Research Centre for Sustainable Hong Kong [1]
City University of Hong Kong

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Credit Rating and OBOR Bond Market Development:
Issues, Challenges and Possible Solutions

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1. Introduction

This position paper aims to highlight major issues on credit rating services and bond market development to support the One-Belt-One-Road (OBOR) Initiative. Foci will be placed on how China and HKSAR would be able to develop a successful bond market for OBOR countries[3], which will find it convenient to issue international bonds to support domestic infrastructure

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[1] Established in June 2017 by a cross-disciplinary research team, the Research Centre for Sustainable Hong Kong (CSHK) is an Applied Strategic Development Centre of City University of Hong Kong (CityU). CSHK conducts impactful applied research with the mission to facilitate and enhance collaborations among the academia, industry, professional service sector, the community and the Government for sustainable development in Hong Kong and the Region. Professor Linda Chelan Li, Professor of Department of Public Policy at CityU, is appointed as Centre Director. In 2017, CSHK is granted by the Policy Innovation and Co-ordination Office of the Hong Kong Special Administrative Region Government to conduct a Strategic Public Policy Research (SPPR) project entitled "Hong Kong Professional Services in the Co-evolving Belt-Road Initiative: Innovative Agency for Sustainable Development" [S2016.A1.009.16S]. For more information about CSHK, please visit our website at www.cityu.edu.hk/cshk. Please send your comment to sushkhub@cityu.edu.hk.

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[3] OBOR countries refer to those countries connected to the OBOR initiative. They generally want to borrow funds to develop long-term infrastructure projects for supporting international trades and cultural exchanges among themselves. In April 2017, HKSAR's Trade Development Council (TDC) identifies a list of 64 OBOR countries (see: http://china-trade-research.hktdc.com/business-news/article/The-Belt-and-Road-Initiative/The-Belt-and-Road-Initiative-Country-Profiles/obor/en/1/1X000000/1X0A36I0.htm

and economic development. Also, international investors, including entities from OBOR countries, would find it convenient to invest in those bonds because of transparent information on related risks.

The article will begin with early history on credit ratings services. Then it reviews the major reforms on credit ratings services after 2008 aimed at addressing public criticisms on the issuer-pay model of the industry. Lastly it will propose solutions for OBOR bond market development and the establishment of a public CRA to effectively serve OBOR bond issuers and global investors in OBOR bonds. The article concludes that, with its experience in international business and finance, HKSAR enjoys substantive competitive advantages in the development of the OBOR bond market and the public CRA.

2. Credit rating services in 1900-2008

History of the three global CRAs

The three global CRAs, including Standard & Poors, Moody's and Fitch, originated from the boom of railway bonds in the USA in 1900-1920. At that time, as an emerging economy in the world, USA built many new railways to support its economic development and needed massive funding for these long-term projects. A bond in fact is a type of loan that can be easily traded among investors. However, bond investors generally have less privilege than banks which can conduct site visits on borrowers' operation and set strict repayment conditions. At that time, many of the railway bonds were sold to wealthy investors in Europe. In order to support global investors to buy the railway bonds, early founders of the CRAs set up their information services companies to sell financial information on railway companies and credit rating reports on bonds. At that time, information users paid fees to get credit ratings reports. This business model is later known as a subscriber-pay model. This business model had been popular for many years until the 1970s.

The historical development of railway bonds in the USA resembles current needs under the OBOR initiative that many OBOR countries are eager to raise funds to strengthen their railway networks, road networks and other infrastructures for economic development. Issuing bonds in the global market will help OBOR countries get long-term funds for economic development. CRAs acting for the interests of bond investors enable global investors feel more comfortable in investing in the bonds.

CRAs: Subscriber-pay model vs issuer-pay model

In the 1970s, bond issuance required the information of credit ratings as a part of issuance documents. This motivated bond issuers to willingly pay fees for credit ratings. Hence, the credit rating industry converted quickly from the subscriber-pay model to an issuer-pay model. Some exchanges and over-the-counter markets set minimum requirements on credit ratings, such as 'BBB' or better, for bond listing and bond trading. This motivates bond issuers to shop for better credit ratings. CRAs are frequently criticized for their inflation on grades to please bond issuers and compete for rating assignments.

Credit ratings as a part of regulation

In addition, credit ratings are generally included as a part of regulation. In the 1930s, after the stock market crash in 1929, US bank regulator prohibited banks from holding speculative investment securities, defined by grades below BBB under S&P rating scale. Under global banking regulation, banks following the standardized approach of Basel III are required to prepare more capital to support their bond holdings if credit ratings of the bonds are poorer, especially 'BBB' or below. Regulators on insurance companies and securities firms also implement capital requirements linked with credit grades of assets.

Before Dodd-Frank Act of the USA implemented in 2009-2016, investment grades refer to 'BBB' or better. Dodd-Frank Act sets an objective to remove credit ratings from laws and regulations. This echoes public criticisms on the quality of credit ratings prepared by the big three CRAs. Currently term "investment grade" in US laws and regulations are mostly rewritten with the term "low probability of default" or "low likelihood of default". This replacement seems to easily remove credit ratings from the laws and regulations but provides very ambiguous guidelines on what is high risk or low risk.

Credit ratings as a part of business contracts and business decisions

Many funds targeting at conservative investors specify that fund managers must invest in investment-grade securities. Global banks in the interbank market generally expect to trade with other banks with Grade A or better. Some exchanges require market makers which quote bid-ask prices, such as equity option market makers, to have Grade A or better in their credit ratings. In international supply chains, sellers may request buyers to provide bank guarantees if they do not have desirable external credit ratings or may adjust trade credit amount in accordance with buyers' external credit ratings. In addition, business partnership between two corporations can be affected by external credit ratings. For bidding and working on long-term projects, corporations with good credit ratings are inclined not to partner with corporations with poor credit ratings. All these indicate that credit ratings are embedded in business contracts and business decisions on daily basis. The information of credit ratings is not simply an issue for laws or the bond market. Removing information on external credit ratings from the market may even hinder economic activities. Therefore, the issue remains: how to assure that CRAs are reliable in their risk assessment.

3. Regulation of CRAs after 2008

The financial tsunami in 2008 triggers off public concerns on the practices of CRAs. Many investment-grade assets totally lose their market value. In response to recommendations of International Organization of Securities Commissions (see IOSCO 2008), many securities regulators currently tighten regulation on CRAs. Basic principles of the regulations include the following:

- CRAs should be regulated. In Hong Kong, SFC issues "Code of Conduct for Persons Providing Credit Rating Services" (see SFC 2011) and requires CRAs to be regulated under Type 10 License on providing credit rating services.

- Credit rating analysts should be fit-and-proper persons. In Hong Kong, these analysts are licensed individually by SFC via a recognized examination.

- CRAs should have proper internal procedures and process to deal with rating production, release of credit rating results, and conflict of interests in relation to credit rating.

- In Hong Kong, CRAs are not allowed to conduct consulting work but may offer ancillary services, such asthe sale of credit research information.

The big three CRAs (Standard & Poors, Moody's and Fitch) share the same issue of "too-big-to-fail" as global banks because credit ratings are tied closely with laws and regulations implemented before the 2008 Financial Crisis. After the Crisis, many governments from advanced economies have tightened regulation on CRAs. In addition, via the coordination of Financial Stability Board of IMF (see FSB 2014), these governments gradually reduce regulatory reference to external credit ratings. They want to keep a clear line between governments and CRAs, ending mechanistic reliance on credit ratings in the market and removing references to credit ratings from existing laws and regulations. They expect market participants to apply their own due diligence on credit risk assessment.

Under such a political and regulatory atmosphere, it is hard to say that CRAs must be good and be promoted. Whether investors manage to conduct their own credit risk assessment remains to be unknown. Without reliable credit information for making decisions, investors tend to be more reluctant to buy bonds or offer much lower prices to buy bonds. This is an undesirable outcome for bond issuers who may find it hard to raise funds or pay high cost for bond financing.

Competition and choice in the credit rating industry

One argument on the failings of CRAs in serving the business community is the lack of competition. In 2010, OECD[4] Competition Committee conducted hearings on competitions issues in the credit rating industry. The committee concluded that "the credit rating market is a natural oligopoly, with three CRAs accounting for more than 90% of the market" (see OECD 2010).

Under new regulation of European Securities Markets Authority (ESMA) on CRAs in 2011, Europe opens up the credit rating services market to more players and promote competition among them. Also, EU new regulations on CRAs require increased due diligence of CRAs. At the end of 2015, there are 26 registered CRAs which follow ESMA principles, close to the IOSCO principles, in providing credit ratings services. Table 1 shows the market share of revenue of

[4] OCED refers to Organization of Cooperation and Economic Development, a supranational organization for industrialized economies.

the European CRAs in 2015.

Table 1 obviously concludes that the big three CRAs remain dominant in EU. It should be noted that, even though Fitch has very long history (around 90 years) in the credit rating industry, its market share remains much weaker than either S&P or Moody's. It may take a long time, probably two to three decades or even more, for other CRAs to remarkably increase their market shares.

Table 1: Market share credit rating activities and ancillary services of CRAs in EU

Registered Credit Rating Agency	Market share (turnover in	Subtotal
Standard & Poor's Group	45.00%	92.85%
Moody's Group	31.29%	
Fitch Group	16.56%	
DBRS Ratings Limited	1.89%	7.15%
AM Best Europe-Rating Services Ltd. (AMBERS)	0.93%	
CERVED Group S.p.A.	0.88%	
The Economist Intelligence Unit Ltd	0.80%	
Creditreform Rating AG	0.50%	
Feri EuroRating Services AG	0.40%	
Scope Ratings AG	0.39%	
GBB-Rating Gesellschaft für Bonitätsbeurteilung mbH	0.34%	
ASSEKURATA Assekuranz Rating-Agentur GmbH	0.21%	
Euler Hermes Rating GmbH	0.21%	
Capital Intelligence (Cyprus) Ltd	0.14%	
ICAP Group SA	0.12%	
Spread Research SAS	0.09%	
Axesor S.A.	0.05%	
CRIF S.p.A.	0.05%	
ModeFinance S.A.	0.05%	
Dagong Europe Credit Rating Srl	0.04%	
ARC Ratings, S.A.	0.03%	
BCRA-Credit Rating Agency AD	0.02%	
EuroRating Sp. Zo.o.	0.01%	
European Rating Agency, a.s.	0.00%	
INC Rating Sp. Zo.o.	0.00%	
Rating-Agentur Expert RA GmbH	0.00%	

Source: ESMA (2016)

The ESMA rules on CRAs involve high compliance cost for a CRA to keep its operation. It is believed that many small-sized CRAs in Europe will soon be extinct from the market given limited room for their revenue growth.

Table 1 suggests that the big three CRAs will remain excessively dominant in the near future unless there are governmental or inter-governmental efforts to regulate their market shares or set favorable rules to support the growth of new CRAs. Similarly, the market share of the three global CRAs in the USA and Hong Kong remains excessively dominant even after tightened regulation on CRAs in 2009-2016[5].

4. Solutions for the OBOR bond market and related credit ratings

Given the discussion above, this article proposes the following solutions to facilitate the growth of the OBOR bond market.

a. **OBOR countries issuing bonds in China and HKSAR**: Credit ratings, regardless of the issuer-pay or the subscriber-pay model of CRAs, come with bond issuances. Some bond issuances do not require any credit rating because investors know very well their credit history and their ability to repay in the future. To help establish their presence in the bond market and develop their credit history, an OBOR government and its state-supported organizations should have their bonds issued in China and HKSAR. All these bonds can be traded via the China-HKSAR bond connect. The history of railway bonds in the USA demonstrates the importance of bond financing for infrastructure projects. With railway and road networks developed, OBOR countries can further develop their economies.

b. **A CRA designated for OBOR bonds**: There should be at least one international CRA which is able to provide credit ratings on the OBOR bonds. Currently the big three CRAs focus mainly on corporate and government bonds from advanced economies. The OBOR bonds will include many railway bonds and infrastructure bonds. Most of the OBOR countries are developing countries. Around 22 OBOR countries are Islamic countries. The new CRA should be knowledgeable in assessing infrastructure project risk, country and business risk in developing countries and Islamic countries, and financial risk of bond issuers. Many developing countries complain that the big three CRAs are biased in rating the credit quality of developing countries. For instance, they are biased against most kinds of government intervention on economic development, with less emphasis on fundamental economic variables, such as budget surplus, public-debt-to-GDP ratio, economic growth, and trade account balance. Some research shows that credit ratings are linearly associated with the following variables of the Heritage Foundation, namely fiscal freedom, business freedom, labor freedom and financial freedom. Many developing countries, including BRICs, do have low scores on these variables. This issue on rating bias against developing countries is summarized in UNCTD (2015). OBOR countries are mostly emerging economies that require a different approach to look at their risk.

c. A public CRA with new business model: A major criticism on the big three CRAs is the issuer-pay model which may induce bond issuers to shop for better ratings and the CRAs to inflate

[5] There is no official statistics on the revenue share of CRAs in both the USA and Hong Kong. However, Reuters (2016) reports the number of CRAs in the USA grows from 3 to 10 in 2016 but the big three CRAs employ 88% of all credit rating analysts. In Hong Kong, all new CRAs have very small operation. More than 90% of the SFC-licensed credit rating analysts work for the big three CRAs.

their grades. Will a public CRA solve this problem? Some scholars advocate the setup of a public CRA in the USA (see, for instance, Dioman, He and Pollin 2009). Some suggest the establishment of an international CRA housed at the United Nations (see, for instance, Schroeder 2013). In 2012, Germany once attempted to create a European CRA to compete with the big 3 CRAs. In such a proposal, a foundation would be set up to support the public CRA, with first rating assignments mainly on sovereign bonds and later assignments extended to financial institutions in EU (see EPRS 2016). This proposal was discontinued because of non-availability of funds, concerns over possible lack of independence, and possible conflict of interests. Some were even worried that the public CRA might one day face legal actions by the USA if its credit ratings caused trouble to US companies. It should be admitted that prudent credit assessment cannot guarantee zero default. The issue is which institutional design will effectively lead to independent and unbiased credit assessment. A profit-driven CRA with issuer-pay model, very much the current model, has been criticized for its likely distorting rating conclusions. A public CRA with clear services mission may perform better. The public CRA can earn income from multiple sources: annual fees from all OBOR countries, subscription fees from selling credit research information to global information subscribers[6], and fees from rating bond issuances. Financial markets in OBOR countries may agree to a rule that bond issuers must get credit ratings from at least one pubic CRA. This public CRA will follow IOSCO principles in producing credit ratings. It will engage international analysts to participate in its various rating committees. In its first phase, the public CRA should focus on bonds issued by OBOR governments, public sector enterprises and infrastructure project owners.

d. Other mechanisms to strengthen OBOR bond market development: Bond issuance and the presence of CRAs are the first ingredients to build the OBOR bond market. There are additional mechanisms that help the market grow faster, which include:

a. <u>Bond funds</u>: There should be bond funds established for OBOR bonds. An OBOR bond fund can invest in a diversified portfolio of OBOR bonds. This fund can be listed and traded in stock markets for both institutional and retail investors.

b. <u>Credit default insurers</u>: Some insurance companies or investment banks or policy banks can offer credit default insurance on selected bond issuers. Protection buyers simply pay annual fees to hedge against default risk. With such insurance contracts, OBOR bond investors can easily convert high-risk investments into low-risk investments.

c. <u>Bank loans with OBOR bonds as collateral</u>: Selected OBOR bonds are accepted as financial assets to back up loan financing. This means OBOR bond investors can borrow funds for short-term financial needs with their long-term OBOR bonds as collateral.

d. <u>Stock issuance and bond issuance</u>: Stock issuance will help bond issuance. If a company have both stocks and bonds issued, bond investors can easily estimate the risk of the bonds with the company's financial information and market movements of the stocks. If the stocks move continuously upward, the credit risk of the bonds should get lower.

[6] Information subscribers may include securities firms, investment fund houses, central banks, universities and etc.

5. The role of HKSAR

The above-mentioned OBOR bond market is an international bond market. This market requires the presence of international bond issuers, international bond investors and international financial intermediaries. HKSAR has a good track record as an international business and financial center, with more than 190 foreign banking institutions operating in the territory and its common law system widely accepted by international merchants. To facilitate the growth of the OBOR bond market and the proposed public CRA, the government, the financial regulators and professional organizations in HKSAR are advised to focus on the following initiatives:

I. Amending listing requirements to facilitate OBOR countries to issue their sovereign bonds and corporate bonds in HKSAR[7].

II. Working closely with Islamic financial markets and Islamic financial institutions in OBOR countries to develop an Islamic bond market in HKSAR to support fund raising for infrastructure projects.

III. Liaising with major banks operating in HKSAR to develop an interbank market for trading OBOR sovereign bonds, which may be denominated in Renminbi, SDR, USD, Euro, HKD or other currencies.

IV. Encouraging leading banks from OBOR countries to set up their operation in HKSAR, which bring their borrowers and investors to the HKSAR capital market and arrange collateralized loans with OBOR bonds as collateral.

V. Supporting the establishment of the public CAR through liaising with Asia Infrastructure Investment Bank (AIIB), the BRICS governments and other stakeholders of the OBOR bond market.

VI. Lobbying the planning committee of the public CRA to designate HKSAR as a target location for headquarter or major operation of the public CRA.

VII. Facilitating leading corporations from OBOR countries to list their equities in HKSAR so as to make their risk information more transparent to the global market.

VIII. Encouraging international asset management companies to set up investment funds in HKSAR on OBOR equities and bonds.

6. Considerations of AIIB setting up an independent credit rating institution in Hong Kong

[7] In April 2017, SFC in HKSAR provides new listing requirements to facilitate the listing of equities relating to infrastructure companies in OBOR countries. This is a good move. However, many infrastructure projects are 100% government-owned or operated under built-operate-transfer (BOT) schemes. These projects may find it hard to list their equity ownership but they are willing to list their bonds.

AIIB is the major user of credit rating system. Prior to investing in relevant projects, it has to perform due diligence on understanding the risks of those projects. Without AIIB's affirmation, participation or even insurance on the investment projects, international bond investors will feel less comfortable on investing in related bonds. Is it suitable for AIIB to establish an independent credit rating agency? Here are some related considerations:

(a) AIIB investment is concentrated in the Asia-Europe region. Those invested projects are mainly infrastructure projects. However, existing international credit rating agencies are not experts on assessing their risk.

(b) Asian infrastructure investors (including public and private investment funds of AIIB member countries) are generally capable of accepting higher investment risks. They would also like to diversify their risks in different countries apart from those in the EU or North America. Their risk appetite can be different from that of traditional bond investors. However, credit rating information provided by the existing international credit rating agencies may not be suitable for these new generation of investors.

(c) Will credit assessment of AIIB be biased? At present, the loans of many banks are handled by their independent credit risk assessment departments. Thus, it reduces the prejudice or biases of regional branches. Courses of many famous universities are validated by the internal quality assurance units of these universities. These independent evaluation departments follow clear assessment criteria and involve internal and external experts to assure impartial decisions.

At present, regulation over credit rating agencies in Hong Kong is at an internationally advanced level. Credit rating agencies need to apply for a license from the Hong Kong Securities and Futures Commission. Credit rating analysts must pass examinations and apply for related licenses. The Hong Kong bond market size will grow rapidly due to "Bond Connect" and "Internationalization of Renminbi". Global bond investors and bond issuers will be more clustered in Hong Kong. If AIIB establishes a credit rating unit in Hong Kong, enabling it to become an independent credit rating agency and capturing Hong Kong's unique institutional advantages, that will effectively support bond issuance in the Belt and Road countries and facilitate their infrastructure development.

7. Conclusion

OBOR bonds aims to support OBOR infrastructure development. Bond issuers will mostly include governmental entities, public sector enterprise and infrastructure project owners. This article proposes that OBOR governments and related entities should list their bonds in China and HKSAR to build their credit history in the bond market. When China-HKSAR bond connect is implemented, the two markets in Mainland China and HKSAR are connected to form one global market. In addition, there should be a public CRA which is familiar with OBOR political and business environments. The public CRA will earn its income from multiple sources. Financial markets in OBOR countries should set a rule that bond issuers must get credit ratings from at least one public CRA. All these will be able to mitigate possible conflict of interests from the current issuer-pay-model.

To further strengthen OBOR bond market development, there should be other mechanisms, including OBOR bond funds, credit default insurers on OBOR bonds, lenders considering OBOR bonds as collateral, and enterprises in OBOR countries listing their stocks publicly.

Those latest regulations on CRAs in advanced economies aim to place less weight on external credit ratings. However, removing CRAs from the economies contributes nothing to financial market development and international trade development. The only option is to build a better CRA with less concern on conflict of interests. A public CRA with mixed business models will serve this role and support bond market development for OBOR countries.

With its experience in international business and finance, HKSAR possess strong competitive advantages in supporting the development of the international OBOR bond market and the public CRA for producing credible credit ratings as proposed here.

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