

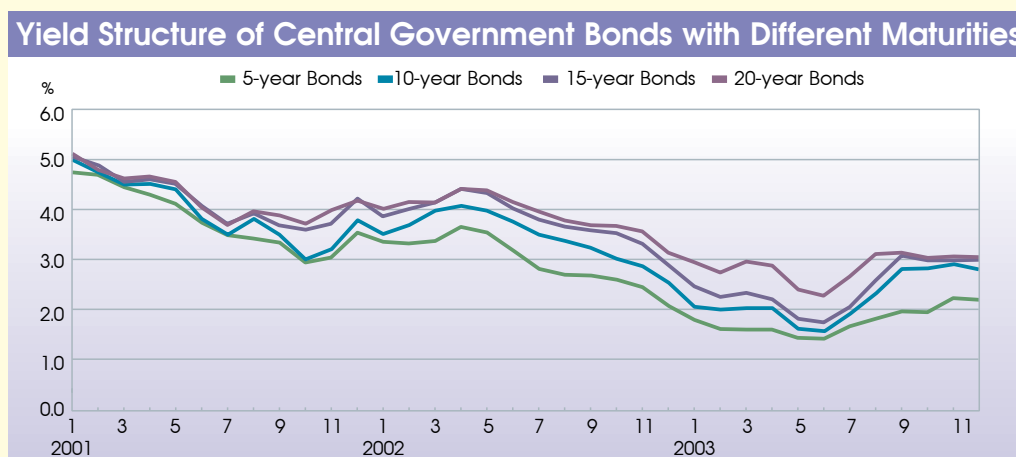
11. Bond Market

In 2003, new issues of bonds were still large, and the total new issues of bonds amounted to NT\$961.5 billion. Among them, issues of central government bonds continued to increase in order to finance the rising budget deficits. Issues of corporate bonds hit the second highest in history as many local companies took advantage of low interest rates to issue corporate bonds to fix their long-term cost of funds. Bank debenture issues mildly decreased as the banking system's funding conditions were relatively easy. Moreover, NT dollar-denominated bonds issued by international financial institutions in Taiwan also significantly increased during the year due to their low issuance costs.

Bond transactions in the secondary market registered a record high for 2003 and bond yields generally exhibited a V-shaped pattern during the year. During the first half of the year, in association with the outbreak of the US-Iraq war and the SARS epidemic, bond yields trended downwards. In the second half of the year, with a rebounding economy and strengthening stock prices, bond yields bounced back. In addition, bond funds continued to expand this year because of their higher returns and tax-free advantages compared with bank deposits. Furthermore, the appreciation of the NT dollar induced the shift of foreign currency deposits into bond funds.

Surge in Central Government Bond Issues

The Ministry of Finance issued central government bonds to a total amount of NT\$455



Issues and Outstanding Value in Bond Market by Category

Unit: NT\$ Billion

	Total		Central Government Bonds		Local Government Bonds		Corporate Bonds		Bank Debentures		Foreign Bonds*	
	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding
2001	814.6	3,012.4	437.0	1,772.6	20.0	85.7	198.1	808.5	119.0	202.6	40.5	143.0
2002	962.0	3,748.6	426.2	2,124.1	10.0	90.4	285.8	1,007.2	214.0	377.3	26.0	149.6
2003	961.5	4,465.1	454.8	2,503.6	--	84.9	279.0	1,176.9	182.7	541.2	45.0	158.5
2003/1	116.2	3,858.5	80.0	2,203.7	--	90.4	10.3	1,015.5	9.9	384.3	16.0	164.6
2	50.8	3,902.3	35.0	2,238.7	--	90.4	1.9	1,012.0	13.9	397.6	--	163.6
3	57.0	3,953.1	40.0	2,278.6	--	90.4	2.5	1,013.0	1.5	395.5	13.0	175.6
4	60.4	4,001.4	30.0	2,308.5	--	88.3	22.0	1,031.6	3.4	398.4	5.0	174.6
5	74.5	4,055.3	30.0	2,338.4	--	88.3	29.5	1,048.6	15.0	413.0	--	167.0
6	109.4	4,126.6	30.0	2,358.6	--	88.3	67.5	1,095.3	11.9	424.4	--	160.0
7	75.5	4,189.3	45.0	2,403.4	--	88.3	24.0	1,108.3	6.5	430.8	--	158.5
8	64.4	4,248.4	30.0	2,433.3	--	88.3	27.9	1,131.3	6.5	437.0	--	158.5
9	98.0	4,309.8	40.0	2,444.2	--	87.3	23.6	1,149.6	27.4	463.2	7.0	165.5
10	77.4	4,375.2	30.0	2,473.9	--	87.3	18.2	1,160.3	25.2	488.2	4.0	165.5
11	58.7	4,381.7	29.8	2,468.9	--	84.9	5.1	1,152.4	23.8	510.0	--	165.5
12	119.2	4,465.1	35.0	2,503.6	--	84.9	46.5	1,176.9	37.7	541.2	--	158.5

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

Sources: *Financial Statistics Monthly, Taiwan District, the Republic of China, Central Bank of China.*

billion in 2003. The total issues registered the highest recorded in history, reflecting the tight fiscal position of the government budget. In order to establish an effective yield curve for the bond market and extend the duration of benchmark bonds, the GreTai Securities Market (GTSM, or over-the-counter market) launched the when-issue market. The Ministry of Finance also regularly issued re-opened government bonds with different maturities, namely 5, 10, and 20 years. With regard to the issuing cost, issuing rates of government bonds declined in the first half of the year mainly due to weak domestic demand and deflationary pressures. However,

Bond Transactions in the Over-the-Counter Market

Unit: NT\$ Billion

Year/ Month	Total	Outright Transactions		Repurchase Agreement Transactions	
		Amount	Share (%)	Amount	Share (%)
2001	118,992.5	53,023.9	44.6	65,968.6	55.4
2002	134,399.0	60,659.0	45.1	73,740.0	54.9
2003	203,624.2	126,570.8	62.2	77,053.4	37.8
2003/1	15,390.4	8,909.7	57.9	6,480.7	42.1
2	11,838.0	6,979.2	59.0	4,858.8	41.0
3	16,493.0	9,850.8	59.7	6,642.2	40.3
4	21,532.0	14,418.9	67.0	7,113.1	33.0
5	24,410.9	16,884.1	69.2	7,526.8	30.8
6	21,811.1	15,128.6	69.4	6,682.5	30.6
7	18,936.4	12,037.1	63.6	6,899.3	36.4
8	14,250.3	8,202.8	57.6	6,047.5	42.4
9	11,898.1	5,929.3	49.8	5,968.8	50.2
10	16,876.4	10,440.9	61.9	6,435.5	38.1
11	13,626.9	7,877.0	57.8	5,749.9	42.2
12	16,560.7	9,912.4	59.9	6,648.3	40.1

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

in the second half of the year issuing rates increased in line with the economic recovery and bullish stock market.

Mild Decrease in Corporate Bonds Issues

The new issues of corporate bonds were relatively small in the first quarter of 2003. In the second quarter, the size of local bond funds expanded in response to the sluggish stock market. As a result, the demand for corporate bonds strengthened. From the supply side, many enterprises were encouraged to issue corporate bonds to lock in low-cost funds in anticipation of a rise in long-term interest rates. Consequently, the issues of corporate bonds increased in the second quarter, and with demand for corporate bonds exceeding supply, issuing rates of corporate bonds fell to record lows. However, in the second half of the year, enterprises became less willing to raise funds through issues of corporate bonds as the cost of funds increased as a result of the stock market upturn. The issues of corporate bonds increased again in December to meet enterprises' seasonal demand for funds as the year-end approached. For the year as a whole, total issues of corporate bonds were NT\$279 billion, a decline of 2.4 percent from the previous year.

Marked Decrease in Bank Debenture Issues

Because funding conditions in the banking system were relatively easy, domestic banks reduced their issues of bank debentures to NT\$182.7 billion this year, a decrease of 14.6 percent from the previous year. Domestic banks issued bank debentures for different purposes, such

Turnover in Bond Market by Category

Unit: NT\$ Billion

Year/ Month	Total	TSE Market		GreTai (OTC) Market				
		Corporate Bonds (Convertible)	Subtotal	Government Bonds	Corporate Bonds		Foreign Bonds	Bank Debentures
					Nonconvertible	Convertible		
2001	118,992.5	24.0	118,968.5	118,334.5	173.8	90.1	360.1	10.0
2002	134,399.0	19.1	134,379.9	133,187.6	656.2	196.0	286.4	53.7
2003	203,624.2	9.8	203,614.4	200,619.8	1,904.6	249.1	713.5	127.4
2003/1	15,390.4	0.8	15,389.6	15,193.3	134.1	13.0	45.0	4.2
2	11,838.0	0.5	11,837.5	11,693.7	98.4	7.5	29.5	8.4
3	16,493.0	1.4	16,491.6	16,256.5	136.0	8.7	83.0	7.4
4	21,532.0	2.1	21,529.9	21,285.0	161.6	12.4	67.2	3.7
5	24,410.9	0.6	24,410.3	24,161.0	156.7	13.6	59.1	19.9
6	21,811.1	0.5	21,810.6	21,539.4	177.5	22.0	63.3	8.4
7	18,936.4	1.0	18,935.4	18,636.2	197.7	27.5	64.8	9.2
8	14,250.3	1.0	14,249.3	14,006.1	164.3	24.8	50.2	3.9
9	11,898.1	0.5	11,897.6	11,641.5	153.0	23.6	64.6	14.9
10	16,876.4	0.4	16,876.0	16,587.9	179.8	32.9	63.2	12.2
11	13,626.9	0.6	13,626.3	13,350.8	171.8	26.7	63.8	13.2
12	16,560.7	0.4	16,560.3	16,268.4	173.7	36.4	59.8	22.0

Sources: Taiwan Securities Exchange (TSE) and GreTai Securities Market (GTSM).

as strengthening their tier II capital, making financial investments, raising their medium- and long-term loan funding sources, and promoting fixed-rate mortgages.

Significant Increase in Foreign Bond Issues

In 2003, as the interest rate spread between local and international markets widened and the NT dollar appreciated, issuance costs of foreign debts in Taiwan were relatively low. As a result, new issues of NT dollar-denominated bonds by international financial institutions increased by 73.1 percent over the previous year to NT\$45 billion. Of these issues, the European Investment Bank (EIB) accounted for the largest share of NT\$15 billion, followed by the Council of Europe Development Bank (CEDB) with NT\$10 billion, the Asian Development Bank (ADB) with NT\$9 billion, the Nordic Investment Bank (NIB) with NT\$7 billion, and the European Bank of Recovery Development (EBRD) with NT\$4 billion. The weighted average issuing interest rate on 7-year NT dollar foreign bonds ranged from 2.7 percent to 3.2 percent.

Booming Transactions in the Bond Market

During the first half of the year, the US-Iraq War and the SARS epidemic caused massive amounts of funds to flow into the bond market for hedging purposes, pressing the yield for benchmark 10-year government bonds gradually down from 1.96 percent to 1.42 percent. From July to September, owing to the rebound in economic activity and the local stock market, the transaction volume of bonds sharply decreased month by month. Therefore, the weighted average yield on 10-year government bonds jumped from 1.81 percent to 2.77 percent. For the rest of the year, as the stock market entered a period of consolidation, bond yields gradually trended upward. The average yield on 10-year government bonds soared to 2.80 percent in December.

Trading in the bond market was very active and amounted to a record high of NT\$203,624 billion in 2003, an increase of 51.5 percent. Of this amount, outright transactions increased by 108.7 percent, and repurchase agreement transactions went up by 4.5 percent from the previous year. The share of outright transactions and repurchase agreements in total transactions were 62.2 percent and 37.8 percent, respectively.

Continued Expansion in Bond Funds

Owing to the sluggish stock market in the first half of the year and the expectation of the NT dollar's appreciation in the second half of the year, local bond funds were a very popular investment instrument. As a result, the size of bond funds continued to expand in 2003. As of

Portfolio Composition of Bond Funds

Unit: NT\$ Billion

	Total	Outright Purchases		Repurchase Agree-ments		Bank Deposits		Short-term Securities	
		Amount	Share (%)	Amount	Share (%)	Amount	Share (%)	Amount	Share (%)
2001	1424.6	520.6	36.5	409.2	28.7	457.0	32.1	37.8	2.7
2002	1846.9	798.2	43.3	472.8	25.6	521.4	28.2	54.5	2.9
2003	2107.6	1066.9	50.6	611.5	29.0	354.8	16.8	74.4	3.6
2003/1	1937.3	854.1	44.1	517.8	26.7	508.0	26.2	57.4	3.0
2	1951.3	865.3	44.3	530.7	27.2	507.2	26.0	48.1	2.5
3	1924.0	856.1	44.5	547.6	28.5	478.7	24.9	41.6	2.1
4	2041.6	901.5	44.2	591.4	29.0	482.5	23.6	66.2	3.2
5	2037.4	930.4	45.7	573.5	28.1	473.3	23.2	60.2	3.0
6	1957.0	926.2	47.3	562.3	28.7	437.0	22.3	31.5	1.7
7	2061.1	956.2	46.4	640.8	31.1	430.0	20.9	34.1	1.6
8	2123.1	991.5	46.7	660.8	31.1	437.7	20.6	33.1	1.6
9	2084.3	985.6	47.3	667.6	32.0	397.1	19.1	34.0	1.6
10	2165.4	1030.4	47.6	693.4	32.0	390.8	18.0	50.8	2.4
11	2229.2	1048.4	47.0	713.5	32.0	389.0	17.5	78.3	3.5
12	2107.6	1066.9	50.6	611.5	29.0	354.8	16.8	74.4	3.6

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

the end of the year, the net assets of local bond funds amounted to NT\$2,107.6 billion, an increase of 14.1 percent from the previous year. Despite lower yields relative to the previous years', the amount of bond funds still grew during the year as a result of a continuous flow of funds from bank deposits in view of their tax-free benefits on capital gains, quick redemption, and higher-than-bank-deposits returns.

With respect to portfolio allocation, local bond funds primarily invested in outright purchases of corporate bonds, repurchase agreements of government bonds, and bank time deposits. Of total investment at the end of 2003, outright purchases of bonds accounted for 50.6 percent, bonds with repurchase agreements made up 29.0 percent, and deposits with financial institutions represented 16.8 percent.

