2018 Thai Bond Market Review

Highlights of 2018

- Total outstanding value of Thai bond market at the end of 2018 surpassed THB 13 trillion for the first time, rising 12% from last year.
- Long term corporate bond issuance hit new record high for three consecutive years, reaching THB 879 billion.
- Green bond was first issued in Thailand.
- Non-resident investor holding of Thai bond reached new all-time high and touched trillion-level to THB 1.002 trillion in November 2018.
- For the first time, since the early of the year 10-year Thai government bond yield has declined to stay below 10-year US Treasury yield until now.
- The Securities and Exchange Commission of Thailand (SEC) amended regulations effective from April 2018 to tighten selling of bill of exchange (BE) to enhance investor protection.

<u>Outstanding Value</u>: Totally grew by 12% while corporate bond ranked 2nd behind government bond in terms of outstanding

Total outstanding value of Thai bond market at the end of 2018 was at THB 13.06 trillion, increasing 12% from the end of last year. Government bond remained the majority at 37% of total outstanding value, while the runner-up was corporate bond with 29% portion which marked two straight years of surpassing BOT bond. The remainders were Bank of Thailand (BOT) bond for 27%, State Owned Enterprise (SOE) bond for 6% and foreign bond for 1%, respectively. *(see Figure 1)*

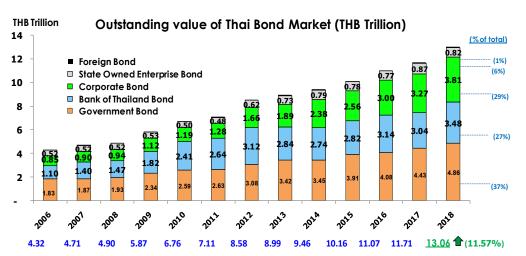


Figure 1: Outstanding Value of Thai Bond Market

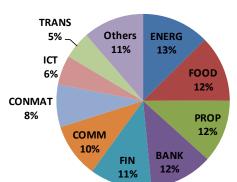
Classified by types of bonds, the outstanding of short term tenor like commercial paper and treasury bills declined 51.21% and 9.38% respectively. On the contrary, long term corporate bond increased the most in terms of outstanding by 36.27% from end-2017, followed by BOT bond for 14.30%. *(see Figure 2)*

			Unit:THB MIn
Туре	2017	2018	Growth(%)
Government Bond	4,298,872	4,737,808	10.21%
Treasury Bill	133,232	120,732	-9.38%
State Owned Enterprise Bond	869,549	821,165	-5.56%
Bank of Thailand Bond	3,041,769	3,476,686	14.30%
Long term Corporate Bond	2,531,905	3,450,314	1 36.27%
Commercial Paper	737,465	359,790	-51.21%
Foreign Bond	94,177	94,771	10.63%
Total	11,706,969	13,061,267	11.57%

Figure 2: Thai Bond Outstanding Value

For long term corporate bond outstanding value, the top sector was energy sector at 13% of total long term corporate bond outstanding. Next there were three sectors co-sharing the second place which were food sector, property sector and bank sector at 12% each. Transportation sector, meanwhile, held the small share at 5%. (see Figure 3)

Figure 3: Long Term Corporate Bond Outstanding Value by Sector



Corporate Bond Outstanding Value by Sector

Trading Value: Totally down 13% from last year

The daily average trading value in Thai bond market was at THB 79 billion, declining 13% from last year's figure as a result of lower trading activity in every type of bonds.BOT bond was the most active traded security with an average daily turnover at THB 55 billion, and government bond came next with

THB 19 billion average daily turnover. Both bonds accounted for approximately 94% of total trading value. Corporate bond, meanwhile, ranked the third with an average turnover at THB 4.5 billion. SOE bond and foreign bond were at THB 0.6 billion and THB 0.05 billion respectively. *(see Figure 4)*

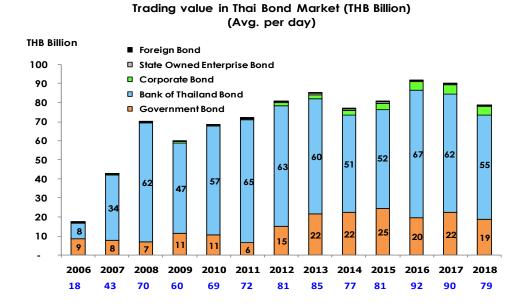
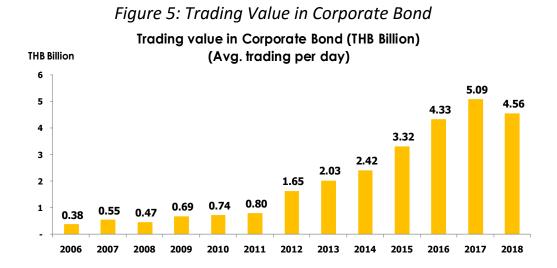


Figure 4: Trading Value in Thai Bond Market

Although the daily average trading value of corporate bond remained small compared to that of government and BOT bonds, it presented remarkably upward trend for the last 10 years. Its annual trading value hit historical high in 2017 at THB 5.09 billion, but slightly declined to THB 4.56 billion in 2018. (see Figure 5)



<u>Bond Issuance:</u> Long term corporate bond issuance stayed in the spotlight with another year of new record high

Total bond issuance in 2018 was seen down 1% from last year. Nonetheless, long term corporate bond issuance rose 6.18% compared to end-2017 on the back of more supply related to an attempt to lock-in cost of funds amid higher interest rates tendency plus some mergers & acquisition related developments. The issuance of BOT bond rose 6.65% due to the upgrade in short-dated auction amount after last year's reduction to curb inflows, while government bond issuance grew 3.64%. Foreign bond showed growth of 18.3% from last year as offshore entities, particularly from Lao PDR, tended to raise funds more in Thailand by taking advantage of excess demand domestically.

On the contrary, treasury bill decreased 45.55% due to last year high base effect from the need of mid-year additional budget deficit by MOF.After above-par fund raising last year, the absence of Government Saving Bank's issuance affected SOE bond issuance as a whole to fall 34.44%. The issuance of commercial paper declined 7.49%. (see Figure 6)

Туре	2017	2018	Growth(%)		
Government Bond	702,777	728,363	3.64%		
Treasury Bills	729,389	397,145	<mark>↓</mark> -45.55%		
State Owned Enterprise Bond	156,464	102,570	-34.44%		
Bank of Thailand Bond	5,892,965	6,285,119	6.65%		
Long term Corporate Bond	827,839	878,990	6.18%		
Commercial Paper	2,610,721	2,415,104	-7.49%		
Foreign Bond	20,000	23,660	18.30%		
Total	10,940,155	10,830,952	-1.00%		

Figure 6: Bond Issuance

- Corporate bond issuance
 - Long term corporate bond issuance

As aforementioned, concern over interest rates hike and M&A related developments have contributed to elevate long term bond supply from corporate group. Therefore, long term corporate bond issuance hit new record high, once again, marking three consecutive years of increase. The total long term corporate bond issuance in 2018 posted at nearly THB 879 billion. *(see Figure 7)*

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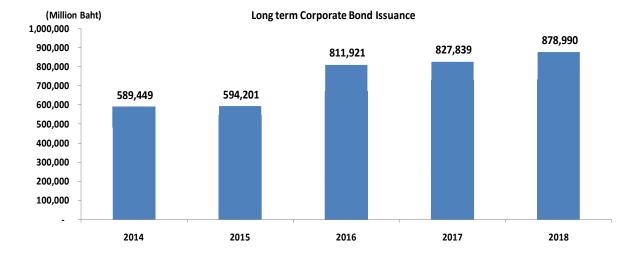
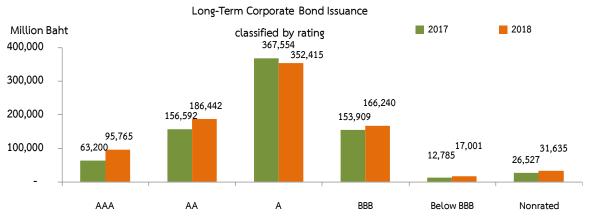
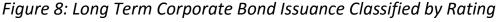


Figure 7: Long Term Corporate Bond Issuance

In terms of ratings, the long term corporate bond issuance with investment grade rating increased, particularly for AAA-rated and AA-rated bond issuance that had the highest growth for 52% and 19 % respectively compared to last year. For the non-rated bond, although the issuance climbed 19%, over 66% of that was secured bond. Those secured bond could be backed by assets or guarantors or both assets and guarantors. *(see Figure 8)*

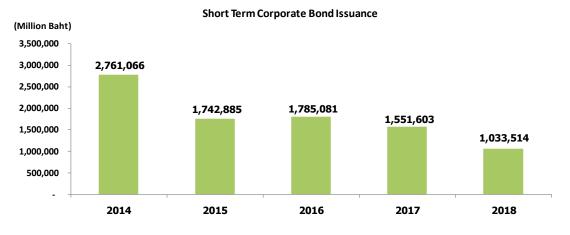




Short term corporate bond issuance

The issuance of short term corporate bond totaled THB 1,033,514 million in 2018, down 33% from last year. The drop was due mainly to lowering B/E issuance after SEC's stricter regulations aimed to enhance investor protection. *(see Figure 9)*





• Baht bond issuance (baht denominated bond issued in Thailand by foreign entity) The total baht bond issuance was up 18% compared to prior year, totally valuing of THB 23,660 million. Ministry of Finance and corporate from Lao PDR were the sole issuer of Baht bond in terms of issuing country. (see Figure 10)

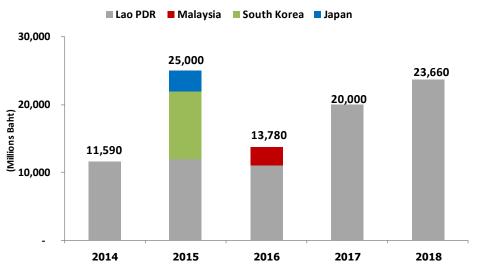


Figure 10: Baht Bond Issuance Classified by Country

• FX bond issuance (foreign currency denominated bond issued in Thailand by domestic or foreign entities)

The total issuance of FX bond was merely at THB 11,947 million but seen up 276% from last year due to low base effect in 2017. The issued currencies in 2018 were respectively USD for 75% and EUR for 25% of the total issuance. *(see Figure 11)*

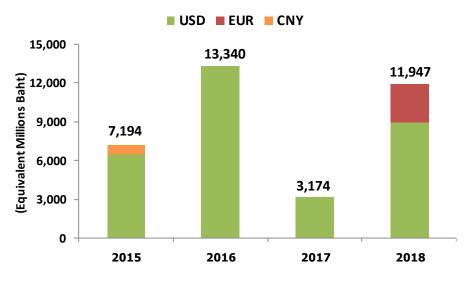


Figure 11: FX Bond Issuance Classified by Currency

• Green and Sustainability bond issuance

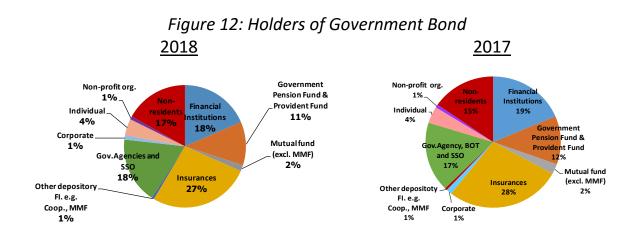
2018 was the year that marked another significant step as market participants were keenly dedicated to support environmental and social developments through green financing.BGRIM Power PCL was the first private sector to issue THB 5,000 million green bond of Thailand with five- and sevenyear maturity, that certified by Climate Bonds Initiative. This bond was subscribed by the Asian Development Bank (ADB). TMB bank PCL, as well, issued the green bond of worth USD 60 million but it was done out of Thailand with the International Finance Corporation (IFC) as the sole investor.

For sustainability bond, Kasikornbank launched sustainability bonds worth USD 100 million outside of Thailand to foreign institutional investors. They stated that it was the first-ever sustainability bond issued in Thailand and ASEAN.

Composition of Bond Holders

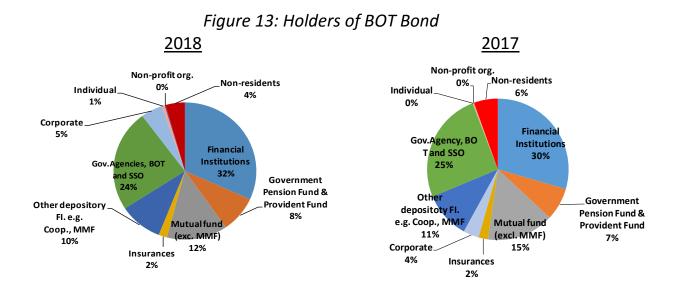
• Holders of government bond

The investor who held government bond the most by end-2018 was institutional investors (including government pension fund, provident fund, mutual fund, securities companies and insurance companies), capturing 41% of total government bond outstanding. Government agencies and Social Security Office (SSO), and Financial institutions sharedthe second ranking with 18% share each. Non-resident investors accounted for 17% share, growing from last year's 15% and evidently underlining that Thai government bond yet remained attractive to offshore investors. *(see Figure 12)*



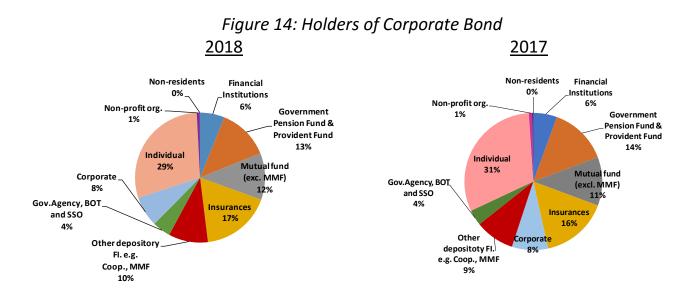
• Holders of BOT bond

Institutional investors, and Financial institutions shared the top holders in BOT bond for 32% of total BOT bond outstanding. The following investors were Government agencies and Social Security Office (SSO) for 24%. The market share of non-resident investors was at merely 4%, no change from end-2017. *(see Figure 13)*



• Holders of corporate bond

The main holder of corporate bond was individuals, capturing shares at 29% of total corporate bond outstanding. Insurance companies were the second major holder, accounting for 17%. Meanwhile, non-resident investors barely held corporate bond, therefore posting 0% share. (*see Figure 14*)



Non-Resident Facts: NR-Holding and ATM-Holding broke new records

Although various uncertainties in 2018 (concerns over UN-China trade dispute, fears of contagion haunting emerging Asian markets and the most discussed policy rate hike course by US Federal Reserve, etc.) had ignited volatility in global market through fund flows movement, outflows from Thai bond market was seen limited due to strong fundamentals in terms of economy and financial market. By the end of 2018, non-resident investors recorded net inflow of THB 133,764 million.

Non-resident investors net bought long term Thai bond every month throughout 2018, totally printing at THB 239,255 million. For short term bond, it recorded outflow of THB 105,489 million, but that was mainly driven by expired amount of worth THB 155,878 million. *(see Figure 15)*

Net Flow						
Period	<=1Y Bond				Accumulation	
renou	Net Trading	Expired	Net Flow	>1Y Bond	All	Accumulation
End of 2017	196,370	-142,350	54,020	168,970	222,990	222,990
Jan-18	38,450	-14,228	24,223	39,148	63,371	63,371
Feb-18	-9,952	-18,993	-28,945	10,200	-18,746	44,625
Mar-18	38,398	-47,586	-9,189	3,226	-5,963	38,662
Quarter 1	66,896	-80,807	-13,911	52,574	38,662	38,662
Apr-18	-29,544	-8,875	-38,418	5,637	-32,782	5,880
May-18	-15,035	-5,911	-20,945	21,147	203	6,083
Jun-18	1,748	-8,416	-6,669	4,957	-1,713	4,370
Quarter 2	-42,831	-23,202	-66,032	31,741	-34,292	4,370
Half year 1	24,065	-104,009	-79,943	84,315	4,370	4,370
Jul-18	-4,206	-6,965	-11,171	9,460	-1,711	2,659
Aug-18	30,768	-13,694	17,074	39,939	57,013	59,672
Sep-18	7,042	-4,027	3,015	38,256	41,272	100,944
Quarter 3	33,604	-24,686	8,918	87,656	96,574	100,944
Oct-18	7,733	-7,533	200	33,178	33,378	134,321
Nov-18	-3,625	-5,912	-9,537	25,608	16,071	150,393
Dec-18	-11,389	-13,738	-25,127	8,498	-16,629	133,764
YTD	50,388	-155,878	-105,489	239,255	133,764	

Figure 15: Non-Resident Fund Flows

Non-resident holding of Thai bond generally continued expanding in 2018, and reached new all-time high to trillion baht level to print at THB 1,002,499 million in November before ended the year at THB 985,773 million. In addition, the Average Time to Maturity (ATM) non-resident holding in Thai bond extended to 7.88 years at the end of 2018 from 6.29 years at the beginning of the year. (*see Figure 16*)

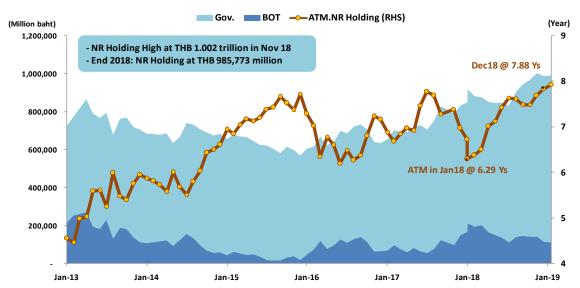


Figure 16: Non-Resident Holding Thai Bond

Yields Movement

Given mounting US Federal Reserve rate hike expectation and persistent inflow into Thai bond market particularly on the long term in January, 10-year Thai government bond yield has begun to submerge 10-year US Treasury yield since April 2016. Later that during April-June Thai government bond yields climbed notably from looming fears over US-China trade war plus the impact of 10-year US Treasury yield breaching psychological level of 3%. Then Thai government bond yields were seen slightly correction lower before resuming upward movement in August, taking cue from Turkish lira crisis that spooked emerging Asian countries.

However, in late November when Fed Chairman Powell stated dovish stance that current interest rates were just below a neutral level, pressuring US Treasury yields lower and consequently dragging Thai government bond yields as well. After that disappointing economic data domestically added downward pressure on Thai government bond yields to continued heading south until the end of 2018. Meanwhile, the first policy rate hike in 7 years by BOT at Dec meeting was seen having limited effect as market participants had been gradual priced in since mid-2018. In short, Thai government bond yield curve in 2018 shifted up almost along the curve except at TTM 10 years that edged lower from end-2017. Thai government bond yields with TTM below 10-year rose smaller than initial expectations by increasing just 13-42 bps, well below US Treasury yields with same TTMs. In the meantime, Thai government bond yield at TTM 10-year inched down 3 bps from the end of 2017.

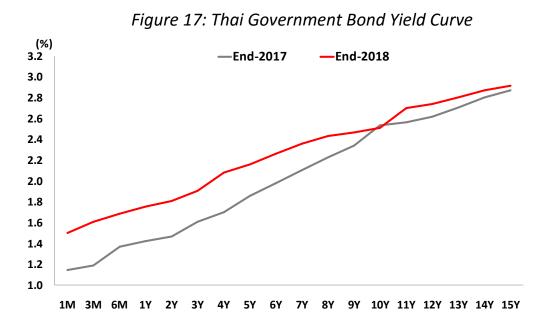
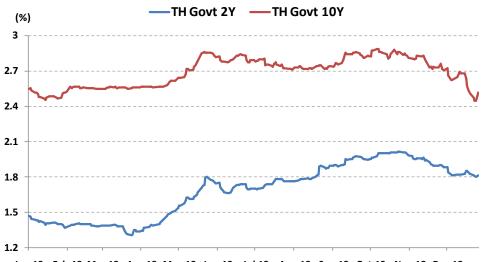


Figure 18: 2-Yr & 10-Yr Thai Government Bond Yield Movement



Jan-18 Feb-18 Mar-18 Apr-18 May-18 Jun-18 Jul-18 Aug-18 Sep-18 Oct-18 Nov-18 Dec-18