HKUST IEMS
INSTITUTE FOR EMERGING MARKET STUDIES

Recent Developments in Trade, Investment and Finance of China's Belt and Road

Alicia GARCIA-HERRERO, Jianwei XU

HKUST IEMS Working Paper No. 2018-50

January 2018

HKUST Institute for Emering Market Studies
The Hong Kong University of Science and Technology
Clear Water Bay, Kowloon, Hong Kong
T: +852 3469 2215 E: iems@ust.hk W: iems.ust.hk

Recent Developments in Trade, Investment and Finance of China's Belt and Road

Alicia GARCIA-HERRERO, Jianwei XU
HKUST IEMS Working Paper No. 2018-50
January 2018

Abstract

This paper makes a mid-term assessment for China's Belt and Road Initiative (BRI) from the perspective of trade, investment and finance, respectively. We will discuss the economic progress of the Belt and Road Initiative from the trade, investment and financial perspectives, respectively. Trade is most accessible field for China to breakthrough as it can be instantly affected by short-term policies such as removing tariff or non-tariff barriers. Our findings also confirm the rapid progress in trade, though the development was not equally distributed in the area, with the ASEAN, Middle East, South Asia and Russia constitute the largest trade share with China. Our analysis on the BRI's spillover effect on the US and the EU reveals that the BRI plan poses actually very little substitution effect but under some scenarios even positive impact on the EU-China trade. We especially assess the impacts on the EU, which sits at the other end of the BRI area, and find that better connectedness within the BRI area will bring higher economic benefits to the EU than free trade agreements.

Author's contact information

Alicia Garcia-Herrero

Chief Economist for Asia Pacific, NATIXIS

Department of Economics & Institute for Emerging Market Studies
The Hong Kong University of Science and Technology
Clear Water Bay, Kowloon
Hong Kong

Jianwei Xu

Beijing Normal University

1. Introduction

It has been three years since China launched its grand plan of the Belt and Road Initiative (BRI). Although Chinese government has put great efforts to push for the plan, not only inserting related topics in most of its diplomatic events, but also promoting more funded projects in the area, domestic and international concerns regarding the feasibility of the plan have never diminished. Against the back drop, an economic overview of the BRI becomes very important to understand the feasibility of the plan.

To this end, we will discuss the economic progress of the BRI from the trade, investment and financial perspectives, respectively. Trade is most accessible field for China to breakthrough as it can be instantly affected by short-term policies such as removing tariff or non-tariff barriers. If China has established a closer relationship with the BRI area, trade between the two should move upward in a short period. Our findings also confirm the rapid progress in trade, though the development was not equally distributed in the area, with the ASEAN, Middle East, South Asia and Russia constitute the largest trade share with China. Our analysis on the BRI's spillover effect on the US and the EU reveals that the BRI plan poses actually very little substitution effect but under some scenarios even positive impact on the EU-China trade. We especially assess the impacts on the EU, which sits at the other end of the BRI area, and find that better connectedness within the BRI area will bring higher economic benefits to the EU than free trade agreements.

Compared with trade, investment needs longer time spans to deliver fruits, especially when most of the BRI area is still classified as risky destination and long-term investment takes time to push forward. Needless to say, the BRI area is attractive for nearly every international participants. Our analysis indicates that the progress in investment has been so far discouraging. Although the overall level of China's oversea investment in the area has been picking up in recent years, the relative share compared with the other destinations actually declined. Chinese oversea investment focuses on the developed world, especially Europe. This can partly be explained by the higher risk associated with many countries in the BRI area. But it is too early to be pessimistic about the plan. It is possible for the trend to reverse in the future. With the rising protectionist atmosphere in the EU and the US, as well as pressure from Chinese regulators to discourage investing in non-productive fields in the developed economies, China is likely to divert more investment to the BRI area, which needs close watch.

Finance is the most difficult part. Although China has set up the Asian Infrastructure Investment Bank (AIIB), the Silk Road Funds, etc., to support the plan, it is far from enough. Various estimates indicate that there is still a big gap to fully fulfil the needs for finance in the BRI area. In fact, the EU has long been an important credit supplier in the BRI area. To better facilitate the grand plan, China must seek international cooperation, especially with the EU.

Admittedly, it is also too hasty to extend our assessment as the final one because it is only three years since the start of the plan, while most of these projects may take a long time to realize their benefits. But our mid-term assessments at least show that it is not easy for China to deal with such a broad area with countries of very different development structures, cultural and political systems. To enhance the efficiency of the BRI, China may consider taking a strategic attitude to implement the plan: first focus on certain low-risk countries, such as the ASEAN countries and Russia, and then extend it to more if their economic conditions have improved.

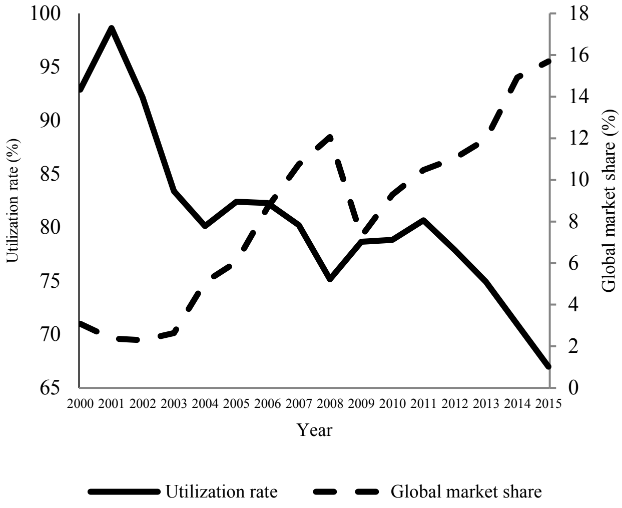
Last but not the least, the prospect of the BRI hinges not only on the BRI area itself, but how China's relationships with the US and the EU evolve. If the US started to befriend China and two territories can agree to put aside their conflicts, China may have more incentive to push stronger for the BRI in the area. Otherwise, the development of the BRI will less likely to be a priority for china. The EU also plays a pivotal role in the plan, as some of its members are directly included as BRI countries and the others stay at the other end of the area. If China could gain more confidence from its cooperation with the EU, and the EU is willing to join efforts in finance and investment, the development of the BRI will undoubtedly accelerate.

2. Economic background of the Belt and Road Initiative

Despite significant political implications embedded in the BRI, serious economic consideration is also an indispensable part of the plan. After all, every successful political plan should not fall afoul of economic return. Otherwise, the rising cost will finally turn headwinds to the sustainability of the plan. Back to 2014, China officially proposed the plan to seek international trade benefits in an international environment where the US was leading the Trans-Pacific Partnership (TPP) with China specially excluded. Later on, although the TPP was suspended due to the internal political reversal arising in the US, China still feels its economic conflicts with the US, and to a less extent with the EU, notably for the issues such as the market economy status and compulsory technology transfers. In this regard, establishing a closer economic relationship with the emerging neighbors has become a straightforward choice for China to maintain its economic influence and balance against the US and the EU in the world economic order.

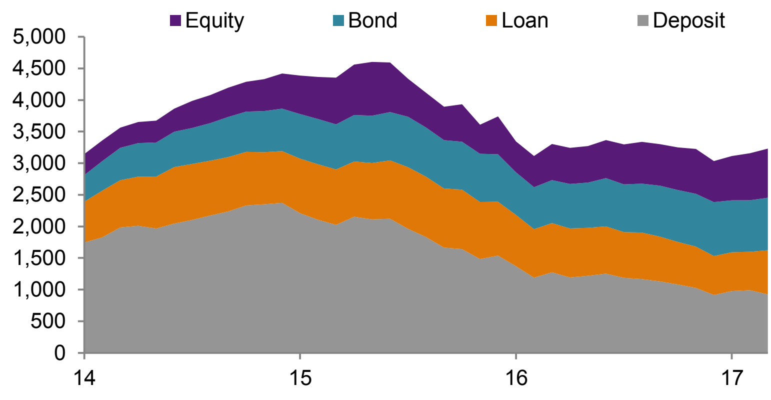
China's domestic economic pressure, mostly from overcapacity and rising debts, also pushes the country to maintain or even extend its global market coverage. The best case is steel, in which China has been rapidly increasing its global market share and draw global concerns (Chart XX). With the accumulation of production capacity after decades of rapid development, China starts to experience gradual economic slowdown with domestic capital returns dropped considerably. This forced the China to explore external investment opportunities, especially in the countries where China's can directly apply its experience in infrastructure and associated heavy industry. Against this backdrop, China eyed its developing neighbors as the new growth engine. More importantly, the BRI area has been less explored so far by both the US and the core EU countries, so becomes an easy destination for China to extend external cooperation.

Chart XX: China's Steel Production Utilization Rate and Global Export Market Share, 2000–2015 (%)



The internationalization of RMB is also an important motivation that drives the implementation of the BRI. It was widely believed that with more projects conducted by China, the use of RMB will also be extended, especially in the developing economies. Back at that time, China was pushing for internationalization of RMB as a way to gain more financial acceptance in the market. However, government's support for RMB internationalization seems to be weakened since 2016, partly due to the large outflows of capital and pressure from exchange rate. In fact, the total amount of RMB assets held by overseas investors have dropped to around RMB 3 trillion (USD 430 billion) last year, falling more than RMB 1.5 trillion from the peak back in May 2015.

RMB assets held by overseas institutions within China (bn)



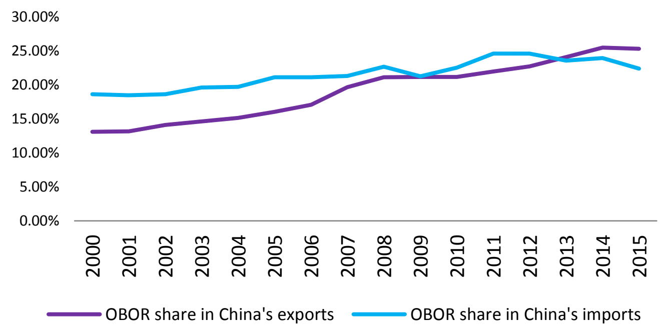
Source: CEIC. Natixis

3. Unbalanced improvement in China's trade with the BRI area

The Belt and Road countries, despite their dispersion in terms of politics and culture, have become an increasingly important trading partners for China, especially destinations for Chinese exports. Back to 2000, the OBOR countries only constitutes 13%

of China's exports and 19% of China's imports, but both shares have reached up to 27% and 23% by 2015, with an apparent bigger winner being exports.

Chart XX: The export and import share of OBOR in China



Undoubtedly, given the broad dispersion in the stage of development as well as politics and culture, China's trade with the Belt and Road area also varies across the region. ASEAN, Middle East, South Asia and Russia are China's largest four trading partner in the region. The other countries are small in terms of economic magnitude, accounting for only three percent of China's total trade.

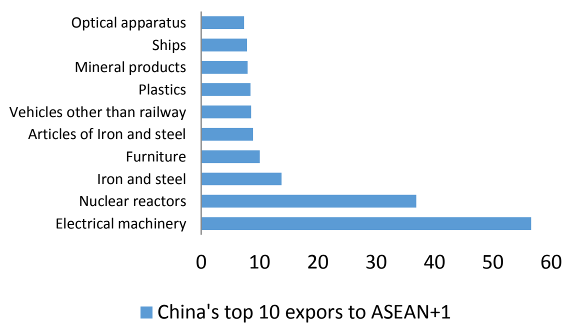
- The largest trading partner for China in the Belt and Road area is the ASEAN countries, which constitutes 12% of China's total exports and 11.58% of total imports. China had relatively balanced trade payment with the ASEAN before 2011, partly because of their complementarity on value added chain. In fact, the largest components of both China's exports to and imports from ASEAN are electrical machinery and nuclear reactor, reflecting close intra-industry linkage between two blocs. However, the balance was tilted after 2012, with Chinese exports increasing faster than imports towards ASEAN, consistent with the trend that the role of processing trade in China has significantly declined.
- China's second largest trading partner within the Belt and Road area is the Middle East. China's exports to the region are broad based, including not only heavy industry products such as nuclear reactors and electrical machinery, but also light industry products such as apparel and clothing accessories. On the contrary, China's imports from the region are concentrated in the mineral resources especially oils.
- South Asia is the third largest trading partner in the region, but the bilateral trade is very unbalanced with imports amounting to only 15 billion but exports reaching up to 96 billion. The product structure of South Asia's trade with China is more complicated, including both endowment-specific products such as pearls and intra-industry transactions such as the nuclear reactors.
- Russia, despite its strategical importance for China, is only China's fourth largest trading partner in the Belt and Road area. Its exports to China also mainly focus on mineral resources, but its imports include a variety of Chinese products. All the other partners –Central Asia, Central and Eastern European countries,

Mongolia added up together account for less than 3 percent of China's external trade.

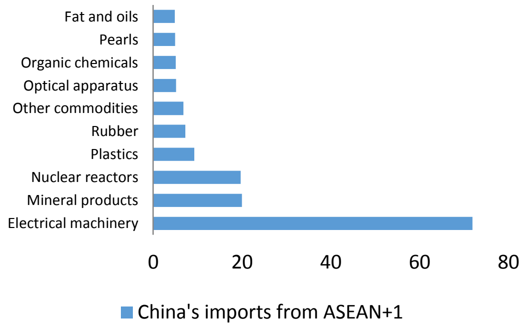
Table XX: Geographic variation in trade with the OBOR region

	Share of China's exports	Share of China's imports	Share of EU's exports	Share of EU's imports
ASEAN	**12.20%**	**11.58%**	**4.50%**	**6.75%**
Central Asia	0.77%	0.90%	0.51%	0.97%
Middle East	**6.20%**	**6.28%**	**13.73%**	**8.00%**
Central and Eastern Europe (excl. EU)	0.35%	0.37%	0.78%	1.97%
Central and Eastern Europe (incl. EU)	1.76%	0.77%	-	-
South Asia	**4.15%**	**1.01%**	**2.60%**	**3.62%**
Russia	**1.53%**	**1.98%**	**4.00%**	**7.77%**
Mongolia	0.07%	0.23%	0.02%	0.00%
China	-	-	9.25%	19.97%

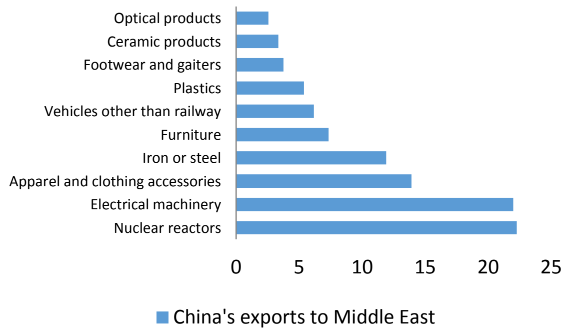
China's top 10 expors to ASEAN+1



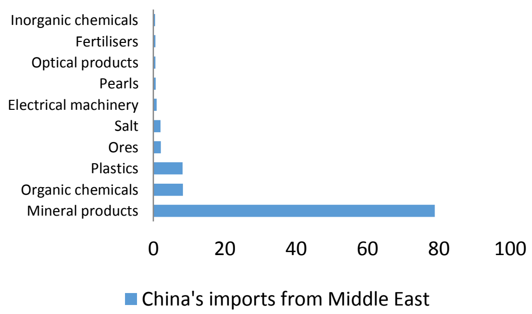
China's imports from ASEAN+1



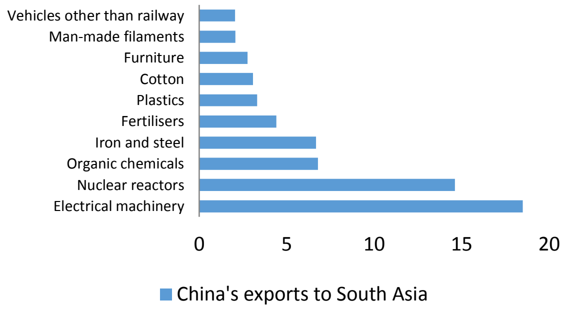
China's top 10 exports to Middle East



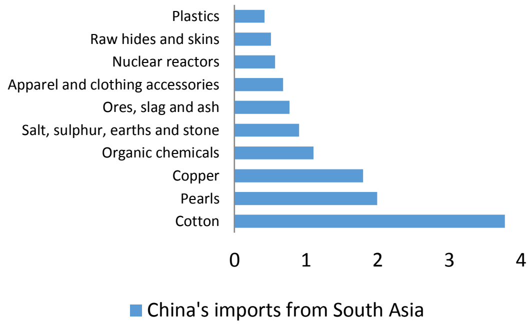
China's top 10 imports from Middle East



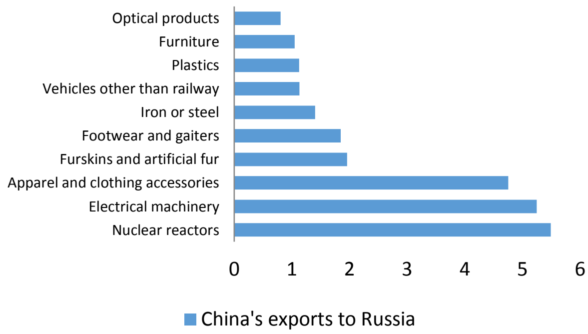
China's top 10 exports to South Asia



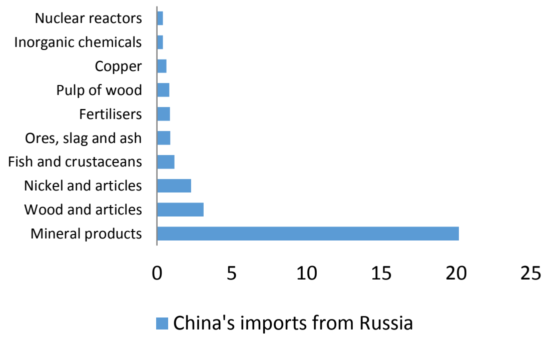
China's top 10 imports from South Asia



China's top 10 exports to Russia



China's top 10 imports from Russia



4. Investment

One important aspect of China's ambitious BRI plan is to invest more projects in this developing area to gain capital benefits as its domestic capital return has declined dramatically. Since the announcement of the BRI in 2014, China has accelerated its project negotiation with the BRI area relative to the other countries. China's signed contract value was only 43780 USD million on April 2014, accounting for 38 percent of China's total oversea signed contracts, but the accumulated contract value since then has climbed up to 781110 USD million in July 2017, which constitute nearly 50% of the total accumulated signed contract value.

Chart X: China's oversea signed contract in the OI countries

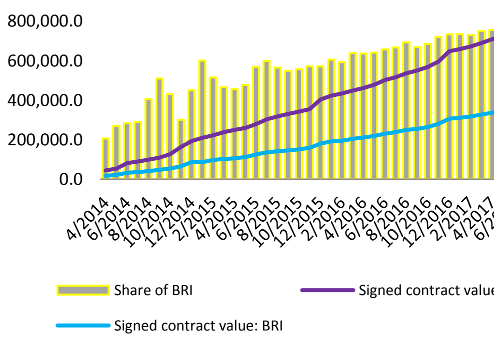
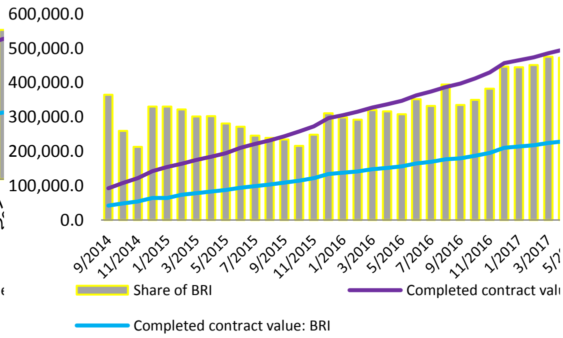
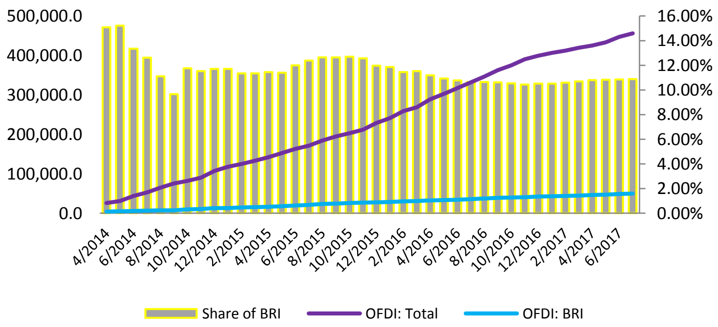


Chart X: China's oversea completed contract in the OI countries



However, it is too early to say that real progress has been made for investment in the OBOR area. Although signed contract value increased dramatically, the accumulated completed contract in the region increased at a relatively slower pace, with its share over the total completed contract only slightly increased from 45% to 46%. This may reflect the fact that most of the existing signed contracts are either ongoing or not started yet. Chart X further shows that the proportion of the accumulated oversea non-financial direct investment in the BRI area has actually decreased since 2014 from 15% to 11%. As such, the implementation of the BRI projects seems still lack efficiency.

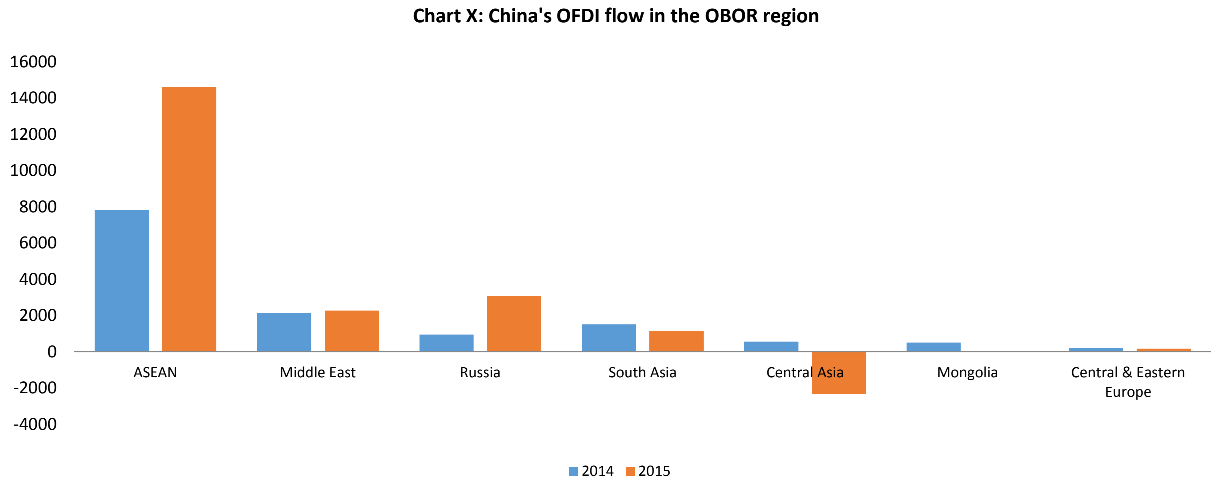
Chart X: China's oversea direct investment in the OBOR countries

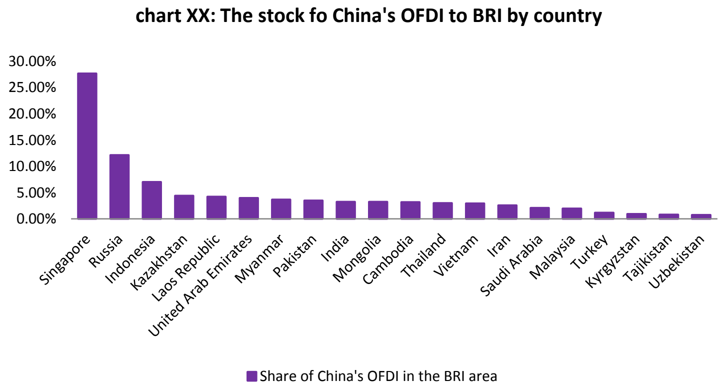


Moreover, China's oversea investment in the BRI area is also not unequally distributed. Most of the increase in outward direct investment goes to ASEAN. In fact, ASEAN is China's most stable economic neighbor, with similar structure as well as cheap labor, so has long been viewed by Chinese investors as the best destination to outsource their production. The intense intra-industry trade between two blocs also reflects that the complementarity in the global production chain. At the country level, Singapore is the largest recipient of China's oversea investment, accounting for nearly 30 percent of China's direct investment in the region. This is not surprising given that Singapore is one of the world's important financial centers and also the most developed country in the region. Although the intermediary role of Singapore implies that capital flows to the country may later be diverted to another country, this nonetheless reflects the crucial role of Singapore in China's grand plan.

Russia also improved its position in attracting Chinese oversea investment. China's investment in Russia has strong geo-strategic consideration. If China builds complete transportation system in Russia, not only Russia can benefit from the infrastructure construction, it can also be a platform for China to further extend its connection with Europe.

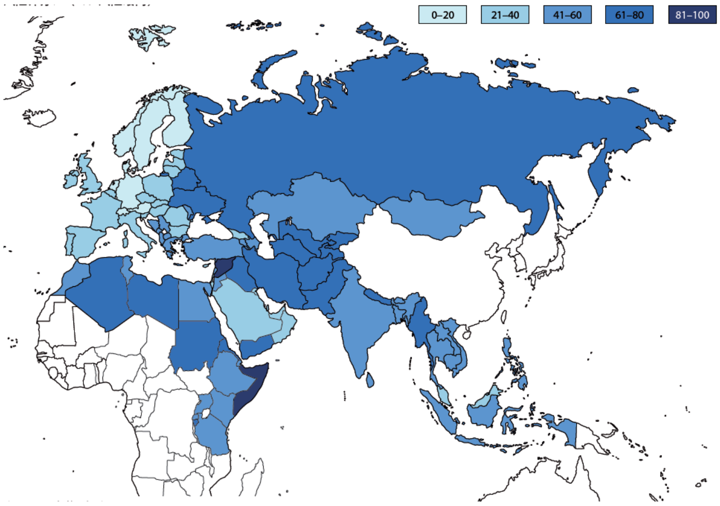
China's investments to the other major destinations have hardly increased. Some regions even experienced declines in Chinese investment from 2014 to 2015. Indonesia, Kazakhstan and Laos are the largest recipient of Chinese oversea investment after Singapore and Russia. Most of Chinese investments to these countries are concentrated on the energy sector.





Needless to say, Chinese investor's unbalanced investment in the BRI area is associated with the country's economic as well political risk. For example, China's port project in Sri Lanka's capital, Colombo, has been suspended after the election of new Prime Minister, Maithripala Sirisena, in 2015. According to the Economist Intelligence Unit, the BRI area on average has much higher risk than the developed countries, with Singapore has the lowest risk compared with the others. ASEAN (except Myanmar and Cambodia), Russia, Mongolia and India are relatively less risky. That is why China's oversea investment is overwhelmingly concentrated on these countries.

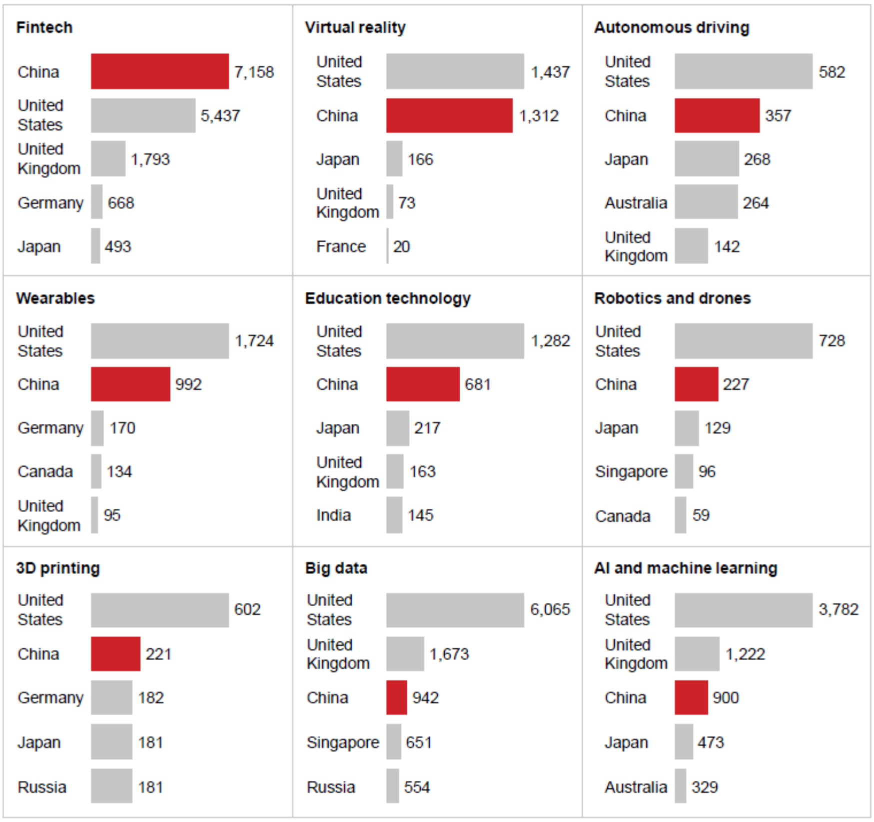
Chart XX: Overall country operational risk in the BRI area



Source: The Economist Intelligence Unit.

Although China's past investment in the OBOR area focuses mainly on infrastructure and energy, but looking forward, more technologies are expected to be embedded in its oversea investment. In fact, China has now been ranked the second following the US in terms of share of total value added created by high-tech manufactures. It is also in the global top three for venture capital investment in key technologies. As such, although the past experience of Chinese oversea investment is concentrated on energy and resources, this may not be always so in the future.

Venture capital investment in leading technologies, 2016[1]
$ million



1 Based on the nationality of the venture-capital investor. Coinvested deals are counted under each nationality. Investments in startups with multiple technologies are counted in each category of technology.
NOTE: Not to scale.

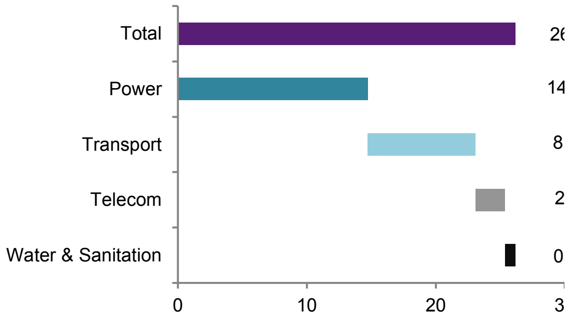
SOURCE: PitchBook; McKinsey Global Institute analysis

In a nutshell, investment growth is expected to continue the expansion in ASEAN, Russia and Mongolia. Even though China has put strong emphasis on the connectedness with the Central Asian and South Asian countries, little improvement in investment has been made, mainly because of their political and economic risk. In the presence of such difficulties, the most feasible route for Asia-Europe connection is still the route across Russia, although the geographic interest conflicts still needs to be sorted out.

5. How to finance the BRI? Headwinds ahead

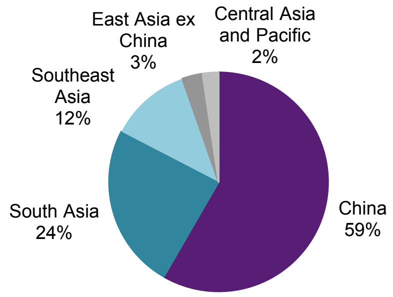
The implementation of the BRI includes a number of grand infrastructure plans. But this is easier said than done. The Asian Development Bank (ADB) recently increased its already very high estimates of the amount of infrastructure needed in the region to 26 USD trillion in the next 15 years, or 1.7 USD trillion per annum. The great thing about the China driven Belt and Road initiative is that it aims to address that pressing need, especially in transport and energy infrastructure. The a-priori is that the financing will be there thanks to China’s massive financial resources.

Asia: Investment Needs by Sector (2016-2030, USD tr)



Source: Natixis, ADB N.B. Climate-adjusted estimates

Asia: Investment Needs by Country (2016-2030)



Source: Natixis, ADB N.B. Climate-adjusted estimates

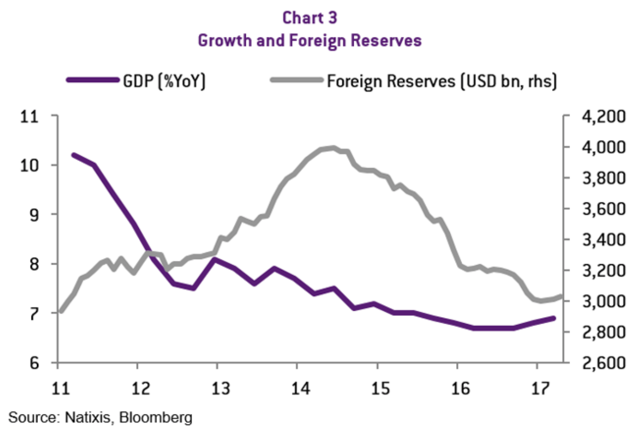
Such a-priori was probably well taken when China was flooded with capital inflows and reserves had nearly reached USD 4 trillion and needed to be diversified. In the same vein, Chinese banks were then improving their asset quality, because the economy was booming and bank credit was growing at double digits. However, the situation today is very different. China's economy has slowed down and banks' balance sheets are saddled with doubtful loans, which keeps on being refinanced and does not leave much room for the massive lendings needed to finance the Belt and Road initiative. This is particularly important as Chinese banks have been the main lenders so far (China Development Bank in particular with estimated figures hovering around USD 100 billion and Bank of China has already announced its commitment to lend USD 20 billion). Multilateral organizations geared towards this objective certainly do not have such a financial muscle. Even the Asian Infrastructure Investment Bank (AIIB), born for this purpose, has so far only invested USD 1.7 billion on Belt and Road projects. As if this were not enough, China has lost nearly USD 1 trillion in foreign reserves due to massive capital outflows. Although USD 3 trillion of reserves could still look ample, the Chinese authorities seem to have set that level as a floor below which reserves should not fall so that confidence is restored (Chart 3). This obviously reduces the leeway for Belt and Road projects to be financed by China, at least in hard currency.

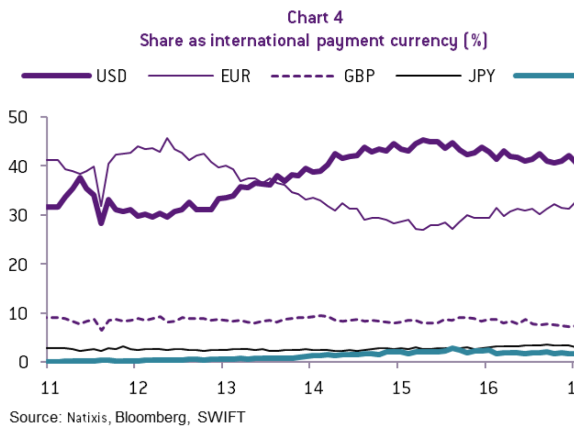
Against this background, we review different financing options for Xi's Grand Plan and their implications. The first and least likely one, is for China to continue such huge projects unilaterally. This is particularly difficult if hard-currency financing is needed, for the reasons mentioned above. China could still opt for lending in RMB, at least partially, with the side-benefit of pushing RMB internationalization. However, even this is becoming more difficult.

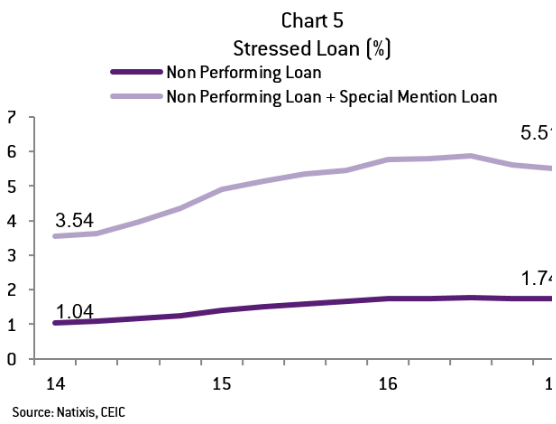
First, the use of the RMB as an international currency has been decreasing as a consequence of the stock market correction and currency devaluation in 2015 but still some of the Belt and Road projects could be financed in RMB in as far as the borrowing of a certain host country would be fully devoted to paying Chinese construction or energy companies (Chart 4). This quasi-barter system can get away with the hard-currency constraint but poses its own risks to the overly stretched balance sheets of

Chinese banks. In fact, their doubtful loans have done nothing but increased during the last few years, which is eating up the banks' room to lend further (Chart 5).

A second option is for China to intermediate overseas financial resources to the Belt and Road projects. The most obvious way to do this, given the limited development of bond markets in Belt and Road countries as well as the still limited size of China's own offshore bond market, is to borrow from international banks. Cross border bank lending has been a huge pool of financial resources, especially in the run up to the global financial crisis. Since then they have moderated but the stock of cross border lending still hovers above 15 USD, out of which, nearly half is lent by European banks. Out of the USD 15 trillion, about 20% is already directed to Belt and Road economies, with European banks being again the largest players (Chart 7).



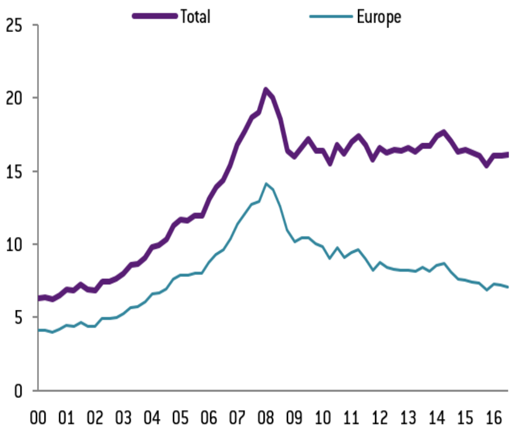




Still, in order to finance the USD 5 trillion targeted in Xi's grand plan for the next five years, you would need to see growth rates of around 50% in cross-border lending. While such a surge in cross-border lending is not unheard of (in fact, it happened in the years prior to the global financial crises), the real bottleneck would be the rapid increase in

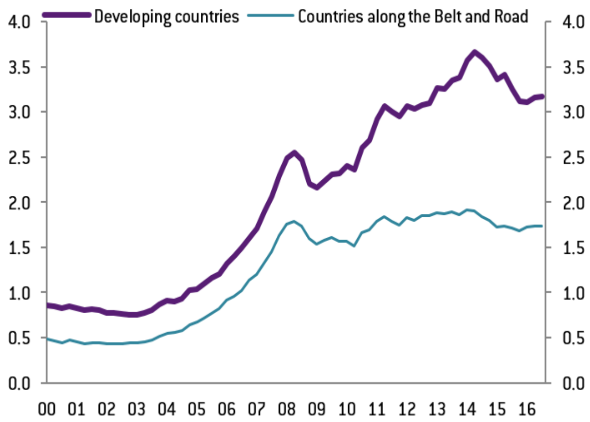
China's external debt, which would go from the currently very comfortable level (12% of GDP) all the way to more than 50% if China were taken on the debt, or something in between, co-financing with Belt and Road countries.

Chart 6
International Claims (USD tr)



Source: Natixis, BIS NB Locational statistics used for China, available from 2015 Q4

Chart 7
Borrowing countries (USD tr)



Source: Natixis, BIS

A mix of option 1 and 2 lies on the use of multilateral development banks to finance the Belt and Road projects. In fact, China is a major shareholder of its newly created multilateral banks (AIIB and New Development Bank) but less so in existing ones (such as ADB, EBRD or the World Bank). This means that the financing burden can be shared (to a lesser or larger extent) with other creditors, while still keeping a tight grip on the construction of such infrastructure (at least in China-led new organizations). While apparently ideal, the problem with this option is that the available capital in these institutions is minimal compared to the financing needs previously discussed (Table 1).

Table 1: China lending to the world through multilateral banks

	Capital	Announced	Disbursed
	240 USD bn	17 - 23 USD bn	> 3.1 USD bn
Asian Infrastructure Investment Bank (AIIB)	100 USD bn	10 - 14 USD bn	1.7 USD bn
New Development Bank (NDB)	100 USD bn	5 - 7 USD bn	1.4 USD bn
Silk Road Fund	40 USD bn	2 USD bn	-

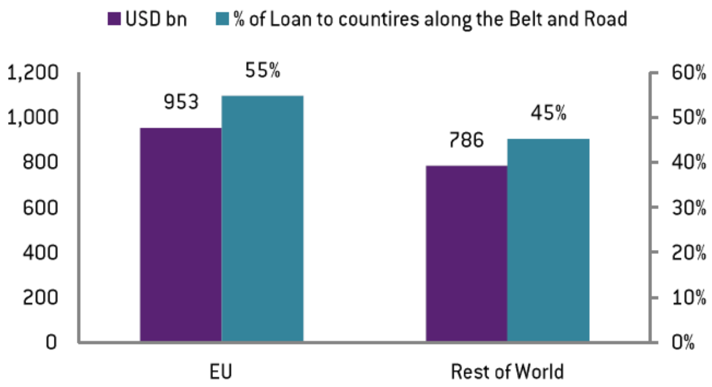
Source: Natixis * Estimated from the proportion of cross border lending (excluding Europe) to OBOR / Total lending

It seems that China cannot really on its banks alone – no matter how massive they are – to finance such a gigantic plan. The key source of co-finance would logically be Europe at least so long as bank lending dominates, which will be the case for quite some time for the countries under the Belt and Road. In fact, European banks are already the largest providers of cross border loans to these countries so it is only a question of accelerating that trend. Furthermore, the geographical vicinity between Europe and some of the Belt and Road countries could make the projects more appealing (Chart 8 and Chart 9). In addition, the European Union has its own grand plan for financing infrastructure – among other sectors – namely the Juncker Plan, which could serve as a standard to identify joint projects of interest to both EU and China. In this vein, EU-

China connectivity platform was launched by the European Commission in late 2015 exactly to identify projects of common interest between the Belt and Road and the EU connectivity initiatives, such as the Trans-European Transport network. All of these bode well for Europe to become an active actor in China's Belt and Road initiative, not only to provide the financing but also to identify projects of common interest.

It goes without saying that other lenders, beyond Europeans, are welcome to finance Belt and Road projects as the ensuing reduction in transportation costs and improved connectivity should be good for the world as a whole. However, Europe's particular advantage in this project should make it a leader on the financing front, bringing the old continent closer to China.

Chart 8
Loan to the Belt and Road Countries (2016 Q3)



Source: Natixis, BIS

All in all, the Belt and Road is great for supporting high demand in Asian infrastructure, but there is a limit on how much China can finance. The slowdown of the economy and the limits on the use of foreign reserves are some of the impediments. Furthermore, Chinese banks balance sheets, the largest source of financing so far, are increasingly saddled by doubtful loans, which limit their lending capacity. As for official multilateral development agencies, their funding sources remain limited for the extent of the project. Against this background, European banks - the largest cross-border lenders in the world – are well placed to step their already large financing to Belt and Road countries. Furthermore, Europe's proximity with some of these countries can make some of these projects more appealing for Europe as well. Thus, we should expect private and public European co-financing of Belt and Road projects to increase over the next few years and, with it, European interest for Xi Jinping's Grand Plan as wll. This should bring Europe closer to China.

6. Conclusion

This paper makes a mid-term assessment for China's BRI from the perspective of trade, investment and finance, respectively. We find that trade has made significant progress in the BRI area in the past three years, but the development was not equally distributed in the area. The progress in investment has been so far more discouraging. Although the absolute level of China’s oversea investment in the area has been picking up in recent years, the relative share compared with the other regions actually declined. The financial aspect of the BRI is also uncertain. China has injected its own funds through various institutions, but various estimates indicate that there is still a big gap to fully fulfil the needs for finance in the BRI area, which requires more international cooperation.

All in all, China’s progress in the BRI is still on the way. The future of the BRI may continue to go in a very unbalanced direction, especially towards ASEAN and Russia. The actual investment in this area is also expected to increase and upgrade with more technology, but this hinges not only on the BRI area itself, but how China’s relationships with the US and the EU evolve. More importantly, China cannot finance the BRI by itself and needs to cooperate with the EU and US for the development of the BRI.

Acknowledgement

This research is supported by the Strategic Public Policy Research Funding Scheme from the Central Policy Unit of the Hong Kong SAR Government.

Visit http://iems.ust.hk/bri-sppr for details.