



HKEX'S FIVE-YEAR CHINA MINISTRY OF FINANCE TREASURY BOND FUTURES — THE WORLD'S FIRST RMB BOND DERIVATIVES ACCESSIBLE TO OFFSHORE INVESTORS

Summary

China's debt capital market has now become the third largest in the world at RMB56.3 trillion, or about US\$8.1 trillion¹, after the rapid expansion over years. Meanwhile, China also made significant strides to advance RMB internationalisation and the openness of the domestic financial market. One major direction is to invite more foreign participation to tap into the domestic bond market in order to boost the diversity and variety of the bond sector and further increase the scale and depth of the domestic financial market.

Although the current share of foreign holdings of Chinese bonds is still at a low level, foreign capital shows a strong appetite for Chinese sovereign bonds, and foreign holdings in the sovereign bond segment has significantly increased after the inclusion of RMB into the International Monetary Fund's Special Drawing Right basket. In 2016, the foreign holdings of Chinese government and policy-bank bonds increased by RMB233 billion, a six-fold rise compared with RMB35 billion in 2015. The foreign ownership in China's sovereign bond market rose to 3.93% from 2.62% at end-2015². If China implements the pilot bond connect scheme between Hong Kong and the Mainland in the near future, the increased foreign investment in Chinese bonds would result in a surging demand for related risk management.

Developing effective hedging support and providing foreign exchange access are important for foreign investors to increase their exposure to RMB assets. The availability of bond futures with better liquidity can help foreign investors improve their ability to hedge against interest rate risks in RMB, and increase their willingness to hold a larger portion of Chinese bond assets. To date, there are a number of interest rate risk management products in the onshore market, which provides supportive tools to hedge RMB interest rate risk. Along with further opening up of the domestic foreign exchange market to foreign investors recently, some eligible foreign investors can directly access mainland derivatives. However, non-eligible foreign institutions are not yet allowed to access the domestic treasury bond futures for risk hedging to date, and the liquidity of the domestic treasury bond futures is limited due to the absence of major participants, such as domestic insurance companies and banks. The offshore market also lacks efficient RMB rates hedging tools for mid- to long-term yield curve before the launch of offshore treasury bond futures. It is on this backdrop that HKEX's 5-Year China Ministry of Finance Treasury Bond Futures (T-Bond Futures) is designed and introduced.

Based on the experience of developed countries, the introduction of treasury bond futures plays an important role in improving the pricing function of the underlying bond market, promoting the liquidity of spot market and enriching the means of interest rate risk management of bond investors. A majority of empirical studies finds either no significant effect, or else a decrease in volatility, of the spot market following the introduction of treasury bond futures. HKEX's T-Bond Futures utilises the product strength of offshore market to provide differentiation to foreign investors and is carefully designed with a few distinguishing features to ensure that the trading of this product would unlikely have an adverse impact on the onshore market.

¹ Source: Wind, as of end-2016

² Source: Wind, as of end-2016

- (1) HKEX's T-Bond Futures contract is cash settled for difference in RMB cash in the offshore market. At each futures contract expiry, the amount of transactions to be exchanged for settlement purpose happens in the offshore market, and only represents a fraction of the full contract notional amount. The impact of settlement process on liquidity is therefore considerably less compared to a physically-delivered futures contract.
- (2) HKEX's T-Bond Futures contract is settled to the price based on the average yield of three constituent bonds in the bond basket. This final settlement price design reduces the risk of manipulation on any individual underlying bond.
- (3) As the HKEX's T-Bond Futures contract will converge to the final settlement price at expiry, any significant price deviation between HKEX's T-Bond Futures and the similar onshore product would be costly. Based on the pro-forma analysis, the average yield of HKEX's T-Bond Futures contract dummy bond basket has a high correlation with the onshore 5-year treasury bond yield (98.3% from 2011 to 2016), and the daily reference price of HKEX's T-Bond futures contract is also highly correlated with CFFEX's T-bond futures price (92.1% from September 2013 to December 2016). Taking a one-way position in HKEX's T-Bond Futures contract that is of sufficient magnitude to affect the onshore market stability would be very difficult, if not impossible, in practice.
- (4) HKEX's T-Bond Futures contract is traded in a regulated, centralised and transparent exchange platform, which improves the market transparency and offers useful information to participants on price expectations and open interest levels.
- (5) There are several measures in HKEX's trading and clearing rules and in relevant Securities and Futures Commission regulations, such as position limits and error trade parameters, which can be used to deter the accumulation of large open positions of the T-Bond Futures contract, and thus may minimise the risk of unwanted volatility in the market.

Being first of its kind in the offshore market, HKEX's T-Bond Futures provide a solid tool to help foreign investors to hedge against interest rate volatility of RMB assets, and could be regarded as a quickening step to facilitate foreign capital flows into China's domestic bond market. Banks, asset management companies, brokerage firms and insurance companies are the main target users of this product.