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Analysis on the Development Trend of Hong Kong's Green Bond Market

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In recent years, sustainability has been more emphasized in economic development. Green finance has emerged accordingly, becoming a spotlight in global financial markets. The Hong Kong Government closely follows the trends in global financial markets and rolled out more comprehensive measures to promote bond market development in the 2018-19 Budget, compared with the past. This article analyzes current situations of green bond markets globally and in Hong Kong as well as the future development in Hong Kong.

I. Development features of global green bond markets

Green bond is a specific debt instrument for financing green projects. Green bond has four unique features compared with traditional bonds, including the usage of funds, evaluation of investing projects, tracing the usage of funds, and submitting annual reports. In general, global green bond markets grow fast with more diverse market structure.

1. Market is expanding fast with huge room for development

The World Bank estimated that there would be USD 23 trillion worth of investments between 2016 and 2030 around the globe in order to transform into the green economy. Green bond markets expanded fast in the past few years given huge financing demand. As of end-2017, global green bond markets reached USD 221 billion, up 87% from 2016. Nevertheless, green bonds merely accounted for 0.2% of entire bond markets with a size of USD 90 trillion. With huge potential for development, robust growth is likely to be sustained in the medium-to-long term.

2. Advanced economies dominate while emerging markets are catching up

In 2017, global green bond issuance reached USD 155.5 billion. The US took the lead with issuance of USD 42.4 billion, followed by China and France, with issuance of USD 22.5 billion and USD 22.1 billion, respectively. These three markets accounted for 56% of entire issuance. At present, global green bond markets are still dominated by advanced economies in Europe and the US. Seven out of top ten markets in the world are advanced economies. Besides the US and France, the remaining markets were Germany, Spain, Sweden, the Netherlands and Canada.

Nevertheless, emerging markets are catching up. Although China has been developing the green bond market for just over two years, it has become a major member in global markets and once ranked first in terms of issuance in 2016. In addition, Indian issuers doubled in 2017, making India one of the top 10 markets. Furthermore, the majority of new green bond issuers came from emerging markets in 2017, including Argentina, Slovenia, Chile, Lithuania, Malaysia, Fiji and Nigeria.

3. Sovereign-related entities play a crucial role in issuance, but the potential of corporate issuance should not be neglected

The governments, sub-sovereign entities and multilateral institutions are major issuers of green bonds. Fannie Mae, a mortgage guarantor, was the largest issuer in 2017 with its Green Mortgage-Backed Securities issuance amounting to USD 24.9 billion, making the US the largest green bond market in the world. The French Government accumulatively issued EUR 9.7 billion (equivalent to USD 10.7 billion) sovereign green bonds during the year, and France became the world's third largest market consequently.

Issuing green bond brings unique advantages to corporates. Firstly, the issuance may attract new types of investors who pay attention to environmental protection issue, expanding investor base accordingly. Secondly, issuers can obtain more favorable conditions and prices given strong demand for green bonds. Furthermore, the issuance helps enhance the reputation of issuer. Although expenses for issuing green bonds are higher than issuing traditional bonds, benefits to the issuer overweigh the costs. In addition, Luxembourg established the world's first exchange for trading green bonds in 2016, promoting trading volume, market depth and breadth. After one and a half years of establishment, there are more than 130 green bonds listed in the exchange with capitalization of EUR 63 billion. Hence, corporates have issued green bonds more actively in the past two years, given the market is getting more matured. At present, corporate issuers mainly come from energy companies, transportation companies and property developers. Meanwhile, banks and insurance companies are major financial institution issuers.

4. Investments in renewable energy and low carbon projects are major use of funds

The use of funds from green bond financing covers a variety of investment areas, including energy, transportation, construction, land development, city management, etc. At present, investments in renewable energy continue to be the most common use of proceeds. However, its share dropped from 37% in 2016 to 33% in 2017. Furthermore, it should be noted that the Paris Agreement passed in 2015 is the catalyst for green bond market development. 195 members of the United Nations signed the Paris Agreement in order to mitigate global warming, striving to control the rise of global average temperature within 2 degree Celsius against pre-industrialization level. Since then, the proportion of usage of funds for investing in low carbon projects increased considerably, with the share climbing from 22% in 2016 to 29% in 2017. Although the usage of funds for investing in clean transportation remained flat at 15%, allocations to low carbon transportation almost doubled due to a lot of green bond issuances related to railway and city subway projects in 2017.

Other than that, the use of funds for investing in waste, land development and climate adaptation were relatively less. The trend is likely to continue due to a lack of clear definitions for which project types would qualify.

II. Current situation of Hong Kong's green bond market

Hong Kong's green bond market needs further development. Firstly, market scale is small. The issuance for 2017 was only USD 2.3 billion. Secondly, the nature of issuer is relatively homogenous with majority of local corporations, including the Link REIT, MTR Corporation, Castle Peak Power Company Limited, the Hong Kong and China Gas Company Limited and Swire Properties. Xinjiang Goldwind Science and Technology (a Chinese wind power company) and China Development Bank also issued green bonds in Hong Kong. Thirdly, green bonds issued in Hong Kong cover major global currencies, and most of them are denominated in the US dollar.

Green bonds issued in Hong Kong

Date	Issuer	Details of issuance
06/2015	Xinjiang Goldwind Science and Technology	> 3-year USD 300 million bonds with coupon rate of 2.5%
07/2016	The Link REIT	> 10-year USD 500 million bonds with coupon rate of 2.875%
11/2016	MTR Corporation	 10-year USD 600 million bonds with coupon rate of 2.5% Further issuance in 2017 through private placement
07/2017	Castle Peak Power Company Limited	> 10-year USD 500 million bonds with coupon rate of 3.25%
11/2017	China Development Bank	 5-year USD 500 million bonds with coupon rate of 2.75% 4-year EUR 1 billion bonds with coupon rate of 0.375%
11/2017	Hong Kong and China Gas Company Limited	 10-year HKD 600 million bonds 10-year JPY 2 billion bonds
01/2018	Swire Properties	> 10-year USD 500 million bonds with coupon rate of 3.5%

Source: Media and company websites, BOCHK Research

Although there are limited green bond issuances in Hong Kong at present, they are welcomed by international investors as oversubscriptions are common. In addition, most of the green bonds issued have been listed in the Hong Kong Stock Exchange. Therefore, investors can trade directly, promoting market acceptance on green bonds. Looking ahead, the issuance of green bonds in Hong Kong is likely to increase in 2018. The Airport Authority Hong Kong has announced that it will issue green bonds in Hong Kong. The MTR Corporation indicated that it intends to issue additional green bonds in Hong Kong, subject to market conditions and its own financing needs.

As Hong Kong's green bond market is still at a primary stage, proactive promotion from the Government is crucial to further market development.

1. Issuance of sovereign green bonds

The 2018-19 Budget mentioned that the Government will launch a green bond issuance program with a borrowing ceiling of HKD 100 billion. The funds raised will be credited to the Capital Works Reserve Fund to provide funding for green public works projects of the Government. The Government will submit a resolution to the Legislative Council as soon as possible so that the inaugural government green bond can be issued in this fiscal year. If the progress can be achieved, it will be the first issuance of sovereign green bonds in Asia, becoming a role model for this region. Furthermore, Hong Kong dollar denominated debts totaled HKD 1,802.2 billion at the end of 2017. In other words, the Government's green bond issuance program would already account for 5.5% of entire debt market. Such move would effectively deliver the Government's objective on promoting green bond market, encouraging domestic and overseas entities from public and private sectors to issue bonds in Hong Kong.

2. Green Finance Certification Scheme

External review and third party certification are necessary for green bonds. In January this year, the Hong Kong Quality Assurance Agency launched the Green Finance Certification Scheme. Two types of certificate are available, namely Green Finance Pre-issuance Stage Certification and Post-issuance Stage Certification. The Scheme has been developed with reference to a number of

international and national standards, including "Green Bond Principles" from International Capital Market Association, Clean Development Mechanism under "United Nations Framework Convention on Climate Change", the People's Bank of China Announcement No.39 and its appendix "Green Bond Endorsed Project Catalogue", etc. With the development of Hong Kong's own certification standard, it helps standardize information disclosure and enhance market transparency. As a result, investors would be more confident with green financial products, helping attract more potential investors.

3. Green Bond Grant Scheme

The Budget mentioned the Scheme will subsidize qualified green bond issuers in using the Certification Scheme. However details have yet to be announced.

III. Development trends of Hong Kong's green bond market

First of all, developing green bond market is compatible with the Belt and Road Initiative. Infrastructure construction is a major component of the Belt and Road Initiative. Moreover, green bond is an appropriate instrument for financing the construction of sustainable infrastructure, given its characteristics of sizable financing amount with long maturity, and taking into account the protection of ecosystem, energy and livelihood. Hong Kong has a great potential for attracting green bond issuance to support infrastructure projects along the Belt and Road, which would be beneficial to market development in the long run.

Secondly, there are potential and opportunities for the development of offshore RMB green bond business. While the Mainland's green bond market has great potential, most of the issuance by Chinese corporates takes place in onshore market, and offshore issuance only accounts for 18%. Meanwhile, Hong Kong has the largest offshore RMB liquidity pool with over 10 years' experience on RMB bond issuance, providing market fundamentals for the development of RMB green bond business. Therefore, financial institutions in Hong Kong can seize favorable macro opportunities and strive to become green financing partners with Chinese corporates.

Thirdly, in order to expand investor base, green bonds listed in Hong Kong can strive to become eligible for trading under Southbound Trading. Bond Connect was officially launched in July 2017. However, only Northbound Trading takes place for the time being, allowing overseas investors to invest in the Mainland's interbank bond market through the mutual access arrangement between Hong Kong and the Mainland. Bond Connect has been operating orderly since introduction, and the extension to Southbound Trading is highly anticipated. If green bonds listed in Hong Kong are included into Southbound Trading, there will be more opportunities for Mainland investors to invest in green projects globally and improve market activeness in Hong Kong.

Fourthly, Hong Kong can enhance competitiveness with reference to global experiences. Green bond is an emerging financial product with development potential. In recent years, major international financial centers proactively rolled out measures, in order to take first-mover advantage for developing as global or regional green bond transaction hubs. Some of them introduced green bond grant scheme for encouraging issuance. Some of them spend effort to gain bargaining power on price setting through introducing green bond indices, becoming bond indices providers. The aforementioned global experiences are valuable for Hong Kong. Hong Kong should closely follow the developments in global markets, in order to make appropriate development strategies and enhance market competitiveness.

To conclude, green bond provides a new financing solution for sustainable economic development with great potential. Hong Kong can seize the opportunities, and the outlook for development is highly anticipated.

主要經濟指標(Key Economic Indicators)

一. 本地生產總值 GDP	2016	2017	2017/Q3	2017/Q4		
總量(億元) GDP(\$100 Million)	23,586	25,432	6,470	6,806		
升幅(%) Change(%)	1.9	3.8	3.7	3.4		
川間(ル) Change (ル)	1.9	3.0	3.7	3.4		
二.對外貿易 External Trade			2018/1	2018/1		
外貿總值(億元) Total trade(\$100 Million)						
總出口 Total exports	35,882	38,759	3,500	3,500		
進 ロ Total imports	40,084	43,570	3,820	3,820		
貿易差額 Trade balance	-4,201	-4,811	-319	-319		
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年增長率(%) YOY Growth(%)						
總出口 Total exports	-0.5	8.0	18.1	18.1		
進 ロ Imports	-0.9	8.7	23.8	23.8		
Z Importo	0.5	0.7	23.0	23.0		
一、沙弗特德。			2010/2	2010/1 2		
三.消費物價 Consumer Price			2018/2	2018/1-2		
綜合消費物價升幅(%) Change in Composite CPI(%)	2.4	1.5	3.1	2.4		
四.樓宇買賣 Sale & Purchase of Building Units			2018/2	2018/1-2		
合約宗數(宗) No. of agreements	73,004	83,815	7,456	14,679		
年升幅(%) Change(%)	-4.1	14.8	32.8	35.5		
T) H (N) Change (N)	-4.1	14.0	32.8	33.3		
五. 勞動就業 Employment			2017/11-	2017/12-		
五: 为動脈未 Employment			2018/1	2018/2		
失業人數(萬人) Unemployed(ten thousands)	13.3	11	10.7	10.7		
失業率(%) Unemployment rate(%)	3.4	2.9	2.9	2.9		
就業不足率(%) Underemployment rate(%)	1.4	1.1	1.0	1.0		
六 . 零售市場 Retail Market			2018/1	2018/1		
零售額升幅(%) Change in value of total sales(%)	0 1	2.2				
_	-8.1	2.2	4.1	4.1		
零售量升幅(%) Change in volume of total sales(%)	-7.1	1.9	2.2	2.2		
七.訪港遊客 Visitors			2018/1	2018/1		
總人數(萬人次)arrivals (ten thousands)	5,665	5,847	533.3	533.3		
年升幅(%) Change(%)	-4.5	3.2	-2.6	-2.6		
八. 金融市場 Financial Market			2017/12	2018/1		
港幣 匯 價(US\$100=HK\$)			2017/12	2010/1		
H.K. Dollar Exchange Rate (US\$100 = HK\$)	775.6	781.4	781.4	782.3		
貨幣供應量升幅(%) change in Money Supply(%)						
	122	0.0		166		
M1	12.3	9.8	9.8	16.6		
M2	7.7	10	10	11		
M3	7.7	10	10	11		
存款升幅(%) Change in deposits(%)						
總存款 Total deposits	9.1	8.7	8.7	10		
港元存款 In HK\$	9.4	11.6	11.6	13.2		
外幣存款 In foreign currency	8.8	5.9	5.9	6.6		
放款升幅(%) in loans & advances(%)						
總放款 Total loans & advances	6.5	16.1	16.1	16.4		
當地放款 use in HK	7.4	15.5	15.5	16.1		
海外放款 use outside HK	4.5	17.4	17.4	17.2		
貿易有關放款 Trade financing	0.2	8.7	8.7	10.8		
東 カ 万 ppp ルスpp、 ir auc ir mancing	0.2	0.7	0.7	10.0		
最優惠貸款利率(%) Best lending rate (%)	5.0000	5.0000	5.0000	5.0000		
取變思貝級利平(%) best rendring rate (%) 恆生指數 Hang Seng index	22,000	29,919	29,919			
压生相数 Hang other linex	22,000	29,919	49,919	32,887		