

2017 Thai Bond Market Review

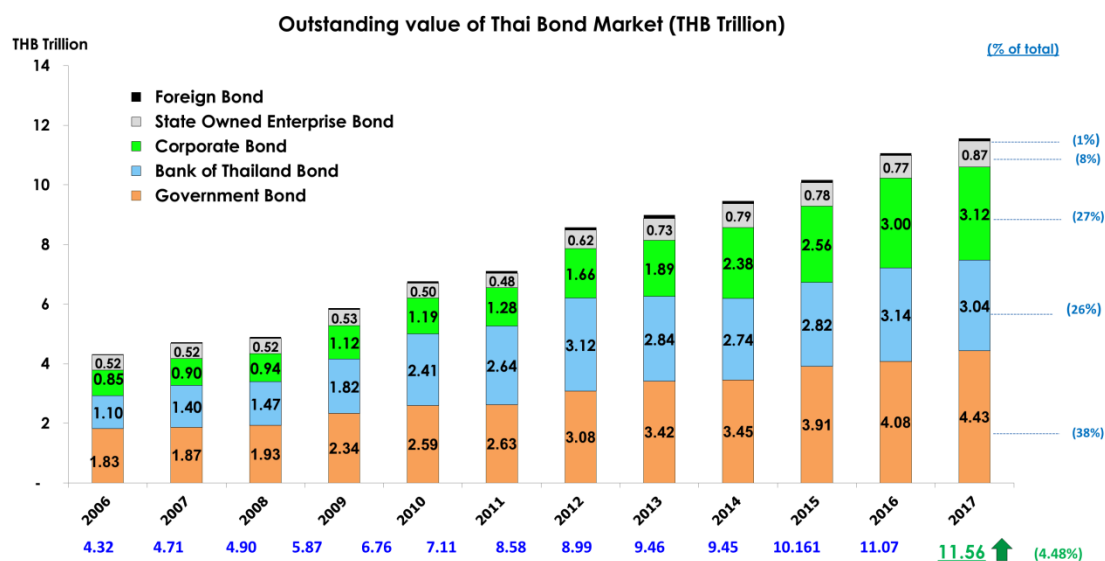
Highlights of 2017

Despite repeatedly predictions about rising rates, Thai bond market in 2017 showed another year of solid growth both in corporate bond issuance and fund flows from non-resident investors. Thai bond market's total outstanding increased 4.48% from last year with the continued expansion from the corporate sector. Long term corporate bond issuance made an all-time high at THB 823 billion, surpassing THB 813 billion in 2016. Trading of corporate bonds rose by 17.48% driven by increased participation of institutional investors. Foreign fund flows recorded net inflows of THB 222,990 million in 2017, most of which were in long term government bonds (TTM \geq 1Y). Due to large inflow and lower global bond yields, Thailand's government bond yields declined across the curve by 11-41 bps from last year.

- Total bond market outstanding value grew 4.48% in 2017

Total outstanding value of Thai bond market at the end of 2017 was THB 11.56 trillion, grew by 4.48% from the end of 2016. Government bonds accounted for 38% of total outstanding value, followed by 27% corporate bond, 26% BOT bond, 8% SOE bonds and 1% foreign bond (See Figure 1).

FIGURE 1: OUTSTANDING VALUE OF THAI BOND MARKET



Classified by type of bond, Treasury bills outstanding as of the end of 2017 jumped 139.06% from last year due to larger issuance in 2017 to finance mid-year additional budget deficit. The outstanding of other types of bond slightly increased except for BOT bond which decreased by 3.01%. The total bond outstanding grew by 4.48% in 2017 (See Table 1).

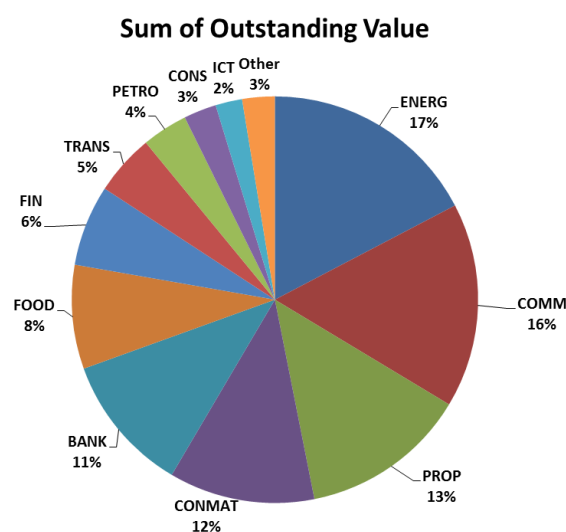
TABLE 1: BOND OUTSTANDING

Unit: THB Mln

Type	2016	2017	Growth(%)
Government Bond	4,024,927	4,298,872	↑ 6.81%
Treasury Bills	55,732	133,232	↑ 139.06%
State Owned Enterprise Bond	765,420	869,549	↑ 13.60%
Bank of Thailand Bond	3,136,029	3,041,769	↓ -3.01%
Long term Corporate Bond	2,671,617	2,743,095	↑ 2.68%
Commercial Paper	332,024	380,659	↑ 14.65%
Foreign Bond	79,845	94,177	↑ 17.95%
Total	11,065,594	11,561,352	4.48%

For corporate bonds classified by business sector, top five business sector made up nearly 70% of total outstanding. The Energy sector has the biggest outstanding value at 17% of total corporate bond outstanding value. The Commerce sector was the second largest with 16% shares while property, construction&materials, and banking sectors had comparative shares around 11% to 13% (See Figure 2).

FIGURE 2: CORPORATE BOND'S OUTSTANDING VALUE BY BUSINESS SECTOR



- **Total bond issuance declined by 12.26% as BOT cut supply on short-dated BOT bills**

Total bond issuance in 2017 decreased 12.26% from last year mainly due to reduced auctions of short-dated BOT bonds in an attempt of the central bank to curb short-term foreign inflows. The issuance of 3-month and 6-month BOT bonds was reduced from THB 40 billion a week to THB 30 billion a week during Q2-Q3. Consequently, total BOT bond issuance declined 21.73%. On the other hand, Treasury bill issuance rose 87.68% due to the need of MOF in financing mid-year additional budget deficit (See Table 2).

Table 2: BOND ISSUANCE

Unit: THB Mln

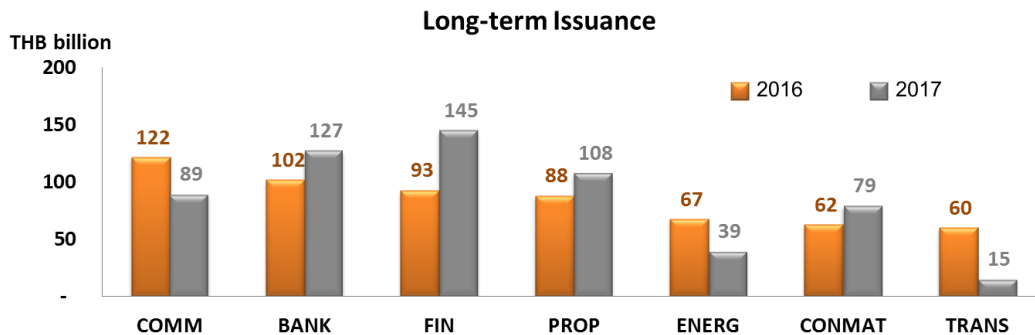
Type	2016	2017	Growth(%)
Government Bond	582,343	702,777	↑ 20.68%
Treasury Bills	388,632	729,389	↑ 87.68%
State Owned Enterprise Bond	145,256	156,464	↑ 7.72%
Bank of Thailand Bond	7,528,672	5,892,965	↓ -21.73%
Long term Corporate Bond	812,819	823,271	↑ 1.29%
Commercial Paper	2,187,204	2,472,934	↑ 13.06%
Foreign Bond	13,780	20,000	↑ 45.14%
Total	10,348,326	9,079,886	-12.26%

- **Corporate Bond Issuance made an all-time high, breaking THB 800 billion level for the second consecutive year**

Corporate firms continued to take advantages of the persistent low interest rates and strong investor demand. Long-term bond (TTM>=1Y) issuance reached an all-time high of THB 823 billion, surpassing THB 813 billion in 2016 and broke THB800 billion level for the second consecutive year. The top five highest issuance sectors were finance, banking, property, commerce and construction& material respectively (See Figure 3).

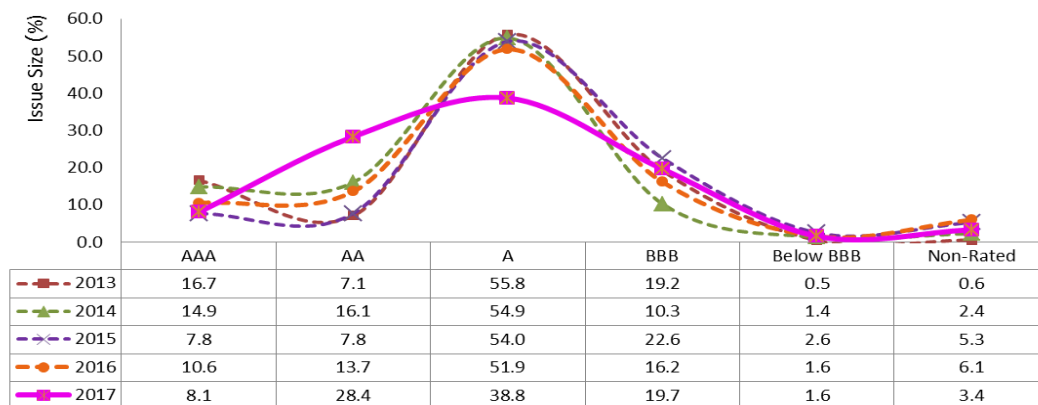
Issuers not only tapped the bond market by increasing amount of bond issuance, but also extending the maturities to lock in low funding costs. The weighted average maturity of corporate bond issuance rose from 6.50 years in 2016 to 8.39 years in 2017.

FIGURE 3: LONG-TERM ISSUANCE CLASSIFIED BY SECTOR



In term of ratings, the proportion of non-rated bonds issuance declined from 6.1% to 3.4% of total issuance amount while AA-rated bond issuance had the highest growth, doubled from 13.7% in 2016 to 28.4% of total in 2017. The change in rating structure was attributed to investor concern on non-rated bond defaults seen during the year. Approximately 95% of total issuance was in an investment grade categories (AAA, AA, A, and BBB) (See Figure 4).

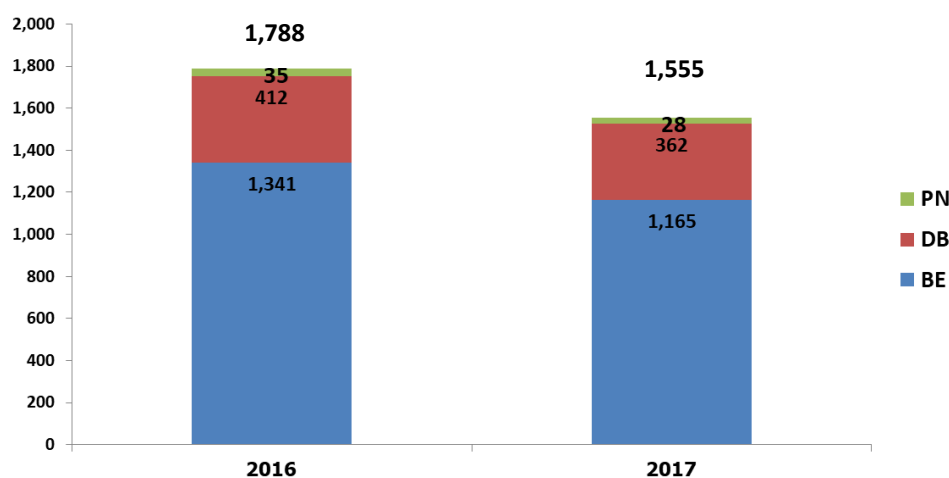
FIGURE 4: LONG-TERM CORPORATE BOND ISSUANCE CLASSIFIED BY RATING



- **Issuance of short-term corporate debt securities declined as a result of B/E scandal which deteriorated investor demand**

Amid short-term bill of exchange defaults during the first half of the year, investor demands in short-dated debt securities had weakened. Thus, short-term corporate bond issuance when excluding borrowing within the same company group dropped by 13% from THB 1,788 billion to THB 1,555 billion in 2017. The majority was still in the form of B/E, accounting for 74.9% of total short-term corporate bond issuance. (See figure 5).

FIGURE 5: SHORT-TERM CORPORATE BOND ISSUANCE (EXCLUDED COMPANY GROUP BORROWING) Unit: THB billion



Trading and Transaction

- Corporate bond trading showed a remarkable growth, rising by 17.5 %

In the secondary market, daily average trading value in 2017 was THB 90,355 million, decreased 1.62% from last year. Around 84% of total trading was in government bonds and BOT bonds (See Figure 6). Although the proportion of corporate bond trading was relatively small, it showed a remarkable growth, with an average trading value rising to historical high level of THB 5.09 billion compared with THB 4.3 billion last year and only THB 0.38 billion in 2006 (See Figure 7).

FIGURE 6: TRADING VALUE IN THAI BOND MARKET

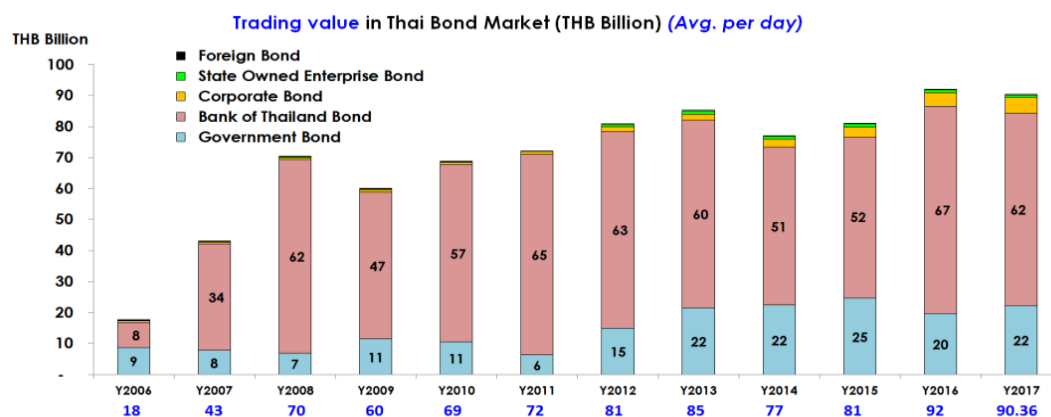
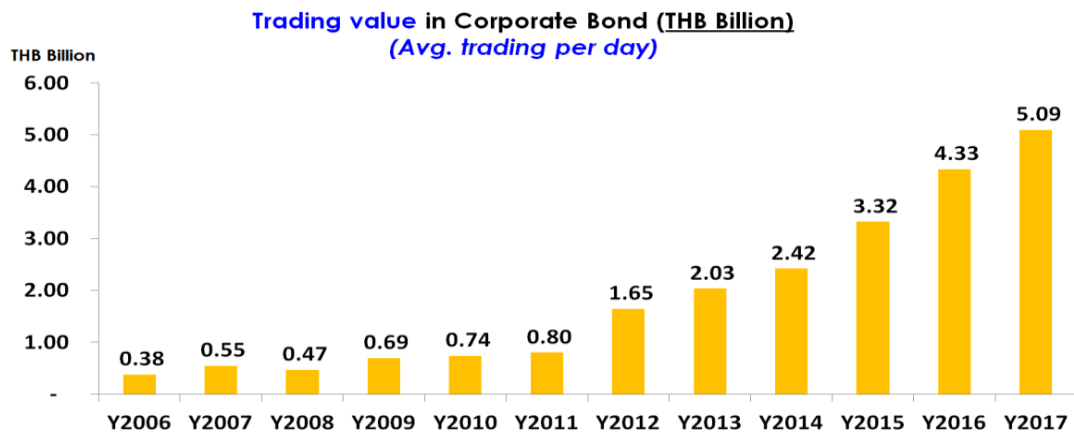


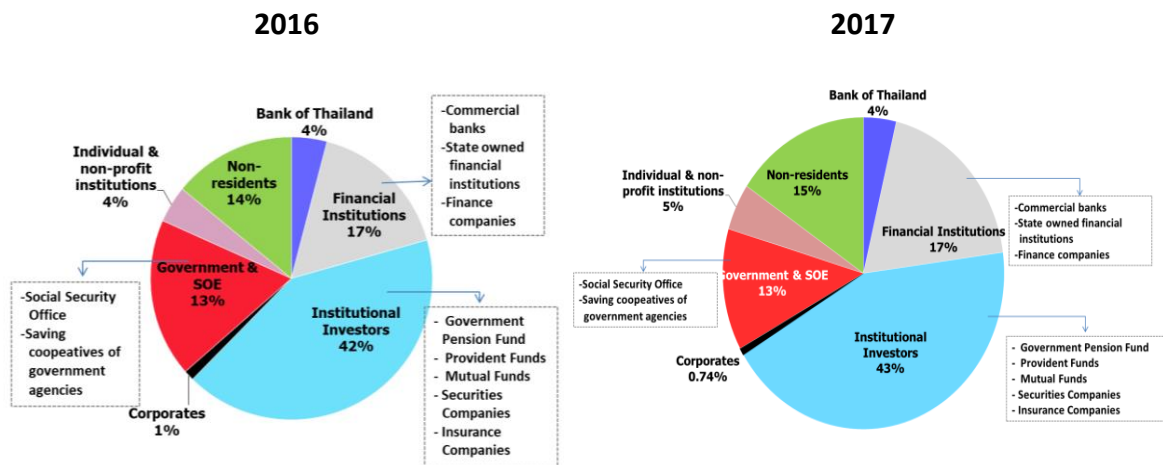
FIGURE 7: TRADING VALUE IN CORPORATE BOND



Composition of Bond Holders

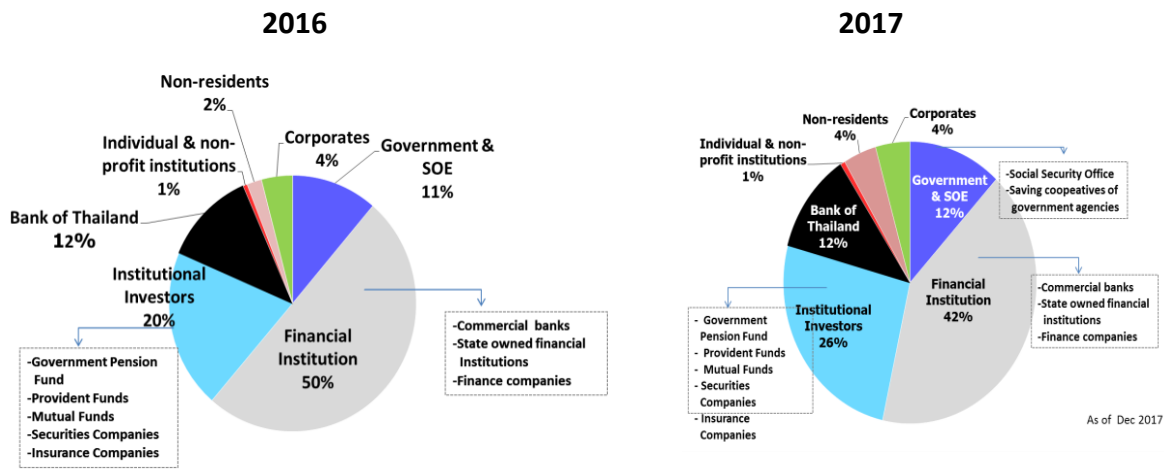
Major investors who held government bonds at the end of 2017 were institutional investors (including government pension fund, provident funds, mutual funds, securities companies and insurance companies), having shares at 43% of total government bond outstanding. Non-resident investors had a market share of 15%, 1% higher than last year (See Figure 8).

FIGURE 8: HOLDERS OF GOVERNMENT BONDS



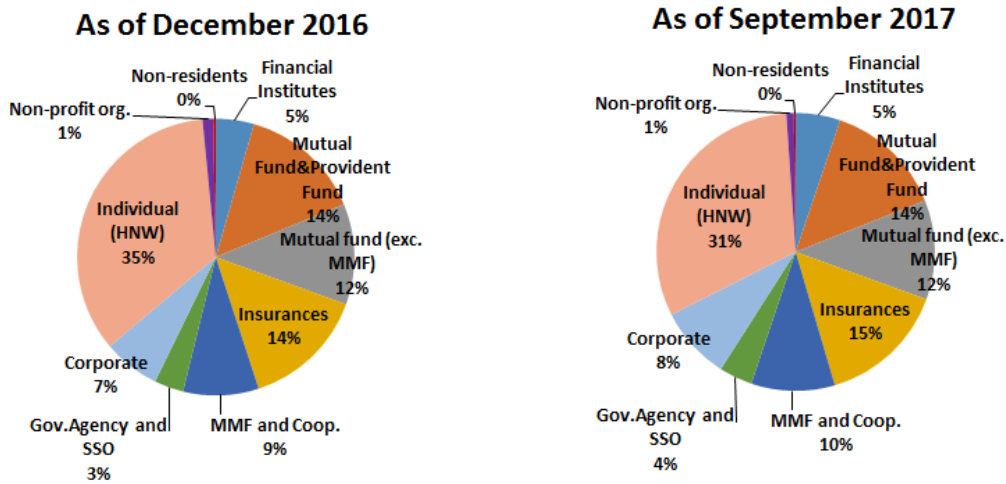
For BOT bond, the largest group of investors was financial institutions, followed by institutional investors. The market share of non-resident investors was at 4%, up from 2% in 2016 (See Figure 9).

FIGURE 9: HOLDERS OF BOT BONDS



As for corporate bonds, dominant holders were individuals having shares at 31% of total outstanding, slightly lower than 35% recorded at the end of 2016. Insurance companies were the second major holders, accounting for 15% of total corporate bond outstanding (See Figure 10).

FIGURE 10: HOLDERS OF CORPORATE BOND



Non-Resident Fund Flows

- **Non-resident investors net bought THB 220 billion in 2017**

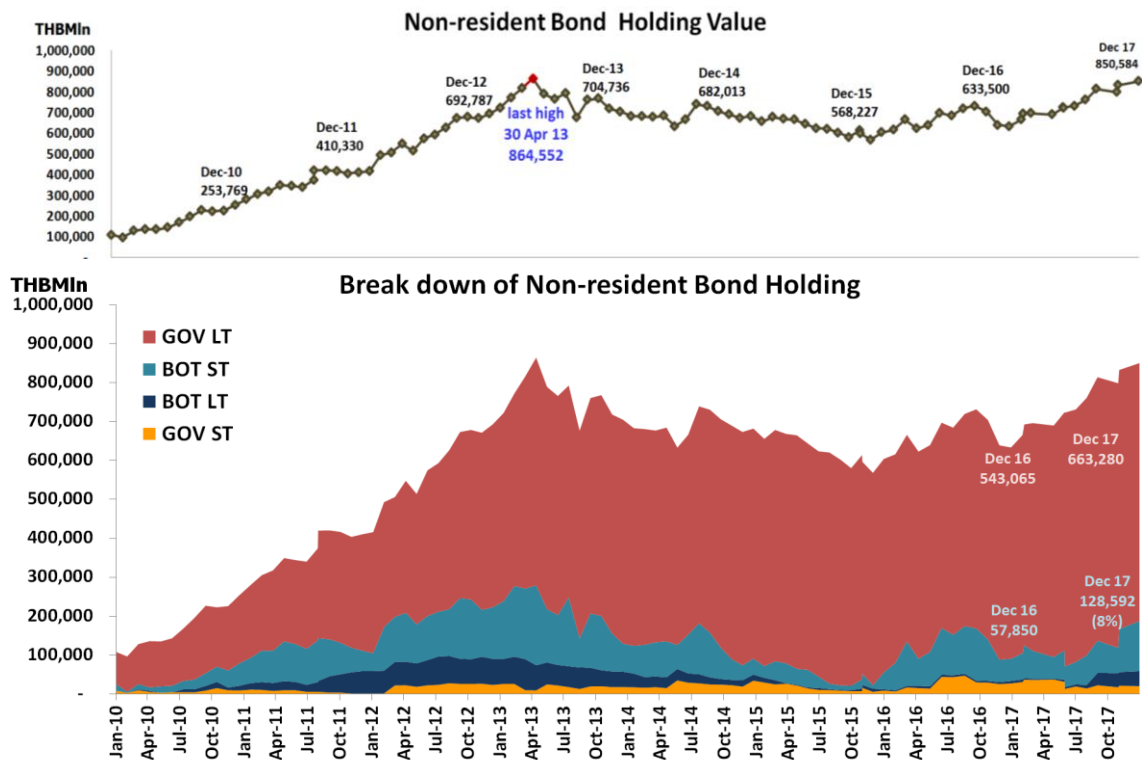
Although the US began its balance sheet normalization in the last quarter of 2017 expected to cause tightening global liquidity and rising bond yields, foreign investor's interest in Thai bond market remained positive. Strong foreign inflows had been observed since the beginning of the year, supported by Thailand's healthy macroeconomic fundamentals. In 2017, non-resident investors had net inflow of THB 222,990 million. The main investment was on long term bond (TTM \geq 1Y), comprising more than 76% of total inflow (See Table 3).

Table 3: NON RESIDENT FUND FLOWS

Period	Net Flow					Accumulation
	<=1Y Bond			>1Y Bond	All	
	Net Trading	Expired	Net Flow			
End of 2016	296,972	-281,446	15,525	46,546	62,071	62,071
Jan-17	21,815	-6,926	14,890	18,204	33,094	33,094
Feb-17	40,006	-8,932	31,074	8,163	39,237	72,331
Mar-17	-17,413	-15,601	-33,014	26,549	-6,465	65,866
Quarter 1	44,408	-31,459	12,949	52,917	65,866	65,866
Apr-17	3,403	-18,910	-15,507	9,196	-6,311	59,555
May-17	15,489	-3,193	12,296	21,298	33,593	93,148
Jun-17	-24,682	-14,311	-38,993	41,733	2,740	95,888
Quarter 2	-5,790	-36,415	-42,204	72,226	30,022	95,888
Jul-17	12,945	-3,584	9,361	-1,963	7,398	103,286
Aug-17	22,993	-7,051	15,942	20,903	36,845	140,131
Sep-17	47,002	-31,903	15,099	35,707	50,805	190,936
Quarter 3	82,940	-42,538	40,402	54,646	95,048	190,936
Oct-17	-19,982	-8,409	-28,392	2,168	-26,224	164,712
Nov-17	57,296	-2,958	54,338	-14,312	40,026	204,739
Dec-17	37,499	-20,571	16,928	1,324	18,251	222,990
Quarter 4	74,812	-31,939	42,874	-10,820	32,054	222,990
End of 2017	196,370	-142,350	54,020	168,970	222,990	222,990

Non-resident holding of Thai bond increased significantly from THB 633.5 billion at the end of 2016 to total THB 850 billion at the end of 2017. Most of the non-resident holding was in long - term government bond (TTM \geq 1) totaling THB 663 billion, the highest level in the last few years. Non – resident holding in short-term bonds was doubled to THB 128 billion from THB 58 billion last year (See Figure 11). The increasing of non-resident participation in the market has contributed to improved bond market liquidity.

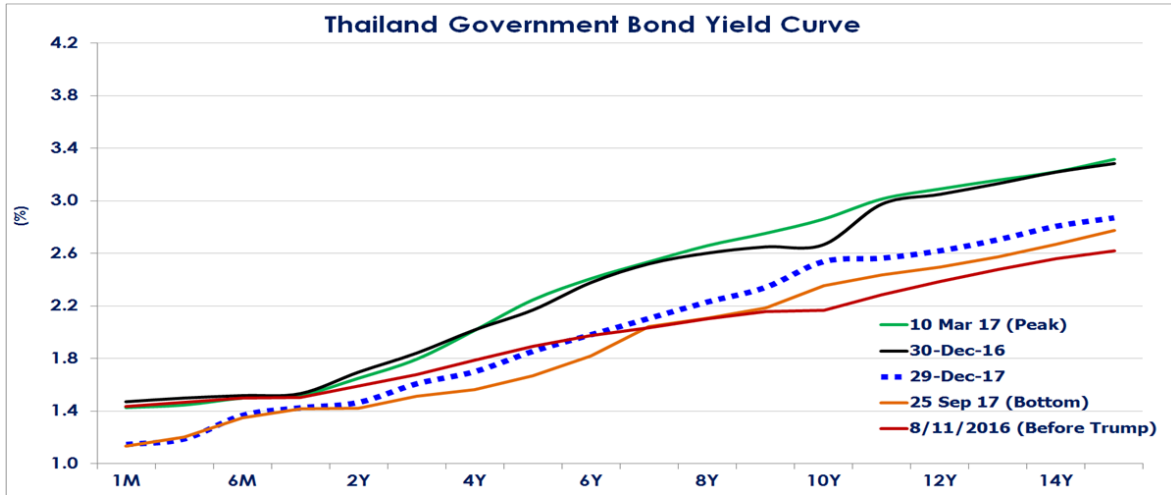
FIGURE 11: NON-RESIDENT BOND HOLDING VALUE



Yield Movement

After the US’s election in Q4, 2016, Thailand government bond yield sharply jumped to the highest level in late 2016. The upward trend continued to be seen in the first half of 2017. 10Y bond yield reached its peak in March before steadily declining afterward amid the failure of US President Trump to deliver his economic stimulus policies. However, in late September when the US’s tax reform seemed to get approval driving US Treasury yields higher, Thailand government bond yield had climbed gradually throughout the end of 2017. However, at the end of 2017, Thailand government bond yields remained lower than the end of 2016 around 10-43 bps since downward move during the earlier of the year was bigger than the upward move in the last quarter (See Figure 12).

FIGURE 12: THAILAND GOVERNMENT BOND YIELD CURVE



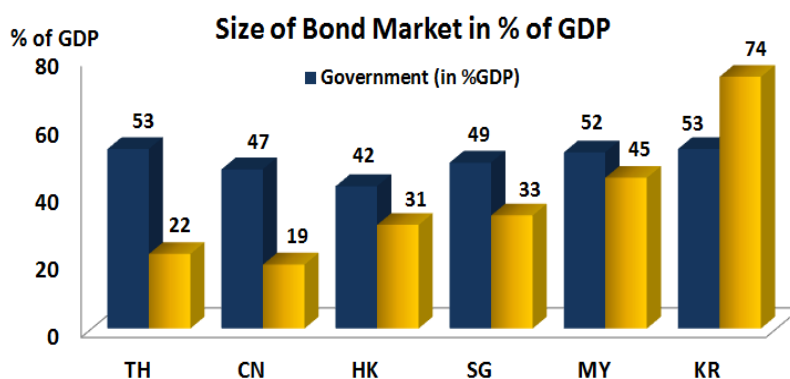
Event of Default and Cross-Default

For more than decades, Thailand bond market has not experienced any case of defaults until late 2016 to first half of 2017. The defaults started from the issuers of Bill of Exchange (B/E), a short-term paper designed for private borrowing. Defaults in some B/Es led to cross-defaults in bonds issued by the same issuers. While the total size of defaults and cross-defaults were small but it was taken as lessons learned for yield-hungry investors. The total amount of defaults was THB 5,450 million, representing 0.46% of total corporate bond outstanding. This was substantially lower than the commercial banks' non-performing loan (NPL) of 2.97%.

Thailand Bond market Challenges and Opportunities

While Thailand's government bond market has grown continuously and stayed well equivalent to peers at 53% of GDP, corporate bond market stood at 22% of GDP, quite small compared to other countries in Asia (See Figure 13). This posted both challenges and opportunities for the corporate sector to be able to utilize lower cost of funding in the capital market.

FIGURE 13: SIZE OF BOND MARKET IN % OF GDP



. To achieve the full potential of the corporate bond market, further development in term of infrastructure and standardization is needed. The Corporate bond market 4.0 was then initiated by ThaiBMA in 2017.

Corporate Bond Market 4.0 comprises of three elements; 1) REGULATION 4.0, 2) INFRASTRUCTURE 4.0 and 3) PRICING 4.0.

Regulation 4.0 focuses on a streamline of related rules and market practices for a more efficient functioning of bond market participants and fixed-income industry. One of the ongoing works include a review of corporate bond prospectus, terms & conditions, covenants and a strengthening of the roles and functions of bond holder representatives to enhance investor protection.

Pricing 4.0 focuses on enhancing standards of bond pricing and developing cutting-edge valuation and reference rates for both government and corporate bond products. The construction methodologies of government bond and corporate bond yield curve and their valuation process will be reviewed to reflect actual trading transactions rather than quotation. Company fundamentals and credit analysis will also be incorporated for corporate bond valuation.

Infrastructure 4.0 addresses a current short-fall of corporate bond registry and settlement procedures which largely remain in non-DVP system. Unlike government bonds, Thailand's corporate bonds were predominantly in certificate form, unable to settle on a DVP basis. There are also multiple bond registrars who possess different registration and bond transfer format. This creates inefficient settlement procedures and higher counterparty risks. The real-time DVP is seen as the key to enhance efficiency and market integrity as well as facilitating further growth in corporate bond market. With the rapid advance in Fintech, ThaiBMA is now exploring the use of Distributed Ledger

Technology (DLT) and Blockchain to allow for more secured and efficient record keeping and transfer of bonds.

ThaiBMA corporate bond 4.0 project will be continued in 2018 and expected to bring in more engagement and cooperation from market participants.

