

7. Bond Market

In 2006, new issues of bonds hit a record high of NT\$1,212.1 billion. Among them, issues of government bonds remained large, issues of asset securitization and bank debentures rapidly increased, and issues of corporate bonds continued to rise. Moreover, the Financial Supervisory Commission (FSC) endorsed Deutsche Bank Frankfurt to issue US dollar-denominated bonds, marking the first issuance of foreign currency bonds in the local market.

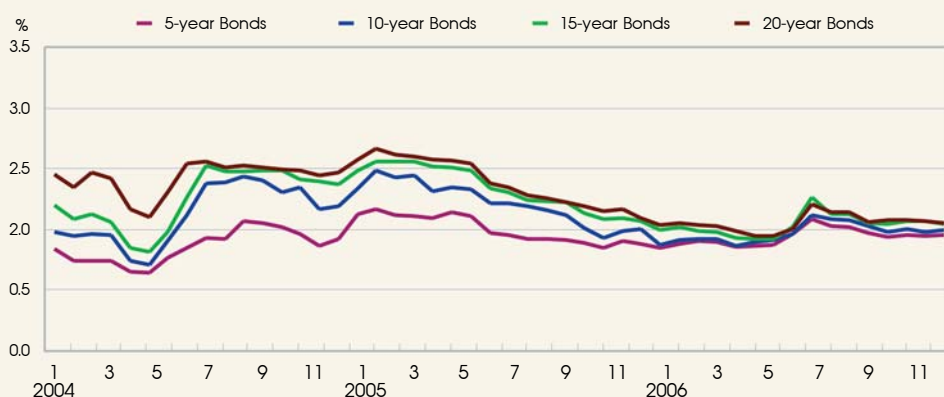
The secondary bond market remained buoyant in 2006. Meanwhile, bond yields exhibited a rising trend for the first five months and a downward trend for the rest of the year, reflecting the movements in US bond yields, the conduct of monetary policy, and local market players' strategies.

In addition, the size of domestic bond funds continued to shrink this year. It was mainly because the rates of return on domestic bonds remained low, causing money to shift from domestic bond funds to other investment instruments.

Government Bond Issues Remained Large

The Ministry of Finance (MOF) issued central government bonds to a total value of NT\$440 billion in 2006, while local governments issued a sum of NT\$20 billion. Both were slightly lower than the previous year's issues. The outstanding amount of central and local government bonds

Yield Structure of Central Government Bonds with Different Maturities



Source: Department of Economic Research, CBC.

Issues and Outstanding Values in Bond Market by Instrument

Unit: NT\$ Billion

Year/ Month	Total		Central Government Bonds		Local Government Bonds		Corporate Bonds		Bank Debentures		Foreign Bonds*		Beneficiary** Certificates	
	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding
2004	1,018.2	4,947.9	465.0	2,729.2	42.0	123.4	231.4	1,215.6	218.3	709.1	10.5	126.5	52.1	62.5
2005	987.0	4,463.6	445.0	3,013.1	24.0	129.2	204.1	1,191.9	131.2	811.2	—	104.0	182.7	214.2
2006	1,212.1	5,878.5	440.0	3,239.3	20.0	137.4	230.1	1,151.4	172.5	925.9	11.7	83.2	337.8	341.3
2007/1	51.4	5,445.5	40.0	2,998.4	—	129.1	6.7	1,193.3	3.7	814.2	—	97.0	1.0	213.5
2	74.2	5,488.7	30.0	3,028.3	—	129.1	1.1	1,172.1	5.0	818.6	—	97.0	38.1	243.6
3	70.0	5,525.5	40.0	3,068.3	10.0	139.1	5.0	1,165.0	7.0	822.4	—	92.6	8.0	238.1
4	104.2	5,558.8	40.0	3,058.3	—	139.1	6.7	1,154.6	22.6	845.0	—	92.1	34.9	269.7
5	102.4	5,591.2	35.0	3,093.3	—	139.1	13.0	1,141.4	16.5	857.7	—	91.1	37.9	268.6
6	104.1	5,648.6	40.0	3,133.2	10.0	149.1	14.1	1,119.7	16.6	873.0	—	90.7	23.4	282.9
7	62.1	5,671.7	35.0	3,168.1	—	149.1	15.1	1,103.9	3.2	876.0	—	85.7	8.8	288.9
8	107.3	5,711.0	30.0	3,198.1	—	147.1	23.0	1,113.4	6.0	871.4	—	81.2	48.3	299.8
9	86.1	5,728.9	45.0	3,213.5	—	147.1	13.3	1,105.9	3.1	862.4	—	80.7	24.7	319.3
10	109.7	5,773.6	30.0	3,213.8	—	147.1	25.6	1,115.6	14.1	874.8	3.5	76.5	36.5	345.8
11	178.5	5,861.4	35.0	3,248.6	—	147.1	58.4	1,146.4	24.2	892.5	8.2	83.7	52.7	343.1
12	162.1	5,878.5	40.0	3,239.3	—	137.4	48.1	1,151.4	50.5	925.9	—	83.2	23.5	341.3

Notes : * Including NT dollar and foreign currency-denominated bonds issued in Taiwan by international financial institutions.

** Including those purchased back by originators for credit enhancement.

Sources : *Financial Statistics Monthly, CBC.*

reached NT\$3,376.7 billion at the end of 2006, an increase of 7.5 percent from the previous year-end, with the government bonds outstanding as a percentage of GDP rising from 28.2 percent in 2005 to 29.2 percent.

The MOF also issued re-opened government bonds 5 times in 2006 with different maturities, namely 5, 10 and 20 years, in order to build an effective bond yield curve and extend the

Outright and Repurchase Agreement Transactions in Bond Market

Unit: NT\$ Billion

Year/ Month	Total	Outright Transactions		Repurchase Agreement Transactions	
		Amount	Share (%)	Amount	Share (%)
2004	205,925.2	123,445.6	59.9	82,479.6	40.1
2005	319,476.5	222,174.5	69.5	97,302.0	30.5
2006	275,668.5	169,991.9	61.7	105,676.6	38.3
2006/1	27,872.1	18,930.7	67.9	8,941.4	32.1
2	24,341.2	16,411.0	67.4	7,930.2	32.6
3	30,096.4	20,272.0	67.4	9,824.4	32.6
4	22,564.3	13,628.7	60.4	8,935.6	39.6
5	18,098.2	8,753.4	48.4	9,344.8	51.6
6	21,260.6	11,961.0	56.3	9,299.6	43.7
7	22,385.0	13,520.5	60.4	8,864.5	39.6
8	24,618.8	15,535.7	63.1	9,083.1	36.9
9	22,228.0	14,223.9	64.0	8,004.1	36.0
10	20,360.4	12,367.9	60.7	7,992.5	39.3
11	22,706.4	14,131.4	62.2	8,575.0	37.8
12	19,137.1	10,255.7	53.6	8,881.4	46.4

Source: *TSE & GTSM.*

duration of benchmark bonds.

In addition, stripped government bonds were issued to a sum of NT\$65 billion in 2006, rising by NT\$25 billion from 2005. Stripped government bonds can be stripped into two separate components, coupons and face values. Both of them are zero-coupon bonds with no re-investment risk. Therefore, stripped government bonds offer greater liquidity than coupon-bearing government bonds of the same maturities and coupon rates. Besides, bondholders can enjoy 10-percent separate taxation on the returns from stripped government bonds.

Steady Increase in Corporate Bond Issues

For the year as a whole, total issues of corporate bonds were NT\$230.1 billion, a rise of 12.7 percent from 2005. Among them, the share of secured corporate bonds and unsecured corporate bonds were 6.2 percent and 93.8 percent, respectively.

New issues of corporate bonds were relatively sluggish in the first four months of 2006, as banks competed for good credit enterprises by extending loans with low interest rates. In May, due to expectations of rising interest rates, some enterprises issued corporate bonds to lock in long-term capital cost. Consequently, the corporate bond issuing market turned bullish. From June onwards, the issuance of corporate bonds further increased mainly because declining bond yields pushed the cost of issuing bonds lower than that of bank loans for large enterprises. In October, the proposed amendment to raise the 35-percent ceiling on life insurance companies' foreign investment was voted down at the Legislative Yuan, encouraging large enterprises to

Transaction Amount in Bond Market by Instrument

Unit: NT\$ Billion

Year/ Month	Total	TSE Market	Gre Tai Market						
		Corporate Bonds (Convertible)	Subtotal	Government Bonds	Corporate Bonds		Foreign Bonds	Bank Debentures	Beneficiary Certificates
					Nonconvertible	Convertible			
2004	205,925.2	4.58	205,920.6	202,015.2	2,328.5	441.1	636.1	457.2	42.5
2005	319,476.5	0.43	319,476.1	314,099.4	3,198.7	364.3	320.0	1,413.5	80.2
2006	275,668.5	0.10	275,668.4	273,496.2	960.8	450.2	108.5	518.8	133.9
2006/1	27,872.1	0.02	27,872.1	27,666.3	114.6	35.5	16.6	35.6	3.5
2	24,341.2	0.00	24,341.2	24,217.1	62.9	17.6	1.2	33.8	8.6
3	30,096.4	0.01	30,096.4	29,942.4	81.0	23.7	6.5	25.6	17.2
4	22,564.2	0.01	22,564.2	22,348.3	85.6	48.2	7.9	54.2	20.0
5	18,098.2	0.00	18,098.2	17,881.5	85.7	56.3	7.3	65.9	1.5
6	21,260.6	0.03	21,260.6	21,031.1	89.0	34.4	4.2	79.7	22.2
7	22,385.0	0.03	22,385.0	22,280.3	49.9	21.6	7.6	24.7	0.9
8	24,618.8	0.00	24,618.8	24,484.2	57.5	25.9	18.6	26.8	5.8
9	22,228.0	0.00	22,228.0	22,041.1	84.3	28.7	15.6	36.1	22.2
10	20,360.4	0.00	20,360.4	20,235.2	61.2	34.3	0.6	28.9	0.2
11	22,706.4	0.00	22,706.4	22,558.1	58.6	60.2	6.5	22.1	0.9
12	19,137.1	0.00	19,137.1	18,810.6	130.5	63.8	15.9	85.4	30.9

Source: TSE & GTSM.

increase their corporate bond issues in the following months.

Large Increase in Bank Debenture Issues

In 2006, domestic banks issued a total of NT\$172.5 billion in bank debentures, an increase of NT\$41.3 billion or 31.5 percent from the previous year. Among them, more than 85 percent were subordinated bank debentures.

In the first three months of 2006, issues of bank debentures slightly increased mainly because banks urgently wrote off their non-performing credit card and cash card loans, leading to the need to strengthen their capital structure by issuing bank debentures. From April to June, the issuance of bank debentures continued to increase mainly because Taiwan Cooperative Bank issued large amounts of bank debentures to fill up its shortage of working capital incurred from the transfer of its farmers' & fishermen's deposits to Agricultural Bank of Taiwan. However, starting from July, the issuance of bank debentures sharply decreased due to the relatively easy funding conditions in the banking system. After September, many domestic banks showed their strong needs to issue bank debentures to meet the rising demand for funds before the year-end and in response to the capital adequacy requirements of the New Basel Capital Accord to be implemented at the beginning of 2007.

Rapidly Growing Structured Bond Securitization

In 2006, the total issuance of beneficiary securities on asset-backed securitization amounted to NT\$337.8 billion. Although this amount accounted for only 27.9 percent of total bond issuance, it presented a jump of NT\$155.1 billion or 84.9 percent from that recorded in 2005. The sharp increase was mainly because some banks and securities firms securitized their holdings of structured bonds to enhance liquidity. Of the components, issues of financial asset securitization reached NT\$314.5 billion, and those of real estate securitization amounted to NT\$23.3 billion.

New Issue of Foreign Currency Denominated Bonds

To attract more foreign financial institutions to participate in Taiwan's bond market, the FSC endorsed Deutsche Bank Frankfurt to issue US dollar-denominated bonds traded on the GreTai Securities Market (GTSM) on November 1, 2006. This new bond issue was named Formosa Bonds with a sum of US\$250 million, a coupon rate of 4.85 percent, and interest payment once a year. Formosa Bonds drew many investors because of stable returns, the low minimal investment requirement of US\$10 thousand, and the tax-free advantage.

Large Transactions in the OTC Market

In 2006, bond transactions in the OTC market amounted to NT\$275.7 trillion, a decrease of 13.7 percent from 2005 and the second highest on record. Of this amount, outright transactions decreased by 23.5 percent, while repurchase agreement transactions went up by 8.6 percent. Outright transactions markedly decreased mainly because the disparity between bond yields moving downward and short-term interest rates shifting upwards narrowed the spread for arbitrage transactions.

As for the long-term trend of bond yields, for the first five months of the year, as the United States bond yields went upwards and the Bank continued to issue 364-day NCDs to recall surplus funds from the market, the yield on benchmark 10-year government bonds rose continually from 1.73 percent in January to 2.23 percent in May. From June to September, due to a slowdown in economic growth and declining bond yields in the United States, the domestic bond market turned bullish. Therefore, the yield on 10-year government bonds fell from 2.17 percent to 1.96 percent. In the final three months, although easy funding conditions fueled the demand for bonds, the Taiwan Post Co. and some insurance companies increased their bond positions, leading to a short supply of bonds in the trading market. In contrast, the FSC claimed that bond trading, which was tax-free, would be liable to a 10 percent separate tax. Affected by these factors, the yield on 10-year government bonds exhibited a narrow swing around 1.98 percent.

Portfolio Composition of Bond Funds

Unit: NT\$ Billion

Year / Month	Total	Outright Purchases		Repurchase Agreements		Bank Deposits		Short-term Securities	
		Amount	Share (%)	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
2004	1,883.3	1,015.5	53.9	562.5	29.9	258.7	13.7	46.6	2.5
2005	1,308.4	498.2	38.1	582.2	44.5	200.6	15.3	27.4	2.1
2006	1,101.5	261.0	23.7	608.5	55.2	209.2	19.0	22.8	2.1
2006/ 1	1,322.6	481.5	36.4	607.1	45.9	207.2	15.7	26.8	2.0
2	1,290.6	455.5	35.3	606.7	47.0	199.1	15.4	29.3	2.3
3	1,286.7	445.6	34.6	617.2	48.0	195.8	15.2	28.0	2.2
4	1,276.4	427.6	33.5	622.7	48.8	199.3	15.6	26.7	2.1
5	1,242.8	396.3	31.9	624.3	50.2	196.5	15.8	25.6	2.1
6	1,229.2	368.1	29.9	640.1	52.1	195.6	15.9	25.5	2.1
7	1,236.3	343.1	27.8	658.5	53.3	210.3	17.0	24.4	2.0
8	1,205.6	328.9	27.3	631.4	52.4	222.9	18.5	22.4	1.9
9	1,156.0	308.7	26.7	601.7	52.1	224.2	19.4	21.3	1.8
10	1,141.2	297.9	26.1	612.9	53.7	209.9	18.4	20.6	1.8
11	1,130.0	296.3	26.2	607.4	53.8	203.8	18.0	22.5	2.0
12	1,101.5	261.0	23.7	608.5	55.2	209.2	19.0	22.8	2.1

Source: Securities Investment Trust & Consulting Association of the R.O.C.

Continuous Shrinkage in Net Assets of Bond Funds

Since early 2006, the FSC had actively promoted the transformation of bond funds. Securities investment trust firms were required to progressively adjust the portfolios of existing bond funds so that bond funds would be transformed into quasi money market funds or fixed income funds by the end of 2006. At the end of the year, more than 90 percent of domestic bond funds have been transformed into quasi money market funds.

With respect to portfolio allocation, local bond funds mainly invested in outright purchases of corporate bonds, repurchase agreements of government bonds, bank time deposits and purchases of money market instruments. At the end of 2005, their portfolio allocation ratios were 38.1 percent, 44.5 percent, 15.3 percent and 2.1 percent, respectively. During 2006, in line with the FSC's bond fund transformation measures, securities investment trust firms progressively adjusted the portfolios of bond funds. At the end of 2006, the above ratios became 23.7 percent, 55.2 percent, 19.0 percent and 2.1 percent, respectively.

Meanwhile, the rates of return on domestic bond funds became lower than most other investment instruments as bond yields exhibited a downward trend. As a result, the net assets of domestic bond funds fell by NT\$206.9 billion to NT\$1,101.5 billion at the end of 2006 from the previous year-end.