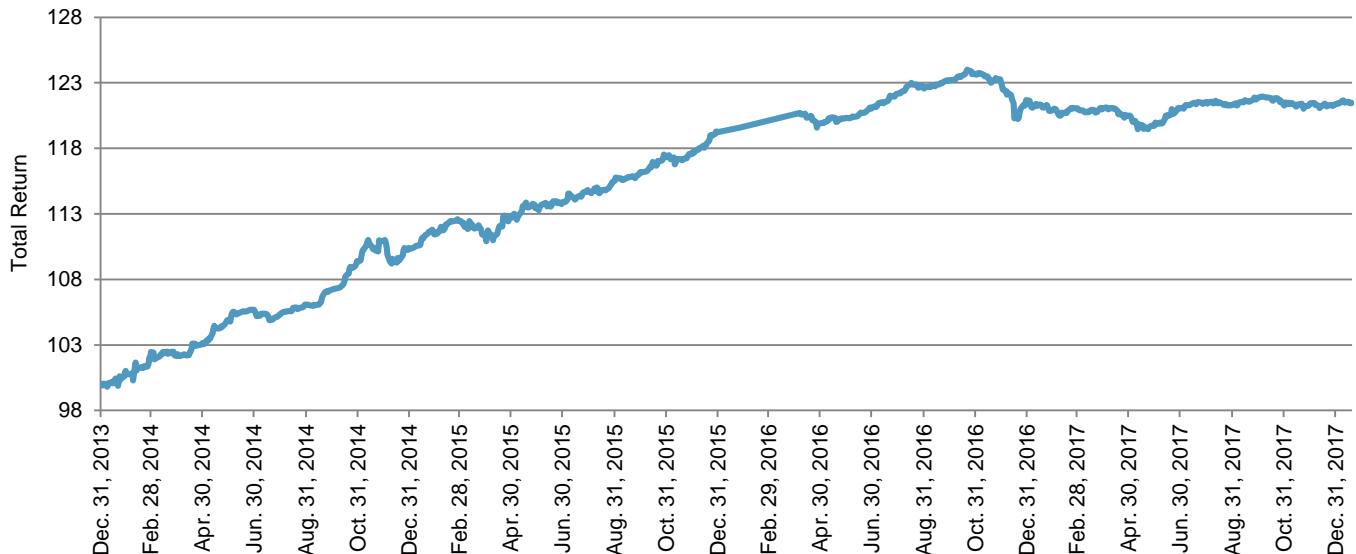


China Bond Market Development: 2017 in Review

Overall, 2017 was a quiet year for the Chinese bond market. As represented by the [S&P China Bond Index](#), the one-year total return was down by 0.29% (see Exhibit 1), contrasting with the strong gains observed in previous years. China's lackluster performance made it the worst-performing country in the Pan Asian bond market in 2017, and it was also the only country that closed the year in negative territory.

Exhibit 1: Total Return Performance of the S&P China Bond Index



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

The launch of the Bond Connect program in July 2017 widened access to China's onshore bond market, bringing positive momentum to the market and helping recover some of the losses seen in the first half. However, deleveraging and liquidity concerns persisted in the second half, and these negative sentiments weighed on the market.

The S&P China Bond Index also underperformed the broad market. The [S&P Global Developed Aggregate Ex-Collateralized Bond Index \(USD\)](#) seeks to track the performance of investment-grade debt issued by sovereign, quasi-sovereign, foreign government, and corporate entities in developed countries, and it delivered a total return of 7.64% in 2017. Specifically for the corporate bond sector,

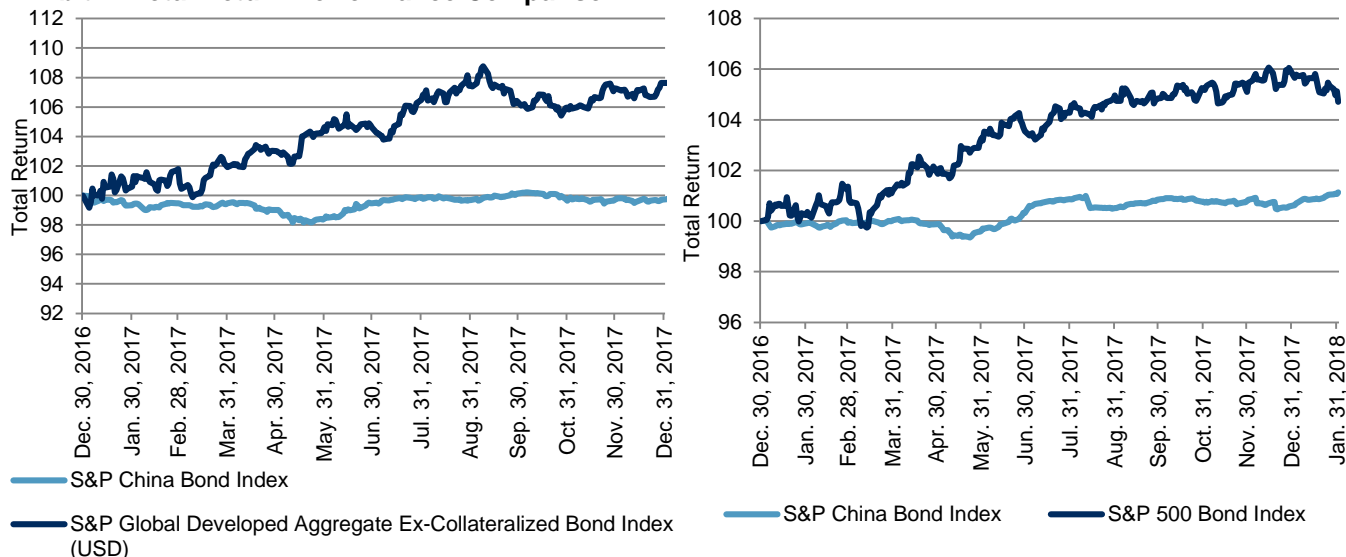
Contributor:

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China had been lagging its U.S. counterpart. The [S&P 500® Bond Index](#) is designed to measure the performance of U.S. corporate bonds issued by the constituents of the iconic [S&P 500](#), and it rose 6.05% last year, compared with the 0.58% gain for the [S&P China Corporate Bond Index](#).

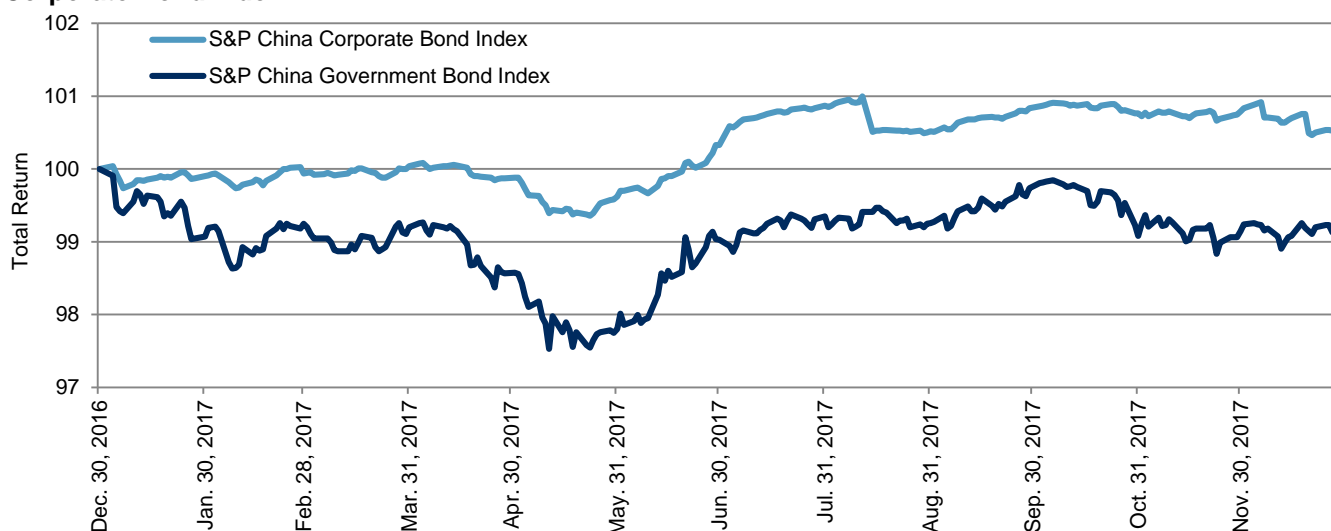
Exhibit 2: Total Return Performance Comparison



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Looking into the China bond market, the [S&P China Government Bond Index](#) dropped 0.75% in 2017, underperforming the S&P China Corporate Bond Index, which gained 0.58% during the same period (see Exhibit 2).

Exhibit 3: Total Return Performance of the S&P China Government Bond Index and the S&P China Corporate Bond Index



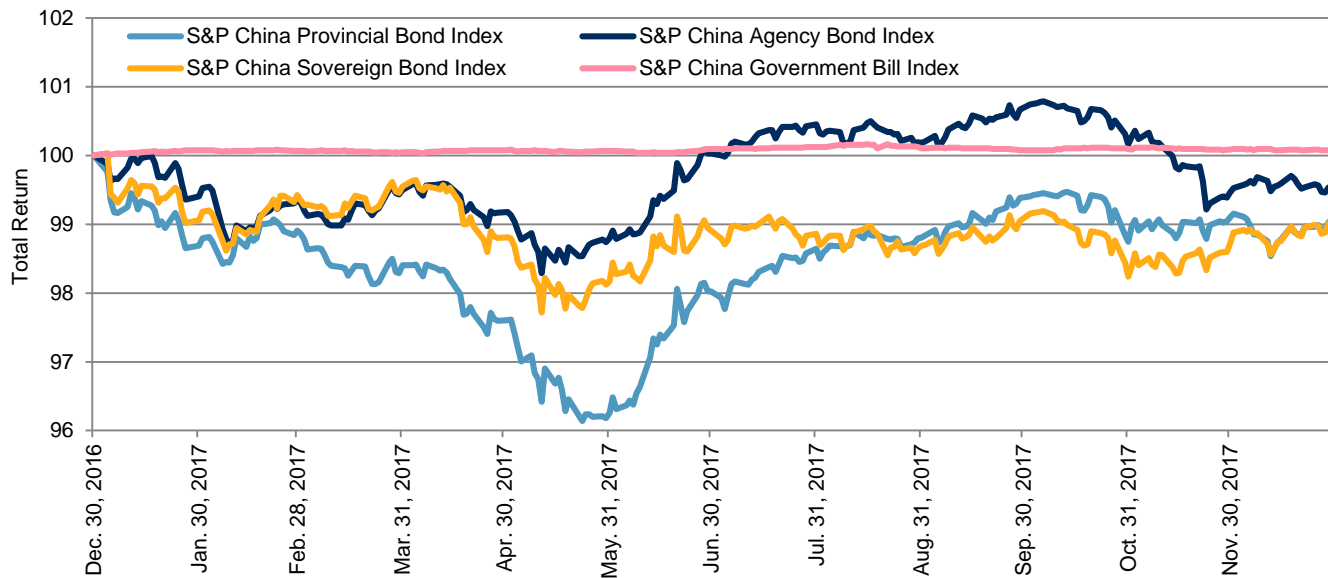
Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Among the government bonds, the [S&P China Provincial Bond Index](#) was the most volatile subindex; it dropped as much as 4% before closing the year down 0.97%. The [S&P China Agency Bond Index](#),

which tracks the three policy bank bonds, was the most resilient subindex and fell only 0.46%. The [S&P China Sovereign Bond Index](#) remained in negative territory throughout the year, falling 0.98%.

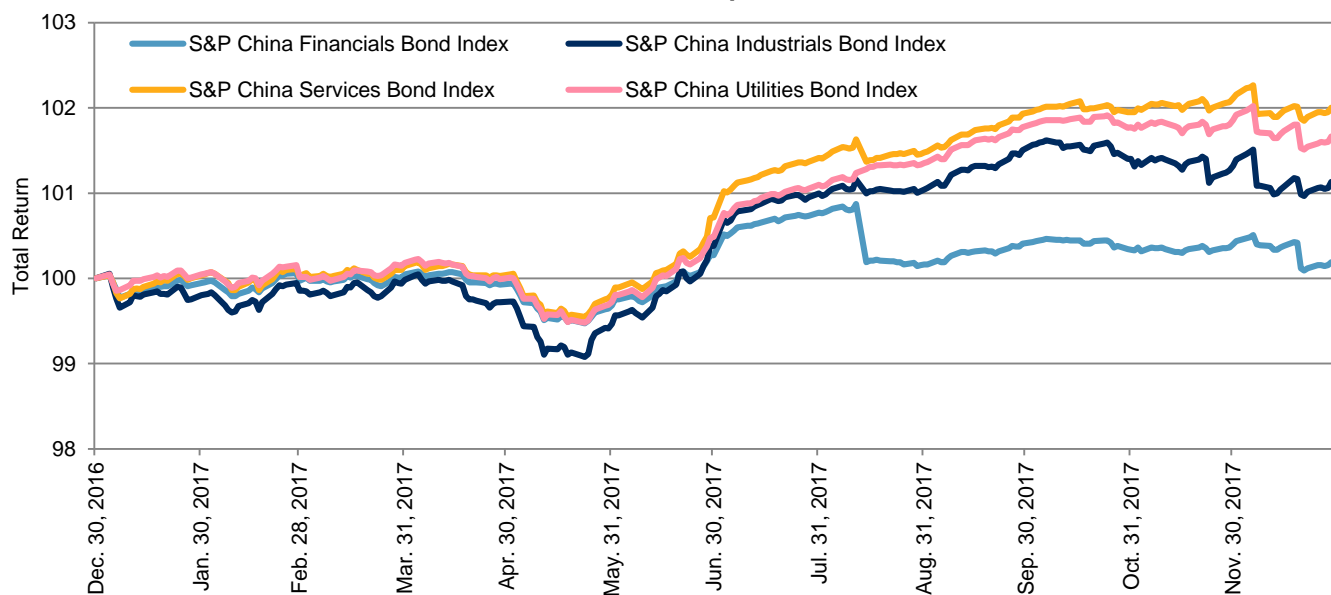
While all corporate sector-level indices were up in 2017, the [S&P China Services Bond Index](#) was the biggest winner and rose 2.0%, followed by the [S&P China Utilities Bond Index](#), which gained 1.66%. The [S&P China Financials Bond Index](#) only climbed 0.19%, reflecting that the tighter liquidity and higher funding cost could have been a drag on the financials sector.

Exhibit 4: Total Return Performance of the S&P China Government Bond Subindices



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Exhibit 5: Total Return Performance of the S&P China Corporate Bond Subindices



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

The market value tracked by the [S&P China Bond Index](#) rose 13% last year; there were a total of 9,933 constituents with CNY 56 trillion. The growth in size was led by government bonds, which advanced 17%, compared with the mere 4% increase of corporate bonds over the same period, a consistent trend since 2014. Meanwhile, the corporate bond market expansion, which started in 2007, has been slowing down, reflecting the industry consolidation and possibly also higher financing costs due to surging yield. Exhibit 5 shows market value and growth in the past 10 years.

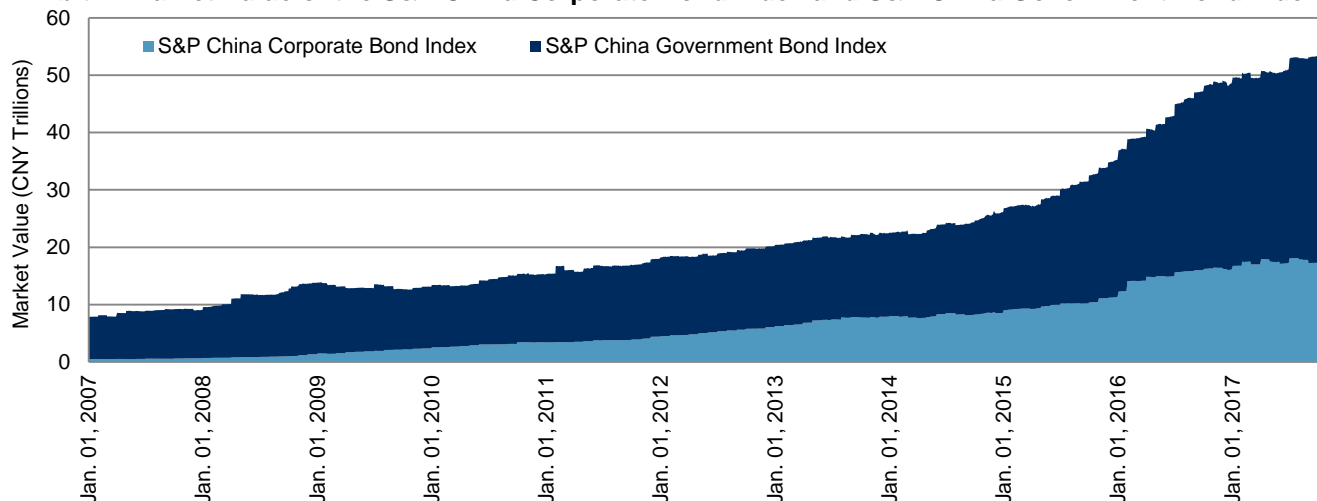
Exhibit 6: Market Value and Growth of the S&P China Corporate Bond Index and the S&P China Government Bond Index

YEAR	S&P CHINA CORPORATE BOND INDEX		S&P CHINA GOVERNMENT BOND INDEX	
	MARKET VALUE (CNY)	YEAR-OVER-YEAR GROWTH (%)	MARKET VALUE (CNY)	YEAR-OVER-YEAR GROWTH (%)
Jan. 1, 2007	526,611,669,273	-	7,339,713,137,431	-
2007	704,928,527,738	34	8,832,023,583,924	20
2008	1,480,886,759,560	110	12,340,497,264,370	40
2009	2,542,702,372,265	72	10,874,637,281,671	-12
2010	3,404,777,591,384	34	11,949,419,996,210	10
2011	4,468,096,411,039	31	13,774,919,866,824	15
2012	6,247,760,913,562	40	14,164,360,689,580	3
2013	7,978,322,484,406	28	14,562,497,337,534	3
2014	9,019,883,324,876	13	17,795,043,823,911	22
2015	12,286,621,190,946	36	24,734,101,768,687	39
2016	16,795,794,082,042	37	32,945,576,442,753	33
2017	17,501,573,200,000	4	38,612,803,000,000	17

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

Despite the slowdown in corporate bond issuances, they maintained their overall exposure and represented 31% of the China bond market as of Dec. 29, 2017 (see Exhibit 6).

Exhibit 7: Market Value of the S&P China Corporate Bond Index and S&P China Government Bond Index



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

Among the government bonds, provincial bonds recorded significant growth, despite the volatility in performance; 801 provincial bonds with a total market value of CNY 4.21 trillion were added to the [S&P](#)

[China Provincial Bond Index](#). Its market value increased 39% to CNY 13.6 trillion in 2017. Among the new issuances, the largest issuers were the Jiangsu, Sichuan, and Shandong provinces. The top 10 new issuers in 2017 are listed in Exhibit 7.

Exhibit 8: Top 10 New Issuers in the S&P Provincial Bond Index in 2017

ISSUER	COUNT	TOTAL MARKET VALUE (CNY)
Jiangsu Province, People's Government of	33	287,844,430,000
Sichuan Province, People's Government of	60	278,494,000,000
Shandong Province, People's Government of	27	217,634,000,000
Guizhou Province, People's Government of	30	209,896,920,000
Hunan Province, People's Government of	12	195,540,000,000
Henan Province, People's Government of	27	191,881,190,000
Yunnan Province, People's Government of	28	186,300,000,000
Guangdong Province, People's Government of	37	176,844,390,000
Guangxi Zhuang Autonomous Region, People's Government of	33	165,081,520,000
Jiangsu Province, People's Government of	33	287,844,430,000

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

For corporate bonds, financials was the only sector that recorded expansion, while the utilities, services, and industrials sectors contracted. The utilities sector, represented by the [S&P China Utilities Bond Index](#), had a drop in market value of 28% to CNY 916 billion, reflecting the impact of China's power sector reform. According to the index, there were a total of 199 bonds with a market value of CNY 583 billion that matured last year. Considering the matured and issued profiles, Exhibit 8 displays the top 10 issuers that resulted in negative net flows. The top three were State Grid Corp, China Huadian Corp, and China Datang Corp (note that the first two did not have any issuance in 2017). Even for those issuers that managed to sell new bonds, the sizes were a fraction of what had matured. Note that while the State Grid Corp of China didn't issue any CNY bonds last year, it raised money with a USD multi-tranche bond in the U.S. market. With the higher local financing cost and strengthening of CNY, a rising trend of Chinese corporates tapping into USD bond market has been observed.

Exhibit 9: Top 10 Issuers That Resulted in Negative Net Flows in the S&P China Utilities Bond Index

RANK	UTILITIES ISSUER	MATURED IN 2017 (CNY)	ISSUED IN 2017 (CNY)	NET IN 2017 (CNY)
1	State Grid Corp of China	92,500,000,000	-	-92,500,000,000
2	China Huadian Corp	38,000,000,000	-	-38,000,000,000
3	China Datang Corp	35,000,000,000	4,000,000,000	-31,000,000,000
4	China Guodian Corp	40,500,000,000	10,000,000,000	-30,500,000,000
5	China United Network Communications Ltd	36,000,000,000	9,000,000,000	-27,000,000,000
6	State Power Investment Corp	55,500,000,000	31,500,000,000	-24,000,000,000
7	China United Network Communications Corp Ltd	17,000,000,000	-	-17,000,000,000
8	China Telecom Corp Ltd	19,000,000,000	6,000,000,000	-13,000,000,000
9	Huaneng Lancang River Hydropower Co Ltd	13,000,000,000	-	-13,000,000,000
10	Datang International Power Generation Co Ltd	11,000,000,000	-	-11,000,000,000

Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Table is provided for illustrative purposes.

In spite of their performance, Chinese bond yields are attractive, considering their relatively short duration. As of Dec. 29, 2017, the yield-to-worst of the S&P China Bond Index was 4.78%, which widened 178 bps over the 12-month period, with a modified duration of 3.7 (see Exhibit 9). As a comparison, the yield-to-maturity of the S&P Global Developed Aggregate Ex-Collateralized Bond Index (USD) and the S&P 500 Bond Index were 1.41% and 3.28%, respectively. China’s solid economic growth and the underparticipation of foreign investors may also serve as positive drivers for the China bond market.

Exhibit 10: Yield-to-Worst of the S&P China Bond Index



Source: S&P Dow Jones Indices LLC. Data as of Dec. 29, 2017. Past performance is no guarantee of future results. Chart is provided for illustrative purposes.

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