

6. Bond Market

The total volume of bond issuance displayed a downtrend for the year 2022. New issues of bonds reached NT\$1,652.7 billion, falling significantly by NT\$1,037.9 billion over the previous year. At the end of 2022, the total outstanding of bonds issued amounted to NT\$16,319.2 billion, an increase of NT\$372.5 billion or 2.34% from the previous year end.

In order to support debt refinancing operations of the Central Government Debt Service Fund and to raise funds for the central government general budget and special budget, central government bond issuance for 2022 stood at NT\$520.1 billion, dropping by NT\$96.9 billion from the previous year.

Issuance of corporate bonds in the year amounted to NT\$473.1 billion, a substantial decrease of NT\$250.6 billion from a year before, mainly because the rise in market rates weighed on corporations' willingness to issue bonds.

Bank debenture issuance totaled NT\$148.9 billion, a rise of NT\$13.7 billion compared to 2021, primarily because banks increased the issuance of subordinated bank debentures in order to strengthen their capital bases so as to improve their capital adequacy ratios.

In 2022, NT dollar-denominated foreign bonds issued in Taiwan by foreign institutions reached NT\$10.9 billion, an increase of NT\$300 million from 2021. Meanwhile, foreign currency-denominated international bonds issued in Taiwan by foreign institutions decreased by NT\$643.7 billion over the previous year to NT\$493.9 billion.

In the secondary market, the policy rate hikes by the US Fed pushed up US Treasury yields, leading to an upswing in Taiwan government bond yields. The yield on 10-year government bonds averaged 1.09% in 2022, 65 basis points higher than the previous year.

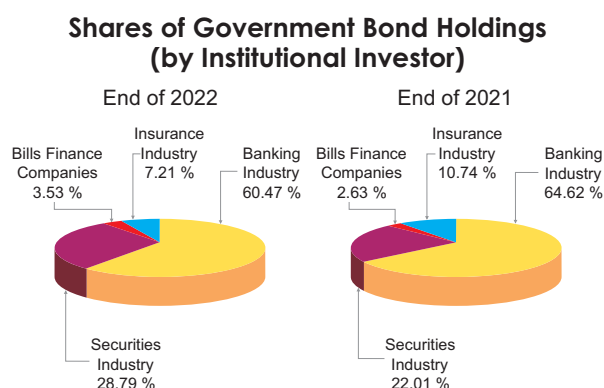
Furthermore, annual transactions stood at NT\$35,404.9 billion, declining by NT\$733.9 billion compared to the previous year, mainly because the rise in interest rates on repurchase agreement (repo) transactions of government bonds was larger than that in government bond yields, resulting in a less vibrant bond market as profits from spread trading narrowed.

Decrease in Government Bond Issuance

To support debt refinancing operations of the Central Government Debt Service Fund and to raise funds for the central government general budget and special budget, central government bond issuance totaled NT\$520.1 billion in 2022, sliding by NT\$96.9 billion compared to a year ago. Government bonds were available with various maturity periods from 2 years, 5 years, 10 years, 20 years, to 30 years.

Broken down by institutional investor, bonds held by the banking industry accounted for the largest share at 60.47%, and the securities industry came in second with a share of 28.79%. The banking industry and the insurance industry held smaller shares of bonds than a year earlier as these industries increased their external investment positions.

As of the end of 2022, the total outstanding of central government bond issuance stood at NT\$5,799.5 billion, rising by NT\$125.1 billion or 2.20% compared to 2021.



Source: Department of the Treasury, CBC.

In terms of bonds issued by governments of special municipalities, new issues were nil in 2022. However, as part of their bonds, worth NT\$14.2 billion, were redeemed mid-year, the outstanding amount of bonds issued by governments of special municipalities at the end of the year decreased by 8.64% to NT\$150.7 billion from the previous year end.

Marked Slide in Corporate Bond Issuance

Corporate bonds refer to NT dollar- or foreign currency-denominated bonds issued in Taiwan by domestic corporations. In 2022, the issuing amount of corporate bonds stood at NT\$473.1 billion,

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		Beneficiary Securities**		Foreign Bonds		Int'l Bonds	
	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding	Issues	Outstanding
2020	3,394.9	14,784.7	535.0	5,524.5	40.5	100.0	842.5	2,592.8	192.0	1,255.7	0.0	5.3	21.5	44.6	1,763.3	5,261.8
2021	2,690.6	15,946.7	617.0	5,674.5	66.6	164.9	723.7	2,983.5	135.2	1,234.0	0.0	5.3	10.6	51.6	1,137.5	5,833.0
2022	1,652.7	16,319.2	520.1	5,799.5	0.0	150.7	473.1	3,124.8	148.9	1,255.4	5.9	11.2	10.9	55.6	493.9	5,921.9
2022/ 1	284.3	16,111.9	53.0	5,702.5	0.0	164.9	41.3	3,006.3	0.0	1,231.0	0.0	5.3	0.0	51.5	190.0	5,950.5
2	151.1	16,154.0	60.0	5,722.5	0.0	164.9	7.0	3,003.5	1.5	1,230.0	0.0	5.3	0.0	51.4	82.6	5,976.4
3	187.0	16,121.2	46.4	5,688.9	0.0	164.9	38.8	3,025.8	27.5	1,249.4	0.0	5.3	0.0	51.3	74.4	5,935.7
4	136.8	16,121.3	55.0	5,693.9	0.0	164.9	45.6	3,037.6	4.4	1,251.5	5.9	11.2	8.0	59.3	18.0	5,903.0
5	79.5	16,111.1	25.0	5,688.9	0.0	164.9	35.4	3,050.7	7.4	1,252.2	0.0	11.2	0.5	56.3	11.3	5,886.9
6	122.9	16,155.3	55.0	5,743.9	0.0	161.6	46.0	3,059.9	13.7	1,240.0	0.0	11.2	0.5	56.2	7.7	5,882.5
7	134.5	16,219.6	30.0	5,773.9	0.0	161.6	39.4	3,061.4	22.8	1,260.3	0.0	11.2	0.0	56.2	42.4	5,895.0
8	144.3	16,252.8	30.0	5,763.9	0.0	161.6	84.4	3,104.3	25.3	1,273.5	0.0	11.2	0.5	56.4	4.1	5,882.0
9	103.3	16,217.7	50.7	5,739.5	0.0	161.6	21.6	3,091.5	12.3	1,268.2	0.0	11.2	0.5	56.6	18.3	5,889.1
10	141.0	16,283.5	30.0	5,744.5	0.0	161.6	65.9	3,127.6	10.1	1,270.6	0.0	11.2	0.4	56.4	34.7	5,911.5
11	92.6	16,313.2	55.0	5,769.5	0.0	161.6	21.3	3,126.0	7.6	1,269.0	0.0	11.2	0.4	56.0	8.4	5,919.9
12	75.2	16,319.2	30.0	5,799.5	0.0	150.7	26.6	3,124.8	16.4	1,255.4	0.0	11.2	0.1	55.6	2.1	5,921.9

Notes: * Referring to bonds issued by governments of special municipalities.

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

Sources: 1. *Financial Statistics Monthly* (February 2023), CBC.

2. Banking Bureau, Financial Supervisory Commission.

3. Department of Foreign Exchange, CBC.

decreasing by NT\$250.6 billion from 2021, mainly because corporations' willingness to issue bonds weakened owing to the rise in market interest rates.

In terms of bond maturities, 5-year corporate bonds accounted for a dominant share of the issuance at 56.07%, while 3-year bonds came in second with a share of 21.22%. At the end of 2022, the outstanding amount of corporate bonds grew by NT\$141.3 billion or 4.74% to NT\$3,124.8 billion over the previous year.

Growth in Bank Debenture Issuance

In 2022, domestic banks issued bank debentures with an issuance amount of NT\$148.9 billion, up by NT\$13.7 billion compared to a year ago, primarily because banks increased the issuance of subordinated bank debentures in order to strengthen their capital bases so as to improve their capital adequacy ratios.

In respect of the maturity of new issues, perpetual debentures made up the largest share of total issuance at 39.74%, followed by 7-year bonds with a share of 20.93%.

At the end of the year, the outstanding amount of bank debentures totaled NT\$1,255.4 billion, an increase of NT\$21.4 billion or 1.74% from a year before.

Increase in Asset Securitization Products

New issues of asset securitization products totaled NT\$5.9 billion in 2022. The outstanding amount of asset securitization climbed by NT\$5.9 billion or 111.01% from the previous year end to NT\$11.2 billion.

Uptick in Foreign Bond Issuance

Foreign bonds are defined as NT dollar-denominated corporate bonds issued in Taiwan by foreign enterprises. The foreign bonds currently in circulation are corporate bonds issued by offshore companies listed on the Taiwan Stock Exchange or the Taipei Exchange (the over-the-counter market). For the year 2022, foreign bond issuance grew by NT\$300 million from a year before to NT\$10.9 billion. At the end of the year, the outstanding amount of foreign bonds reached NT\$55.6 billion, increasing by NT\$4.0 billion or 7.81% over the previous year end.

Drop in International Bond Issuance

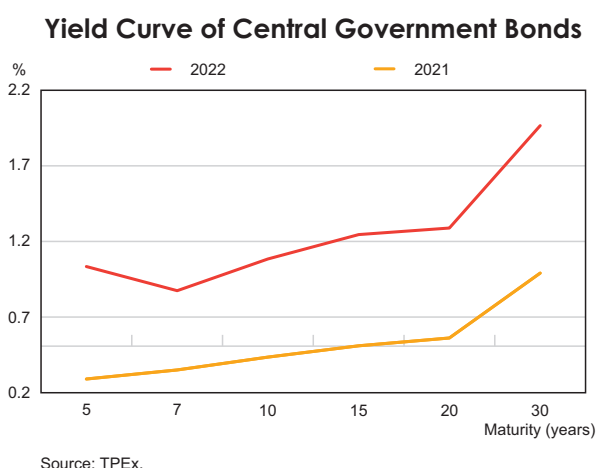
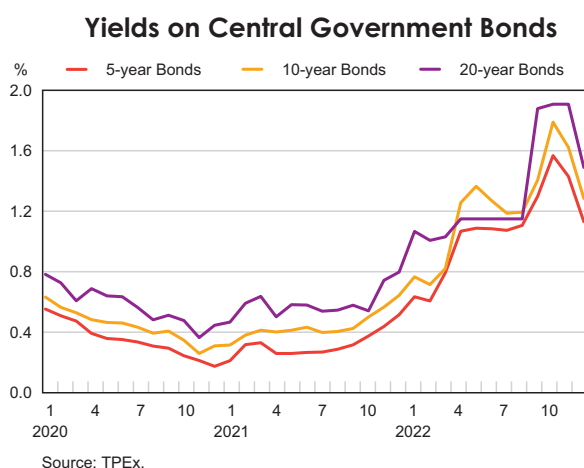
International bonds currently refer to foreign currency-denominated corporate bonds issued in Taiwan by foreign institutions. During 2022, issuance of international bonds fell significantly by NT\$643.7 billion from a year before to NT\$493.9 billion. The contraction was primarily because an uptrend in US dollar-denominated market rates led to a decrease in international bond issuance by foreign institutions.

In respect of currency composition, the majority of total international bond issuance went for US dollar-denominated bonds with a share of 93.25%, followed by Australian dollar-denominated bonds at 3.10%. At the end of the year, the outstanding amount of international bonds stood at NT\$5,921.9 billion, representing a year-on-year increase of NT\$89.0 billion or 1.53%.

Uptrend in Average Government Bond Yields and Decline in Transactions

For the year 2022, substantial policy rate hikes by the US Fed raised US Treasury yields, while the Bank's several policy rate rises also sent Taiwan government bond yields higher. Nevertheless, Taiwan government bond yields recorded a smaller increase than US bond yields owing to ample domestic liquidity. Looking at the volume-weighted average yields in 2022, the 10-year government bond yield rose to 1.09%, 65 basis points higher than the 0.44% of the previous year.

Among government bonds of the other maturity ranges, average yields on 5-year, 20-year, and 30-year bonds moved up by 75, 73, and 98 basis points, respectively, over the previous year.



With respect to transaction volume, annual transactions contracted by NT\$733.9 billion or 2.03% to NT\$35,404.9 billion, primarily because the rise in interest rates on repo transactions of government bonds was larger than that in government bond yields, resulting in narrowing profits from spread trading and thus a less vibrant bond market.

By type of bonds, the majority of total bond transactions went for corporate bonds with a share of 53.60% and an annual trading volume of NT\$18,975.6 billion. The second most actively traded were government bonds, contributing to 37.11% of total transactions with an annual trading volume of NT\$13,137.8 billion. Bank debentures came in third, accounting for a smaller share of 5.59% with an annual trading volume of NT\$1,980.0 billion.

Turnover in Bond Market by Category

Unit: NT\$billion

Year/ Month	Total	Government Bonds	Corporate Bonds		Bank Debentures	Beneficiary Securities	Foreign Bonds	Int'l Bonds
			Nonconvertible	Convertible				
2020	52,504.7	28,776.6	17,254.7	1,297.6	2,891.9	2.1	434.9	1,846.9
2021	36,138.8	15,557.9	15,807.2	1,348.2	2,024.9	0.5	393.0	1,007.0
2022	35,404.9	13,137.8	17,473.1	1,502.5	1,980.0	26.7	537.3	747.5
2022/ 1	3,227.9	1,401.5	1,410.0	95.7	138.0	1.0	37.3	144.3
2	2,558.7	970.3	1,240.5	90.9	126.4	1.0	36.2	93.5
3	3,434.5	1,385.4	1,571.4	133.9	213.7	1.6	46.8	81.8
4	2,823.6	986.6	1,450.7	128.5	138.6	5.9	47.4	65.9
5	2,799.0	960.3	1,467.4	124.8	142.0	3.0	46.7	54.8
6	2,981.1	1,001.1	1,580.6	153.0	164.3	2.1	41.6	38.6
7	2,730.1	944.5	1,423.6	115.7	156.5	3.5	42.2	44.2
8	3,101.2	1,195.7	1,485.8	136.1	193.0	2.1	47.0	41.5
9	3,110.0	1,187.6	1,474.2	133.1	202.5	2.3	49.1	61.1
10	2,924.7	1,015.0	1,528.4	123.5	175.6	2.3	43.2	36.8
11	2,655.4	962.2	1,325.2	123.4	143.3	0.5	47.9	52.9
12	3,058.6	1,127.6	1,515.3	143.9	186.3	1.5	52.0	32.0

Source: TPEX.