Thai Bond Market Report

21 November 2016

Mr. Tada Phutthitada
President, ThaiBMA
Tada Phutthitada has been the President of the Thai Bond Market Association (ThaiBMA) since 2014. He is responsible for ensuring the organization that serves its purposes as a Self-Regulatory Organization (SRO) and an information center for the Thai Bond market, including market conventions and Bond Pricing Agency.

He has almost 20-year experience pertaining bond market. Before joining the ThaiBMA, he was the Director of Bureau of Policy and Planning, the Public Debt Management Office (PDMO), Ministry of Finance. He was in charge for planning and managing Mega-projects Financing and infrastructure development for both government and state-owned enterprises.
As of September 2016, the outstanding value of Thai bond market totaled THB 10.70 trillion, increased by 5.72% from last year.

Government bonds (38%) are the majority of the market, following by BOT bond (28%).

Government sector bonds (Gov, BOT and SOE bond) represent 75% of the market.
In the first 3 quarters of 2016, the average trading value of Thai bond market increased about 17.42% from the last year, equivalent to THB 94,971 million per day.

BOT bonds are the most active bonds, having average trading value at THB 69 billion per day.

Approximately 94% of the total trading value was attributed to government and BOT bonds.

Trading value of corporate bonds have significantly increased since 2012.
Trading value of corporate bonds have significantly increased since 2012, growing at 40% averagely per year.

In the first 3 quarters of 2016, corporate bond trading value amounted at THB 4,429 million per day.
After the 1997 financial crisis, Thai Bond Market has significantly grown from 12% of GDP to 77% of GDP as of Sep 2016.

The growth of Thai Bond Market creates more balance among 3 main financial pillars (bank loan, equity and bond market).

The size of Thailand’s corporate bond market (represented by % of GDP) has been continuously increasing, unaffected by 2008 subprime crisis impacts.
Thai Corporate Bond market stood at 19% of GDP, smallest in comparison to other countries.

Opportunities allow for potential expansion.
YTD, fund flow from non-resident investors totaled THB 140,475 million, which is more than outflow of the last year.

More than half of the inflows invested in long-term bonds (THB 71,805 million), while the remaining (THB 68,670 million) invested in short-term bonds.
As of 8 Oct, NR holding totaled THB 704,630 million.  
80% of NR bond holding was long-term government bonds, accounting for only 14% of total government bond outstanding.  
15% of NR bond holding was short-term BOT bonds, accounting for only 5% of total central bank bill outstanding.
Non-Resident’s Portfolio Shift

Non-resident’s portfolio shift

THB mln.

- 300,000
- 250,000
- 200,000
- 150,000
- 100,000
- 50,000
- 19,564
- 56,309
- 90,835
- 22,039
- 99,695
- 186,385
- 163,870
- 276,187
- 268,720
- 244,599

<=1Y 1-3Y 3-5Y 5-10Y >10Y

128,266 Dec-15
143,728 June-16
151,620 Sep 2016

THE THAI BOND MARKET ASSOCIATION
### Thailand Government Bond Yield Curve

**Government Bond Yield**

<table>
<thead>
<tr>
<th>Term</th>
<th>1M</th>
<th>6M</th>
<th>1Y</th>
<th>2Y</th>
<th>5Y</th>
<th>10Y</th>
<th>15Y</th>
<th>30Y</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 Dec 2015</td>
<td>1.50</td>
<td>1.50</td>
<td>1.50</td>
<td>1.58</td>
<td>2.16</td>
<td>2.51</td>
<td>2.94</td>
<td>3.59</td>
</tr>
<tr>
<td>5 April 2016 (Min)</td>
<td>1.35</td>
<td>1.37</td>
<td>1.37</td>
<td>1.36</td>
<td>1.47</td>
<td>1.54</td>
<td>1.99</td>
<td>2.32</td>
</tr>
<tr>
<td>3 June 2016 (Max)</td>
<td>1.42</td>
<td>1.47</td>
<td>1.49</td>
<td>1.65</td>
<td>1.96</td>
<td>2.24</td>
<td>2.58</td>
<td>2.79</td>
</tr>
<tr>
<td>28 Oct 2016</td>
<td>1.44</td>
<td>1.49</td>
<td>1.50</td>
<td>1.61</td>
<td>1.89</td>
<td>2.16</td>
<td>2.60</td>
<td>2.84</td>
</tr>
<tr>
<td>YTD (bps)</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>26</td>
<td>33</td>
<td>33</td>
<td>75</td>
</tr>
</tbody>
</table>
Currently, Thai bond market has demand over supply totaling THB 625 billion.

- Demand in fixed income grows about THB 1 trillion each year, while supply of bond increases at THB 425 billion per year.
- Demand received from increases in fixed income investment of major institutional investors averagely for the past 5 years.
- Supply are projected from growth of both government bond and corporate bond, averagely for the past 5 years.
Local Demand in Thai Bond Market grows averagely THB **1,043,376 Mln** per year

**Avg. growth per year (THB Mln) (during past 5 years: 2011-2015)**

<table>
<thead>
<tr>
<th>1. Fixed Income Fund</th>
<th>246,744</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Insurance Companies</td>
<td>198,715</td>
</tr>
<tr>
<td>3. Government Pension Fund (GPF)</td>
<td>41,026</td>
</tr>
<tr>
<td>4. Social Security Fund (SSF)</td>
<td>86,181</td>
</tr>
<tr>
<td>5. Provident Fund (PVF)</td>
<td>39,505</td>
</tr>
<tr>
<td>6. Retirement Mutual Fund (RMF)</td>
<td>5,012</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>370,439</strong></td>
</tr>
</tbody>
</table>

| 7. Household’s Deposit             | 372,644 |
| 8. Saving Cooperative’s Investment and Deposit | 15,436 |
| 9. Non-profit Organization’s Deposit | 38,113 |
| **Total**                          | **53,549** |

Currently, Thai Bond Market has a strong DEMAND from local investor have an opportunity to move to invest in bonds considering only investment in bonds.

Factors impacting investment to move from deposit to other investment channels:

2. Adoption of Basel III, leading borrowing cost from banks to rise.

**Total** **53,549**
## Supply Side: Government Bond Issuance

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>GOVT Bond Issuance for compensating Government Deficit (THB Mln)</th>
<th>Net increase of GOVT Bond / Projected GOVT Bond issuing for Infra-Development Project</th>
<th>Treasury Reserve (end fiscal year) (THB Mln)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Announced Amount / Actual Amount</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2010</td>
<td>350,000 / 232,600</td>
<td>373,889</td>
<td>429,026</td>
</tr>
<tr>
<td>2011</td>
<td>370,000 / 200,700</td>
<td>246,699</td>
<td>521,294</td>
</tr>
<tr>
<td>2012</td>
<td>400,000 / 344,100</td>
<td>198,928</td>
<td>561,270</td>
</tr>
<tr>
<td>2013</td>
<td>300,000 / 282,000</td>
<td>383,794</td>
<td>605,052</td>
</tr>
<tr>
<td>2014</td>
<td>250,000 / 250,000</td>
<td>94,229</td>
<td>495,747</td>
</tr>
<tr>
<td>2015</td>
<td>250,000 / 250,000</td>
<td>(Included in Government Deficit)</td>
<td>200,000</td>
</tr>
<tr>
<td>2016</td>
<td>390,000 / n.a.</td>
<td>200,000</td>
<td>426,177</td>
</tr>
<tr>
<td>2017</td>
<td>390,000 / n.a.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2018</td>
<td>n.a.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2019</td>
<td>n.a.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2020</td>
<td>n.a.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2021</td>
<td>n.a.</td>
<td></td>
<td></td>
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<tr>
<td>2022</td>
<td>n.a.</td>
<td></td>
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</tbody>
</table>

*Under this plan, estimated to raise funds through issuing GOVT bonds around THB 1.4 trillion, spanning over 8 year period*
Thank You