

7. Bond Market

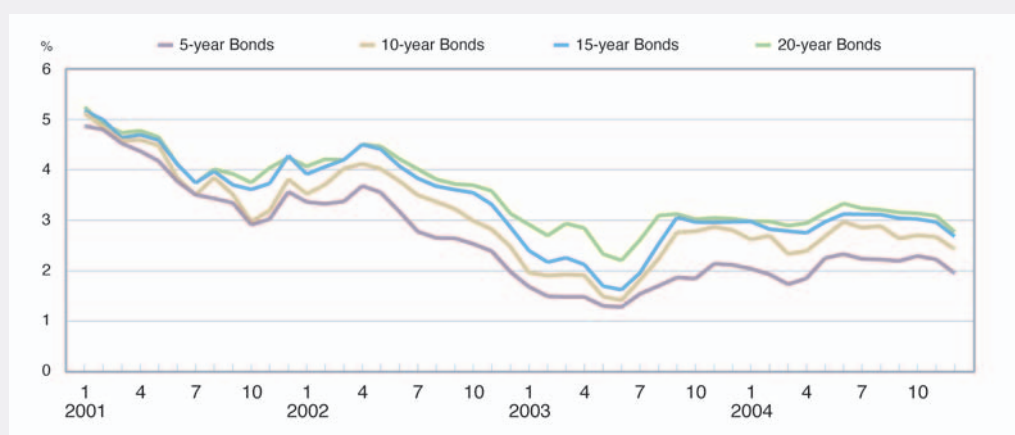
In 2004, new issues of bonds hit record highs, amounting to NT\$1,018.2 billion. Among them, issues of government bonds increased by large amounts in order to finance continuously rising budget deficits. Issues of corporate bonds diminished to a new low under the influence of rising interest rates and corporate scandals of some technology companies. Bank debenture issues increased significantly as banks managed to improve their capital adequacy ratios and strengthen their risk tolerance. NT dollar-denominated bonds issued by international financial institutions in Taiwan substantially decreased owing to rising issuance costs. Moreover, issues of asset securitization products successively increased, mainly due to their eligibility as liquidity reserves of banks, and a low withholding tax rate on investment returns relative to other similar financial products.

The total turnover of bonds in the secondary market also went up to a historic high in 2004, while bond yields fluctuated within a narrow range. In addition, bond funds shrank substantially this year because of the rise in interest rates and the massive redemption by investors. The bond fund market was overshadowed by negative sentiment in the second half of the year following the failure of the United Securities Investment Trust Corporation (USITC) in June.

Increase in Central Government Bond Issues

The Ministry of Finance issued central government bonds to a total value of NT\$ 465 billion

Yield Structure of Central Government Bonds with Different Maturities



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

Issues and Outstanding Value 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
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	278.8	1,176.9	182.5	541.2	45.0	158.5	27.0	11.8
2004	1,008.2	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	51.0	44.1
2004/1	100.4	4,494.8	80.0	2,524.2	--	84.9	13.0	1,171.7	7.4	547.9	--	154.5	--	11.6
2	59.4	4,539.0	30.0	2,553.9	--	84.9	19.9	1,178.9	9.5	555.5	--	154.5	--	11.3
3	126.3	4,640.4	40.0	2,593.6	15.0	99.9	7.6	1,171.8	49.4	602.0	5.0	153.5	9.3	19.6
4	79.2	4,706.6	40.0	2,633.2	--	99.9	28.8	1,195.7	8.4	608.9	2.0	149.5	--	19.4
5	88.2	4,802.1	35.0	2,608.2	--	99.9	31.4	1,209.0	16.5	624.0	--	149.5	5.3	23.3
6	101.4	4,752.2	35.0	2,643.1	--	99.9	45.6	1,203.6	12.9	633.3	3.5	147.0	4.4	25.3
7	108.4	4,789.2	35.0	2,648.1	19.0	118.8	35.2	1,226.3	19.2	627.5	--	143.5	--	25.0
8	73.4	4,832.5	30.0	2,678.0	--	118.8	18.0	1,222.9	15.5	641.0	--	138.5	9.9	33.3
9	63.3	4,869.7	35.0	2,712.9	--	117.9	9.6	1,217.6	13.6	649.5	--	138.5	5.1	33.3
10	67.0	4,927.4	35.0	2,747.9	--	117.9	9.0	1,217.9	23.0	672.2	--	138.5	--	33.0
11	54.9	4,868.4	35.0	2,694.6	--	115.5	8.2	1,218.1	9.9	677.6	--	129.5	1.8	33.1
12	96.3	4,947.9	35.0	2,729.2	8.0	123.4	5.1	1,215.6	33.0	709.1	--	126.5	15.2	44.1

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

in 2004. The new issues registered a historic high, reflecting the government's tight fiscal position. The GreTai Securities Market (GTSM) has vigorously promoted the when-issued system to help discover prices of government bonds before issuance. The amount of when-issued trading for the year totaled NT\$14.8 trillion, which jumped 150.85 percent from NT\$5.9 trillion in 2003. Meanwhile, the Ministry of Finance also regularly issued re-opened government bonds with different maturities, namely 5, 10, and 20 years, in order to build an effective bond yield curve

Bond Transactions in the Over-the-Counter Market

Unit: NT\$ Billion

Year/ Month	Total	Outright Transactions		Repurchase Agreement Transactions	
		Amount	Share (%)	Amount	Share (%)
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
2004	205,925.2	123,445.6	59.9	82,479.6	40.1
2004/1	11,398.7	6,550.3	57.5	4,848.4	42.5
2	11,811.5	6,139.6	52.0	5,671.9	48.0
3	19,314.1	12,306.7	63.7	7,007.4	36.3
4	18,416.9	11,674.8	63.4	6,742.1	36.6
5	15,039.4	8,408.6	55.9	6,630.8	44.1
6	15,491.4	8,331.4	53.8	7,160.0	46.2
7	20,772.7	12,821.7	61.7	7,951.0	38.3
8	17,219.6	9,947.2	57.8	7,272.4	42.2
9	16,199.0	8,858.9	54.7	7,340.1	45.3
10	18,569.4	11,743.6	63.2	6,825.8	36.8
11	20,570.7	13,480.3	65.5	7,090.4	34.5
12	21,121.8	13,182.5	62.4	7,939.3	37.6

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

and extend the duration of benchmark bonds. Moreover, since July 1, 2004, the government bond auction system has adopted a single-price (also called Dutch auction) instead of a multiple-price bidding process. Under this new auction method, all bidders settle at the highest winning rate thereby reducing volatility of bond yields in the secondary market.

Diminishing Amounts in Corporate Bond Issues

The new issues of corporate bonds were relatively active in the first quarter of 2004 mainly due to the large amount of convertible corporate bonds issued by many enterprises in response to the bullish stock market. In the second quarter, as local bond funds continuously expanded, 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 substantially increased in the second quarter. From the third quarter, under the influence of rising interest rates and a series of corporate scandals, new issues of corporate bonds started to decline. The issuance of corporate bonds was much muted during the second half of the year. For the year as a whole, total issues of corporate bonds were NT\$231.4 billion, a decline of 17 percent from the previous year.

Significant Increase in Bank Debenture Issues

Although in recent years the increasing diversity of bank debenture products has raised the issuing cost, domestic banks issued a record high of NT\$218.3 billion in bank debentures

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			
2002	134,399.0	19.1	134,379.9	133,187.6	656.2	196.0	286.4	53.7	--
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
2004/1	11,398.7	0.5	11,398.2	11,208.2	110.5	28.4	42.2	8.9	--
2	11,811.5	0.6	11,810.9	11,552.2	139.8	43.6	56.7	17.3	1.0
3	19,314.1	0.4	19,313.7	18,990.5	174.6	54.8	74.8	16.0	3.0
4	18,417.0	0.5	18,416.5	18,133.9	155.5	46.8	65.2	14.1	1.0
5	15,039.4	0.4	15,039.0	14,785.1	146.4	36.9	50.8	15.6	4.2
6	15,491.4	0.2	15,491.2	15,210.1	145.9	30.4	50.7	46.0	8.1
7	20,772.7	0.3	20,772.4	20,388.1	248.9	31.2	58.1	43.5	2.6
8	17,219.6	0.6	17,219.0	16,907.4	195.5	28.8	52.1	29.5	5.7
9	16,199.0	0.6	16,198.4	15,775.0	235.4	46.2	50.5	85.6	2.3
10	18,569.4	0.2	18,569.2	18,170.5	255.0	32.5	34.8	74.1	2.5
11	20,570.6	0.2	20,570.4	20,182.1	274.6	29.7	37.6	43.9	6.4
12	21,121.8	0.1	21,121.7	20,711.8	246.4	31.8	62.6	62.7	

Source: Taiwan Securities Exchange (TSE) & Gre Tai Securities Market (GTSIM).

this year, an increase of 19.62 percent from the previous year. The increase was mainly because banks hurried to raise low-cost medium- and long-term funds before interest rates turned up, while at the same time improving capital adequacy ratios and strengthening risk tolerance.

Decrease in Foreign Bond Issues

In 2004, as bond yields rose, prices of foreign bonds traded by Cross Currency Swap (CCS) trended down. As a result, new issues of NT dollar-denominated bonds by international financial institutions dropped by 76.67 percent over the previous year to NT\$10.5 billion. Of these issues, the European Bank for Recovery and Development (EBRD) accounted for the largest share of NT\$7 billion, followed by the Central American Bank for Economic Integration (CABEI) with NT\$3.5 billion. The weighted average issuing interest rate on 5-year NT dollar foreign bonds ranged from 2.25 percent to 2.40 percent.

Gradually Growing Asset Securitization

In 2004, the total issuance of asset-backed securities amounted to NT\$51 billion. Although this amount accounted for only 5.01 percent of total bond issuance, it presents a jump of NT\$24 billion or 88.89 percent from that recorded in 2003. Of the components, the issues of Financial Asset Securities including Mortgage Backed Securities (MBS), Collateralized Loans Obligations (CLO), Obligatory Right of Auto Loans (ORAL), and Obligatory Right of Business Accounts Receivables (ORBAR) reached NT\$41 billion. The issues of Real Estate Securities, all of which belonged to Real Estate Asset Trust (REAT), amounted to NT\$10 billion. Most investors of securitization products were institutional investors, including banks, insurance companies, bills finance companies, and bond funds. The securitization products are welcomed by institutional investors mainly because banks are allowed to hold them as liquidity reserves and the interest payments distributed to investors are taxed separately at a low withholding tax rate of 6 percent.

Booming Transactions in the OTC Market

During the first half of the year, as economic recovery strengthened and expectations of rising interest rates prevailed, the bond market became bearish, pressing the yield on benchmark 10-year government bonds to rise from 2.33 percent to 2.97 percent. In the second half of the year, under the influence of rising interest rates and surging oil prices, economic growth apparently moderated. In addition, the failure of a local securities investment trust company, the USITC, triggered massive redemptions of bond funds. A large part of these funds, in turn,

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 (%)
2002	1,847.0	798.4	43.2	472.7	25.6	521.4	28.2	54.5	3.0
2003	2,107.6	1,066.9	50.6	611.5	29.0	354.8	16.8	74.4	3.6
2004	1,883.3	1,015.5	53.9	562.5	29.9	258.7	13.7	46.6	2.5
2004/ 1	2,260.2	1,105.9	48.9	668.6	29.6	385.3	17.1	100.4	4.4
2	2,317.1	1,119.6	48.3	694.3	30.0	395.4	17.1	107.8	4.6
3	2,204.9	1,118.4	50.7	623.1	28.3	376.8	17.1	86.6	3.9
4	2,384.2	1,176.1	49.3	693.3	29.1	404.3	17.0	110.5	4.6
5	2,409.7	1,182.4	49.1	706.8	29.3	399.8	16.6	120.7	5.0
6	2,281.7	1,162.9	51.0	635.8	27.9	382.3	16.7	100.7	4.4
7	2,097.8	1,149.7	54.8	517.1	24.6	364.7	17.4	66.3	3.2
8	2,073.2	1,114.5	53.8	558.1	26.9	340.1	16.4	60.4	2.9
9	1,938.3	1,068.7	55.1	511.3	26.4	313.1	16.2	45.1	2.3
10	1,932.9	1,045.1	54.1	545.3	28.2	293.3	15.2	49.2	2.5
11	1,924.5	1,014.2	52.7	585.8	30.4	273.6	14.2	50.9	2.7
12	1,883.3	1,015.5	53.9	562.5	29.9	258.7	13.7	46.6	2.5

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

flowed to the government bond market for hedging purposes and the weighted average yield on 10-year government bonds gradually diminished from 2.97 percent to 2.43 percent.

Trading in the bond market remained relatively active and amounted to a record high of NT\$205.93 trillion in 2004, a marginal increase of 1.13 percent from the previous year. Of this amount, outright transactions decreased by 2.47 percent, and repurchase agreement transactions went up by 7.04 percent. Meanwhile, the share of outright transactions and repurchase agreements in total transactions were 59.9 percent and 40.1 percent, respectively.

Shrinkage in Net Assets of Bond Funds

Bond funds substantially expanded in the first half of the year as interest rates on bank deposits remained at record lows. As of the end of May, the net assets of local bond funds registered a record high of NT\$2,409.7 billion in total. During the second half of the year, the rise in interest rates, coupled with the failure of a local securities investment trust company, caused large redemptions of bond funds in general. However, in the following months prudent steps were taken to boost the credibility of bond funds, such as the strict control of investment positions in mid- to long-term bonds, increasing liquidity holdings, and raising the minimum rating requirement for fixed income vehicles. As a result, redemptions of bond funds were curbed and the net assets of local bond funds were NT\$1,883.3 billion at the end of the year.

Moreover, the newly revised *Regulations Governing Securities Investment Trust Funds* stipulated that the weighted-average duration of the portfolio held by bond funds must be one year or above. Nearly all the 92 bond funds met this criterion at the end of the year. Furthermore, outright purchases of bonds exceeded 50 percent of the portfolio held by all bond funds. With respect to portfolio allocation, local bond funds mainly invested in outright purchases of corporate bonds, repurchase agreements of government bonds, and bank time deposits. At the end of 2004, outright purchases of bonds accounted for 53.92 percent of total investment, representing an increase from the previous year-end, repurchase agreements increased to 29.87 percent, and deposits with financial institutions declined to 13.74 percent.