## 7. Bond Market

For the year 2011, Taiwan's capital market conditions were steady. New issues of bonds amounted to NT\$ 1,393.9 billion, showing a marginal increase of NT\$300 million or 0.02 percent over the previous year.

Issuance of central government bonds increased by NT\$ 10.0 billion, or 1.64 percent, to NT\$620.0 billion in order to support fiscal funding needs.

In terms of corporate bonds and bank debentures, issuance grew in the first half of 2011 as firms and banks tried to lower funding costs in expectation of rate hikes amid inflationary pressures. Entering the second half of the year, as the sovereign debt crisis in Europe deepened and the credit downgrade in the US occurred, market interest rates declined to a relatively low level, boosting corporate funding. For the year as a whole, corporate bonds and bank debentures totaled an issuance of NT\$591.4 billion, increasing by NT\$ 103.2 billion or 21.14 percent over the previous year.

With respect to asset securitization, several products reached maturity during the year, while the volume of products on a revolving issuance basis declined significantly from the previous year. Foreign and international bonds recorded no new issues during the year.

At the end of 2011, the outstanding amount of bonds issued stood at NT\$7,113.5 billion, an increase of NT\$495.3 billion or 7.48 percent from the previous year-end. In the secondary market, annual transactions totaled NT\$97,809.1 billion, contracting by 8.0 percent over the previous year. While all quasi-money market funds in Taiwan had already been transformed to money market funds by the end of 2010, leaving only one fixed income fund in the market, the remaining fund's size shrank to NT\$3.3 billion at the end of 2011.

## Continuous Increase in Government Bond Issuance

In 2011, central government bond issuance in support of fiscal funding needs totaled NT\$620.0 billion, an increase of NT\$ 10.0 billion or 1.64 percent compared with the previous year.

Issues of 5 -year and 10-year government bonds were both NT $\$ 150.0$ billion, and the issuance of 20-year government bonds was NT\$ 160.0 billion. In addition, there were also 2-year bond issuances worth NT\$40.0 billion and 30-year bond issuances worth NT\$ 120.0 billion to meet market demand.

In terms of issuing rates, the weighted average issuing rate on 30 -year bonds declined to 1.972 percent due to supply/demand factors and large investment by life insurance companies. The weighted average issuing rates on 2 -year and 5 -year bonds were 0.791 percent and 1.107 percent,
respectively, both higher than the previous year due to expectations of rate increases.

The government of Kaohsiung special municipality issued construction bonds in October and December with a combined amount of NT\$20.0 billion to repay maturing debts.

In sum, government bond issuance amounted to NT\$640.0 billion in 2011, an increase of NT\$ 10.7 billion or 1.70 percent from 2010. The outstanding amount continued to rise to NT\$4,644.4 billion at year-end, an increase of NT\$310.1 billion or 7.15 percent from the previous year-end.

## Continued Growth in Corporate Bond Issuance

During the first half of 2011, optimistic economic prospects and rising inflation risks lifted expectations for policy rate hikes, prompting corporations, as well as financial institutions, to issue bonds for funding. In the second half of the year, corporate bond issues grew faster as market rates trended to relative lows owing to the heightened debt crisis in Europe. For the year, corporate bond issues amounted to NT\$396.7 billion, increasing by NT\$67.0 billion or 20.32 percent from a year before.

State-owned enterprises issued bonds worth NT\$ 109.0 billion, making up 30 percent of total corporate bond issuance in 2011. In the private sector, Formosa Plastics Group topped the list with its yearly bond issuance reaching NT\$48.0 billion, while the respective bond issues of shipping firms and financial holdings companies exceeded NT\$30.0 billion.

Issues and Outstanding Values in Bond Market by Category


[^0]Supported by ample market liquidity, the weighted average issuing rates on 3-year, 5-year, 7year and 10-year corporate bonds fell from the previous year to 1.4487 percent, 1.4075 percent, 1.7499 percent, and 1.6677 percent, respectively. At the end of 2011 , the outstanding amount of corporate bonds was NT\$ $1,351.0$ billion, rising by NT\$ 148.8 billion or 12.38 percent from the previous year-end.

## Moderation in Bank Debenture Growth

A total of 24 financial institutions issued bank debentures in 2011 . In addition to subordinated debt issuance to bolster capital adequacy, some financial institutions increased senior debt issues prior to the introduction of new Basel liquidity risk management rules. For the year as a whole, bank debenture issuance totaled NT\$194.7 billion, which was NT\$36.2 billion or 22.84 percent higher than the previous year.

The largest share of bank debenture issues was constituted by those with an issuing amount of NT\$ 10.0 billion and above, making up more than 75 percent of total issuance. Moreover, 7-year bank debentures continued to be most favored in the market, with an issuance share of 62.94 percent.

However, unsatisfying credit ratings of some banks that issued 7 -year debt led the weighted rate to average 1.692 percent, 0.09 percentage points higher than the 1.602 percent issuing rate of 10-year debt. At the end of 2011, the outstanding amount of bank debentures was NT\$900.4 billion, growing by NT $\$ 8.6$ billion or 10.37 percent from the end of the previous year.

## Significant Decline in Asset Securitization

In 2011, a new asset-backed security worth NT\$5.0 billion was issued. However, revolving issuance declined significantly as several financial asset securitization products were not renewed at maturity, thus dragging the amount of total issues of asset-backed securities lower by NT\$94.3 billion or 36.72 percent less than 2010 to NT\$ 162.5 billion. At the end of 2011, the outstanding amount of asset securitization stood at NT\$ 178.3 billion, a decrease of NT\$38.5 billion or 17.76 percent compared to the previous year-end.

## Lower Foreign Bond Issuance

In terms of issuance of foreign and international bonds, new issues were nil in 2011. At the end of the year, the outstanding amount was NT\$39.4 billion, a decline of NT\$ 13.7 billion or 25.80 percent less than the previous year-end.

## Bond Transactions and Yields

The yield on benchmark 10-year government bonds edged down from a year-opening high of

Yield Curve of Central Government Bonds


Source: GreTai Securities Market.

Yield Structure of Central Government Bonds with Different Maturities


Source: GreTai Securities Market
1.5260 percent because of a stabilizing global bond market and TAIEX stock selloffs by foreign investors. Towards March, as a result of the impacts of the Middle East geo-political tension and the Japanese earthquake and its ensuing nuclear crisis, bond markets gained support to end the first quarter of 2011 with a yield of 1.3493 percent.

During the second quarter, ample market liquidity and short-term foreign capital inflows limited bond yield rises following the Bank's policy rate hike. Nonetheless, European debt concerns resurfaced around mid-June and added more uncertainties to the global economic outlook, reducing the 10 year bond yield to end the month at 1.5087 percent.

Adverse factors in the third quarter, including the aggravated European debt crisis and the US credit rating downgrade by Moody's, triggered a panic global stock market slump. Investors turned to bond markets for safety, causing the 10-year bond yield to descend.

Although the European debt crisis loomed large again in the fourth quarter with heightened risks to the global economy, investor demand for safety was more subdued. Therefore, the 10-year bond yield recorded a similar but more moderate downtrend to close the year at 1.2856 percent, 0.24 percentage points lower than the start of the year.

For the year 2011, yields on government bonds in every maturity range averaged lower than the previous year. Long-term and short-term yield spreads continued to narrow and the yield curve was more flattened when compared with the previous year.

In 2011, total bond transactions contracted by NT\$8,508.9 billion or 8.0 percent from the previous year to NT\$97,809.1 billion. Of the components, outright transactions decreased by NT\$15,794.8 billion or 37.03 percent over last year. However, repo transactions increased by NT\$7,285.9 billion or
11.44 percent. By type of bonds, government bonds accounted for more than 80 percent of total bond transactions with an annual trading of NT\$81,961.0 billion. Corporate bonds came in second at NT\$ 14,822.3 billion. Bank debentures, asset-backed securities, and foreign bonds each made up marginal shares of less than 2 percent in total transactions, with their respective annual trading reaching NT\$ $1,676.7$ billion, NT\$ 152.3 billion, and NT\$61.7 billion.

## Bond Transactions in the Over-the-Counter Market

| Year/ Month | Total | Outright Transactions |  | Repurchase Agreement Transactions |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Amount | Share (\%) | Amount | Share (\%) |
| 2009 | 97,547.5 | 39,404.7 | 40.4 | 58,142.8 | 59.6 |
| 2010 | 106,318.0 | 42,651.6 | 40.1 | 63,666.4 | 59.9 |
| 2011 | 97,809.1 | 26,856.8 | 27.5 | 70,952.3 | 72.5 |
| 2011/1 | 8,842.2 | 2,735.5 | 30.9 | 6,106.6 | 69.1 |
| 2 | 6,475.8 | 2,041.8 | 31.5 | 4,433.9 | 68.5 |
| 3 | 9,632.6 | 2,860.7 | 29.7 | 6,771.9 | 70.3 |
| 4 | 7,315.0 | 1,746.7 | 23.9 | 5,568.4 | 76.1 |
| 5 | 8,354.2 | 2,306.0 | 27.6 | 6,048.2 | 72.4 |
| 6 | 8,503.8 | 2,543.2 | 29.9 | 5,960.6 | 70.1 |
| 7 | 8,301.0 | 2,331.6 | 28.1 | 5,969,4 | 71.9 |
| 8 | 9,145.8 | 2,583.9 | 28.3 | 6,562.0 | 71.7 |
| 9 | 8,722.0 | 2,967.2 | 34.0 | 5,754.8 | 66.0 |
| 10 | 7,455.6 | 1,873.5 | 25.1 | 5,582.1 | 74.9 |
| 11 | 7,528.5 | 1,486.1 | 19.7 | 6,042.4 | 80.3 |
| 12 | 7,532.6 | 1,380.6 | 18.3 | 6,152.0 | 81.7 |

Source: Taiwan Securities Exchange \& GreTai Securities Market.

Turnover in Bond Market by Category

| Unit: NT\$ Billion |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year/ Month | Total | TWSE Market Corporate Bonds (Convertible) | Subtotal | GovemmentBonds | Corporate Bonds |  | Bank <br> Debentures | Beneficiary Securities | Foreign \& int'I Bonds |
|  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  | Nonconvertible | Convertible |  |  |  |
| 2009 | 97,547.5 | - | 97,547.5 | 95,993.3 | 480.4 | 861.1 | 152.5 | 0.1 | 60.1 |
| 2010 | 106,318.0 | - | 106,318.0 | 95,211.4 | 8,405.5 | 1,155.6 | 1,361.8 | 123.3 | 60.5 |
| 2011 | 97,809.1 | - | 97,809.1 | 81,096.1 | 12,820.8 | 2,001.5 | 1,676.7 | 152.3 | 61.7 |
| 2011/1 | 8,842.2 | - | 8,842.2 | 7,576.6 | 964.4 | 154.4 | 127.0 | 11.3 | 8.5 |
| 2 | 6,475.8 | - | 6,475.8 | 5,615.4 | 658.6 | 111.2 | 78.9 | 6.9 | 4.8 |
| 3 | 9,632.6 | - | 9,632.6 | 8,216.7 | 1,020.0 | 198.6 | 176.2 | 16.6 | 4.5 |
| 4 | 7,315.0 | - | 7,315.0 | 6,058.0 | 938.6 | 164.8 | 142.1 | 9.3 | 2.2 |
| 5 | 8,354.2 | - | 8,354.2 | 7,060.4 | 944.1 | 167.1 | 161.0 | 8.5 | 13.1 |
| 6 | 8,503.8 | - | 8,503.8 | 7,146.7 | 1,013.9 | 181.1 | 140.6 | 19.4 | 2.1 |
| 7 | 8,301.0 | - | 8,301.0 | 6,810.2 | 1,131.0 | 209.3 | 130.7 | 11.0 | 8.8 |
| 8 | 9,145.8 | - | 9,145.8 | 7,523.3 | 1,226.9 | 220.6 | 153.5 | 14.9 | 6.6 |
| 9 | 8,722.0 | - | 8,722.0 | 7,242.0 | 1,146.2 | 182.6 | 134.6 | 13.3 | 3.3 |
| 10 | 7,455.6 | - | 7,455.6 | 5,994.1 | 1,179.1 | 140.4 | 131.1 | 8.5 | 2.4 |
| 11 | 7,528.5 | - | 7,528.5 | 5,923.0 | 1,305.4 | 135.7 | 146.5 | 15.5 | 2.4 |
| 12 | 7,532.6 | - | 7,532.6 | 5,929.7 | 1,292.6 | 135.7 | 154.5 | 17.1 | 3.0 |

[^1]
[^0]:    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
    Banking Bureau, Financial Supervisory Commission, Executive Yuan
    Department of Foreign Exchange, CBC

[^1]:    Source: Taiwan Securities Exchange \& GreTai Securities Market.

