2019 Thai Bond Market Review

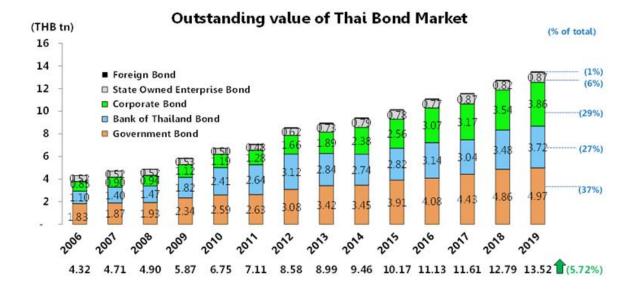
Highlights of 2019

- ⇒ Long term corporate bond issuance reached THB 1 trillion-level for the first time
- ⇒ First green bond issuance under new regulatory by the SEC
- ⇒ The Average Time to Maturity of Non-Resident Holding Thai bond extended to new high at 8.93 years
- ⇒ Government bond yields of 5-Year and 10-Year hit new historical lows
- ⇒ First corporate bond issuance using blockchain technology

Outstanding Value: The total outstanding value grew by 5.72% compared to 2018

The total outstanding value of Thai bond market at the end of 2019 was at THB 13.52 trillion, increasing 5.72% from end-2018. The outstanding value of government bond remained at the top, printing at THB 4.97 trillion with 37% portion of the total outstanding value. The runner-up was corporate bond accounting for 29%, while Bank of Thailand (BoT) bond ranked the third for 27%. The remainders were 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 tenor of bonds, the outstanding value of short term bond (tenor equal or less than 1 year) i.e. commercial paper and treasury bill declined 24.19% and 75.15% respectively. For tenor over 1 year, outstanding value of government bond increased by 4.27% while long term corporate bond rose by 13.13%. (see Figure 2)

Figure 2: Outstanding Value Classified by Types of Bonds

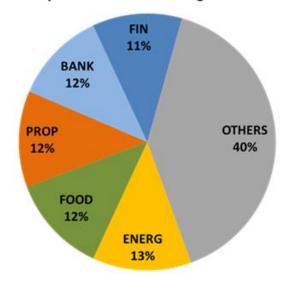
Unit:THB Mln

Type	2018	2019	Growth(%)
Government Bond	4,737,808	4,939,985	1.27 %
Treasury Bill	120,732	30,000	₹ -75.15%
State Owned Enterprise Bond	821,165	873,603	6.39 %
Bank of Thailand Bond	3,476,686	3,717,748	1 6.93%
Long term Corporate Bond	3,168,533	3,584,540	13.13 %
Commercial Paper	369,714	280,275	-24.19 %
Foreign Bond (Baht Bond)	94,771	95,098	1 0.34%
Total	12,789,409	13,521,250	5.72%

Classified by sector, the outstanding value of top 5 sectors of long term corporate bond contributed to 60% of total, considering well balanced with shares around 11-13% each. Those 5 sectors were energy sector, food sector, property sector, bank sector and finance sector. (see Figure 3)

Figure 3: Long Term Corporate Bond Outstanding Value Classified by Sector

Long Term Corporate Bond Outstanding Value Classified by Sector



Trading Value: Totally up 11.3% from last year

The daily average trading value in Thai bond market was at THB 88 billion, rising 11.3% from last year's THB 79 billion due to increasing turnover in government bond, corporate bond and particularly BoT bond which was seen up 13.5%. BoT remained the most traded security with an average daily turnover at THB 62 billion, and government bond came second with average daily turnover at THB 20 billion. Both bonds accounted for 94% of the total trading value. Corporate bond, meanwhile, ranked the third with average daily turnover at THB 4.7 billion. Compared to others, the average daily turnover of SOE and foreign bonds were minor at THB 0.5 billion and THB 0.01 billion respectively. (see Figure 4)

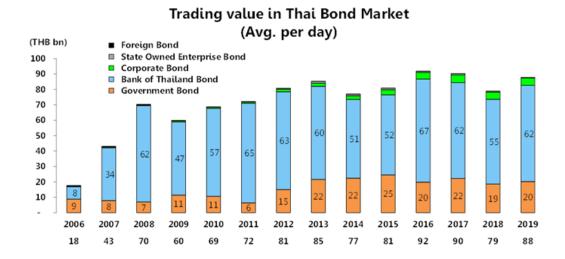


Figure 4: Average Daily Trading Value in Thai Bond Market

Although corporate bond's average daily trading activity remained small compared to the total value, overall we have seen continuous growth. The average daily trading value in 2019 grew by 3.3% to THB 4.71 billion from 2018's figure at THB 4.56 billion. (see Figure 5)

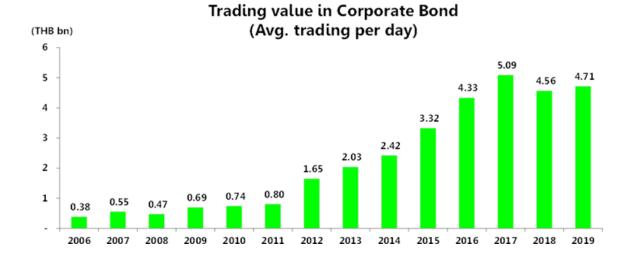


Figure 5: Average Daily Trading Value of Corporate Bond

Bond Issuance: Long term corporate bond issuance reached THB 1 trillion-level for the first time

The growth of long term corporate bond issuance has been increasing significantly, underlining that bond is one important source of fund besides of bank loan and equity. Therefore the long term corporate bond issuance (including foreign Baht-denominated bond and Foreign currency denominated (FX) bond) in 2019 reached new historical record by breaking THB 1 trillion-level for the first time with the growth of 25.68%.

For weighted-average issue term, although the figure in 2019 dropped slightly to 4.96 years from 5.33 years in 2018, the weighted-average issue term has been on the upward trend as back in 2015 it was 4.71 years. For issue size, the weighted-average issue size also has been increasing to stand at THB 2,586 million compared to THB 2,305 million in 2018, while in 2015 it was only THB 1,742 million.

Meanwhile, the growth of SOE bond issuance was also noteworthy by increasing 62.88% mainly by Government saving bank and SME bank. BoT bond issuance increased by 21.33%.

Although long term corporate bond issuance hit new historical high, the total bond issuance in 2019 was down 3.36% from last year due to lower issuance on short term paper. (see Figure 6)

			Unit: THB Mln
Туре	2018	2019	Growth(%)
Government Bond	728,363	727,344	-0.14%
Treasury Bills	397,145	40,000	-89.93%
State Owned Enterprise Bond	102,570	167,070	62.88%
Bank of Thailand Bond	6,285,119	7,625,757	21.33%
Long term Corporate Bond	854,963	1,074,478	2 5.68%
Commercial Paper	2,614,981	990,283	-62.13 %
Foreign Bond (Baht Bond)	23,660	12,060	-49.03 %
Total	11,006,801	10,636,991	-3.36%

Figure 6: Bond Issuance

Corporate Bond Issuance

Short term corporate bond issuance

The issuance of short term corporate bond was at THB 853 billion, falling 17% from last year. The decrease was due to issuer switching from short term to long term on the back of lower rates environment. (see Figure 7)

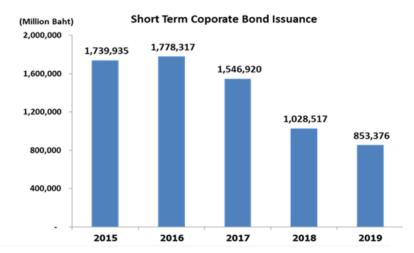
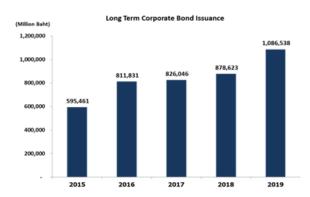


Figure 7: Short Term Corporate Bond Issuance

Long term corporate bond issuance

Stricter lending conditions from banks and low rates environment helped encouraging corporates to funding through bond issuance. Therefore, long term corporate bond issuance broke the THB 1-trillion level for the first time in history to end the year at approximately THB 1.09 trillion, as well as worth noting that it was the fourth consecutive year for growth of issuance at 24%. (see Figure 8)

Figure 8: Long Term Corporate Bond Issuance



In terms of ratings, the long term corporate bond issuance with investment grade increased across the broad, underlining that Thailand's corporate bond has grown both in terms of quality and quantity. The pool of long term corporate bond issuance with investment grade accounted for 94% of the total long term corporate bond issuance, inching up from 93% in 2018. The issuance of below BBB rating, meanwhile, declined 11% from last year. For nonrated group, although the issuance still increased, over half of the total non-rated long term corporate bond issuance was secured bond, backing by assets (e.g. Land, Stocks, etc.) or guarantors or both assets and guarantors. (See Figure 9 & Figure 10)

Figure 9: Long Term Corporate Bond Issuance Classified by Ratings

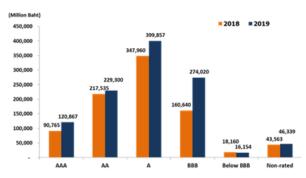
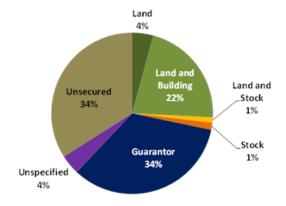


Figure 10: Non-Rated Bond Issuance Classified by Secured Assets



Foreign bond (Baht bond) issuance (baht denominated bond issued in Thailand by foreign entity): New comer joined in for baht bond issuance

Although the total baht bond issuance in 2019 declined 49% from last year with total issuance amount of THB 12,060 million, there was a new comer joining in to fund capital through Thai bond market. Yoma Strategic Holdings Ltd, a Myanmar company listed on Singapore stock exchange, issued baht bond worth THB 2,220 million for the first time, while the rest came from various corporate companies of Lao PDR. For last few years, ministries of finance and corporate companies from Lao PDR have been familiar faces to funding through Thai bond market. (see Figure 11)

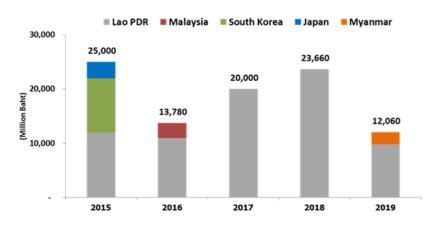


Figure 11: Baht Bond Issuance Classified by Country

FX bond issuance (foreign currency denominated bond issued in Thailand by domestic or foreign entity): **TMB bank PCL issued first FX bond in euro currency**

The total issuance of FX bond in 2019 was approximately THB 17,345 million, increasing 45% from last year. There was only one issuer this year which was TMB Bank PCL, and those four tranches of bonds were all issued in euro. (see Figure 12)

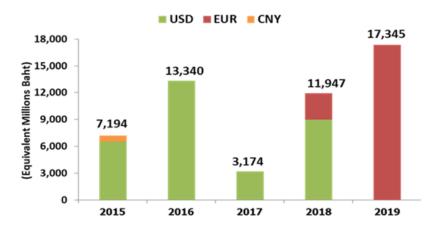


Figure 12: FX Bond Issuance Classified by Currency

Green Bond: First green bond under new regulatory guidelines by the SEC

Although last year there were some green bond issued by Thai companies, those green bonds were issued offshore thus the regulatory was not under Thailand's SEC. Nonetheless, in 2019 we have seen the first green bond issued under regulatory guidelines by the SEC, which was from BTS Group Holding PCL with total amount at THB 13,000 million and tenor 2-10 years. Energy Absolute PCL was another company issued green bond in 2019 for totally THB 10,000 million with tenor 3-10 years. Investors are Institutional Investor (II) and High Net Worth (HNW).

Composition of Bond Holders

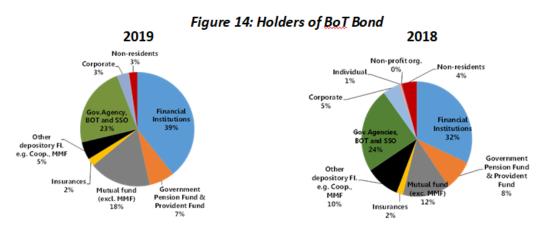
Holders of Government Bond

The top government bond holder in 2019 was insurances at 27% of the total government bond outstanding, which was the same as in 2018. Government agencies, BoT and Social Security Office (SSO) ranked the second at 20%, rising from 18% last year. Next was non-resident investor by distributing 17%. (see Figure 13)

Figure 13: Holders of Government Bond 2019 2018 Non-profit 12 Individual 11% Mutual fund Mutual fund (excl. MMF) (excl. MMF) Other lepository FI. e.g. Coop., MMF 1%

Holders of BOT bond

Financial institutions remained the top BoT bond holder, while share grew from 32% to 39% of the total BoT bond outstanding. Government agencies, BoT and Social security office (SSO) ranked the second for 23%. The market share of NR investor was merely 3%, slightly down from 4% in 2018. (see Figure 14)



Holders of corporate bond

The main holder of corporate bond was individual investors, accounting for 31% of the total corporate bond outstanding, which grew from 29% last year. Insurances were the second major holder with share at 18%. (see Figure 15)

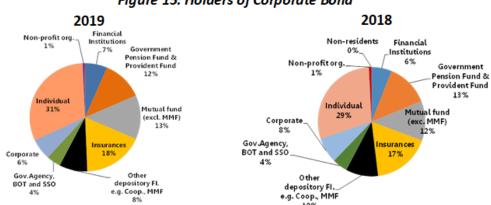


Figure 15: Holders of Corporate Bond

Non-Resident (NR) Flows: First net annual outflows since 2015

NR flows in 2019 ended the year with net outflows at THB 84,452 million, marking as the first net annual outflows since 2015 after last year's end at THB 133.83 billion of inflows. Subdued tension on trade dispute between US and China in the first quarter of the year helped boosting risk appetite, consequently discouraging demand on Thai bond for foreign investors.

However after trade dispute started to escalate apparently in the second quarter, market sentiment turned sour and concerns over the global economic slowdown were mounting. Therefore, we have seen a return of inflows into Thai bond market as regional safe haven asset on the back of expectation for <u>BoT's</u> rate cut and as well as speculative flow for Thai baht's appreciation.

In the latter half of the year as adverse effects from trade dispute hit market sentiment and global economy more materially, NR investors were more conscious on investment in emerging market. There were outflows from Thai bond market to less risky and more safe-haven assets in developed economies.

From net outflows by year end at THB 84,452 million, it could divide into net inflows for long term at THB 52,456 million. For short term, it comprised of net sold for outright trading for THB 67,401 million and expired for THB 69,508 million, resulting in totally THB 136,909 million of outflows. (see Figure 16)

Figure 16: Non-Resident Fund Flows

(Unit: THB Million)

		Net Flow				
Period Net Trading	<1	<=1Y Bond		>1Y Bond	All	Accumulation
	Net Trading	Expired	Net Flow	>11 Bond		
End of 2018	50,488	-155,940	-105,452	239,288	133,836	133,836
Jan-19	-20,425	-5,239	-25,665	13,274	-12,390	-12,390
Feb-19	107	-11,593	-11,486	-2,841	-14,326	-26,717
Mar-19	-13,061	-10,047	-23,108	8,193	-14,915	-41,631
Q1 2019	-33,379	-26,879	-60,258	18,627	-41,631	-41,631
Apr-19	-9,001	-3,545	-12,546	-9,327	-21,873	-63,505
May-19	10,920	-5,467	5,453	8,012	13,464	-50,041
Jun-19	36,763	-18,478	18,285	35,191	53,476	3,436
Q2 2019	38,681	-27,490	11,191	33,876	45,067	3,436
H1 2019	5,302	-54,369	-49,067	52,503	3,436	3,436
Jul-19	-42,353	-348	-42,701	16,975	-25,726	-22,291
Aug-19	-20,853	-2,519	-23,372	-9,592	-32,964	-55,258
Sep-19	-1,362	-9,412	-10,774	9,438	-20,211	-75,467
Q3 2019	-64,569	-12,279	-76,847	-2,055	-78,902	-75,467
Oct-19	-5,944	-70	-6,014	1,995	-4,019	-79,486
Nov-19	-4,610	-261	-4,871	-1,187	-6,058	-85,544
Dec-19	2,419	-2,530	-110	1,201	1,091	-84,451
Q4 2019	-8,134	-2,861	-10,995	2,009	-8,986	-84,453
YTD	-67,401	-69,508	-136,909	52,456	-84,452	

NR investor holding of Thai bond by end 2019 declined from THB 988,950 million last year to stand at THB 911,638 million. Nonetheless, the Average Time to Maturity (ATM) of NR holding in Thai bond continued to extend to the longest level at 8.93 years in May before ended the year at 8.81 years, expanding from last year's average ATM of 7.82 years. (see Figure 17)

Gov. BOT -ATM.NR Holding (RHS) (TH8 Million) (Year) 1,200,000 Dec 19 @ 8.81 Yr 1,000,000 800.000 ATM in 600,000 400,000 200,000 Jan-16 Jan-15 Jan-17 Jan-18 Jan-19 Jan-13

Figure 17: Non-Resident Holding & Average Time to Maturing Holding

Yields Movement: Shifted down across the curve with some tenors hitting new historical lows

At the beginning of the year before tensions on US-China trade battle intensified and global economy showed no signs of concerned situations yet, the movement of Thai government bond yield curve was seen tilted to the upside. However, in the second half of the year as US-China trade negotiations worsened and market participants turned cautious on investment, consequently sending global government bond yields including Thailand to fall across the curve.

Pressure on the downward movements continued persisting as various central banks around the world like US, Australian and South Korea started to ease monetary policy as pre-emptive measures in order to shield adverse impact from economic slowdown. Bank of Thailand's MPC followed the path by slashing policy rate by 0.25% to 1.50% in August, which was the first rate cut since 2015. As a result, Thai government bond yields continued to decline further particularly on 5-Year and 10-Year that yields touched new historical lows at 1.34% and 1.43% respectively on 29th August.

After that in the fourth quarter, although MPC took another policy rate cut by 0.25% to a record low of 1.25% on 6th November, Thai bond yields with tenor over 10-year rose slightly on the back of easing fears over US-China trade dispute. Nevertheless, at the end of 2019 Thai government bond yield curve shifted down across the curve compared to end of 2018 by declining in 34-143 bps. (see Figure 18 & Figure 19)

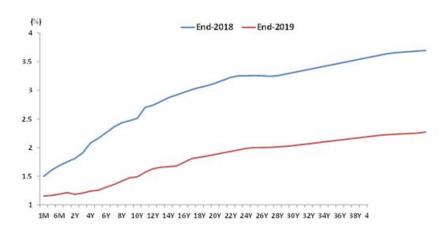


Figure 18: Thai Government Yield Curve



