

7. Bond Market

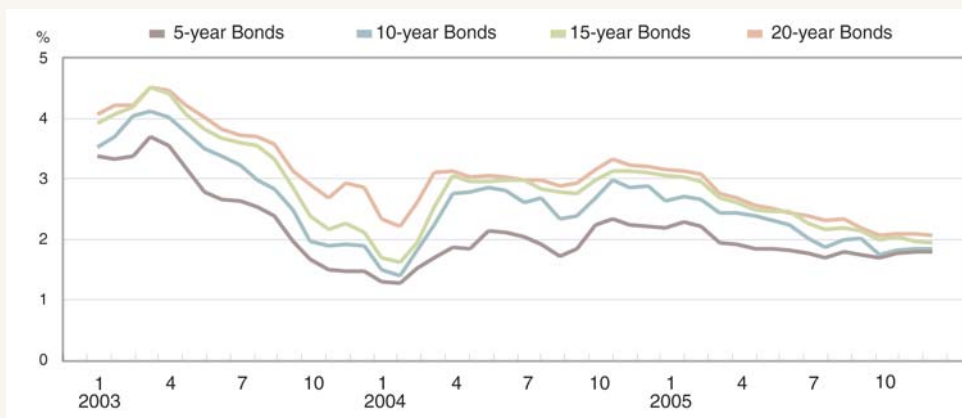
In 2005, new issues of bonds remained active with the outstanding amount reaching a new high of NT\$5,463.6 billion at the year-end. Among them, issues of government bonds continued to increase in large amounts to finance rising budget deficits, while those of corporate bonds significantly shrank, continuing the trend over the past three years, as massive redemptions of bond funds weakened the demand for corporate bonds in their portfolios. Issues of bank debentures rapidly declined largely because most banks improved their capital adequacy ratios in 2004 and hence had less need to issue debentures to strengthen their capital structure. Moreover, issues of asset-backed securities sharply increased, mainly because securities investment trust companies were pushed by the Financial Supervisory Commission to dispose of structured bonds held by bond funds by the year-end.

The total transaction volume of bonds in the secondary market reached a historic high in 2005, and bond yields gradually declined along with a bullish bond market. This was due to easy funding conditions and strong demand for benchmark bonds from bond dealers to increase their returns by short-swing trading.

Government Bonds Outstanding Hit a New High

The Ministry of Finance (MOF) issued central government bonds to a total value of NT\$445 billion in 2005. The large amount of central government bonds issued was for the purposes of

Yield Structure of Central Government Bonds with Different Maturities



Source: *Financial Statistics Monthly, Republic of China, Department of Economic Research, the Central Bank of China.*

Issues and Outstanding Values in Bond Market by Category

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
2003	961.5	4,465.1	454.8	2,503.6	—	84.9	278.8	1,176.9	182.5	541.2	45.0	158.5	27.0	24.7
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	5,463.6	445.0	3,013.1	24.0	129.2	204.1	1,191.9	131.2	811.2	—	104.0	182.7	214.2
2005/1	113.4	5,018.8	80.0	2,768.8	5.0	128.4	3.6	1,209.4	16.3	723.0	—	120.5	8.5	68.7
2	37.1	5,046.7	30.0	2,798.5	—	128.4	0.2	1,204.2	5.5	727.2	—	120.5	1.4	67.9
3	65.4	5,063.5	40.0	2,808.3	—	126.4	11.9	1,207.3	6.7	730.9	—	118.5	6.8	72.1
4	57.1	5,105.0	30.0	2,838.3	—	126.4	19.9	1,216.8	6.3	735.9	—	117.5	0.9	70.1
5	60.4	5,102.2	30.0	2,838.2	—	126.4	5.9	1,201.3	13.7	742.7	—	117.5	10.8	76.1
6	107.5	5,184.3	40.0	2,878.1	—	121.5	26.3	1,211.2	37.4	778.7	—	117.5	3.8	77.3
7	57.5	5,194.7	30.0	2,908.0	—	121.5	22.2	1,196.9	4.5	782.5	—	110.0	0.8	75.8
8	72.2	5,236.7	30.0	2,938.0	10.0	131.5	20.9	1,190.5	3.0	784.3	—	110.0	8.3	82.4
9	112.8	5,301.9	40.0	2,947.9	—	131.5	42.8	1,217.6	0.0	784.2	—	110.0	30.0	110.7
10	75.8	5,342.9	30.0	2,977.9	—	130.5	9.3	1,207.2	7.4	785.1	—	104.0	29.1	138.2
11	60.2	5,334.3	30.0	2,978.1	—	120.0	5.1	1,188.2	14.5	797.9	—	104.0	10.6	145.9
12	167.6	5,463.6	35.0	3,013.1	9.0	129.2	36.0	1,191.9	15.9	811.2	—	104.0	71.7	214.2

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

** The outstanding beneficiary certificates exclude amount purchased back by originators for credit enhancement.

Sources: *Taiwan Statistics Monthly, Republic of China, Department of Economic Research, the Central Bank of China.*

efficient management of the national treasury, effective treatment of central government debt funds, the continuous promotion of a standardized schedule of government bond issuance schedule, and extending the duration of benchmark bonds. Meanwhile, local governments' bond issuance amounted to a sum of NT\$24 billion, mainly to refund matured debts. The outstanding amount of government bonds hit a historic high of NT\$3,142 billion at the end of 2005, an increase of 10.2 percent from the previous year. Consequently, government bonds

Bond Transactions in the Over-the-Counter Market

Unit: NT\$ Billion

Year/ Month	Total	Outright Transactions		Repurchase Agreement Transactions	
		Amount	Share (%)	Amount	Share (%)
2003	203,624.0	126,570.8	62.2	77,053.2	37.8
2004	205,925.2	123,445.6	59.9	82,479.6	40.1
2005	311,386.7	222,174.5	71.4	89,212.2	28.6
2005/1	23,556.8	15,968.6	67.8	7,588.2	32.2
2	13,023.0	8,296.4	63.7	4,726.6	36.3
3	21,820.4	14,031.4	64.3	7,789.0	35.7
4	23,142.9	16,094.5	69.5	7,084.4	30.5
5	29,006.6	21,048.6	72.6	7,958.0	27.4
6	24,232.6	16,053.7	66.2	8,178.9	33.8
7	31,153.1	23,743.0	76.2	7,410.1	23.8
8	34,291.6	26,686.0	77.8	7,605.6	22.2
9	28,474.0	20,539.6	72.1	7,934.4	27.9
10	33,714.6	26,639.1	79.0	7,075.5	21.0
11	27,162.1	19,622.9	72.2	7,539.2	27.8
12	21,809.0	13,450.7	61.7	8,358.3	38.3

Source: *Taiwan Securities Exchange (TSE) & GreTai Securities Market (GTSM).*

outstanding as a percentage of GDP rose from 26.5 percent at the previous year-end to 28.2 percent. Moreover, the MOF issued re-opened government bonds 5 times with different maturities, namely 5, 10, and 20 years, in order to build an effective bond yield curve and extend the duration of benchmark bonds. The GreTai Securities Market (GTSM), an over-the-counter market, vigorously promoted the when-issued system to help discover prices for auctions of government bonds before issuance. The amount of when-issued trading for the year totaled NT\$13.2 trillion, down by 10.8 percent from the previous year.

In addition, the FSC formally launched the stripped government bond system on November 7, 2005, in order to develop principal guaranteed notes (PGNs), and attract retail investors into the bond market. As of the end of 2005, the sum of stripped government bonds issued was NT\$40 billion. Stripped bonds are attractive to investors because they have greater liquidity than interest-bearing bonds of the same maturities and coupon rates, and they also enjoy 10-percent separate taxation on their returns.

Continuous Decline in Corporate Bond Issues

New issues of corporate bonds were relatively sluggish in the first quarter of 2005 as rising short-term interest rates made it difficult to reduce issuing costs via structured pricing. In the second quarter, with low long-term interest rates, many enterprises issued corporate bonds to redeem their high-cost debts. Consequently, issues of corporate bonds increased. In the third quarter, due to a strong demand for corporate bonds by life insurance companies and bills

Turnover in Bond Market by Category

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			
2003	203,624.0	9.8	203,614.2	200,619.9	1,904.5	249.0	713.4	125.4	2.0
2004	205,925.2	4.6	205,920.6	202,015.2	2,328.5	441.1	636.1	457.2	42.5
2005	311,386.7	0.4	311,386.3	306,009.6	3,198.7	364.3	320.0	1,413.5	80.2
2005/1	23,556.8	0.2	23,556.6	23,139.7	237.5	31.0	32.7	110.0	5.7
2	13,023.0	0.0	13,023.0	12,820.4	125.4	19.1	15.8	42.1	0.2
3	21,820.4	0.1	21,820.3	21,460.4	207.4	44.1	29.4	76.6	2.4
4	23,142.9	0.0	23,142.9	22,792.5	213.5	22.6	30.7	82.0	1.6
5	29,006.6	0.0	29,006.6	28,575.3	264.0	22.9	23.1	117.3	4.0
6	24,232.6	0.0	24,232.6	23,542.5	412.1	36.4	25.7	209.6	6.3
7	31,153.1	0.0	31,153.1	30,739.4	271.2	45.1	9.5	79.7	8.2
8	34,291.6	0.0	34,291.6	33,898.8	242.8	33.3	15.2	84.6	16.9
9	28,474.0	0.0	28,474.0	28,058.8	248.4	27.0	20.1	109.2	10.5
10	33,714.6	0.0	33,714.6	33,320.3	220.6	20.0	30.1	119.0	4.6
11	27,162.1	0.0	27,162.1	26,670.6	321.1	25.0	18.1	119.9	7.4
12	21,809.0	0.1	21,808.9	20,990.9	434.7	37.8	69.6	263.5	12.4

Source: Taiwan Securities Exchange (TSE) & GreTai Securities Market (GTSM).

finance companies, new issues of corporate bonds continued to rise. However, in the fourth quarter, the issuance of corporate bonds was much muted. This was mainly because, on the demand side, securities investment trust firms hurried to sell out all of their structured bonds before the end of 2005 in line with the FSC's policy to classify bond funds into money market funds and genuine bond funds. As a result, local bond funds shrank significantly, and the demand for corporate bonds for portfolio investment in bond funds weakened.

For the year as a whole, NT\$204.1 billion worth of corporate bonds were issued, a decline of 11.8 percent from the previous year.

Substantial Decrease in Bank Debenture Issues

In 2005, domestic banks issued NT\$131.2 billion in bank debentures, a decrease of NT\$87.1 billion or 39.9 percent from the previous year. Issues of bank debentures rapidly declined mainly because most banks improved their capital adequacy ratios in 2004, so pressure to strengthen their capital structures by issuing bank debentures was lowered. Moreover, many banks cut back on their consumer loan business due to increasing debt defaults on credit cards and cash cards during the second half of the year. As a result, funding conditions in the banking system remained relatively easy, and most banks had no strong needs to issue bank debentures.

Rapidly Growing Asset-Backed Securitization

In 2005, the total issuance of beneficiary securities on asset-backed securitization amounted to NT\$182.7 billion. Although this amount accounted for only 18.5 percent of total bond issuance, it presented a jump of NT\$130.6 billion or 250.7 percent from that recorded in 2004. Of the components, the issues of financial asset securities reached NT\$142.5 billion, and those of real estate securities amounted to NT\$40.2 billion. The sharp increase was mainly because many securities investment trust companies hurried to sell out all of their structured bonds held by bond funds before the year-end by means of securitization, and some life insurance companies aggressively issued Real Estate Investment Trust Securities (REITs).

Most investors of securitized products were institutional investors, including banks, life insurance companies, bills finance companies, and bond funds. In general, the securitized products are welcomed by institutional investors largely because banks are allowed to hold them as liquidity reserves and the interest payments distributed to investors enjoy 6-percent separate taxation.

Booming Transactions in the OTC Bond Market

During the first half of the year, as economic recovery slowed and market funds remained abundant, bond markets were very active, pressing the yield on benchmark 10-year government bonds to decline from 2.4 percent in January to 1.9 percent in June. In the second half of the year, as surging oil prices raised expectations of inflation, a large part of stock market funds flowed to the bond market for hedging purposes. Therefore, the weighted average yield on 10-year government bonds gradually declined from 2.0 percent in July to 1.8 percent in December.

Trading in the OTC bond market was very aggressive in 2005. The trading value hit a record high of NT\$311.39 trillion, a remarkable increase of 51.2 percent from the previous year. Of this amount, outright transactions increased by 80.0 percent, and repurchase agreement transactions went up by 8.2 percent. Outright transactions increased significantly mainly because the GTSM established a net settlement platform and an electronic bond trading system. This resulted in more transparent trading information and lower trading costs of outright transactions, and the limited availability of benchmark bonds for trading made it easy for bond dealers to manipulate prices by short-swing trading to increase returns.

Shrinkage in Net Assets of Bond Funds

In 2005, local bond funds shrank substantially. This was mainly because the FSC required securities investment trust companies to sell out all of their structured bonds held by bond

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 (%)
2003	2,107.6	1,066.9	50.6	611.5	29.1	354.8	16.8	74.4	3.5
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
2005/ 1	1,978.3	997.7	50.4	663.0	33.5	269.5	13.6	48.1	2.4
2	1,990.1	995.3	50.0	668.1	33.6	280.7	14.1	46.1	2.3
3	1,933.2	958.1	49.6	646.4	33.4	279.5	14.5	49.1	2.5
4	1,946.3	964.2	49.5	657.0	33.8	281.6	14.5	43.4	2.2
5	1,895.6	924.0	48.7	654.4	34.5	277.6	14.6	39.6	2.1
6	1,691.8	885.1	52.3	504.7	29.8	263.2	15.6	38.8	2.3
7	1,704.0	882.4	51.8	543.3	31.9	247.1	14.5	31.2	1.8
8	1,680.2	837.4	49.8	571.6	34.0	241.7	14.4	29.5	1.8
9	1,545.9	787.4	50.9	505.2	32.7	225.1	14.6	28.2	1.8
10	1,509.3	730.7	48.4	540.7	35.8	212.6	14.1	25.3	1.7
11	1,398.8	643.1	46.3	518.0	37.3	204.2	14.7	24.5	1.8
12	1,308.4	498.2	38.1	582.2	44.5	200.6	15.3	27.4	2.1

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

funds before the year-end in compliance with its policy to divide bond funds into genuine bond funds (i.e. fixed income funds) and money market funds. As a result, massive redemptions of bond funds occurred and the net assets of local bond funds fell by NT\$574.9 billion to NT\$1,308.4 billion at the end of 2005 from the previous year-end. Of the redemption amount, financial institutions (including domestic banks, medium business banks, life insurance companies and investment trust companies) accounted for 10.9 percent, while 89.1 percent were from the non-financial private sector.

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 2004, their portfolio ratios were 53.9 percent, 29.9 percent, 13.7 percent and 2.5 percent, respectively. During 2005, in line with the FSC's policy, securities investment trust firms adjusted their portfolio investments of bond funds. At the end of 2005, the above ratios became 38.1 percent, 44.5 percent, 15.3 percent and 2.1 percent, respectively. The current ratio of outright purchases of bonds is less than 40 percent of the portfolio held by all bond funds. This shows that a large number of bond funds seem to favor a transfer to money market funds in the future.