

## 6. Bond Market

For the year 2018, the total volume of bond issuance displayed a downtrend. New issues of bonds amounted to NT\$1,930.5 billion, decreasing by NT\$191.6 billion or 9.03% over the previous year. At the end of 2018, the total outstanding of bonds issued stood at NT\$13,564.3 billion, rising by NT\$904.4 billion or 7.14% from the previous year end.

Central government bond issuance for 2018 totaled NT\$347.3 billion, falling by NT\$52.7 billion or 13.17% from the previous year, mainly because the increase in tax revenues reduced fiscal funding needs.

Issuance of corporate bonds for 2018 posted an increase of NT\$26.6 billion or 6.90% to NT\$412.3 billion. The rise was primarily because corporations issued new bonds in order to roll over old ones and repay short-term loans.

In terms of bank debentures, the main purpose for banks to issue bonds was to strengthen their capital base and meet mid-to long-term operation funding needs. Bank debenture issuance amounted to NT\$231.8 billion for the entire year, increasing by NT\$42.3 billion or 22.31% over the previous year.

In 2018, 116 foreign currency-denominated international bonds were issued in Taiwan by foreign institutions with a total amount of NT\$903.7 billion, contracting by NT\$235.5 billion or 20.67% compared to the previous year. Meanwhile, foreign institutions issued 12 NT dollar-denominated foreign bonds totaling NT\$7.1 billion, down by NT\$0.6 billion or 8.44% over the previous year.

In the secondary market, abundant domestic liquidity and the international oil price slump brought down annual average yields on bonds with different maturities in 2018. For the 10-year government bond, its yield slid by 12 basis points to 0.942%.

In addition, with Taiwan's bond exchange-traded fund (ETF) market growing considerably, surging demand for bonds drove the bond trading volume higher. As a result, annual transactions reached NT\$64,822.1 billion, rising by NT\$3,238.7 billion or 5.26% over the previous year.

### Reduction in Government Bond Issuance

With respect to central government bonds, as tax revenues increased and public debt approached the statutory ceiling, central government bond issuance declined by NT\$52.7 billion or 13.17% from the previous year to NT\$347.3 billion in 2018.

Among the total volume of government bonds issued by the Ministry of Finance, 10-year bonds accounted for the largest share with NT\$145.0 billion, while 5-year bonds came in second

with NT\$90.0 billion. 2-year, 20-year, and 30-year government bonds recorded issuance of NT\$27.3 billion, NT\$45.0 billion, and NT\$40.0 billion, respectively.

The weighted average issuing rates in 2018 on central government bonds with different maturities were all lower than the previous year, reflecting ample market liquidity and a drop in international oil prices. The issuing rate on 20-year bonds registered the largest decrease of 36 basis points, and second was that on 30-year bonds with a decrease of 34 basis points.

In terms of bonds issued by governments of special municipalities, all new bonds in 2018 were issued by the government of Kaohsiung Special Municipality with a total amount of NT\$14.6 billion. At the end of the year, the outstanding amount of bonds issued by governments of special municipalities totaled NT\$43.9 billion, up by NT\$2.3 billion or 5.65% from the previous year end.

### Growth in Corporate Bond Issuance

Corporate bonds refer to NT dollar- or foreign currency-denominated bonds issued in Taiwan by domestic corporations. For the year 2018, the issuing amount of corporate bonds increased by NT\$26.6 billion or 6.90% to NT\$412.3 billion, mainly because corporations issued new bonds in order to roll over old ones and repay short-term loans.

#### 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
2016	2,522.1	11,581.9	563.5	5,542.3	0.0	63.1	286.0	1,898.3	140.1	1,209.5	5.0	97.8	3.0	9.8	1,524.6	2,761.0
2017	2,122.1	12,659.9	400.0	5,594.8	0.0	41.6	385.7	1,938.1	189.5	1,227.3	0.0	95.6	7.7	14.5	1,139.2	3,748.0
2018	1,930.5	13,564.3	347.3	5,558.6	14.8	43.9	412.3	2,023.0	231.8	1,320.2	13.6	104.2	7.1	15.1	903.7	4,499.3
2018/ 1	207.9	12,712.7	25.0	5,504.8	0.0	41.6	43.8	1,945.8	6.8	1,232.7	0.0	95.8	0.0	14.3	132.3	3,877.9
2	209.8	12,852.3	25.0	5,499.9	0.0	41.6	2.4	1,936.1	31.8	1,257.5	0.0	96.0	1.8	16.1	148.8	4,005.3
3	266.8	12,971.8	25.0	5,449.9	0.0	41.6	23.5	1,941.3	53.1	1,291.0	0.0	92.8	0.0	15.9	165.2	4,139.4
4	275.6	13,214.4	25.0	5,474.9	0.0	41.6	18.3	1,936.8	26.5	1,312.8	0.0	92.5	0.0	15.3	205.8	4,340.6
5	222.4	13,358.3	20.0	5,494.9	0.0	41.6	70.2	1,984.1	15.9	1,310.0	0.0	91.6	0.6	15.9	115.7	4,420.2
6	170.0	13,458.7	37.3	5,532.2	0.0	41.6	65.1	1,998.0	9.9	1,308.7	3.0	94.3	0.4	16.1	54.4	4,467.9
7	126.3	13,546.3	25.0	5,557.2	0.0	41.6	56.6	2,027.8	11.5	1,311.6	0.0	94.3	0.6	15.5	32.6	4,498.5
8	76.4	13,557.6	25.0	5,582.2	0.0	41.6	25.5	2,018.2	7.5	1,309.5	0.0	94.3	0.9	13.9	17.5	4,498.0
9	95.9	13,524.1	40.0	5,542.2	0.0	41.6	31.7	2,029.5	19.9	1,312.9	0.0	94.2	0.6	14.1	3.7	4,489.7
10	83.0	13,493.4	25.0	5,513.6	14.8	43.9	20.2	2,024.0	3.8	1,302.6	0.0	94.7	1.0	14.8	18.3	4,499.8
11	97.7	13,521.9	40.0	5,523.6	0.0	43.9	31.0	2,033.0	19.9	1,307.2	0.0	93.5	0.4	14.5	6.4	4,506.3
12	98.8	13,564.3	35.0	5,558.6	0.0	43.9	24.0	2,023.0	25.4	1,320.2	10.6	104.2	0.8	15.1	3.1	4,499.3

Notes: \* Referring to bonds issued by governments of special municipalities.  
 \*\* Including those purchased back by originators for credit enhancement.  
 Sources: 1. *Financial Statistics Monthly*, CBC.  
 2. Banking Bureau, Financial Supervisory Commission.  
 3. Department of Foreign Exchange, CBC.

Regarding bond maturities, the majority of the issuance went for 5-year corporate bonds with a share of 43.92%, followed by 7-year bonds with 22.91%. The six largest corporate bond issuers were Taiwan Power Company, Fubon Life, China Steel Corporation, Hon Hai/Foxconn Technology Group, Far Eastern New Century Corporation, and Taiwan Mobile Co., Ltd., with a combined issuance amount of NT\$145.3 billion, accounting for 35.24% of total issuance.

At the end of 2018, the outstanding amount of corporate bonds totaled NT\$2,023.0 billion, expanding by NT\$84.9 billion or 4.38% from the previous year end.

### **Rise in Bank Debenture Issuance**

For the year 2018, 28 domestic banks issued bank debentures in support of their funding needs, with an issuance amount of NT\$231.8 billion, increasing by NT\$42.3 billion or 22.31% over the previous year. The rise was largely because banks issued new debentures to lock in mid- to long-term funding costs at low levels amidst a low interest rate environment.

The main purpose for banks to issue NT dollar bank debentures was to strengthen their capital base and support mid- to long-term operation funding needs. Subordinated debts made up the lion's share of 64.50% in total issuance.

As for foreign currency bank debentures, the purpose of issuance was to meet mounting demand for foreign currency loans and support mid- to long-term foreign currency funding needs. Therefore, the majority of the issuance went for senior bank debentures with lower issuing rates, amounting to NT\$99.0 billion.

In respect to the maturity of new issues, perpetual debentures made up a dominant 43.73% of total NT dollar bank debenture issuance, while 10-year, 3-year, and 7-year debentures accounted for 14.68%, 11.97%, and 11.63%, respectively.

In 2018, issuance of foreign currency bank debentures was primarily composed of 30-year debentures and perpetual debentures, with respective shares of 92.78% and 7.22%. At the end of the year, the outstanding amount of bank debentures was NT\$1,320.2 billion, expanding by NT\$92.8 billion or 7.56% from the previous year end.

### **Expanding Asset Securitization Products**

New issues of asset securitization products amounted to NT\$13.6 billion for the entire year. The outstanding amount of asset securitization went up by NT\$8.6 billion or 8.94% from the previous year end to NT\$104.2 billion.

## Contraction 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 2018, issuance of foreign bonds totaled NT\$7.1 billion, a decrease of NT\$0.6 billion or 8.44% from a year earlier. At the end of the year, the outstanding amount of foreign bonds stood at NT\$15.1 billion, growing by NT\$0.7 billion or 4.50% over the previous year end.

## Deceleration in International Bond Issuance

International bonds refer to corporate bonds issued in Taiwan by foreign institutions and are currently denominated in foreign currencies. In 2018, international bond issuance fell by NT\$235.5 billion or 20.67% from a year before to NT\$903.7 billion.

The Financial Supervisory Commission (FSC) announced the amendments to the Regulations Governing Foreign Investments by Insurance Companies on November 21, 2018. According to Article 10 of the Regulations, the total foreign investment amount (including investments in international bonds) of an insurer shall not exceed 145% of the insurer's approved foreign investment limit. Furthermore, the aforementioned total amounts of some insurers had nearly reached the limit prior to the promulgation of the amended regulations. Both factors caused demand for international bonds to soften compared to the previous year.

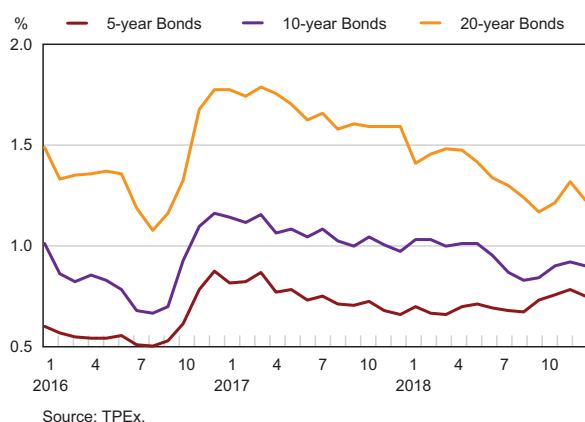
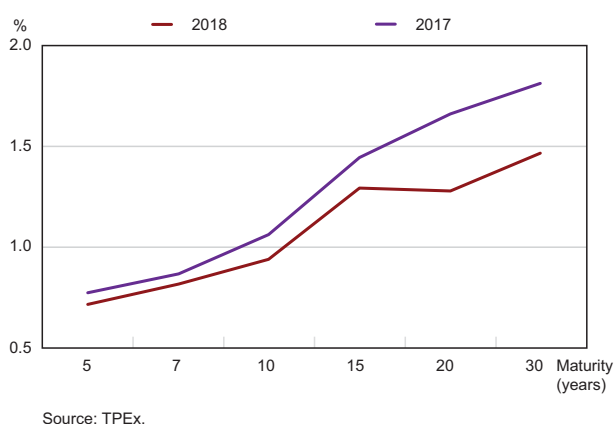
In terms of currency composition, issuance of US dollar-denominated, RMB-denominated, and ZAR-denominated bonds in 2018 stood at NT\$822.1 billion, NT\$79.6 billion, and NT\$0.3 billion, respectively. At the end of the year, the outstanding amount of international bonds reached NT\$4,499.3 billion, an increase of NT\$751.3 billion or 20.04% over the previous year end.

## Downtrend in Average Government Bond Yields yet Uptick in Transactions

In 2018, on account of sufficient domestic liquidity and plunging international oil prices, the 10-year government bond yield moved downward and averaged 0.942% for the entire year, 12 basis points lower than the 1.064% of the previous year.

Compared to the previous year, the average yield curve of central government bonds shifted downward for the year 2018. The average yield on 20-year bonds recorded the biggest decline of 38 basis points over the previous year. Second was that on 30-year bonds with a decrease of 35 basis points. Moreover, average yields on 5-year, 7-year, and 15-year bonds in 2018 dropped by 6, 5, and 15 basis points, respectively, compared to 2017.

With regard to transaction volume, total bond transactions expanded by NT\$3,238.7 billion or 5.26% from the previous year to NT\$64,822.1 billion for the year 2018. The rise was because the growing domestic bond ETF market helped push up demand for bonds.

**Yield on Central Government Bonds with Different Maturities****Yield Curve of Central Government Bonds**

By type of bonds, the majority of total bond transactions went for government bonds with a share of 65.36% and an annual trading volume of NT\$42,369.8 billion. The second most actively traded were corporate bonds, making up 28.60% of total transactions with an annual trading volume of NT\$18,536.3 billion. Bank debentures came in third, contributing to 4.11% of total transactions with an annual trading volume of NT\$2,665.3 billion.

Meanwhile, international bonds, foreign bonds, and asset securitization products made up marginal shares of 1.17%, 0.14%, and 0.02% in total transactions, with their respective annual trading reaching NT\$1,149.7 billion, NT\$88.5 billion, and NT\$12.5 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				
2016	66,817.9	45,243.5	16,546.7	655.3	2,376.9	19.4	29.4	1,946.8
2017	61,583.5	39,532.0	17,202.1	887.2	2,295.8	21.7	57.9	1,586.8
2018	64,822.1	42,369.8	17,553.2	983.1	2,665.3	12.5	88.5	1,149.7
2018/ 1	6,394.2	4,392.1	1,556.2	88.5	190.0	1.3	5.4	160.7
2	3,889.1	2,506.3	1,009.1	61.0	141.9	0.2	8.7	162.0
3	5,711.7	3,825.9	1,377.3	82.8	249.6	1.3	7.9	166.9
4	4,865.1	3,238.9	1,228.0	63.8	228.0	1.2	5.7	99.4
5	5,872.9	3,873.6	1,541.5	77.8	253.3	1.2	8.3	117.1
6	5,509.4	3,503.6	1,572.2	102.0	212.9	1.2	6.8	110.8
7	5,858.1	3,764.6	1,690.1	77.0	264.7	1.2	7.3	53.1
8	5,933.3	3,897.7	1,616.7	88.2	256.9	1.2	7.0	65.6
9	5,047.2	3,303.8	1,396.5	78.5	216.2	0.0	4.7	47.5
10	5,683.6	3,763.6	1,522.3	88.7	234.3	1.2	14.1	59.5
11	5,196.3	3,332.9	1,514.8	76.4	207.5	1.2	5.8	57.8
12	4,861.1	2,966.9	1,528.4	98.4	210.1	1.2	6.8	49.2

Source: TPEX.