

Fostering the Corporate Bond Market in Pakistan

Farhan Hameed*

A well functioning corporate bond market is an important component of financial sector development of an emerging economy. This paper gives an overview of the corporate bond market in Pakistan and compares it to the international market. It also identifies some impediments to corporate bond market development including: crowding out by government borrowing, administrative barriers and lack of liquidity in the corporate bond market. Finally, the paper concludes with some discussion on future prospects and policy recommendations for corporate bond market development in Pakistan.

1. Introduction

Since the Asian crisis considerable attention has been paid to the role of corporate bond markets in overall financial sector stability and economic development. Several studies have found that financial market development is correlated with economic development.¹ Corporate bond markets are important for several reasons including: as a source of long term financing, providing competition to the banking sector, and enhancing financial sector stability. The corporate bond market in Pakistan is still at an early stage of development with total public corporate debt issues accounting for just over one percent of GDP.²

When companies need financing they have four basic options: retained earnings, bank borrowing, corporate bonds, and equity. In emerging markets most of the corporate financing is through bank borrowing. For example in 2003 over 80 percent of corporate financing in emerging markets was in the form of bank

* Senior Economist, Debt Office, Ministry of Finance, Islamabad, Pakistan and Visiting Faculty at Lahore University of Management Sciences, Lahore, Pakistan. [farhan.hameed@gmail.com]. This paper does not reflect the views of the Ministry of Finance or the Debt Office. He would like to thank Umara Daud for able research assistance. The author would also like to thank SBP and IMF Resident Representative Office for sharing various data and discussions. This paper also benefited from comments by Zafar-ul-Hassan Almas.

¹ See Levine (1996) and Montiel (2003).

² See Appendix.

loans.³ Similarly, in Pakistan the majority of external financing of firms is through the banking sector.⁴

The next section of the paper gives a brief overview of why a corporate bond market is important followed by a discussion on the current state of the corporate bond market in Pakistan. We have used a dataset on Term Finance Certificate (TFC) issued since inception to estimate weighted average coupon rates for the TFC market. To our knowledge this has not been done before. Section 3 presents an account of Pakistan's bond market and section 4 will identify some impediments to development of the corporate bond market. The final section will discuss future prospects and policy recommendations for corporate bond market development in Pakistan.

2. Why Corporate Bond Market?

Corporate bond market can improve financial stability, provide competition to the private sector, and allow more efficient allocation of savings by providing a broader range of assets.

2.1. Financial Stability

A primary reason for developing corporate bond markets is that they provide an alternate source of external funds for the private sector other than equity and bank borrowing, which enhances financial stability and efficiency of credit allocation. This alternate source of financing, in the words of the former Federal Reserve chairman Allan Greenspan, acts as a "spare tire" for the economy.⁵ For example, after the Asian crisis, the weak banking sector provided an impetus to development of the corporate bond markets in emerging Asia. By diversifying their source of funds, companies can adjust their borrowing between the banks and debt markets.

³ See Luengnaruemitchai and Ong (2005).

⁴ Here "external finance" refers to bank borrowing, equity, or debt instruments offered through a public offering. Although by most estimates the private loan market is large in most countries the scope of this paper is limited to loans through banks or publicly offered debt instruments due to lack of data on privately arranged funds.

⁵ Allan Greenspan quoted in Sundaesan (2005): "Before the crisis broke there was little reason to question the three decades of the phenomenally solid East Asian economic growth, largely financed through the banking system, so long as rapidly expanding bank credit outpaced lagging losses and hence depressed the ratio of non-performing loans to total bank assets. The failure to have alternative forms of intermediation was of little consequence so long as the primary means worked. That is, the lack of a spare tire is of no concern if you do not get a flat. East Asia had no spare tires. The United States did in 1990 and again in 1998."

The complementary roles of corporate bond markets and banks can ensure financial stability even if one channel of financial intermediation is under stress. Lack of developed bond markets is often sighted as a reason for severity of the Asian crisis. Well functioning bond markets may have been able to pick up the slack from the banking sector and provide much needed funds to the private sector as it did in the United States in 1990.

A corporate bond market can also enhance financial sector stability by mitigating rollover risk and interest risk for the borrowers. In case the interest rates are raised due to monetary policy or exchange rate considerations, the firms which rely on short term bank lending will face higher debt servicing costs at rollover and may be unable to borrow in case of a credit crunch. In contrast, firms which issue longer term securities have access to capital at more predictable rates.

2.2. Competition to the Banking Sector

Competition from the corporate bond market will likely reduce the spread between the rates on deposits and advances in the banking system. State Bank of Pakistan (SBP) has expressed concern over the wide spread in the banking system and encouragement of a corporate market could be another tool used to address this issue. A corporate bond market competes with the banking sector for both deposits and advances. By giving better returns on investments, a corporate debt market would force the banks to offer higher rates on deposits. At the same time, by offering an alternate source of funding bond markets can prevent banks from charging exploitative rates.

A corporate bond market can improve allocation of capital through several channels. A well functioning corporate bond market with market determined returns will provide a clear measure of opportunity cost of funds and lead to efficient allocation of investment funds. To see why this would be the case, consider that banks have stricter loan requirements due to prudential regulations. This means that they are likely to invest in industries with tangible assets or a certain flow of funds. These industries would be flushed with financing at the cost of starving the riskier projects of funds. A well functioning bond market would allow for investment in even riskier assets. An example of this is the thriving junk bond market in United States.

To see how increased competition can lead to more efficient allocation of capital, consider an economy which relies solely on bank borrowing for corporate funds. Banking sectors are generally marked by concentration where a few large banks are responsible for most of the lending decisions. This concentrated decision

making can result in inefficient allocation of capital due to "crony capitalism", where bad loans are carried on the books due to political or other non-economic reasons. Further, since bankers can more easily avoid writing off bad loans, they are more willing to engage in "crony capitalism." (Hakansson (1999)). In contrast, bond holders immediately realize if a bond is not being serviced and can hold the issuer to account.

In the absence of a bond market, the banks also tend to be larger since there are few other destinations for savings. In the case of Pakistan, the National Saving Schemes (NSS) provide an alternate destination for capital but NSS funds are only used for government budgetary support and do not directly finance the private sector. Banks flushed with deposits and faced with limited lending opportunities may relax selection criterion and engage in excessive lending to some specific industries. This leads to excess capacity in those industries resulting in bad loans and lower overall returns for the banks.

Heavy dependence on bank borrowing has been shown to affect investment decisions of firms (Herring and Charusripitak (2000)). In emerging markets, due to weak corporate practices, i.e. accounting, auditing, and contract enforcements, the banks solve the asymmetric information problem by lending for shorter terms. As a result banks tend to lend for shorter terms than corporate bonds. Several studies have shown that firms tend to match maturities of their assets and liabilities which implies that short term borrowing is likely to result in short-term assets (Hart and Moore (1995) and Caprio and Demerguc-Kunt (1998)). The short term nature of bank lending would bias investment against industries where costs are recovered over a long-term such as infrastructure, power generation, and capital intensive industries.

Large-scale, long-term fixed investments are best financed through long term corporate debt, whereas bank loans are more suitable for financing short-term investments such as working capital, inventories, and current assets (Bose and Coondoo (2003)). Another option is to finance the longer-term capital by issuing equity but equity capital is generally more expensive than debt capital because investors would expect a higher risk premium. Further, in many countries debt servicing is tax-deductible at the corporate level whereas corporate profits are usually taxed before dividends are retained or distributed to shareholders (Bose and Coondoo (2003) and Endo (2000)).

2.3. Range of Assets

Corporate bonds allow economic agents to match their assets and liabilities. This is particularly important for life insurance companies and pension fund that have long term liabilities. Assuming a standard yield curve, the shorter term securities would offer lower returns than longer term securities. For example, a pension fund will be able to offer better returns if it could invest in long term assets rather than rolling over shorter term securities till the longer term liability is due.

Finally, existence of a corporate bond market makes available a wide range of assets over different maturities and levels of risk. Hakansson (1999) argues that "under fairly general conditions ... the financial market richer in bonds will constitute a Pareto-improvement over a financial market in which banks do most of the lending." The basic argument is that by providing more choice the savers can better match their risk appetite and returns. In the absence of these products, the savings would be placed in substitute assets such as bank deposits, equity, and other non-financial assets. With an excess supply of saving these assets would offer lower rate of returns than an economy with developed bond markets.

3. Overview of Pakistan's Corporate Bond Market

The corporate bond market exists in Pakistan in the form of Term Finance Certificates.⁶ The following sections present some salient features of the TFC market along with an international comparison.

3.1. Features of the TFC Market

The corporate bond market in Pakistan, in the form of TFCs, has experienced robust growth since the first TFC issue of Packages Limited for Rs. 232 million in February of 1995. The total amount of outstanding TFCs as of March 2006 is estimated at Rs. 57.99 billion (US\$ dollars 0.97 billion or 1.12 percent of GDP).⁷ The TFC issuers include both non-financial and financial institutions as well as

⁶ TFCs are based on legislation enacted in 1984, which authorized the issuance of redeemable capital securities. As a debt instrument, the TFC is slightly different from the traditional corporate bond because it was specifically designed to comply with Sharia Law. The key difference is that the TFC substitutes the words "expected profit rate" for "interest rate." (Leonardo (2000)).

⁷ The amount of TFCs outstanding is estimated using data on the date of issue, size of issue, and the maturity date of the public portion of TFCs. This likely underestimates the amount of TFCs since by law only 25 percent of the issue has to be raised from the public. Further, it is assumed that amortization payments are made in the form of a bullet payment on the maturity date. Although many of the TFCs are amortized through bullet payments some have different amortization structures.

private and public firms. The coupon rate on the TFCs display a wide variety with different fixed coupons as well as floating coupons linked to various interest rates including the discount rate, Pakistan Investment Bond (PIB) rates, and the Karachi Inter-bank Offer Rate (KIBOR).

As early as 1960s and 1970s, prior to nationalization of the financial institutions, corporate debentures issued by Pakistani corporates were listed on stock exchanges with limited secondary market trading. TFCs were issued by development finance institutions (DFIs) as early as 1985, although these were placed privately. In 1988, Water and Power Development Authority (WAPDA), a government owned statutory company, issued a five year bond. Over the period 1988 to 1994, WAPDA issued Rs. 22.5 billion of bonds to the public (Leonardo (2000)). The market experience of WAPDA bonds was disappointing due to two factors. First, WAPDA had to delay repayments of its maturing bonds due to insufficient funds. Second, the secondary market for the WAPDA bonds did not meet market expectations due to the under capitalization of the market maker resulting in low liquidity of the bonds.

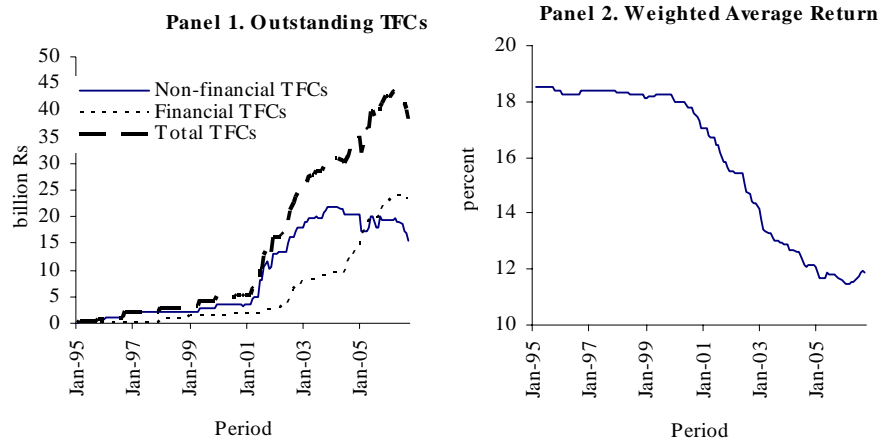
Although the first TFC was issued in 1995, the pace of issuance did not take off until 2001 when the number of new issues (17) equaled the total number of issues in the period 1995-2000. The sum of the new issues in 2001 was close to twice the total amount issued in the period 1995-2000. This sudden surge in TFC issues was partially a result of the Government's decision to bar institutional investors from NSS in March 2000.⁸

The largest TFC ever issued was by PIA for Rs. 15.4 billion, issued in February of 2003, while the smallest issue was for Rs. 100 million issued by Network Lease in October of 2000.⁹ Excluding the jumbo issue by PIA the average size of the TFCs was Rs. 660 million with maximum of Rs. 2.5 billion. Figure 1 shows the evolution of the stock of outstanding TFCs. The marked increase in amount of outstanding TFCs since 2001 can be clearly observed in chart. The growth of outstanding TFC has moderated since 2004 and the total amount outstanding has declined in the first quarter of 2006.

⁸ This decision was recently reversed and the institutional investors (Other than banks) will again be allowed to invest in NSS. This is likely to have a negative impact on the TFC market.

⁹ The PIA TFC is excluded in much of the analysis below because it is an outlier. The size of the PIA TFC represented 50 percent of all TFC issues outstanding at the end of 2003.

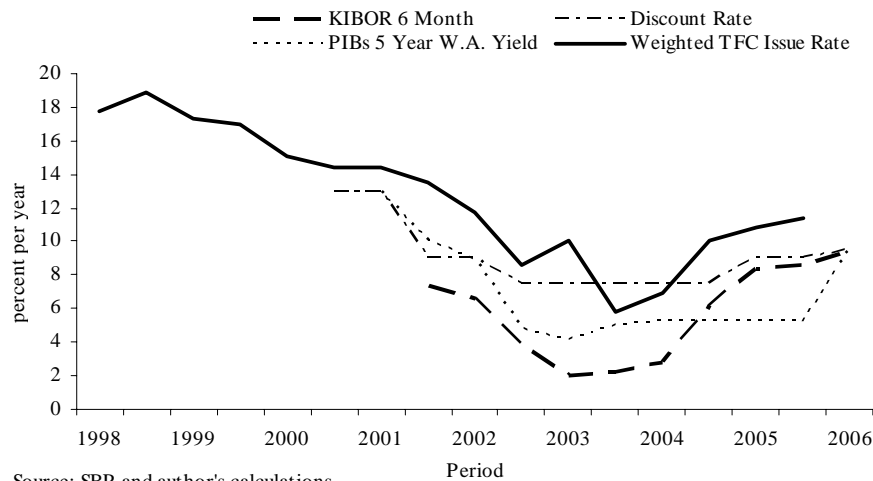
Figure 1. Outstanding TFCs



Source: SBP and author's calculations.
Excludes the Rs. 15.4 billion PIA TFC in first hal

The weighted average coupon rate for the outstanding TFCs can be seen in the second panel of Figure 1. The average coupon rate on TFCs has been on a declining trend since 1995 with a reversal in trend since January 2006. The rate follows closely the trend of other important interest rates including the discount rate and KIBOR (Figure 2). In terms of quantity, the returns on TFCs most closely

Figure 2. TFC Issue Rate (W.A.) and Other Interest Rates



Source: SBP and author's calculations.

follow the returns on Defense Saving Certificates (DSCs) as can be seen in Figure 3. This is not entirely surprising since TFCs and DSC compete for the same funds at the retail level. Figure 3 also shows that the TFC rates track the bank marginal lending rates although TFC rates have generally been higher.

As the amount of TFCs outstanding has continued to grow, there have been subtle changes in the type of firms tapping the TFC market and in the nature of the coupons on TFCs. There has been a slow shift towards more finance related TFCs and floating coupons. The number of private companies issuing TFCs is much higher than public companies but interestingly, the average size of the public entity issues is almost twice the size of private sector issues.

Another change in the structure of the TFC market has been a shift in issuance from non-financial enterprises to mainly financial institutions (including leasing firms). The outstanding amount of non-financial TFCs has been stagnant since middle of 2004. In contrast, the TFCs by finance related firms have been increasing since 2004, partly because banks have been issuing TFC on a regular basis to raise their tier II capital. The shift towards TFCs of financial firms can be seen clearly in Figure 1 and Figure 4. In 2006, the amount of outstanding TFC by financial firms overtook the outstanding issues by non-financial firms. This shift can also be observed in new issues where majority of the TFCs in recent years have been associated with financial firms.

Figure 3. TFC Issue Rate (W.A.) and DSC Rates

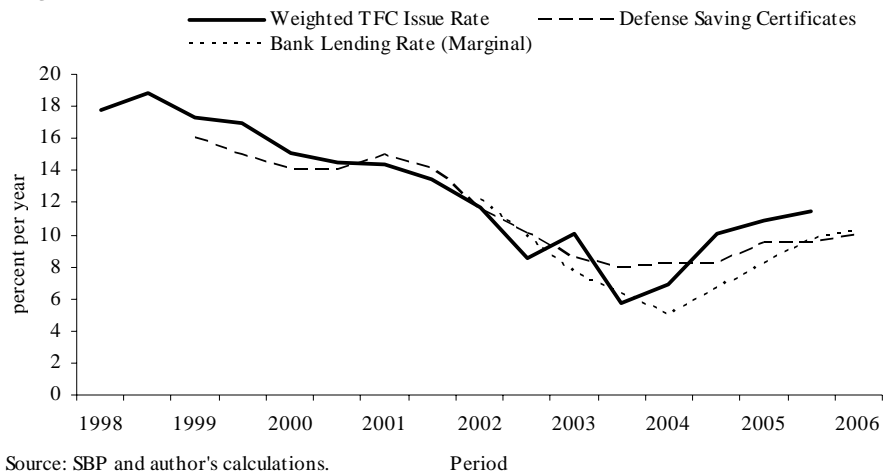
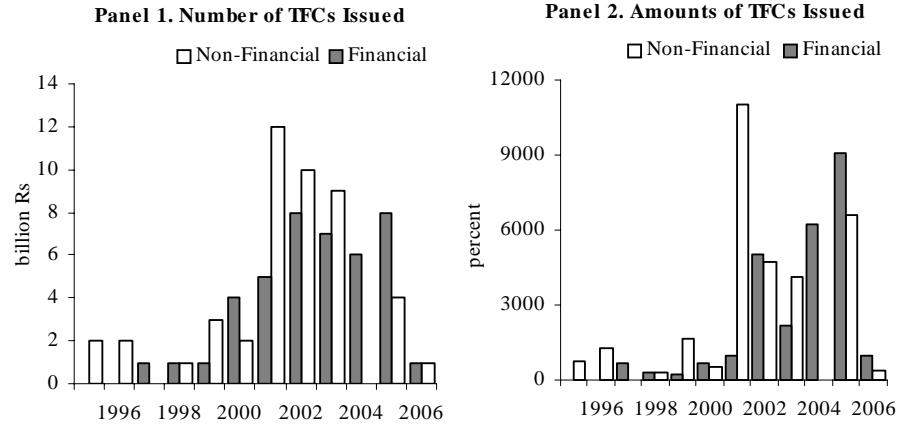


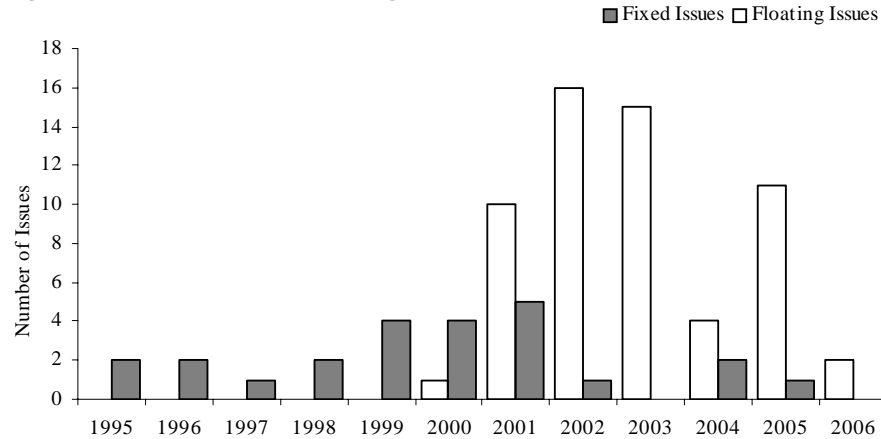
Figure 4. TFCs Issued



Source: SBP and author's calculations.
Excludes the Rs. 15.4 billion PIA TFC in first

Another change in TFC issuance has been a move from fixed to floating rates as shown in Figure 5. Until 1999 all TFCs were issued at fixed rates but starting in 2001, most of the new TFCs were issued at floating coupons. This shift away from fixed rates reduces the effectiveness of TFCs in mitigating rollover risk. Some of the recent TFCs by banks have been issued at KIBOR plus premium with no floor or caps. Banks are willing to accept this risk most likely because they are

Figure 5. TFCs Issued: Fixed vs. Floating



Source: SBP and author's calculations.

confident about availability of funds at least at the prevailing KIBOR. Unlike banks, the non-financial firms do not have an ensured source of funds available at KIBOR, but in order to compete with the bank TFCs, they might have to offer similar terms on their TFCs. This may explain the stagnation in non-financial TFC issuance.

The underlying bench mark rates for floating TFCs has also shifted over time. Table 1 lists the different underlying rates used as well as the number of TFCs issued since 2000.¹⁰ Till 2003, most of the floating TFCs were linked to the SBP discount rate.

There are subtle differences even amongst the securities linked to PIBs with the majority being linked to the weighted average yield of the 5 year PIB while some were linked to the cut-off yields of the last auction or an average of previous auctions. The reason for linking long term rates to the PIB rates was the expectation that a robust secondary market for PIB would ensure that the yields on PIB reflected long-term market rates. The secondary market for PIBs is not sufficiently developed to serve this purpose so the markets have shifted to using the 6 Month KIBOR as the bench-mark. Using short-term rates to price long term paper reduces the efficacy of bond markets in mitigating rollover and interest rate risk. Majority of the new papers in 2005 and 2006 was linked to the 6 month KIBOR.

Table 1. TFC Rate Anchors

(Numbers of TFCs)

Year	Discount Rate	KIBOR	Fixed	PIB
2000	1	-	5	-
2001	7	-	5	4
2002	9	-	-	7
2003	12	-	-	3
2004	-	3	2	1
2005	-	11	1	-
2006	-	2	-	-
Total	29	16	13	15

Source: SBP and author's Calculations.

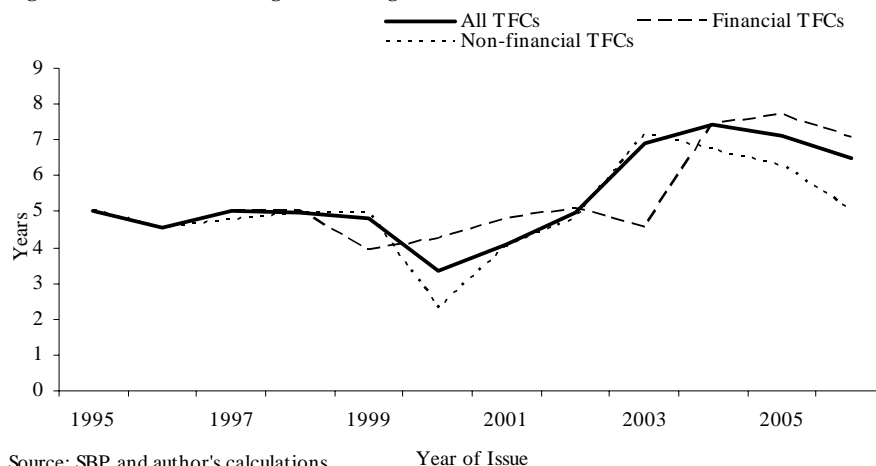
TFCs have been linked to both 3 month KIBOR and the 6 month KIBOR. Similarly, TFCs linked to PIBs use PIB rates of different maturities, weighted average, and/or cut-off rates.

¹⁰ Very limited numbers of TFC coupons were linked to profits.

The length of TFC tenors on new issues has increased over the last three years. Considering annual averages, the highest average tenor was 7.4 years in 2004 while the lowest was 3.4 years in 2000.¹¹ As can be seen in Figure 6, the average tenor over the last three years has been higher than the average tenor from 1995-2002, a change from an average of 5 years to 7 years. This reflects the increasing issuance by banks of 8 year TFCs linked to the KIBOR. Further, average tenor for new issues of non-financial TFCs has been declining and is lower than the average tenor of new financial TFCs.

The TFC market is regulated by the Securities and Exchange Commission Pakistan (SECP) and all public issues of TFCs require a credit rating. There are currently two credit rating firms operating in Pakistan, Pakistan Credit Rating Agency (PACRA) associated with Fitch IBCA and JCR-VIS which is associated with Duff and Phelps. An analysis of the TFCs, for which the credit ratings were readily available, shows that most TFCs were rated A+ and above. A casual look at the data suggests that after controlling for length of tenor, the issue rate seem to be unrelated to the rating.¹²

Figure 6. TFCs Issued: Weighted Average Tenor



¹¹ There are a limited number of TFCs issued each year so a large TFC with a short tenor can drastically impact the average tenor. The average tenor of 3.4 in 2000 reflects the Rs. 340 million TFC issued by Nishat Mills for a tenor of 9 months.

¹² That is in a regression with difference of issue rate and discount rate (to control for prevailing monetary conditions) as the dependent variable and length of tenor (in years) and numerical category

3.2. International Comparison

Finally, a natural question to ask is, how does the Pakistan's TFC market compare to corporate bond markets in other countries? As expressed earlier, firm have three major sources of external financing: bank borrowing, issuing equities, or issuing corporate bonds. The choice of financing is dependent on several factors including: institutional and policy factors, cost of financing, and firm's preferences.

The private sector financing is dominated by banks in emerging markets (see Table 2) with an estimated share of the bank loans at 81 percent of total financing. Similarly, in Pakistan the primary source of private enterprise financing is the banking sector, with net loans of US\$ 1.89 billion in FY05 which represents around 63 percent of total financing. The reliance on banking sector is similar to that in Central Europe and Latin America. The share of financing raised through equities at 27.79 percent (US\$ 0.83 billion) is much higher than the average for all emerging markets. The reliance on bonds for private sector financing is most

Table 2. Financing of Private Sector in Selected Countries

	Equities	Bonds	Bank Loans	Total
(In billions of U.S. dollars)				
Pakistan (FY05)	0.83	0.26	1.89	2.98
Emerging markets	46.49	76.98	529.05	652.52
Asia	44.90	36.97	472.31	554.18
Central Europe	1.31	2.37	6.92	10.60
Latin America	0.28	37.64	49.83	87.74
(In percent of total)				
Pakistan (FY05)	27.79	8.80	63.41	
Emerging markets	7.12	11.80	81.08	
Asia	8.10	6.67	85.23	
Central Europe	12.36	22.36	65.28	
Latin America	0.32	42.90	56.79	

Source: Luengnaruemitchai and Ong (2005) and author's calculations based on data from SBP.

Bank Borrowing indicates the change in the stock of private enterprise borrowing from all banks on a semi-annual basis. Equity is the funds mobilized from new listings. For Pakistan, financing from Bonds indicates the total value of new TFCs issues in the financial year.

for rating (AA+ = 5, AA = 4, ...) as independent variables, the coefficient on tenor variable is positive and statistically significant while the numerical rating variable is not significant.

prevalent in Latin America where bonds represent 42 percent of all financing. The number for Pakistan is 8.8 percent which is similar to the share of bond financing in Asia but nowhere close to numbers found in Latin America or USA.

The bond markets in most countries are dominated by sovereign bonds as can be seen in the Appendix. In Pakistan, TFCs account for 7.3 percent of all debt securities. By comparison, the average share of non-sovereign bonds in total debt securities is 44 percent in Asia and almost 50 percent in mature economies. In the United States, over 70 percent of the market is represented by non-sovereign securities. In the emerging market, the highest shares of corporate debt are observed for Malaysia and Argentina followed by China and Thailand. The lower than average figures for Pakistan corporate bond market, both in terms of share of GDP and as a share of total debt securities, suggest that there is significant room for growth in the corporate bond market in Pakistan.

4. Impediments to Bond Market Development

The literature on impediments to bond market development is vast and growing.¹³ This section will discuss only those impediments which apply directly to Pakistan.

4.1. 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 (see Appendix), it provides the volume of paper required for a secondary market. Sovereign bonds are easier to price because they 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.¹⁴

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 a considerable amount of moral suasion involved on the part of the government to

¹³ See Herring and Charusripitak (2000), Luengnaruemitchai and Ong (2005), and Leonardo (2000).

¹⁴ Tradable securities here are defined as securities for which basic secondary markets exist. At this time this only applies to MTBs and PIBs. One point of contention here is that some of the NSS instruments may be tradable in the sense that they can be withdrawn with a penalty fee and reinvested at the current rate. For the purposes of this paper we only count PIBs and MTBs as government market debt securities.

convince both public and private companies to purchase government paper. Attempts to keep the interest rate lower are evidenced by fact that there has been only one successful auction of PIBs since June 2004 while the bids were rejected in all other auctions. Clearly the market expects a higher interest rate which the government is unwilling to accept.

Secondly, the limited volume in the secondary market undermines the benchmarking role of 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. As Figure 2 shows, the weighted average issue rate for TFCs closely follows the 6 month KIBOR.

4.2. Crowding Out by Government Borrowing

Another impediment to corporate bond market 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 risk free. The government taps the retail saving through its 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 markets.

4.3. Administrative Impediments

A regular concern of the private sector is that the cost of issuing TFCs is prohibitive. 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/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 Statutory 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.

4.4. Impediments to Corporate Bond Liquidity

The lack of liquidity in TFC market is often cited as an impediment to TFC market development. Although the TFCs in Pakistan are listed on the stock exchange the trading is limited. In the absence of a well-functioning secondary market the investors are likely to demand a higher liquidity premium and interest rate risk premium. That being said, there are few countries with liquid secondary markets in corporate bonds instead the secondary market is usually over-the-counter (OTC) and is dominated by a limited number of large corporate issues. Low liquidity in the secondary markets is also a result of small scale of issues, the variety of instrument characteristics and aptitude of the investor base. The small

scale of many of the local issues means even limited trading can affect the price (Knight (2006)). A wide variety of instruments and characteristics makes it more difficult to price the issues. Finally, pricing of corporate bonds with different covenants and terms requires sophisticated financial analysis which is in short supply in emerging markets as well as Pakistan.

5. Future Prospects and Recommendations

Pakistan has already achieved several of the pre-requisites for development of the bond market including a stable macroeconomic environment, political stability, and a robust banking system. The government's fiscal and monetary policies support high growth while keeping a check on inflation and external imbalances. Although these are important pre-requisites for bond market development, there are several steps the government can take to further support the bond market.

5.1. Secondary Market for Sovereign Bonds

The government should take concrete step to develop a well functioning secondary market in sovereign bonds. In order to address the issues of limited supply of PIBs, the government should announce a regular calendar for PIB auctions (most likely on a quarterly basis) and also clearly indicate its targets. The government should also be willing to accept higher discounts as dictated by the market. Further, as a policy, the Government should limit its direct borrowing from SBP and instead borrow at market rates. Regular auctions can also provide benchmark rates in the absence of a secondary market.

The lack of fresh supply of PIBs is detrimental to the secondary market and should be avoided even at the cost of "over funding". An argument for scrapping several of the PIB auctions in the last two years has been that the government borrowing requirements from the banking sector have been reduced due to unexpectedly high inflows in NSS. In order to develop bond markets and establish benchmarks several countries have issued bonds in the absence of financing needs. By mid-2000, Singapore had outstanding government paper of US\$ 20 billion while Hong Kong had Exchange Fund paper nearing US\$ 14 billion. The overfunded amount could be reinvested in other assets including foreign currency assets. Further, issuance of paper to establish benchmarks is not unprecedented for Pakistan. It regularly issues Eurobonds in order to establish and maintain international benchmark rates.

Another factor that hinders secondary market development is the limited size of the publicly issued sovereign debt. "The larger the outstanding stock of publicly

issued central government debt, generally higher the turnover in cash and futures trading... And higher the turnover, the better the liquidity, as measured by the bid-ask spread of 10 year issues... there may be a size threshold that lies around US\$ 100-US\$ 200 billion" (McCauley and Remolona (2000)). Since the total securities issued in the form of PIBs or MTBs is around US\$ 12 billion (See Table 3), the prospects for a liquid secondary market are limited in Pakistan.

Pakistan may want to consider lumping issuance of debt and concentrating on a limited number of benchmarks in order to create size. For example, focusing on issuance of the 10 Year PIBs and increasing its supply in the market could foster a liquid secondary market. The largest outstanding issues are the 12 Month Treasury Bill with US\$ 8.3 billion and the 10 Year PIB with US\$ 3.9 billion. There is a choice to be made between concentrating on issuance for benchmarks and supplying a continuous yield curve. In Pakistan, preference has been given to establishment of a continuous yield curve but this policy should be reconsidered in the light of low volume in the secondary market. As an example United Kingdom now issues conventional gilts in mostly 10-year and 30-year maturities. Studies have suggested that savings of around 5-15 basis points can be achieved by a careful grouping of benchmark issues in developing countries (Knight (2006)).

The government financing through NSS should also be reduced because it crowds out the private sector and distorts the market rate for long term funds. The decision to allow institutional investors into the NSS should be reversed at the earliest possible time because that will divert much of funds available for TFCs to NSS at non-market rates. The rates on NSS should also be steadily reduced because they act as a substitute for benchmark long term rates and distort the opportunity cost of funds. The distortion is further exacerbated by the fact that most of the NSS instruments are not held to maturity and the actual cost of funds is lower due to early redemptions.

5.2. Liquidity of the Corporate Bond Market

Availability of data on secondary market transactions plays an important role in making the price discovery process more efficient leading to improved liquidity.

Much of the secondary market trading data is already available in Reuters and on the SBP website. This data dissemination process can be further strengthened by providing the data on a historical basis and in a readily usable form. The stock exchanges should make it mandatory for their members to report any debt securities transactions.

Table 3. Pakistan: Debt Securities Outstanding¹

(As of June 2006)					
Security		(In billion of Rs.)	(In percent of total)	(In percent GDP)	(In billions U.S. dollars)
PIB	3 Yrs.	17.63	2.22	0.34	0.29
	5 Yrs.	72.06	9.07	1.39	1.20
	10 Yrs.	200.43	25.23	3.85	3.35
	15 Yrs.	7.00	0.88	0.13	0.12
	20 Yrs.	6.76	0.85	0.13	0.11
	Total	303.87	38.24	5.84	5.08
MTB	3 Months	2.10	0.26	0.04	0.04
	6 Months	7.93	1.00	0.15	0.13
	12 Months	422.65	53.19	8.13	7.06
	Total	432.68	54.46	8.32	7.23
TFC	Corporate	34.08	4.29	0.66	0.57
	Financial	23.91	3.01	0.46	0.40
	Total	57.99	7.30	1.12	0.97
Total		794.54	100.00	15.28	13.27
GDP		5199.37		100.00	86.86
Domestic Debt		2296.87		44.18	38.37
Rs./US\$		59.86			

Source: SBP Statistical Bulletin, SBP and author's calculations.

¹ Marketable securities here are defined as securities for which a basic secondary market exists and at this time this only applies to MTBs and PIBs.

In order to improve liquidity, SBP should consider introducing a repo facility for TFCs. The SBP could make a significant contribution to improving liquidity by accepting some high-grade TFCs as collateral for their lending operations. Repurchase transactions ("repos") do not affect bond prices directly so have less of an impact on the market, but play a role in adding liquidity to the market (Knight (2006)). The liquidity premium is likely to be reduced since the investors have an option to get cash at the current repo rates. "In the United Kingdom, there is evidence that the introduction of repo markets facilitated arbitrage along the securities yield curve, as reflected in a narrowing of the average gap between yields on outstanding securities and fitted yield curves (Knight (2006))." Similarly, Mexico has also started a repo facility for corporate bonds (Luengnaruemitchai and Ong (2005)).

The SECP/SBP can also improve liquidity of the secondary bond market by allowing short-selling of TFCs. This will improve efficiency of bond pricing by creating more opportunities for trade. The main drawback of this strategy is that it introduces additional risk to the financial system and there are concern regarding local financial institutions' risk management systems (Leonardo (2000)).

5.3. Other Measures

The authorities should consider several regulatory reforms with a view to improving investor confidence. Effort should be made to reduce the processing time of TFC approval at the SECP. Revised bankruptcy procedures which facilitate corporate debt restructuring should be introduced.

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.

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.

Finally, in order to improve the technical skills of financial analysts, the SECP could consider instituting courses for the analyst community. A publicity campaign to highlight the benefits and risks associated with TFC could also support the TFC market.

6. Conclusion

Corporate bond markets are increasingly becoming an important source of financing for the private sector in Pakistan. Private sector financing in Pakistan, similar to rest of the emerging markets, is dominated by banks. There are several advantages to fostering a corporate bond market to complement the banking sector. These include improved financial stability, competition in the financial sector, more efficient allocation of credit, and a diversified portfolio of assets.

The corporate bond market in Pakistan has seen tremendous growth since its inception in 1995. Recently, more financial institutions have been tapping the TFC

market as compared to non-financial firms. There are fewer fixed rate TFCs with an increasing number TFCs being issued at floating rates linked to the 6 Month KIBOR. The average tenor of the TFCs has also increased over the years from around 5 years to 7 years at present. The share of the bond market in private sector financing in Pakistan is similar to the share of bonds markets in Asia and emerging markets.

Although the TFC market is growing, some impediments to bond market development still exist. A major impediment is a lack of long term benchmark rates as a result of thin secondary market for sovereign bonds. Second, since the sovereigns and TFCs are competing for the same pool of saving there is potential for crowding out. Finally, there are some administrative barriers to TFC market growth including high stamp duty and a lengthy approval process.

The authorities can take several steps to support the corporate bond market development. Secondary market for sovereign bonds could be promoted by: regularly issuing PIBs at market rates regardless of financing needs, concentrating issuance on one or two length of maturities (e.g. 10 Year PIB), and reducing borrowing from unfunded sources. Liquidity of the corporate market could be enhanced by strengthening data dissemination of OTC corporate bond transactions, providing a repo facility for TFCs, and allowing short selling of TFCs. Finally, steps should be taken to make TFC issuance more cost effective by reducing stamp duty and administrative barriers.

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Appendix: Outstanding Domestic Debt Securities

(In percent of GDP)

	Total Outstanding Debt Securities	Government Securities	Corporate Issues	Financial Institutions
Pakistan	15.3	14.2	0.7	0.5
Asia				
China	31.9	20.3	0.9	10.7
India	36	35.4	5.4	0.2
Malaysia	102.8	43.6	43.4	15.8
Korea	81.1	24.2	24.8	32
Thailand	42.1	24.1	12.9	5
Latin America				
Argentina	17.3	6.7	6.6	4
Brazil	65	52	0.7	12.3
Chile	57	29.4	13.5	14.2
Colombia	33.1	32.5	0.6	0
Mexico	26.9	23.5	2.6	0.8
Central Europe				
Czech Republic	63.4	55.8	4.1	3.3
Hungary	58	52.8	1.3	3.9
Poland	37.8	37.8	0	0
Russia	3.7	3.7	0	0
Turkey	60.9	60.9	0	0
Mature Markets				
Australia	61.8	16.4	17.8	27.6
Canada	83.2	61	10.5	11.7
Hong Kong SAR	28.8	10	3.4	15.5
Japan	189.5	145.1	16.9	27.5
Singapore	68.8	45.3	5.8	17.6
United States	169.5	49.1	23.4	97

Source : Luengnaruemitchai and Ong (2005) and SBP Statistical Bulletin and author's calculations.
Pakistan data as of June 2006 and all other countries as of 30 September 2004.