# The corporate bond market in Thailand

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#### Brief introduction to Thailand's bond market

Prior to the Asian economic crisis in 1997, the function of financial intermediation in Thailand fell almost entirely to commercial banks. Funds were mobilised mainly through bank deposits, while direct financing through the domestic bond market, both public and corporate, was relatively small-scale and undeveloped.

Indeed, nine consecutive years of fiscal surplus between 1988 and 1996 provided no incentive for the government to make regular and substantial issues of government bonds. The limited supply of government bonds inhibited the development of a risk-free benchmark, against which private issuers could price their bonds, which, in turn, impeded the development of the corporate bond market.

The 1997 crisis was exacerbated by an imbalance in the structure and operations of Thai financial markets. With limited financing alternatives to bank loans, the business sector in Thailand faced a severe liquidity crunch as the banking sector curtailed its lending operations amid high non-performing loan ratios and recapitalisation needs - which, in turn, intensified the economic slowdown, as the normal and main channel of funding could not function.

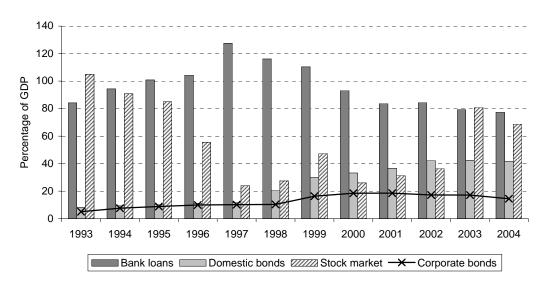
The rapid growth of emerging local bond markets over the last decade has been a natural outcome of financial crises. In the case of Thailand, efforts to develop the domestic bond market were given an extra boost by the Thai authorities, who not only had to fiscalise the cost of post-crisis financial restructuring, but also saw the necessity of reducing the economy's reliance on bank intermediation and external financing.

### Size and composition

As a result, the bond market has grown rapidly since 1997. Graph 1 shows the ratios of bank loans, total domestic bonds outstanding, stock market capitalisation and corporate bonds outstanding to GDP. The ratio of domestic bonds outstanding to GDP has been on an increasing trend, although corporate issuance remains relatively small. The ratio of the value of the Thai bond market to GDP is currently about 42%, whereas that of the value of corporate bonds outstanding to GDP is only about 14%, which is still low compared to the equivalent ratios in industrial countries.

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Graph 1
Size of Thailand's financial sectors<sup>2</sup>

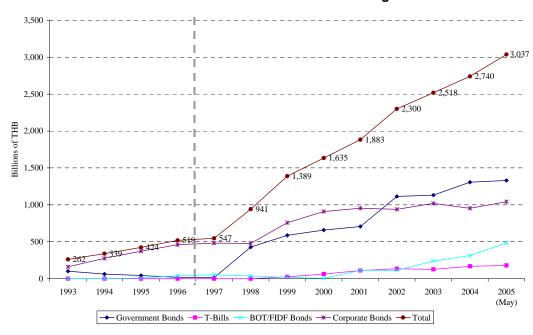


Note: "Domestic bonds" here includes both government and corporate bonds.

Source: Thai Bond Market Association (ThaiBMA).

Graph 2

Values of domestic bonds outstanding



Source: ThaiBMA.

As with other Asian economies, the Thai bond market is currently dominated by public debt securities, which account for about two thirds of total bonds outstanding. Graph 2 also shows that although the

In this paper, local currency corporate bonds are defined as local currency denominated bonds with maturity of one year or more, and not issued by the sovereign or central bank. Corporate bonds may be issued by financial institutions or non-financial companies.

corporate bond market has grown since the crisis, there is still much room for expansion. In terms of the absolute amount outstanding, corporate bonds have been on an increasing trend. However, the share of corporate bonds in total bonds has declined since 2001.

With regard to the supply of corporate bonds, the limited number of large, quality corporate issuers with financial standings strong enough to meet the rigorous public disclosure and external rating agency requirements results in a higher all-in cost of funding through debt issuance relative to bank lending for most firms. This problem was compounded by the fact that banks, which derive a large part of their profits from lending, were reluctant to underwrite bond issues. As a result, only a limited number of issuers (mainly companies with strong credit profiles) were able to obtain funding from this market.

Graph 3

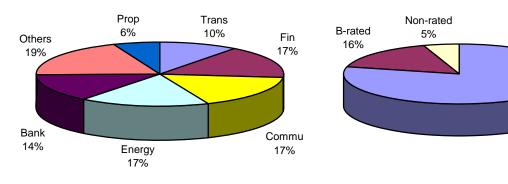
Profile of corporate bond issuers (as of 30 June 2005)

Corporate bonds, outstanding value by sector

Corporate bonds, outstanding value by rating

A-rated

79%



Source: ThaiBMA.

Credit enhancement and structured products will help lower-rated corporates gain access to the bond market, which will be a key step in promoting a growing and diverse set of issuers.

### Activity in the secondary bond market

Both government and corporate bonds are traded over the counter (OTC), with institutional investors including commercial banks, mutual funds, provident funds, the Government Pension Fund, the Social Security Office and insurance companies - as the main investors. Since the establishment of the Bond Electronic Exchange (BEX) in 2004, some corporate bond issues have been listed on the newly established exchange market, which has provided access to retail and individual investors. Going forward, the authorities are promoting the establishment of an electronic trading platform (ETP) for all types of bonds to facilitate trade and reduce transaction costs. The ETP is expected to be up and running by early 2006. (More details on the ETP can be found in Box 1)

#### Box 1

#### **Electronic trading system by BEX**

The Bond Electronic Exchange (BEX), a subsidiary of the Stock Exchange of Thailand (SET), is in the process of developing an electronic trading platform (ETP) for institutional and large-scale investors (ie the wholesale market), called Fixed Income and Related Securities Trading System, or "Firsts". As the country's central ETP, "Firsts" will be an efficient centre for bond trading, since it will offer a trading system, settlement and clearing services, transparent disclosure and efficient communication channels. Most importantly, "Firsts" will provide market participants with real-time trading information, enabling them to make more efficient investment decisions, as well as trade and negotiate bonds more conveniently, quickly and transparently.

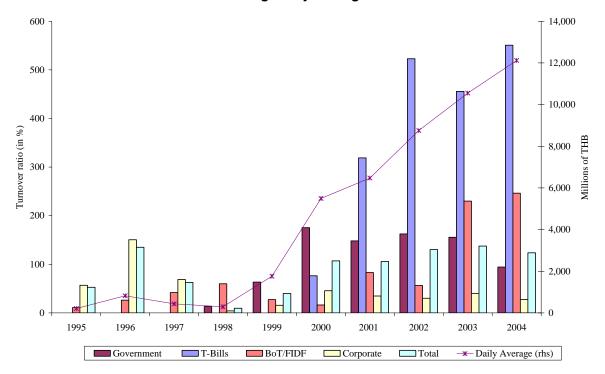
"Firsts" specifications			
	Dealer to dealer (D2D)	Dealer to client (D2C)	
Firsts user	Dealers	Dealers, institutional investors	
Bond type	All bonds	All bonds	
Trading method	Yield-to-maturity dealing	Yield-to-maturity dealing	
Order type	Indicative and firm quotation	Requests for quotes (RFQ)	
Trading session	10.00 am–12.30 pm and 2.30 pm–4.30 pm		
Clearing and settlement	Gross settlement Clearing and settlement through TSD is optional		

For retail investors, BEX has also been operating an automatic order matching bond trading system since 26 November 2004 on which both government and corporate bonds are listed. The system aims to provide retail investors with an additional investment channel by providing better access to information and ease of transaction. Prior to BEX, bonds were traded OTC, which was principally for institutional investors. Because of information and transparency issues as well as small transaction sizes, retail investors were effectively excluded from the OTC market. TSD stands for Thailand Securities Depository.

Even though the average daily trading volume in the secondary market has been increasing since 2000, the average daily trading volumes of government bonds and corporate bonds have not increased much in the past few years. This is mainly because the activity in the secondary market has become more focused on short-term, liquid instruments, such as Treasury bills and central bank bonds (the majority of which have maturities of less than a year). Turnover ratios of the major instrument types, along with the average daily trading volume in the secondary market, are shown in Graph 4.

Graph 4

Turnover ratios by instrument and average daily trading volume



Note: Turnover ratio is the annual outright trading volume divided by the year-end amount outstanding of each corresponding instrument.

Source: ThaiBMA.

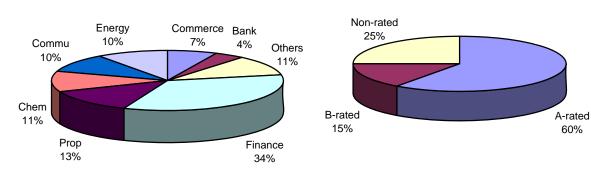
For corporate bonds, trading volume in the secondary market is concentrated at the high end of the credit spectrum, with around 60% of transactions taking place in A-rated corporate bonds.

Graph 5

Profile of corporate bond trading (as of 30 June 2005)

Corporate bond, trading value by sector

Corporate bond, trading value by rating

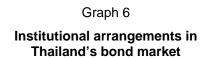


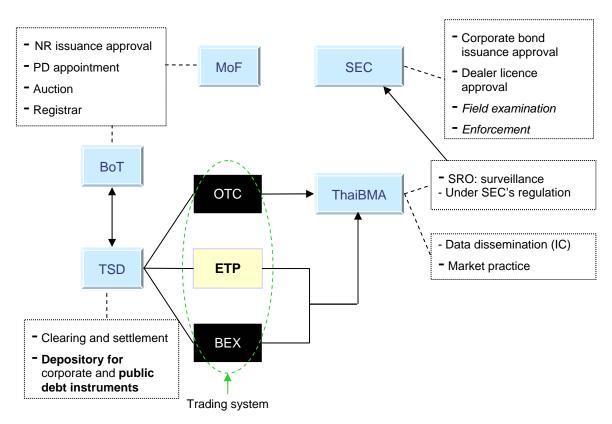
Note: Commu stands for community.

Source: ThaiBMA.

## Institutional arrangements in Thailand's bond market

Various parties are involved in the development of the corporate bond market, including: the Ministry of Finance (the issuer of government securities); the Bank of Thailand, or BoT (the fiscal agent for and registrar of government securities); the Securities and Exchange Commission (the main regulator and developer of the capital market); the Stock Exchange of Thailand (the system operator of BEX and the centralised ETP); the Thai Bond Market Association, or ThaiBMA<sup>3</sup> (a self-regulatory organisation and information centre); and the Thailand Securities Depository (TSD, the clearing and settlement agent). Graph 6 summarises the structure of the Thai bond market.





#### Abbreviations

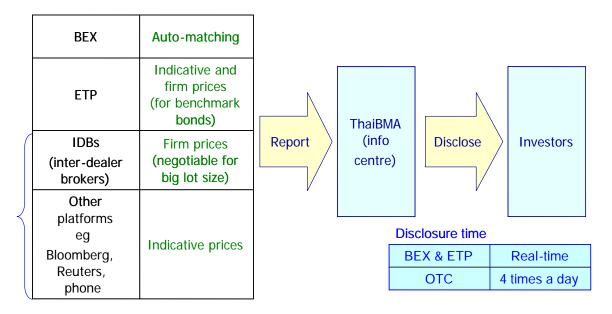
N4 - E	Mariata of Flances	ETP	electronic trading platform
MoF	Ministry of Finance	BEX	Bond Electronic Exchange
BoT	Bank of Thailand	ThaiBMA	Thai Bond Market Association
TSD	Thailand Securities Depository	SEC	Securities and Exchange Commission
OTC	over-the-counter	SRO	self-regulatory organisation
NR	non-resident		
		PD	primary dealer

Formerly known as the Thai Bond Dealing Centre (TBDC), the Thai Bond Market Association (ThaiBMA) is a securities business-related association established under the Securities and Exchange Commission Act B.E. 2535. Its main purposes are to be a self-regulatory organisation (SRO) for a fair and efficient operation of the bond market and to be an information centre for the bond market. It also plays functional roles in market development, such as drawing up market conventions and standards and being a bond pricing agency for the industry. In addition, the ThaiBMA provides a forum where industry professionals can discuss and respond to current issues and play a role in shaping the future of the Thai bond market.

Graph 6 shows that although market participants in the bond market have a number of alternative trading channels, ranging from the traditional OTC market to the centralised electronic trading systems, ie ETP (wholesale and dealing) and BEX (retail and auto-matching), all trading information will be reported to and centralised at the ThaiBMA for public dissemination (see Graph 7). Under current regulations, bond dealers have to report their transactions in the OTC market to the ThaiBMA, which discloses the executed prices to its subscribers four times a day. All transactions are disclosed to the public at the end of each trading day. There will be further improvement to information transparency and disclosure in the OTC market, with the more timely submission and disclosure of post-trade information from January 2006 onwards. However, market participants in the two electronic trading systems already have access to real-time pre- and post-trade price information.

Graph 7

Reporting and disclosure system for bond trading transactions



## Market infrastructure

Following the enactment of the Securities and Exchange Act of 1992, which streamlined the criteria for the issuance of corporate bonds, the corporate sector gradually began to issue debt. The authorities' efforts to develop local bond markets, combined with the corporate sector's efforts to diversify away from refinancing and foreign exchange risks and reduce its reliance on bank borrowing, have also contributed to an expansion of the local corporate bond market in Thailand, as has happened elsewhere in the world.

A sound market infrastructure is a prerequisite for a properly functioning bond market: it supports active participation and trading, contributing to continuous price discovery and market liquidity, and gives markets more flexibility in an ever changing environment. The efforts of the BoT in this area have been focused on measures to: 1) enhance the role of market-makers; 2) improve the clearing and settlement system; 3) develop risk and liquidity management tools; 4) create electronic trading platforms; and 5) establish a risk-free government bond benchmark for the pricing of bonds.

#### Market-makers

The Thai secondary bond market has functioned largely as an OTC market between dealers and institutional investors, with only the limited participation of retail investors. Due to relatively illiquid conditions and imperfect market information, market participants have had to rely principally on the market-making mechanism to stimulate trading activities. Consequently, market-makers have not been able to perform their functions efficiently because of the lack of supporting tools to make continuous bid-ask quotes with commitment to those quotes. As a result, there have been no two-way quotations committed to by dealers, including primary dealers. <sup>4</sup> Therefore, the authorities are looking at ways to enhance primary dealers' efficiency in performing their role as market-makers in the secondary market as well as make available those facilitating tools, so that the market-makers can fulfil their duties.

#### Clearing and settlement systems

The clearing and settlement process for corporate bonds in Thailand is costly, due to the ongoing use of scrip, as well as continued fragmentation of this function in the industry. The cost of clearing and settling a dematerialised security is now a fraction of the cost of clearing and settling scrip. Moreover, the greater the lack of standardisation arising from divergent clearing and settlement procedures, the greater the cost to the entire market.

Currently, the settlement of public debt securities is operated by the BoT, while corporate bonds are cleared and settled at the Thailand Securities Depository. The BoT is working closely with the TSD to centralise the settlement of bonds by setting up a Central Securities Depository (CSD) and a central clearing and settlement system at the TSD. The TSD plans to have this operation up and running sometime in early 2006.

The BoT is currently studying a conceptual model for the CSD, as well as its possible linkage to other CSDs. The issues under consideration include: 1) the infrastructure of the linkage; 2) risk management; 3) the settlement process; 4) the finality of the transaction in each country;<sup>5</sup> 4) the impact of exchange rates; and 5) other related issues.

## Risk and liquidity management tools

The lack of hedging instruments also contributes to the low liquidity of corporate bonds in Thailand. Investing in corporate bonds exposes investors to market, credit and liquidity risk - and repo and derivatives markets that would allow investors to hedge such risks, and dealers to manage their positions and inventories more effectively, are relatively underdeveloped in Thailand.

Currently, the derivatives market in Thailand consists of products traded mostly in the OTC market. An exchange-traded derivatives market does not yet exist. However, the Derivatives Act of 2004 has legally endorsed the establishment of a financial futures exchange, and interest rate futures contracts are expected to begin trading in 2006 - thus providing an important hedging tool for bond market participants.

## **Trading platforms**

The issue of appropriate trading systems for our corporate bonds has been a constant topic of discussion since bonds began trading in the Thai capital market. Current trading systems have included traditional trading via telephone, screen-based trading, inter-dealer brokering and the soon to be launched central electronic trading platform. Details of the planned central electronic trading platform are shown in Box 1 above.

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The BoT first appointed primary dealers on 5 June 2000. Currently, there are nine primary dealers. The Ministry of Finance and the BoT are now reviewing the current primary dealer system to include more tangible privileges as well as obligations in both the primary and secondary markets. The particular issue being considered is whether the exclusive right in primary market auctions should be given to primary dealers.

<sup>&</sup>lt;sup>5</sup> "Settlement finality" means "the discharge of an obligation by a transfer of funds and transfer of securities that have become irrevocable and unconditional".

#### Benchmark government bonds

The ThaiBMA has developed and disseminated a daily government yield curve that extends out 16 years, using government bonds across all 27 issues (maturities ranging from one to 17 years, with an average duration of about 5.13 years). Realising the importance of a risk-free benchmark against which private issuers can price their bonds, the Ministry of Finance is planning to issue seven-year and 10-year benchmark government bonds on a monthly basis, starting from January 2006. Having a reliable risk-free benchmark (based on sizeable issuance) is a crucial step in improving liquidity and building market infrastructure for both the bond and derivatives markets.

## **Policy implications**

Since the crisis, the Thai authorities have put a great deal of effort into developing the domestic bond market. In 1998, the Domestic Bond Market Development Steering Committee, chaired by the Director General of the Ministry of Finance, was established to promote the development of the domestic bond market. In January 2005, this committee was reorganised to enhance its functional efficiency, and is currently chaired by the Finance Minister and comprises high-level representatives from both the public and private sectors. The aim of this committee is to find ways to enhance funding sources and investment alternatives in the market, which would also lead to better distribution among bank financing, equity financing through the stock market, and debt financing through the domestic bond market.

The BoT has been entrusted with the responsibility of further developing the secondary market. To meet this challenge, the BoT, in collaboration with other authorities and market participants, has mapped out a multi-year strategy and a plan of action for secondary bond market development. The plan of action focuses on: 1) improving efficiency and reducing transaction costs in the bond market; 2) increasing market players' ability to lend and borrow securities; 3) enhancing participants' ability to hedge risks; 4) streamlining and enhancing the function of primary dealers in their role as market-makers; and 5) broadening the investor base by increasing market access for both domestic and foreign players.

Despite the rapid growth in the government securities market during the past decade, the Thai corporate bond market has been expanding at a much slower pace. However, we strongly believe that an effective government bond market lays the foundation for the development of the corporate bond market. Experience in developed markets generally shows that the following components are helpful in the development of an effective government bond market: 1) regular issuance; 2) a well functioning primary dealer system; and 3) a vibrant hedging market and active liquidity enhancement facilities.

Developing a well functioning bond market is not an easy task. Much progress has been made in Thailand, but many major problems still need to be tackled. The development of corporate bond markets should be viewed as an incremental process that takes place over a number of years. By their very nature, and given their social and political implications, the above reforms are likely to be implemented gradually, rather than all at once. Our planned endeavours will be time-consuming, but worthwhile - because they will lay the foundation for the strong and diversified financial markets that will underpin sustained economic recovery and prosperity for all.