# Thai Bond Market Movement in 2007

### I. Primary Market

New issues of State Agency bonds registered with the Thai BMA increased significantly by 311% in 2007. The total new issues of registered bonds at the ThaiBMA stood at THB 6,246.88 billion in 2007, 103% higher than the amount of THB 3,077.38 billion in 2006 (See Table 1). THB 4,121.55 billion of the Bank of Thailand (BOT) bonds were auctioned off in 2007, up by 311.50% from the previous year. New issues of long-term corporate bonds were THB 194.82 billion, increasing by 34.85% from the previous year. The number of such issues rose from 73 issues of 37 companies in 2006 to 92 issues of 43 companies in 2007, with the issue size ranging from THB 3.5 million to THB 15 billion, and the issue rating ranging from AAA to BBB.

State Owned Enterprise (SOE) new issuance registered bonds totaled THB 64.83 billion in 2007, or 7.03% lower than those in 2006. Also, the auctioned T-Bills amounted to THB 553 billion, down by 38.23% from the previous year; whereas the auctioned government bonds amounted to THB 330.22 billion, up by 49.61% from those in 2006.

# Outstanding Value of ThaiBMA Registered Bonds

The total outstanding value of ThaiBMA registered bonds as of December 2007 amounted to THB 4,698 billion, representing an increase of 18.92% from the previous year. This total outstanding value consisted of THB 1,717.25 billion of government bonds, THB 1,425.20 billion of State Agency (SA) bonds, THB 678.67 billion of long-term corporate bonds, THB 342.28 billion of guaranteed SOE bonds, THB 177.47 billion of non-guaranteed SOE bonds, THB 218.20 billion of commercial papers, THB 114 billion of T-Bills and THB 25.87 billion of foreign bonds (See Table 2).

The largest portion of corporate bonds outstanding was in the energy sector (23%), followed by construction material sector (15%), banking sector (11%), financial institution sector (10%), communication sector (7%), property sector (7%), petroleum sector (3%), and others (24%). In terms of credit rating, the majority of corporate bonds are A-rated bonds, accounting for THB 625.62 billion or 93% of the total outstanding value. The remaining 6% consisted of THB 46.83 billion of B-rated bonds (1%) and THB 6.22 billion of non-rated bonds (1%) (See Figures 1 and 2).

**TABLE1: The ThaiBMA New Issuance Registered Bond** 

Unit : THB Billion

Туре	2005	2006	2007
Government Bonds	172.90	220.72	330.22
T-Bills	494.00	895.20	553.00
SOE	100.14	69.73	64.83
State Agency Bond	988.28	1,001.60	4,121.55
Long Term Corporate Bond	135.44	144.47	194.82
Commercial Paper	n.a	736.56	975.69
Foreign Bond	7.00	9.10	6.77
Total	1,897.76	3,077.38	6,246.88

Source : BOT, SEC and MOF

**TABLE 2: ThaiBMA Registered Bond Outstanding** 

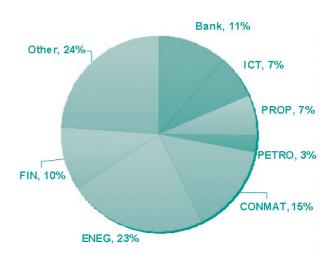
Unit: THB Billion

Туре	2005	2006	2007
Government Bonds	1291.66	1,469.26	1,717.25
T-Bills	209.00	228.00	114.00
State Enterprises	486.12	490.92	519.71
- Guaranteed	361.76	348.48	342.28
- Non Guaranteed	124.36	142.44	177.43
State Agency Bond	641.33	896.70	1.425.20
Long Term Corporate Bond	487.04	608.91	678.67
Commercial Paper	0.00	241.42	218.18
Foreign Bond	7.00	16.10	25.87
Total	3,122.16	3,951.31	4,698.88

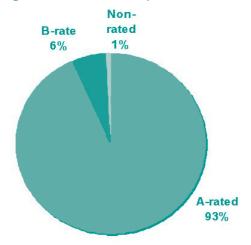
Source : BOT, SEC and MOF

 $\label{eq:Remark: Preliminally figures collected from the followering registras: BAY/BBL/BFIT/TFB/TSD \ ect.$ 

Figure 1: Corporate Bonds Outstanding Value by Business Sector as of December 28, 2007



**Figure 2: Corporate Bonds Oustanding Value** by Rating as of December 28, 2007



## II. Bond Trading Activities in 2007

In 2007, total outright trading value was THB 10,532.49 billion, 146.23% higher than in 2006 (See Table 3). Average daily outright trading value surged to THB 42.99 billion in 2007, compared to only THB 17.60 billion in 2006. Similar to the previous year, trading activities were concentrated in BOT bonds, accounting for THB 8,406.20 billion or 79.81% of the total outright trading value in 2007. This was followed by THB 1,112.26 billion of government bonds, THB 799.73 billion of T-Bills, and THB 71.80 billion of SOE bonds, representing a share of 10.56%, 7.59%, and 0.68% of the total outright trading value, respectively. With regards to SOE bonds, the total outright trading value of guaranteed SOE bonds and non-guaranteed SOE bonds were worth THB 45.76 billion and THB 26.04 billion, respectively.

**TABLE 3: ThaiBMA Trading and Outstanding** Value in 2005-2007 Linit - TUD Million

					Unit: II	AR Million
Type of Securities	20	005	2	006	2007	
Type of Securities	Trading	Outstanding	Trading	Outstanding	Trading	Outstanding
Government State Enterprise - Guaranteed - Non Guaranteed T- Bills State Agency Corporate Foreign	438,157.52 110,079.47 71,928.46 38,151.01 9.8,448.94 1,282,437.01 77,685.45 394.00	1,291,663.90 486,122.82 361,761.19 124,361.63 209,000.00 641,332.00 487,037.40 7,000.00	631,117.30 83,832.72 51,554.84 32,277.87 1,500,202.87 1,968,201.76 92,543.82 1,602.01	1,469,263.55 490,921.75 332,900.01 158,021.74 228,000.00 896,702.00 850,327.33 16,100.00	1,112,263.01 71,795.90 45,756.43 26,039.47 799,731.23 8,406,201.12 135,136.74 7,359.78	1,717,248.55 519,708.42 342,275.30 177,433.12 114,000.00 1,425,199.58 896,849.28 25,874.00
	2,817,202.39		4,277,500.48		10,532,487.78	
- Monthly Average - Daily Average - No. of trading days	234,766.87 11,498.79 245		356,458.37 17,602.88 243		877,707.32 42,989.75 245	
	40,870.00					
- Monthly Average - Daily Average	3,406 167		4,343 214		6,983 342.02	
	41					

Total outright trading value of corporate bonds (including long-term corporate bonds and commercial papers) in 2007 totaled THB 135.14 billion or 1.28% of the total outright trading value. The total outright trading value of corporate bonds consisted of bonds in the energy sector (27%), financial institution sector (18%), communication sector (13%), banking sector (7%), construction material sector (6%), property sector (5%), transportation and logistics sector (4%), and others (21%).

### **Market Participants**

In 2007, 61% of the total outright trading value, or THB 6,384.65 billion, came from transactions between dealers and their clients, whereas 39% or THB 4,147.85 billion was from the transactions among dealers themselves. Major investors trading bonds with dealers were mutual funds (53%), domestic companies (DCO) (22%), non-dealer financial institutions (NDL) (5%), foreign companies (FCO) (2%), insurance companies (2%), individuals (1%) and others (15%).

The top ten active member dealers in 2007 comprised seven domestic banks, namely, Siam Commercial Bank Public Company Limited (18.69% market share), Kasikornbank Public Company Limited (16.06%), Bank Thai Public Company Limited (10.01%), Bangkok Bank Public Company Limited (9.16%), TMB Bank Public Company Limited (7.64%), United Overseas Bank (Thai) Public Company Limited (6.26%), Bank of Ayudhya Public Company Limited (4.54%); and three foreign banks: Deutsche Bank AG (5.94%), the Hongkong and Shanghai Banking Corporation Limited (4.74%), and Citibank, N.A. (4.5%) (See Table

Table 4: Top ten active member dealer 2007

					Unit : 1	THB Billion
		% Market		Trading	Value	
tank	Dealers	Share	Outright	Financing	Other	Total
1	Siam Commercial Bank Plc.	18.69%	2741.83	851.82	18.09	3611.73
2	Kasikorn Bank Plc.	16.06%	2355.81	980.29	12.11	3348.22
3	Bank Thai Plc.	10.01%	1468.33	112.93	0.00	1581.26
4	Bangkok Bank Plc.	9.16%	1344.32	1139.56	0.00	2483.88
5	Thai Military Bank Plc.	7.64%	1120.26	7.61	2.54	1130.42
6	United Overseas Bank(THAI) Plc.	6.26%	917.78	132.57	15.15	1065.50
7	Deutsche Bank AG, Bangkok Branch	5.94%	871.83	0.36	0.22	872.41
8	The Hongkong and Shanghai Banking Co., Ltd.	4.74%	694.95	801.46	0.00	1496.40
9	Bank of Ayudhya Plc.	4.54%	666.02	11.30	3.72	681.04
10	Citi Bank, N.A.	4.50%	660.05	1.62	0.00	661.67
	Other	12.46%	1827.24	3351.95	31.93	5211.12
	Total	100.00%	14 668 42	7 201 48	92.76	22 142 66

### **Market Liquidity**

In 2007, the turnover ratio (outright transaction only) for all types of bonds was 224.15%, up by 107% from the ratio of 108.25% in 2006. In particular, the turnover ratio of T-Bills was 701.52%, up by 7% from the previous year. The turnover ratio for SA bonds was 589.83%, followed by that of government bonds (64.77%), SOE bonds (13.81%), and corporate bonds which consisted of long-term corporate bond and commercial papers (15.07%).

The top five active issues of government bonds were LB191A, LB267A, LB137A, LB145B and LB175A (See Table 5), whereas the top five active SOE bonds were PEA129A, PEA168A, ETA139A, GHB173A and EXIM083A (See Table 6). With regards to long-term corporate bonds, the top five active issues were PTTC153A, PTTC16OA, AIS139A, EFAI07OA and AIS119A (See Table 7).

**Table 5: Top 5 Most Active Government Bonds** 

				Trading		Turnover	
Issue	Type/ Rating	TTM (Yr)	YTM (%)	Value (THB Min)	% of Total Trading	Ratio (%)	Last trade Date
Goverment	Bonds						
LB191A	GB	11.06	5.230000	161,455.03	1.53	350.99	25-Dec
LB267A	GB	18.54	5.350000	128,044.04	1.22	261.31	28-Dec
LB137A	GB	5.55	4.500000	92,073.21	0.87	177.06	28-Dec
LB145B	GB	6.38	4.620000	89,888.95	0.85	192.67	27-Dec
LB175A	GB	9.42	4.910000	79,506.79	0.75	181.40	28-Dec

**Table 6: Top 5 Most Active State Owned Enter- prise Bond** 

	Trading Turnover									
Issue	Type/ Rating	TTM (Yr)	YTM (%)	Value (THB Min)	% of Total Trading	Ratio (%)	Last trade Date			
State Own	ed Enterpri	se Bon	ds							
PEA129A	-	4.7	4.620000	3,110.84	0.03	200.70	28-Dec			
PEA168A	-	8.6	4.950000	2,909.58	0.03	193.97	28-Dec			
ETA139A	G	6.01	4.225453	2,556.81	0.02	255.68	12-Sep			
GHB173A	G	9.78	4.300000	2,375.38	0.02	118.77	12-Jun			
EXIM083A	/AAA(tha)	0.33	3.570000	2,131.84	0.02	21.32	22-Nov			

Table 7: Top 5 Most Active Registered Corporate Bonds

Issue	Type/ Rating	TTM (Yr)	YTM (%)	Trading Value (THB MIn)	% of Total Trading	Turnover Ratio (%)	Last trade Date
Corporate	Debentures	;					
PTTC153A	/AA+(tha)	7.24	5.520000	7,900.21	0.08	131.67	26-Dec
PTTC16OA	/AA+(tha)	8.8	5.650000	6,848.24	0.07	85.60	26-Dec
AIS139A	/AA	5.72	5.700000	4,843.63	0.05	121.09	20-Dec
EFAI07OA	/AA-	0.07	3.300000	3,488.58	0.03	39.64	18-Sep
AIS119A	/AA	3.74	5.250000	3,452.26	0.03	86.31	13-Dec

# Yield Movement and the ThaiBMA Bond Index

The Bank of Thailandís Monetary Policy Committee (MPC) cut its 1-day RP rate down 4 times in 2007, accounting for a total of 175 bps, and made RP rate hold at 3.25% at the end of 2007. Although during the third guarter of 2007 market believed that domestic interest rates were already set at the lowest rate and BOT would consider raising the policy rate, such market sentiment changed in the last quarter with government yield curves shifting down due to expectations on declining interest rates and the US sub-prime crisis which seemed unlikely to be resolved soon. The yield of short-term bonds with 1 month to 3 years maturity decreased dramatically in the range of -100 to -180 bps, whereas the medium-term bond with 5-10 years maturity were down by -50 to -63 bps, and the longterm bond with more than 10 years maturity dropped by -40 to-45 bps.

The ThaiBMA government clean price index closed the year 2007 at 98.70, with a positive total return of 2.35%. Returns on ThaiBMA government index subgroup 1 (1-3 years), subgroup 2 (3-7 years), subgroup 3 (7-10 years), subgroup 4 (over 10 years) and subgroup 5 (less than 10 years) were 6.11%, 7.45%, 7.77%, 9.78% and 7.07%, respectively.

Corporate clean price index closed at 103.22 at the end of December 2007 with a positive return of 2.17%. Also, total returns on corporate bond index rose from 6.56% in 2006 to 7.35% in 2007.

Outlook of the Thai Bond Market in 2008 (Source: Opinion survey from underwriters and active dealers by the ThaiBMA)

### **Primary Market**

New debt securities in 2008 are expected to expand by 8% from 2007. The BOT is predicted to issue large amount of new debt securities. In term of growth rate, issuance of foreign bonds is likely to have the highest growth of 156%. New SA bonds are expected to grow continuously by 12% from the previous year, followed by long-term corporate bonds (9%) and SOE bonds (7%). On the other hand, T-Bills are likely to decrease by 14%.

In the private sector, new corporate debt securities are also predicted to increase due to the continued support of the government in the encouraging business expansion and the downtrend of domestic interest rates. Most of the new issuance of corporate bonds are likely to concentrate on short-term bonds with maturity not over 5 years which are more preferred by most investors than long-term corporate bonds. Financial institutions and the property sector are expected to issue more debt securities than other business sectors.

### **Secondary Market**

In 2008, the secondary bond market is predicted to expand from the previous year and trading activities are likely to concentrate in short-tem bonds such as BOT bonds since BOT tends to issue new bonds continuously in 2008. Financing transactions are expected to increase since BOT will close its repurchase market (BOT repo) in February 2008 and encourage non-primary dealers to enter into private repo transactions with primary dealers instead.

Trading of corporate bonds is expected to slow down and the spread of corporate bonds over government bonds is likely to widen in order to compensate the increase in price and inflation risks.

**Table 8: Yield Curve Prediction** 

TTM	Yield (%)
1 Month < TTM <= 1 Year	2.90%-4.00%
2 Years < TTM <= 4 Years	3.00%-5.00%
5 Years < TTM <= 10 Years	4.00%-5.80%
10 Years < TTM <= 15 Years	4.50%-6.00%
TTm > 15 Years	4.50%-6.50%

## **Appendices**

### **Table 1: Size of Thai Financial Market**

	1999	2000	2001	2002	2003	2004	2005	2006	2007 (Nov)
Bank Loans	5,119.00	4,585.90	4,298.90	4,602.70	4,701.50	5,081.35	5,488.43	5,706.75	5,931.57
Equities (SET mkt. cap)	2,193.10	1,279.20	1,607.31	1,986.24	4,789.90	4,521.89	5,105.11	5,078.70	6,541.66
Domestic Bond (at par)	1,388.60	1,634.80	1,882.90	2,300.00	2,518.00	2,740.38	3,366.84	4,085.26	4,836.59

### Table 2: ThaiBMA Registered Bonds by TTM

Issue Term(Yrs.)	Outstanding(THB Bln.)	#issue
1.1 Treasury Bill		
0-5	114.00	43
Total	114.00	43
1.2 Government Bond		
0-5	104.14	20
6-10	540.54	24
11-15	651.91	14
>15	420.65	13
Total	1,717.25	71
1.3 State Agency Bond		
0-5	1,384.50	31
6-10	40.70	1
Total	1,425.20	32
1.4 State Owned Enterpris		
0-5	84.60	38
6-10	286.35	225
11-15	118.40	95
>15	30.36	25
Total	519.71	383
2.1 Long-term Corporate E		400
0-5 6-10	315.37 232.43	160 98
11-15	96.38	23
>15	34.50	11
Total	678.67	292
2.2 Commercial Paper	070.07	232
0-5	218.18	658
Total	218.18	658
3 Foreign Bond		
0-5	3.00	1
6-10	18.00	6
11-15	4.87	3
Total	25.87	10

## **Table 3: Asset Size of Institution Investors (THB** bln.)

	Dec/98	Dec/99	Dec/00	Dec/01	Dec/02	Dec/03	Dec/04	Dec/05	Dec/06	Jun/07
	51.6	62.8	87.2	92.9	92.53	92.39	116.80	391.32	639.88	869.63
	288.6	311.5	344	396.3	468.87	575.43	664.43	760.50	563.14	604.48
	95.4	111.6	135.2	158.6	190.95	238.39	246.89	286.98	320.74	353.02
	158.4	182.7	201.3	201.3	244.8	287.33	305.46	345.90	255.35	322.42
	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	262.33	345.53	382.35
Total	594	668.6	767.7	849.1	997.15	1,193.55	1,333.58	1,784.69	2,124.64	2,531.91

### **Table 4: Top 5 Active Registered Bonds**

Goverment Bonds			Owned se Bonds	Corpo Deber	
Issue	THB Min	Issue	THB Min	Issue	THB Min
LB191A	161,455.03	PEA129A	3,110.84	PTTC153A	7,900.21
LB267A	128,044.04	PEA168A	2,909.58	PTTC160A	6,848.24
LB137A	92,073.21	ETA139A	2,556.81	AIS139A	4,843.63
LB145B	89,888.95	GHB173A	2,375.38	EFAI070A	3,488.58
LB175A	79,506.79	EXIM083A	2,131.84	AIS119A	3,452.26

### **Table 5: ThaiBMA Government Interpolation** Yields (%)

Date	1M	ЗМ	6M	1	2	3	5	7	10	12	15	16	19
29-Dec-06	4.95	4.93	4.9	4.91	5.02	5.06	5.12	5.22	5.44	5.55	5.73	5.77	5.9
28-Dec-07	3.15	3.19	3.31	3.55	3.91	4.06	4.49	4.69	4.94	5.15	5.28	5.34	5.45
Change (bp)	-180.00	-174.00	-159.00	-136.00	-111.00	-100.00	-63.00	-53.00	-50.00	-40.00	-45.00	-43.00	-45.00

### **Table 6: ThaiBMA Bond Indices**

Government Bond Index	2006	2007	Return (%)		
Clearn Price	96.43	98.70	2.35		
Gross Price	97.83	100.15	2.37		
Total Return	155.1	166.93	7.62		

Corporate Bond Index	2006	2007	Return (%)
Clearn Price	101.03	103.22	2.17
Gross Price	101.99	104.22	2.19
Total Return	133.49	143.30	7.35

### **TABLE 7: Bond Return (%)**

ThaiBMA Government Bond Indices	Return (%)				
	2006	2007			
Government Bond Index	5.46	7.62			
Maturity Sub Group					
Group 1(1 <ttm<=3)< td=""><td>5.28</td><td>6.11</td></ttm<=3)<>	5.28	6.11			
Group 2(3 <ttm<=7)< td=""><td>5.86</td><td>7.45</td></ttm<=7)<>	5.86	7.45			
Group 3(7 <ttm<=10)< td=""><td>5.94</td><td>7.77</td></ttm<=10)<>	5.94	7.77			
Group 4(TTM>10)	6.17	9.78			
Group 5(<= 10)	5.29	7.07			
Investment Grade Corporate Bond Index	6.56	7.35			

### **Table 8 : Yields Volatility (15 day annualized)**

Date/TTM	1-M	3-M	6-M	1-Y	3-Y	5-Y	7-Y	10-Y	12-Y	15-Y	16-Y
29-Dec-06	0.10	0.08	0.09	0.10	0.16	0.19	0.21	0.24	0.22	0.24	0.25
28-Dec-07	0.48	0.46	0.41	0.33	0.23	0.14	0.12	0.11	0.09	0.10	0.09
Change	0.38	0.37	0.32	0.23	0.07	(0.05)	(0.10)	(0.13)	(0.13)	(0.14)	(0.16)

Figure 1: Outstanding Value of Government **Bonds by Year to Expiration** 

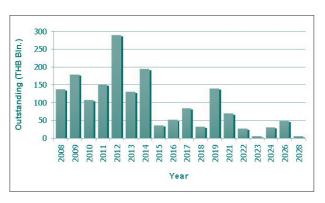


Figure 2: Outstanding Value and Trading Value of ThaiBMA Registeres Bonds by Sector: 2007



Figure 5: Composition of Dealer to Client Trans-

actions in Year 2007

Figure 6: Composition of Dealer to Client **Transactions in Year 2007** 

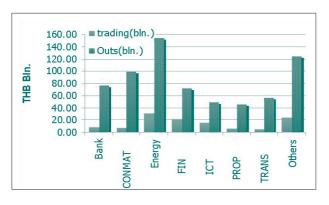
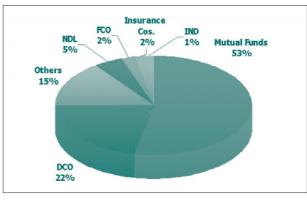


Figure 3: Outright Trading & Outstanding Value of Corporate Registered Bonds by Rating: 2007



**Figure 7: Provident Fund: Portfolio Investment** 

**Provident Fund** 

350.00

300.00

250.00 ₹

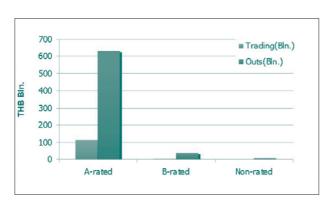
200.00 €

150.00

100.00 🗟

50.00

Net Asset Value(THBBIn.)



**Figure 4: Composition of Market Participants** in Year 2007

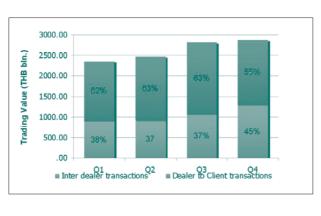


Figure 8: Insurance Companies: Portfolio Investment

Jun/07

Sep/07 Nov/07

Mar/07

Fund Size(NAV)



10.00

9.00

8.00

7.00

6.00

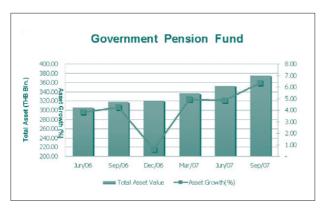
5.00

4.00

3.00 2.00

1.00 0.00

Figure 9: Government Pension Fund : Asset size Figure 13: Government Bond Yield curve



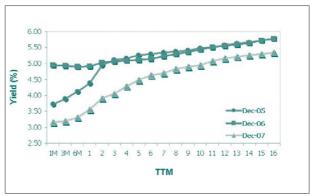


Figure 10: Fixed Income Mutual Funds: Net Figure 14: 1- Month Yield Movement **Asset Value** 

**Fixed Income Mutual Funds** 1,000.0 Bln) 18.00 900.0 瞿 800.0 16.00 700.0 14.00 Total % 12.00 600.0 500.0 10.00 Total NAV (bln.) 400.0 8.00 300.0 6.00 -Growth NAV (%) 200.0 4.00 100.0 2.00 0.00 Sep/06 Dec/06 Mar/07 Jun/07 Sep/07 Nov/07

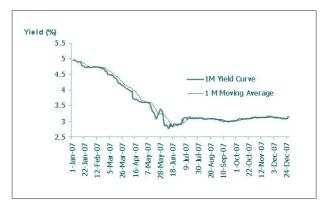
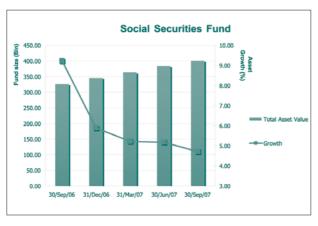


Figure 11: Social Security Fund : Portfolio Investment





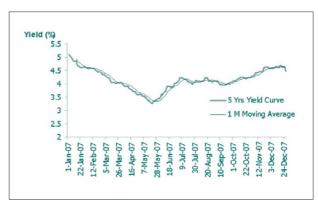
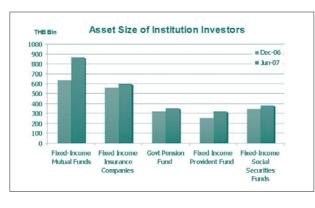
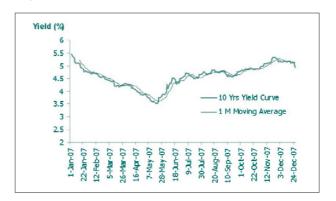


Figure 12: Asset Size of Institution Investors

Figure 16: 10-Year Yield Movement





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**Figure 17: Government Bond Index Movement** 

Figure 18: Investment Grade Corporate Bond Index



