for fixed income securities in January, 2010. This will provide clear signals to future issuers about the type, yield and other features of the long term bond that market desire. 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. Real time trading information will also facilitate in the development of the yield curves for various market segments. This will also provide a choice to the banks who are the largest investor in the government securities to swap these with private sector credit when the market is deepened and broadened with the increased activity. It can provide a window to foreign investors through Bloomberg and potentially attract foreign investment in good times. Economic outlook for Pakistan has already shown improvement in 2010 when the sovereign rating improved and the spread on credit default swap reduced from 3500 basis points to 500 bps. Daily trading volumes of government securities are now available. The table-1 below shows the trading activity on April 24,

Table-1

**Daily Trading Volumes of Government Securities EBND System All Activity on April 24, 2015**

<table>
<thead>
<tr>
<th>Last Volume</th>
<th>Total Traded</th>
<th>Security</th>
<th>Last Trade</th>
<th>Traded Yield (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>PK06TB140515</td>
<td>99.5858</td>
<td>7.59%</td>
<td>HIGH 1,000</td>
<td>7.75%</td>
</tr>
<tr>
<td>PK06TB230715</td>
<td>98.1249</td>
<td>7.75%</td>
<td>LOW 7.75%</td>
<td>7.75%</td>
</tr>
<tr>
<td>PK12TB300415</td>
<td>99.8728</td>
<td>7.75%</td>
<td>LOW 7.75%</td>
<td>7.75%</td>
</tr>
<tr>
<td>PK12TB261115</td>
<td>93.7648</td>
<td>7.75%</td>
<td>LOW 7.75%</td>
<td>7.75%</td>
</tr>
<tr>
<td>PK12TB170316</td>
<td>100.6785</td>
<td>7.75%</td>
<td>LOW 7.75%</td>
<td>7.75%</td>
</tr>
<tr>
<td>PK12TB180716</td>
<td>104.3794</td>
<td>7.45%</td>
<td>LOW 7.45%</td>
<td>7.45%</td>
</tr>
<tr>
<td>PK12TB170316</td>
<td>104.8867</td>
<td>7.63%</td>
<td>LOW 7.63%</td>
<td>7.63%</td>
</tr>
<tr>
<td>PK12TB180716</td>
<td>107.2762</td>
<td>7.63%</td>
<td>LOW 7.63%</td>
<td>7.63%</td>
</tr>
<tr>
<td>PK12TB190717</td>
<td>110.4998</td>
<td>7.63%</td>
<td>LOW 7.63%</td>
<td>7.63%</td>
</tr>
<tr>
<td>PK12TB260320</td>
<td>115.6738</td>
<td>9.00%</td>
<td>LOW 9.00%</td>
<td>9.00%</td>
</tr>
<tr>
<td>PK12TB260325</td>
<td>104.1744</td>
<td>9.10%</td>
<td>LOW 9.10%</td>
<td>9.10%</td>
</tr>
</tbody>
</table>

Source: BLOOMBERG E-Bond Platform Day’s Total Traded Volume: 12,702.4
2015. Trading activity was however confined to various issues of MTBs and PIBs only and the volume touched PKR 14.5 billion for the single day activity. It bids well for future development of the secondary market.

**Cut Off yields and the auction calendar of government securities**

It was recommended in the past by the researchers that monetary management and debt management functions must be separated to clear the misgiving that cutoff yields decided in the auction signals the changes in the yield curve. Any change in the yield curve is merely the function of supply and demand forces and nothing else. Until recently, SBP used to decide and announce the cutoff yields of government securities. SBP has transferred this function of deciding the MTB and PIB cut-off rates in regular auctions to the Ministry of Finance (MoF) with effect from January, 2009. The government (MOF) will also be responsible to pre-announce its quarterly T-bill auction targets, indicating its required volume of borrowings from the scheduled banks. In relatively developed markets, governments provide the quarterly calendar for the issuance of debt securities. This helps in providing liquidity and in the formation of the long term yield curve which is prerequisite for the development of the market.

**Active role of the Financial Market Association (FMA)**

Previously known as Funds Managers Association renamed itself to Financial Market Association, however retaining the same acronyms (FMA) also introduced the Karachi Overnight Index Average (KONIA) in April, 2010 with a view to improve the efficiency in the money market through better price discovery. KONIA is a pure vanilla swap, in which two parties agree to an interest rate swap such that one party opts for a fixed rate and the other for a floating rate. This carries very nominal credit risk as the deal is done on the notional principal amount and only the amount of the interest rate differential
is exchanged. So far, only overnight swap transactions have been executed on this basis.

Owing to the above adjustments and changes government securities market in 2010 witnessed reduced interest rate volatility, marked improvement in efficient price discovery and comfortable liquidity position.

Corporate Bonds

The first corporate bond was issued in 1988 by WAPDA for 10 years for 3 billion PKR at a fixed rate of 12.5% p.a. payable semi annually. It took about 7 years for the corporate bond market to take off. Corporate bond market began to develop in 1995 when private companies were allowed to issue Term Finance Certificates (TFCs) to raise resources. Corporate bonds in Pakistan were called Term Finance Certificates (TFCs), for Islamic reasons. The word “expected profit” is used instead of “interest rate” in the TFC to make it sharia compliant. The first TFC was issued in 1995 by Packages Ltd. Pakistan Credit Rating Agency (PACRA) was created to guide investors about the rating of the issuing company. Progress was slow in the beginning as the pricing of new issues of TFCs was very difficult due to the WAPDA bond with very high coupon rate even higher than FIB and also carrying the guarantee of federal government. Discontinuation of further issues of WAPDA proved conducive for the bond market. Only five TFCs were issued up to 1998; however, after the decline in short-term interest rates, market for TFCs picked up with four new issues in 1999 alone. Five new issues of TFCs came to market in 2000. Despite the issuance of several TFCs, trading in the secondary market was very thin as most investors classified this investment as held to maturity. Market makers were largely undercapitalized thus remained unable to provide two-way quotes to develop a vibrant secondary market. Moreover, the volume of outstanding issues was also very small in comparison to long-term government bonds.
The momentum in TFC issuance by corporate Pakistan continued up to 2003 when 19.5 billion PKR were raised through the issuance of TFCs. A close look at the table showing financing pattern reveals that preference for bank credit is overwhelming by the corporate Pakistan. Corporate debt market constitutes less than 1 percent of the GDP. The corporate debt market is not very active and private firms seldom resort to issuance of debt instruments directly to the investors. An investigation of capital markets data shows that issuance of new TFCs remained weak in 2010. Only 2 new TFCs worth Rs. 5.5 billion were issued in 2010 as against 2 new issues worth Rs. 6.1 billion issued in 2009. Debt market seemed to pick up its pace as more debt instruments were issued and amount raised in subsequent years. Discussion with corporate issuers point to several issues which need to be addressed before any meaningful development pattern emerges in Pakistani bond market.

**Table-3:**

Sources of Corporate Financing

<table>
<thead>
<tr>
<th>Year</th>
<th>Banks</th>
<th>IPO*</th>
<th>TFC*</th>
</tr>
</thead>
<tbody>
<tr>
<td>2002</td>
<td>525</td>
<td>0.1</td>
<td>4.7</td>
</tr>
<tr>
<td>2003</td>
<td>607</td>
<td>2.5</td>
<td>19.5</td>
</tr>
<tr>
<td>2004</td>
<td>873</td>
<td>21.7</td>
<td>0.0</td>
</tr>
<tr>
<td>2005</td>
<td>1096</td>
<td>9.8</td>
<td>6.6</td>
</tr>
<tr>
<td>2006</td>
<td>1210</td>
<td>3.0</td>
<td>3.0</td>
</tr>
<tr>
<td>2007</td>
<td>1520</td>
<td>4.9</td>
<td>4.0</td>
</tr>
<tr>
<td>2008</td>
<td>2016</td>
<td>6.9</td>
<td>12.6</td>
</tr>
<tr>
<td>2009</td>
<td>2065</td>
<td>1.1</td>
<td>0.0</td>
</tr>
<tr>
<td>2010</td>
<td>2340</td>
<td>0.9</td>
<td>0.5</td>
</tr>
<tr>
<td>2011</td>
<td>2912</td>
<td>0.6</td>
<td>0.5</td>
</tr>
<tr>
<td>2012</td>
<td>2959</td>
<td>0.8</td>
<td>6.3</td>
</tr>
<tr>
<td>2013</td>
<td>2967</td>
<td>1.1</td>
<td>7.1</td>
</tr>
<tr>
<td>2014</td>
<td>2970</td>
<td>0.9</td>
<td>6.5</td>
</tr>
</tbody>
</table>

* Source: SBP and KSE

* The IPOs and TFCs issued by financial institutions are not included.

Table -3 shows the heavy reliance of corporate Pakistan on bank financing and explains the lackluster performance of these organizations in the capital markets, more particularly in the corporate debt market. A quick look at table -3 clearly reaffirms the choice path
the corporate Pakistan likes to tread on for catering its financing requirements; an overwhelming inclination towards bank financing. Interestingly, banks show a different preference pattern for investments. They like risk free government securities in the wake of ever increasing non performing loans; a love-hate relationship matrix.

In such a scenario, it is up to our financial architects to devise a strategy sound enough to elicit the desired response. Take the cart before the horse if it is unwilling to carry the cart as the famous adage goes.

Corporate bond market however currently has a number of structural and administrative issues while crowding out effect and pricing issues remain the key impediments. The latter had also caused severe revaluation losses in 2008 to mutual fund industry. To date, Fixed Income mutual fund industry has not been able to recover from the pressure nor has the general investment confidence been revived in the corporate debt market.

**Equity Market**

Stock market performance can be seen in Table 4 below. The number of listed companies grew from 497 in year 91 to 762 in the year 2000 showing a healthy growth of 53%. However, this trend showed a reversal in the next decade. Listed capital showed a growth of 636 percent, from Rs 31.1 billion in 1991 to Rs 229.0 billion in 2000. This growth pattern continued strongly and registered an increase of Rs.586.5 billion in year 2010 bringing the listed capital to Rs.815.5 billion. This 256% increase in listed capital shows that the firms were able to increase it by issuing the right and bonus shares. In witness to the market activity, KSE 100 shares index also shot up from a paltry 1855 in 1991 to 29653 by the end of year 2014. Trade volumes also showed great improvement during 1990s mainly due to automation of the stock exchanges (CATS) and the establishment of Central Depository Company of Pakistan Ltd (CDC).

**Table-4**

Stock Market Performance

<table>
<thead>
<tr>
<th>Year</th>
<th>Y91</th>
<th>Y92</th>
<th>Y93</th>
<th>Y94</th>
<th>Y95</th>
<th>Y96</th>
<th>Y97</th>
<th>Y98</th>
<th>Y99</th>
<th>Y00</th>
<th>Y05</th>
<th>FY10</th>
<th>FY11</th>
<th>FY12</th>
<th>FY13</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Companies</td>
<td>497</td>
<td>596</td>
<td>652</td>
<td>683</td>
<td>746</td>
<td>783</td>
<td>782</td>
<td>779</td>
<td>769</td>
<td>762</td>
<td>659</td>
<td>651</td>
<td>638</td>
<td>573</td>
<td>560</td>
</tr>
<tr>
<td>Listed Capital (billion)</td>
<td>31.1</td>
<td>50.6</td>
<td>63.5</td>
<td>76.1</td>
<td>118.8</td>
<td>145</td>
<td>206.7</td>
<td>211.2</td>
<td>215</td>
<td>229</td>
<td>439</td>
<td>815.5</td>
<td>1,048</td>
<td>1,094</td>
<td>1,129</td>
</tr>
<tr>
<td>Market Capitalization (billion)</td>
<td>90</td>
<td>218.4</td>
<td>214.4</td>
<td>404.6</td>
<td>293.3</td>
<td>365.2</td>
<td>496.1</td>
<td>259.4</td>
<td>289.2</td>
<td>391.9</td>
<td>2068</td>
<td>2732</td>
<td>2,945</td>
<td>4,242</td>
<td>6,056</td>
</tr>
<tr>
<td>KSE 100 Index</td>
<td>1855</td>
<td>1545</td>
<td>1264</td>
<td>2333</td>
<td>1612</td>
<td>1703</td>
<td>1566</td>
<td>880</td>
<td>1055</td>
<td>1521</td>
<td>7450</td>
<td>9721</td>
<td>12,496</td>
<td>13,801</td>
<td>21,006</td>
</tr>
<tr>
<td>Trading Volume (million)</td>
<td>361</td>
<td>725</td>
<td>894</td>
<td>1,831</td>
<td>2,293</td>
<td>5,232</td>
<td>8,023</td>
<td>15,004</td>
<td>25,533</td>
<td>48,109</td>
<td>46,455</td>
<td>54,319</td>
<td>56,581</td>
<td>70,000</td>
<td></td>
</tr>
</tbody>
</table>
National Savings Schemes

This section provides a brief analysis of National Savings Schemes as an important component of financial savings and assesses its impact on the financial sector. National Savings came into existence after the promulgation of Savings Bank Act in 1873. During the First World War, the British government used this channel to raise funds to meet war related expenditures. In normal circumstances, this facilitates financing of budget deficit through mobilization of public savings. Since 1947, national savings remains operational in different forms. The present structure of Central Directorate of National Savings (CDNS) was set up in 1972 under the Ministry of Finance.

CDNS offers a variety of saving certificates, accounts and recently launched long term bond of different maturities to general public, institutional investors on comparatively attractive rates than available in the banking system. Maturity of the offered instruments by CDNS ranges from 3 years to 10 years. Pre mature encashment is allowed in many of these instruments. National Savings Bond launched on January 11, 2010, helped in mobilization of Rs.3.7 billion and also paved the way for future issues. NSB is issued for 3, 5 and 10 years period in scrip less form and tradable at exchange. Profit is paid at six monthly intervals and pre mature withdrawal is not allowed. Investors in need of liquidity will be able to trade these bonds at electronic bond trading platform. This will create more appetite for such bonds in non banking sector and reduce government reliance on banking sector for deficit financing which in turn minimize the crowding out of private sector. Borrowing directly from non banking sources will have less inflationary effect as compared to bank borrowing.

Issues impeding growth in the corporate debt market:

While we have made substantial progress in developing the government bond market, progress has been slower in the corporate debt market for a variety of reasons. In this section, we will examine
Issues in the Development of Long Term Bond Market . . . Research

these factors in the light of experiences of developed and emerging economies.

The development of local corporate bond markets in general could be constrained by a variety of factors (see Roldos, 2004a). The lack of liquidity in secondary markets and a meaningful investor base with developed credit assessment skills, as well as high costs of issuance, are key reasons.

**Role of Macroeconomic factors**

Stability in the macroeconomic conditions is the single most important factor for the growth and development of the financial markets in any economy. The relationship has been widely discussed in literature and researches provide evidences of a direct relationship between the two: macroeconomic stability and the development in the financial markets. Dornbusch and Reynoso (1993) “Financial Factors in Economic Development” emphasized that macroeconomic stability should precede the economic reforms. It is argued that if the financial reforms are pursued in total disregard to the macroeconomic factors such as high inflation, rapidly depreciating currency and large fiscal and current account deficits, it will further destabilize the economy. Looking at the past macroeconomic factors since we embarked upon the journey of financial reforms in early 1990s reaffirms the above proposition. Therefore, efforts should be made to attain macroeconomic stability for the meaningful results in the development of financial markets in the country.

**Competing Role of NSS**

Securities and Exchange Commission of Pakistan in June 2006 set up The Debt Capital Market Committee (DCMC) to investigate and identify the critical issues hindering growth of the debt and capital market in Pakistan and make suitable recommendations for the development and promotion of the debt and capital market. DCMC was comprised of leading experts and various industry stakeholders under the chairmanship of SECP chairman.
DCMC pointed that NSS pose a major challenge in reforming the debt and capital markets. On the positive side, NSS schemes provide a reliable source of long term finance to the government through its widespread distribution network accessing retail investor base. However, it has been a costly source of funding owing to inefficient pricing, facility of premature encashment and limited control over the amount mobilized emanating from the fixed tap nature of NSS instruments. DCMC stressed that NSS instruments be integrated to the mainstream capital market by converting these into market based instruments to be sold directly to the retail investor base. CDNS should be restructured in such a manner that it can continue to play its vital role in mobilizing financial savings in the economy without creating significant distortions in the financial sector. To meet this objective, NSS instruments need to be integrated into mainstream capital markets by making them tradable and by withdrawing the implicit put option, which is a potential source of liquidity problems for the government. It is also important to upgrade CDNS infrastructure by utilizing IT services. Given the huge size of investments in NSS, a restructured and well-equipped CDNS can be strategically used to promote outreach of financial services to remote areas.

**Concentration in the banking sector**

Empirical research in the past evidences high concentration in commercial banks of the country. All the tests of concentration, i.e. Gini coefficient, Herfindahl index and Concentration Ratio, H-statistics conclude that distribution of banking business is tilted in favour of few banks which implies the absence of competitive environment in the industry. This is evident in low rates of deposit and high banking spreads available to banking industry. In the last few years, considerable reduction has been noticed in the concentration of banking assets, advances and deposits. This positive change has been the result of the enhanced capital requirements under Basel II regime. We have witnessed a wave of mergers and acquisitions by banks and financial institutions focusing on consolidation in the past few years. We can say that the banking industry is monopolistically...
competitive which reflects in the increasing degree of competition in the banking Industry. This domination of the banking industry is an impediment to the development of a vibrant bond market. In U.S, the bond market has long overtaken the lending function from the banks having the lowest concentration in the world.

**Liquidity**

Liquidity is essential for the growth of the corporate bond market. Better understanding of the liquidity drivers is necessary for the smooth development of the market. Liquidity can broadly be measured in two dimensions:

(i) macro—the resilience to macro shocks; and (ii) micro—depth, tightness, and the ability to absorb random shocks, Turner (2008). The microeconomic indicators are relatively easy to identify. Market depth is the ability to absorb large transaction volumes without a significant change in prices as measured by the average Turnover ratios. Tightness implies the cost efficiency and is measured by the bid–ask spreads.

The ability to absorb random shocks can be reflected in the day-to-day price volatility. Secondary market liquidity can be provided by the regular issuance of sizable bond instruments having sufficiently long trading life.

Less liquid markets are generally characterized by a narrow investor base, insufficient infrastructure, low market transparency, and lack of timely information on bond issuers Gyntelberg, Ma, and Remolona (2005).

To improve liquidity, some countries such as China, Indonesia, and Thailand have undertaken reforms of their market microstructure by establishing market-makers, introducing modern trading platforms, and upgrading the payment and settlement systems. In Pakistan, we have the infrastructure but the absence of market
makers continues to hinder development in the corporate bond market.

Empirical analysis has identified five potential determinants for the three components of liquidity, using cross-country regressions covering 30 countries. Market size is the first factor. Large-size bond markets tend to raise liquidity by increasing the availability of potentially tradable instruments. The second factor is the quality of legal and regulatory systems (rule of law). It promotes bond market liquidity in enhancing investor confidence and strengthening market microstructures. The rule of law consist of trust in the judicial system, legal protection and standards of governance. The third factor is the availability of derivatives and other hedging instruments traded on active Futures Exchanges. It improves bond market liquidity in facilitating active and efficient portfolio management. The fourth factor is the degree of financial openness. Capital controls negatively impact bond market liquidity in limiting foreign investor participation and narrowing investor diversity. The fifth factor is foreign exchange rate volatility. It impairs liquidity in adding exchange rate risk to market risk borne by foreign investors.

The findings of researchers in the Asian Development Bank can be summarized in the table below.

<table>
<thead>
<tr>
<th>Market Liquidity</th>
<th>Bond Outstanding</th>
<th>Rule of Law</th>
<th>Futures Markets</th>
<th>Capital controls</th>
<th>Exchange rate volatility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Turnover ratio</td>
<td>+ (n.s)</td>
<td>+</td>
<td>+</td>
<td>(n.s)</td>
<td>-</td>
</tr>
<tr>
<td>Bid Spread</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+ (n.s)</td>
<td>+</td>
</tr>
<tr>
<td>Bond Yield Volatility</td>
<td>0 (n.s)</td>
<td>-</td>
<td>+</td>
<td>+ (n.s)</td>
<td>+</td>
</tr>
</tbody>
</table>

+ (positive) or – (negative) influence significant at 5% ns: non significant

The factors that are significant on all three components of market liquidity are the rule of law, the existence of Futures Exchange markets and rate volatility. The former two affect liquidity positively, the latter
negatively. Capital controls are never significant. Since the removal of capital controls always entail greater exchange rate volatility, it follows that an emerging market country should never open its capital accounts before having strengthened its legal and regulatory system and having developed a full array of domestic financial instruments.

**Lack of Benchmark Rates**

Lack of a credible benchmark for long term-paper is a significant impediment to corporate bond market development in Pakistan.

In most countries, since the government is the largest issuer of debt securities, it provides the volume required for a secondary market. Sovereign bonds are easier to price because these have negligible credit risk and can be used as a basis for pricing riskier issues of the similar maturity.

In Pakistan, majority (over 92 percent) of debt securities are sovereign bonds in the form of long term Pakistan Investment Bonds (PIBs) or in the short-term Treasury Bills. There are twofold reasons for why the yield on long-term government paper in Pakistan does not provide a credible benchmark for pricing corporate issues.

First, the interest rate on government paper is not entirely market determined. There is considerable amount of moral suasion involved on the part of the government to convince both public and private companies to purchase government paper. Secondly, the limited volume in the secondary market undermines the benchmarking role of the sovereign paper. The scrapping of PIB auctions limits the supply of PIBs which is detrimental to liquidity of the secondary market. The limited supply is likely to drive up the prices of bonds due to supply constraints rather than monetary conditions. Further, the trading decisions are likely to be based on liquidity requirements rather than portfolio considerations. The secondary market is also undermined
by the government’s attempt to keep the interest rate low. Even if the government is able to convince institutional investors to accept government paper at below market rate, that paper is unlikely to be traded and held to maturity in order to avoid booking capital losses. Since the long term sovereigns have not provided credible benchmarks for pricing long term paper, the corporate bond market has moved to issuing long term paper on floating rates linked to the KIBOR.

Crowding out by Government Borrowing

Another impediment to corporate bond market development is crowding out of the private sector by government borrowing. The corporate bond market and the Government sovereigns compete for the same pool of savings.

The government has an advantage because lending to the government is considered riskfree. The government taps the retail saving through it various NSS and the institutional investors through PIBs and MTBs. Since the NSS are guaranteed by the Government their rates should be lower than the rates offered by TFCs which carry considerable more credit risk. But Figure 3 shows that the weighted average rate on TFCs tracks the rate on new Defense Saving Certificates (DSC) closely. This suggests that markets are pricing the TFCs around the issue rate for new DSC which is a ten year certificate with government guarantee and represents 13 percent of all domestic government debt.

Although NSS rates are marginally linked to PIB yields, in effect they may not reflect the market long term rate for two reasons. First, because the rates are reset every six months and secondly because the yields on PIB do not reflect the market conditions due to limited secondary market.
Administrative Impediments

A major concern of the private sector is that the cost of issuing TFCs is too high. In addition to the coupon rate, the costs include listing charges, trustee fees, advising fees, rating fees and stamp duties. The stamp duty on a TFC issue is 0.15 percent of the face value at the time of registration which is considered on the high side. An example of a country where high issuance costs hampered the development of local corporate bond markets is Japan. The costs in Japan were estimated at 2.5 percent for a 10-year corporate bond while in the United State the cost was 0.7-1.3 percent (Luengnaruemitchai and Ong, 2005).

A supporting regulatory framework is critical for development of a corporate bond market. For example in Germany, the length of the permission process is blamed for establishment of the deutsche mark corporate bond market in London instead of Germany (Luengnaruemitchai and Ong, 2005). The administrative and regulatory process by the SECP for issuing a TFC is considerably more complicated than obtaining a bank loan and the disclosure requirements and turn-around time for applications appear to be excessive. Moreover, SBP and SECP do not seem to apply their policies and regulations uniformly across all TFCs. For example, consider the SBP policy of qualifying TFCs for meeting Statuary Liquidity Requirements (SLRs). In line with international best practices in central banking, the SBP does not consider investments in TFC eligible for SLR of scheduled banks Leonardo(2000). At the same time, the WAPDA Sukuk Certificates launched in November 2005, were approved for SLR of Islamic Banks. This either suggests that WAPDA bonds are considered sovereign bonds or that an exception is being made for Islamic banks. Ad hoc regulation undermines public/investor confidence in the corporate bond market and the overall economy.
Empirical evidence provided in the literature

- The importance of institutional investors is positively correlated with the development of bond markets, particularly the non-financial private component.
- The existence of fixed setup costs does not seem to be particularly important; we do not find strong country size effects.
- Banking sector development and bond market development seem to be complementary, particularly so for the private, non-financial segment.
- Consistent with crowding-out, larger government markets appear to reduce the share of corporate bonds in the total stock.
- The most significant determinant of the development of bond market is the level of general economic development, particularly so for the private segment. Macroeconomic volatility seems not to matter much.
- Elements related to the supply of instruments do not seem to be critical.
- The failure of countries to follow internationally recognized accounting standards has slowed the development of private debt markets. Corruption and low bureaucratic quality, which are signs of unreliable securities market regulation, work in the same direction. Countries with competitive, well-capitalized banking systems, on the other hand, have larger bond markets. (Eichengreen and Luengnaruemitchai, 2004)

Way Forward

The authorities should consider several regulatory reforms with a view to improving investor confidence. Efforts should be made to reduce the processing time of TFC approval at the SECP. In order to
reduce the cost of issuing TFCs, the government could reconsider the stamp duty on TFCs. A reduction in tax rate along with a cap on total duty paid could provide a stimulus to the TFC market. Tax exemptions to investors of corporate bonds will have a positive effect on the growth of the corporate bond market. Any new regulation should be general enough to accommodate a variety of securities other than TFCs. As the corporate bond market grows, new debt instruments are likely to be introduced in the market including mortgage backed securities, credit card and car loan securitizations, and derivatives. The SECP should be proactive in establishing new regulations to accommodate new instruments. This may require that SECP upgrade its technical base to deal with the more complex issues and policies relating to debt market development.

Appointment of primary dealers may be considered on the pattern of monkey market as done for government securities. This will help facilitate market making and related developmental activities in the corporate bond market.

Finally, restrictions on institutional investors may be relaxed a bit to allow them to include corporate bonds in their investment portfolios.
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