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China's One Belt One Road Initiative—A Debt Trap?

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Abstract

Infrastructure has been a bottleneck for industrialization of developing countries. After decades of economic growth led by investment in infrastructure, China released its first global strategy in 2013, One Belt One Road (BRI), to improve infrastructure in less developed countries along the belt and road. Although economic development has been witnessed in some BRI members, large amount of investments from China raised concern over debt crisis from the Western world and host countries. Countries receiving loans from China are struggling to effectively manage the BRI projects. Some are renegotiating the investments with China and some BRI members even canceled them. However, one reality that cannot be ignored is that the majority of BRI members have successfully finished their BRI projects and integrated them into the national economy. The main goal of this paper is to determine whether three elected BRI members (Djibouti, Pakistan and Maldives) have been exposed to the debt crisis caused by massive investments from China. This research also covers details of the BRI contracts signed by China and BRI members in which the amount of investments, interest rates of the loans and the cooperation models will be explained. By comparing debt conditions of BRI members with the debt crisis of Mexico in 1982, readers should draw the conclusion that a limited number of BRI countries are facing a debt crisis caused by China's BRI. These BRI members are in a difficult stage of economic development where many new developed economies have conquered. Also discussed in this paper are the roles of the IMF and the World Bank to seek international cooperation between China and western countries in external debt borrowing.

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Abstract

Infrastructure has been a bottleneck for industrialization of developing countries. After decades of economic growth led by investment in infrastructure, China released its first global strategy in 2013, One Belt One Road (BRI), to improve infrastructure in less developed countries along the belt and road. Although economic development has been witnessed in some BRI members, large amount of investments from China raised concern over debt crisis from the Western world and host countries. Countries receiving loans from China are struggling to effectively manage the BRI projects. Some are renegotiating the investments with China and some BRI members even canceled them. However, one reality that cannot be ignored is that the majority of BRI members have successfully finished their BRI projects and integrated them into the national economy. The main goal of this paper is to determine whether three elected BRI members (Djibouti, Pakistan and Maldives) have been exposed to the debt crisis caused by massive investments from China. This research also covers details of the BRI contracts signed by China and BRI members in which the amount of investments, interest rates of the loans and the cooperation models will be explained. By comparing debt conditions of BRI members with the debt crisis of Mexico in 1982, readers should draw the conclusion that a limited number of BRI countries are facing a debt crisis caused by China's BRI. These BRI members are in a difficult stage of economic development where many new developed economies have conquered. Also discussed in this paper are the roles of the IMF and the World Bank to seek international cooperation between China and western countries in external debt borrowing.

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1. Introduction

One Belt One Road Initiative (BRI) was first announced by the Chinese president Xi Jinping in 2013. This initiative is the heritage of the ancient Chinese Silk Road during the Han dynasty, when Rome and China traded silk with one other. The modern BRI involves massive investments in infrastructure in Eastern Europe, Asia and Africa and is devoted to building a community towards a shared future for mankind. As China's first global economic strategy, the BRI also served to deepen the Chinese reform and opening-up policies. China's economy has been in a new normal situation. Since 2013, China has been experiencing lower economic growth and excess production capability. Long period investment-led growth created record high GDP growth rate, and thousands of steel and concrete factories in China. There are over 1,400 steel factories in China with annual production of 800 million tons. In December 2019, the production of crude steel in China accounted for 55% of global production. The BRI's investment in infrastructure can effectively absorb excess production, upgrade Chinese industries and avoid the middle-income trap[1] (Jin, 2018). Meanwhile, the world economy is in a mediocre period. Globalization and anti-globalization both exist in today's world. The BRI is designed to improve economic integration, policy coordination and infrastructure connection.

[1] Jin, "Why does China Lead One Belt One Road Initiative?" https://www.sohu.com/a/241897832_100122958.

However, critics predict the BRI is a debt trap for investment recipients. At the IMF-PBC conference in 2018, the IMF Managing Director, Christine Lagarde, stated that"these ventures can also lead to a problematic increase in debt, potentially limiting other spending as debt services rise, and creating an imbalance of payment challenges." (Lagarde, 2018) Unlike the Marshall Plan, which mainly gave grants and did not request repayments, clauses of BRI often involve commercial loans. China has invested in over 3,000 projects in the BRI. In 2015, 49 participating countries signed $17.8 billion contracts with Chinese companies and a total of $12 billion were executed. A report from the Center for Global Development[2] (Is Pakistan Sitting on China's BRI Debt Bomb? , 2018) found eight countries were at a debt risk due to BRI: Djibouti, Kyrgyzstan, Laos, the Maldives, Mongolia, Montenegro, Pakistan and Tajikistan. Djibouti has 86% external debt to GDP in 2017, and 80% of its debt is owed to China, according to the Center for Global Development. Sri Lanka's Port Hambantota was leased to China for 99 years as an exchange of the $1.1 trillion Chinese debt written off. Pakistan will renegotiate a trade agreement in the $62 billion China-Pakistan Economic Corridor plan. Financial crisis has pushed Pakistan to its 13th bailout with the IMF within three decades. Developing countries such as Malaysia, Myanmar, Bangladesh and Sierra Leone also either backed away or cancelled BRI projects because of BRI projects' high costs and impacts on national debt and the economy (Chandran, 2019).

[2] "Is Pakistan Sitting on China's BRI Debt Bomb?". 2018. https://www.cgdev.org/article/pakistan-sitting-china%E2%80%99s-bri-debt-bomb-report-says-it-could-derail-economic-growth-8.

However, after 7 years of the first BRI project was launched, China and BRI members are still signing more contracts. By analyzing three BRI members—Djibouti, Pakistan and Maldives—this thesis critically discusses those worries as perhaps unfounded. If the BRI is a debt trap and can cause massive debt crisis to its members, China's first global strategy will face a large obstacle. The cooperation between China and BRI members will also need to be adjusted accordingly.

In this thesis, Chapter Two will introduce necessary literature for this essay. Basic concepts related to debts between countries will be explained; readers will understand the problems and solutions for international borrowing. In Chapter Three, readers will have a general picture of three targeted BRI members' trade with China and details of their BRI projects. International trade between BRI members and China partly provides foreign reserves to external debts, which China offers; it can also serve as a barometer of three members' debt statuses. The BRI projects explain the model of cooperation and details of investments in the BRI. Readers will discover the differences between BRI investment and other forms of international borrowing in this chapter; some answers to concerns previously mentioned can also be found through exploring the model of cooperation. Chapter Four further compares debt conditions of three targeted countries with Mexico. By analyzing certain related ratios, readers will have a clear image of three BRI members' debt borrowed from China. Chapter Five echoes the debt solutions in Chapter Two. This chapter provides practical debt solutions to prevent BRI members being struck by debt crisis. Readers will also find the reason that BRI members participate in the program even though the West has criticized it. This chapter also addresses concerns from the West. Transparency has always been a drawback for the BRI. By improving international

cooperation with the IMF and World Bank, the BRI can be more accessible to the West, who has objections toward the BRI.

Mexico has historically fallen into debt crisis. In the 1970s, the country borrowed a large amount of funds from multilateral and bilateral agents to develop its infrastructure. Its road to industrialization was disturbed by the sharp drop of oil prices in the 1980s. As a major export product, oil could not bring in enough foreign exchange to pay back Mexico's external debts. Although the Mexican government made efforts to devaluate the peso to increase exports, the foreign reserves still ran out. The rising interest rates in the U.S. and Europe in 1979 increased the exchange rate of the US dollar, which made it harder for debtors to repay their debt. In August 1982, Mexico declared it could not service its debt. The U.S. banks owned about 30% of $75 billion commercial loans of Mexico, who had $98 billion foreign debt in total. The external debts lent by the 9 largest US banks were equal to 233% of their primary capital. By the end of 1985, Latin America had accepted around $217 billion foreign debts from commercial banks. US banks held 41.7% of these debts, and European and Canadian banks held 37% and 7.6% respectively.

The IMF issued $3.8 billion loans to Mexico in December 1982, helping Mexico to alleviate its debt obligations. The IMF was a super credit agency in foreign aid. Before the aid was given by the consortiums, the IMF would decide whether the recipients were credit-worthy for relief funds. As an international organization, the IMF is reckoned better able to advise governments on sensitive matters of financial policy and to suggest corrective measures in return for credits. The suggested measures usually include exchange rate practices, import regulations, control of the domestic budget deficit, bank credit controls and policies towards foreign investment[3]

[3] Payer, Cheryl. (1974). *The Debt Trap*. New York, NY: Monthly Review Press. Page 29

(Payer, The Debt Trap: the IMF and the Third World, 1974). The quantitative commitments for these terms are often specified by the IMF, and the aid will be suspended if the government fails to keep the commitments.

2. Literature Review

2.1 Internal Debt and External Debt

A country's debt can be split into internal debt, which is owed to creditors within the country, and external debt, which is owed to foreign lenders. The debt in BRI projects is external debt. According to Investopedia.com, internal debt is owned to lenders who are within the country. External debt is borrowed from foreign lenders including governments, commercial banks and international financial institutions. The borrowers of external debt usually repay the debt in the currency that the loan was made, so the borrowing countries may sell or export goods to the lender's country. In the Two-Gap models of development designed by Harrod[4] (Harrod, 1939) and Domar[5] (Domar, 1946), they pointed out that net capital imports can be used to bridge the saving gap and the foreign currency gap. The first gap is between saving and investment in the economy. A less developed country usually has low savings, which is not adequate to start heavy investment in infrastructure. External debts from developed countries is an effective solution to fill in the saving gap; or a less developed country can also participate in international trade to generate surplus, which can be used to fill the saving gap. However, trade with other countries leads to the second gap, which is the foreign

[4] Harrod, Roy F. (1939). "An Essay in Dynamic Theory". *The Economic Journal*. 49 (193): 14-33.

[5] Domar, Evsey (1946). "Capital Expansion, Rate of Growth, and Employment". *Econometrica* 14(2):137-147.

currency gap. Most less developed countries can only provide primary goods to advanced economies. Production of exporting requires basic machine, capital and technology. Less developed countries have limited accesses to these resources but to import from other countries, which can create a cost differential in a short run. The internal debt markets of BRI countries are not adequate for their own infrastructure construction as of low domestic savings. The foreign currency reserves from trade are not sufficient to import the equipment needed for industrialization, either. Most countries turn to external borrowing, which can also bring in technology, management and technical training.

Economists Carmen Reinhart and Kenneth Rogoff assert in "Growth in a Time of Debt"[6] (Reinhart & Rogoff, 2010) that the growth thresholds for external debt are considerably lower than for the thresholds for total public debt. The relationship between government debt and real GDP growth is weak for debt-GDP ratios below a threshold of 90% of GDP. Above 90%, median growth rates fall by 1%, and average growth falls considerably more. However, growth deteriorates significantly at external debt levels over 60%, and further still or even declines when the levels exceed 90%. Based on Reinhart and Rogoff's data from 59 countries, external burdens are particularly high in Europe, where the ratio of external debt to GDP is over 200% in advanced European countries and around 100% in emerging European countries. The ratio of US gross external debt liabilities to GDP was less than half of Europe's in 2009, according to Reinhart and Rogoff's findings; Japan had a much smaller size of external debt. The Latin American figure was around 50% from 2003 to 2009. Interestingly, the change in

[6] Reinhart, C., & Rogoff, K. (2010). "Growth in a Time of Debt". 16-20

external debt to GDP ratio in Latin America was -30% compared with 50% in advanced economies from 2003 to 2009.

2.2 Liquidity Problem and Solvency Problem

The liquidity problem refers to a short-run debt service problem. A country with foreign debt has a liquidity problem when its assets cannot be immediately converted to a form acceptable to creditors, although the debtor country will eventually repay the debt. The liquidity problem can be resolved through temporary finance.

The solvency problem refers to a country's incapability to repay its external debt. A country is in insolvency if it can never repay its external debt due to its poor economic condition and dismal economic prospects.

2.3 Causes of the Developing Countries' Debt Problem

In the co-authored book "International Economics"[7] (Appleyard & Field, 2017), Dennis Appleyard and Alfred Field point out that the factors of the debt problem vary from country to country. Some factors are generalized by the two authors.

(a) Oil Price

The change of oil price is a prominent factor in a country's debt problem. The increase of oil price during 1973-1974 and 1979-1981 forced many emerging and developing countries to pay more for oil imports. It was necessary for these countries to borrow external debts, which were lent by industrialized countries' commercial banks. Mexico's debt crisis in 1982 was directly caused by the change of oil price, but in an opposite way. As a

[7] Appleyard, D., & Field, A. (2017). *International Economics.* New York: McGraw-Hill Education.

petroleum exporter, Mexico's foreign exchange reserves plummeted as the price of oil dropped in 1982. It became impossible for Mexico to service its external debts, and a debt crisis struck Mexico's economy in a chain reaction. In terms of the three BRI countries in this paper, refined petroleum is the top import for Pakistan and Maldives; Djibouti is also an oil importer. Influences described above will happen to them if oil price soars.

(b) Recessions in the Industrialized Countries

The recessions in the 1970s were caused mainly by the oil shocks and partly resulted from anti-inflationary macroeconomic policies adopted in industrialized countries. Imports from developing countries to industrialized countries decreased as of the recessions. However, developing countries must maintain a flow of imports to ensure their economic growth. As a result, more foreign borrowings were conducted by developing countries. The US is the top export destination for Pakistan and Maldives, and the UK is the first export destination for Djibouti. The trade conditions of the three BRI countries are closely related to the economy of industrialized countries. If these industrialized economies experience a recession, the three BRI countries' exports will be largely affected. Then the foreign exchange reserves and capabilities of external debt service will deteriorate due to a chain effect.

(c) Real Interest Rates

The real interest rate is equal to the nominal interest rate minus the expected rate of inflation. The real interest in the 1970s was low because of high inflation, which encouraged developing countries to borrow more external debts. In the 1980s, the inflation rate of the U.S. plummeted, and the real interest rate increased. Developing countries who borrowed existing debt

services had more financial burdens. Mexico was one of the countries that had difficulties in servicing foreign debt because of the high real interest rate in the US. Approximately 75% of the interest payments were tied to the US interest rate and the London Interbank Offering Rate (LIBOR), which repriced every six months. Mexico's debt owed to foreign institutions was especially vulnerable to repricing risk driven by changes in the macroeconomic conditions of the creditor nations. In terms of BRI loans, the interest rates of loans are not released to researchers. Partly because the rates for different projects are various, given conditions of countries, and the Chinese financial institutions purposely conceal them to avoid competition among BRI members. BRI countries will face the same challenge that Mexico experienced in 1982 if China decides to raise interest rates. But the strong political will of the Chinese government toward the success of the BRI can facilitate renegotiation between the debtors and creditor, which is the most different aspect from American lending.

(d) Primary-Product Prices

Primary products are goods without a manufacturing process; examples are oil, water, fruit and wood. Developing countries are main exporters of primary products. The Prebisch-Singer hypothesis, created by economists Raul Prebisch and Hans Singer, points out that the price of primary goods declines relative to that of manufactured goods. As economist Hans Singer mentions in "The Distribution of Gains between investing and

borrowing countries"[8] (Singer, 1950), the specialization of underdeveloped countries in the export of food and raw materials to industrialized countries, largely as a result of investment by the latter, has been unfortunate for the underdeveloped countries for two reasons: (a) because it removes most of the secondary and cumulative effects of investment from the country in which the investment took place to the investing country; and (b) because it diverts the underdeveloped countries into types of activity offering less scope for technical progress, internal and external economies taken by themselves, and withholds from the course of their economic history a central factor of dynamic radiation which has revolutionized society in the industrialized countries. Compared with industrialized countries, less developed countries have not experienced the same growth in income, capital, employment and technical knowledge by exporting their primary goods. It might be even more important that the price of primary goods has been heavily reduced against sellers, limiting the benefits to underdeveloped counties.

The decreasing price of primary products in the 1980s caused developing countries to borrow more external debt to finance their imports. Mexico was mainly affected by the lower price of its primary product—oil—in the financial crisis of 1982. Most countries participating in the BRI are less developed countries whose exports are mainly primary products. Coffee, wood charcoal, house linens, rice and fish fillets are top exports for the three BRI countries with difficult indebtedness. Incomes from trading these

[8] Hans Singer. (1950). "The Distribution of Gains Between Investing and Borrwoing Counties". The American Economic Review, Vol. 40, No. 2, Papers and Proceedings of the Sixty-second Annual Meeting of the American Economic Association (May 1950), pp. 473-485.

primary commodities will change along the price changes of these products, which will reflect on their Current Account. A long term deteriorating Current Account will jeopardize the country's debt service capability. Compared with Mexico, these three BRI countries' Current Accounts are unsatisfactory; this is also the reason that countries are constantly looking for financial supports from various sources. Besides borrowing from countries like Saudi Arabia, China, and the US, etc., multilateral borrowing (IMF and World Bank) is also an alternative method for BRI countries. Nonetheless intricate requirements and long processes of multilateral borrowing daunt these less developed countries, who try to keep their sovereignty independent.

(e) Domestic Policies

How a country uses its loans will affect its capabilities to repay its external debt. If the external loans are used for consumption other than for productive investment, the investment will not directly generate cash flows to serve the debt. The excessive monetary policy associated with government budget deficits will also influence a country's debt services. Furthermore, mismanagement of domestic financial institutions, poor domestic price controls, and overvalued currency will all hinder a country's ability to repay its external debt. Mexico experienced an enormous fiscal expansion under the administration of the president Luis Echeverria. The budget deficits soared to 10% of GDP in 1975 and 1976. The growth rate of the monetary base accelerated to 33.8% in 1975, and the inflation rate was over 20% in 1973 and 1974. A large amount of remunerations from oil exports for Mexico also enabled the country to reinvigorate economic confidence and direct the most dynamic development. Its public sector borrowed $37 billion from

international lending institutions and $24 billion was serviced to the public debt. The large-scale intervention of Mexico's government in trade and foreign investment policies made many state-owned companies unprofitable, which became a landmine for its debt crisis. As far as BRI countries, the corruption problem in Maldives has also led to the increasing cost of projects. But Maldives's fiscal strategy involves a good combination of external debtors and debt types; the government is trying to keep a moderate increase of its external debts. The mismanagement problem of BRI projects in Pakistan has forced the country to reconsider the investment in the China and Pakistan economic corridor. Pakistan is also looking for new bridge financing for current debt services. Because BRI projects are all intended to develop the public sector, the cost for which normally requires a long time to break even, these public enterprises' capacities of profitability determine the success of the BRI. The state-owned enterprises in Maldives and Pakistan both have better performances than those in Mexico.

(f) Capital Flight from the Developing Countries

Domestic citizens send funds overseas due to concerns about rapid inflation, low real interest rate and political instability. Mexico's annual inflation rate exceeded 20% from mid-1978 to mid-1980. The overvalued exchange rate also increased the fear of devaluation and led to capital flight. The peso depreciated 16% from 1980 to 1982 and the real interest rate turned to negative. Mexico's capitalists were more interested in accumulating capital through rentier practices in 1982 but in industries with low profits. The state lost control over the speculative capital as political and economic power of finance capital increased. The significant difference between BRI capital and

capital in Mexico in 1982 is that the BRI capital is guided and controlled by the Chinese government who can effectively prevent capital flight. Besides, the direct investments in BRI infrastructure projects, other than lending to local banks, can increase the investment precision and restrain speculation of BRI capital. It is not necessary for BRI members to have the fear of capital flight now.

(g) "Loan-Pushing" by Banks in Developed Countries[9] (Darity & Horn, 1988)

The large amount of outstanding loans brought risks not only to developing countries but to developed countries. The banks in advanced economies with enough funds, fueled by the deregulation of financial institutions, were anxious to expand their loan portfolios. As a result, the external loans were often made without sound economic analysis or risk considerations. Meanwhile, the burdens of external debt were easily ignored by the banks in advanced economies due to more debt talks aggressively made by developing countries. However, loan pushing is hardly seen in the BRI due to the limited supplies of funds and the overwhelming demands. All investments are assessed and lent by Chinese financial institutions based on the necessity of local infrastructure development. Meanwhile, the buyer's credit is favored, and most lent to Maldives in 2016. Compared with other external loans, buyer's credit can provide short term funds but with a higher interest rate. The portion of buyer's credit in Maldives' external debts is relatively high and still rising in recent years. It is possible and economically practical for Chinese financial institutions to push their high profitable

[9] Darity, W., & Horn, B. (1988). *The Loan Pushers: The Role of Commercial Banks in the International Debt Crisis.* Cambridge: Ballinger.

products to BRI members, which can increase the cost of external debts and the risks of illiquidity for BRI countries.

2.4 Possible Solutions to the Debt Problem

(a) Changing Domestic Policies

Change of policy is a long-term solution that deals with a country's temporary illiquidity. The structural adjustment policies of the International Monetary Fund and the World Bank is an example of this solution. When a debtor borrows new loans from institutions, conditionality measures (austerity policies) are normally needed to be adopted by developing debtors. These policies involve reduction of government budget deficits, control of money supply, and the adoption of a realistic exchange rate. A country's trade balance and ability for debt services will be improved by devaluation along with contractionary monetary and fiscal policies. Mexico is an example that implemented changing domestic policies after the debt crisis in 1982. The Mexican government gradually retreated from micromanagement of its economy, which became more liberal after the crisis. Pakistan's government also faced the requests of austerity policies from the IMF while seeking bridge funds for BRI projects. But Pakistan cannot rely on the IMF for immediate funds because of the longer lending process within the multilateral institution. Among BRI members, Pakistan's economic corridor project is the largest investment from China. Most investments in other members are not large enough to change their domestic policies. The BRI investments in roads, hydraulic dams and bridges only provide limited funds for industrialization. It is not necessary for the countries who receive relatively smaller BRI

investments, which are the most cases, to change their domestic policies due to BRI loans.

(b) Debt Rescheduling

This is also a solution for liquidity problem. In a debt rescheduling, a debtor normally has a lower interest rate and longer maturity. The "Paris Club," a consortium known to deal with rescheduling, has rescheduled a large number of debts for Africa and Mexico. On December 10, 1982, US commercial banks rescheduled $23 billion of capital payments with Mexico. The "Baker Plan" and "Brady Plan" were implemented to reschedule Mexican external debts. The US commercial banks allowed Mexico to pay smaller payment streams in exchange for the original payments that could not be serviced. In "Making the Brady Plan work"[10] (Sachs, 1989), Jeffrey Sachs points out that the Baker Plan assumed that stretching out Mexico's repayment could help restore the country's banking system. What the Brady Plan recognized was that Mexico could not solve the problem without debt reduction, because the continuing crisis caused by the large stock of bad debt hindered the country's prosperity. Furthermore, the debt reduction did not make a significant change to the nominal debt of Mexico as of new financing. The discount bond reduced Mexico's debt by approximately $6.7 billion, which was close to the amount of new financing. Given the short period of time after the launch of the BRI, debt rescheduling has not been used by the creditor and debtors. Based on the experiences of China and its debtors, and China's expectation for its global strategy, it is predictable that this will be a

[10] Sachs, Jaffrey (1989). "Making the Brady Plan Work". https://www.foreignaffairs.com/articles/1989-06-01/making-brady-plan-work.

main technique to adjust the BRI loans if BRI members experience problems in regard to debt services.

(c) Debt Relief

Debt relief is intended to reduce a debtor's principal or interest rate with an anticipation that the debtor would carry out market and growth-oriented reforms. IMF or the World Bank can use a pool of money to guarantee the new bonds issued by debtors. These bonds are sold to existing lenders to retire the old debt, which can reduce the outstanding debt. The other way is to reduce the interest rate on new debt than on the old debt, which can also ease debt burdens. Both debt relief and rescheduling were involved in solutions to Mexican debt crisis in 1982 through the Baker Plan and the Brady Plan. China has been using debt relief with Africa, but apparently the Chinese financial institutions will not favor this solution because of capital loss. On one hand, Chinese financial institutions are avoiding debt relief; on the other hand, Chinese contractors are maintaining operations of local projects to ensure cash flows. These two methods can ensure the benefits for Chinese financial agencies.

(d) Debt-Equity Swaps

A debt-equity swap is when foreign creditors exchange the debt claim for local shares of stock in a productive enterprise. The debt burden of developing countries can be eased, and the creditors are holding equity in an ongoing company. The advantages of this solution depend on the performance of the company involved. Banks can be sellers, traders and direct investors of debt-equity swaps, and all roles are beneficial to banks. The disadvantage of the swaps is that it takes time for a company with financial problems to start

benefiting. Companies in this situation, especially newly privatized companies, are not likely to realize sufficient profitability in a short amount of time. After Mexico's debt crisis, debt-equity swaps helped transfer foreign capital to some of the country's unprofitable companies. In the 1989-92 debt package, the US and Mexico agreed to use debt-to-equity swap to stimulate investments in infrastructure; meanwhile, privatization of assets in the public sector was also conducted in the swaps. Mexican national and foreign companies took over the assets at a discount from 55 cents to 65 cents on a dollar value. The great deal did not last long, however, due to high inflation coming along with the debt-to-equity swap. The deal was suspended and was not revived until 1990. BRI member Sri Lanka leased one port to China for 99 years as a debt-equity swap. It is the least favorite solution for local governments in BRI projects; China has not accepted more debt-equity swaps after the case of Sri Lanka. Given the critiques of China's new colonialism, participants of the BRI are cautious of implementing debt-equity swaps.

(e) The Secondary Market of External Debt

Since 1982 banks have tried to eliminate claims on one country and to concentrate claims on another country whose prospects and future relations are more foreseeable. Lee Buchheit[11] (Buchheit, 1986) mentions in "Legal Issues in Trading Sovereign Debt" that purchasing banks could have a special relation with debtor countries, which increased the banks' chances of seeing the obligations repaid. Some banks even sold their loans at a discount to get cash. Banks would also purchase their external debts from some business-

[11] Buchheit, Lee. *"Legal Issues in Trading Sovereign Debt".* 1986.

profitable countries, according to Frydl and Sobol[12] (Frydl & Sobol, 1988). Not only the creditors in developed countries, but also investors and debtor countries participated in the secondary market of external debt in the late 1980s, which made the market more active. In 1986, Nissan using Citibank as a broker bought $60 million Mexican debt for $40 million. Then Nissan traded the debt with the Banco de Mexico for an $54 million worth of equity investment in Mexican pesos. For countries in the BRI, there has been no sign of trading loans in the secondary market. One main reason is that many Chinese contractors are operating local infrastructure projects, which makes the trading more sophisticated if the BRI loans were to be listed on the secondary market. In the future, it is not impossible for BRI members and Chinese financial institutions to trade their loans and to realize their mutual benefits. Mexico's debt crisis in 1980s can help readers to understand well the causes of the liquidity problem for BRI members. From conditions of global economy to domestic policies, readers will see repeated history in selected BRI members. However, these conditions should be carefully assessed given the different times and various economic strength of BRI members. The same indicator of debt crisis does not necessarily mean the same result, because the policy makers will learn and strive to avoid a crisis situation similar to what occurred in Mexico.

[12] Frydl, Edward and Sobol, Dorothy, (1988). "Prospects for LDC Debt Management: debt reduction versus debt forgiveness," Research Paper 8826, Federal Reserve Bank of New York.

3. BRI's Indebtedness

This chapter will introduce trade conditions and project contracts of five selected BRI countries. Trade income is the direct source of servicing external debt. The five countries' trade balance with China is listed in the following spreadsheet. As the top supplier to all five countries, China owns trade surplus with all five BRI members. As a result, it is difficult for these members to service their Chinese external debts with trade income from China. China is the only country with positive trade balance with all trade partners in the following chart. These BRI members' international trade will not provide them with extra US dollars to service the Chinese yuan.

Three countries' contracts with China will also be discussed; they are Djibouti, Pakistan and Maldives. As mentioned in the introduction, among 65 BRI participating countries, there are eight countries in debt crisis according to a report from the Center for Global Development: Djibouti, Kyrgyzstan, Laos, the Maldives, Mongolia, Montenegro, Pakistan and Tajikistan. The three countries receiving more focused discussion in this paper were selected due to their globally strategic locations and diplomatic relations with China. The geographic location of Djibouti is significant to international shipping routes. It connects the marine routes of Europe and Asia as an important commercial hub and military supply base. Maldives, a fort in Indian Ocean, also shares the geographic significance on the ocean route of BRI. Pakistan is the largest BRI funds recipient who also keeps a close political relationship with China. Besides the eight countries targeted by the Center for Global Development, the other

57 countries' indebtedness is not negatively affected by BRI if we follow their research findings. It is fair and necessary to discuss BRI countries who have well performed external debt management. Kenya's BRI projects will be introduced as a positive example in Africa, where many Chinese companies and individuals are heavily invested. Meanwhile, on the silk belt between Europe and Asia, Uzbekistan is located at the crossroads of Central Asia. As a landlocked country, Uzbekistan sets an example of strategy development for the BRI countries who similarly do not posess a sea gate. The projects in Uzbekistan have enlightening significance for the less developed countries constrained by efficient transportation.

To better understand the risks of external debts for Djibouti, Pakistan and Maldives, comparison of the three countries with Mexico will be presented. In the catastrophic debt crisis of the 1980s, Latin America experienced high unemployment and dropped income, the three main victims of which were Brazil, Argentina and Mexico. As a neighbor of the largest economy, Mexico owns the geographic advantage of linking South America and North America. Adequate external funds did not help Mexico to seize a booming economy in 1982, resulting in the country's worst lost decade since the 1930s. Will the economic development of BRI countries who own a large amount of external debts be trapped by foreign loans? By comparing data and exploring reasons in depth, the risks and opportunities will be explained to BRI countries.

The infrastructure projects in BRI countries are the source of concerns and the main difference from other external loans. The contracts between BRI countries and China will be presented including the models of engineering, source of capital and financial ratios. Readers can better understand structures of BRI projects from the details of released contracts.

	Djibouti	Pakistan	Maldives	Kenya	Uzbekistan
Change of Import from China (2014-19)	95.6%	22%	235%	1.3%	88%
Change of Export to China (2014-19)	1089%	-34.5%	87.7%	133%	36.5%
Total Trade Balance 2017 ($)	-3,830,000,000	-30,900,000,000	-1,080,000,000	-11,000,000,000	-2,840,000,000
Trade Balance with China in2017 ($)	-2,175,394,000 (56.8%)	-13,875,318,000 (44.9%)	-295,005,000 (27.3%)	-3,681,784,000 (33.5%)	-1,277,974,000 (45%)
Top Supplier	China	China	China	China	China
Top Import	Agricultural Product, Palm Oil	Industrial Product, Refined Petroleum	Industrial Product, Refined Petroleum	Industrial Product, Refined Petroleum	Industrial Product, Vehicle Parts
Top Destination	UK	US	Sri Lanka	Uganda	Switzerland
Top Export	Agricultural Product, Coffee	Agricultural Product, House Linens	Industrial Products, Petroleum Gas	Agricultural Product, Tea	Industrial Products, Gold

However, because of various economic conditions of BRI countries, rates of external debts are not easily accessible. BRI projects are independent from each other so that there is no universal regulation on loan terms among participating members. The data from Pakistan is more sufficient than that of Djibouti, which is the case of different disclosure systems. Intensive research in countries with more reliable information can be more easily accessible; for countries with little information released, publications from China and the third party are the mains sources of data. Limitation of data in key BRI countries restricts the comparison among members.

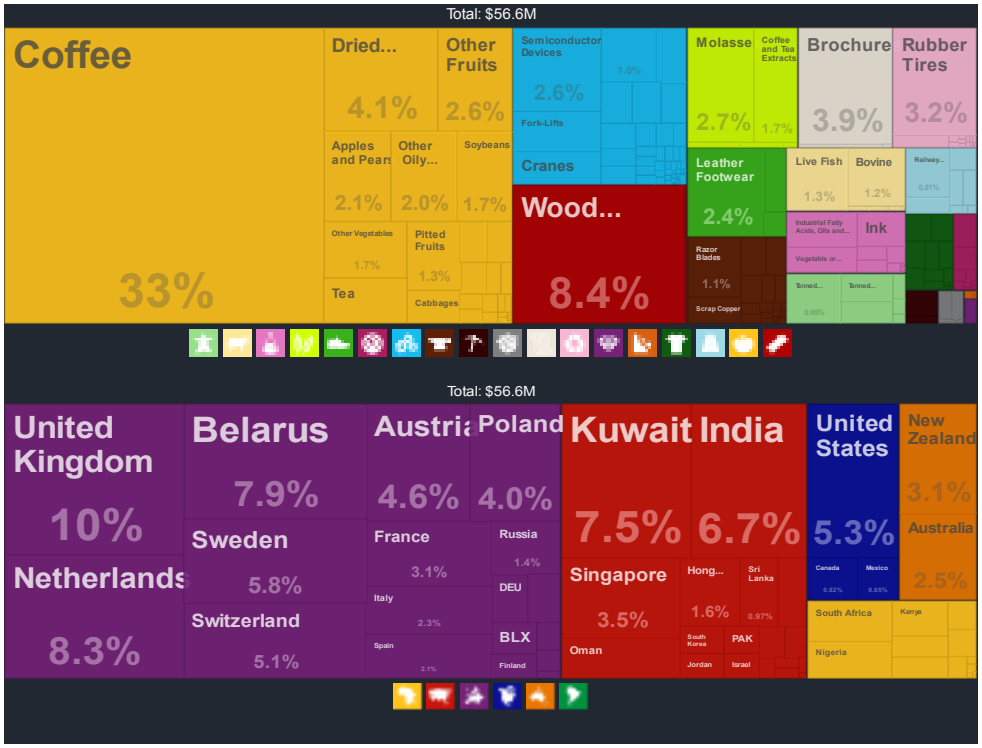
3.1 Countries With "Unhealthy" Indebtedness

Djibouti

According to the IMF, Djibouti's external debt over GDP ratio was formerly 87.3%, indicating a high risk of debt distress. The ratio has been kept high in recent years: 84.9% in 2016 and 86.9% in 2017. The IMF has estimated that the external debt over GDP ratio will be 63.1% from 2020 to 2036.

Djibouti ranks 193rd in the worldwide export economy, according to the Observatory of Economic Complexity. In 2017, its total value of export was $56.6 million, and the value of import was $3.89 billion. The total trade balance was negative $3.83 billion in 2017. Like other developing economies, Djibouti exports low value-added products including coffee (33%), wood charcoal (8.4%) and dried

Figure 1 The Exports and Export Destinations of Djibouti

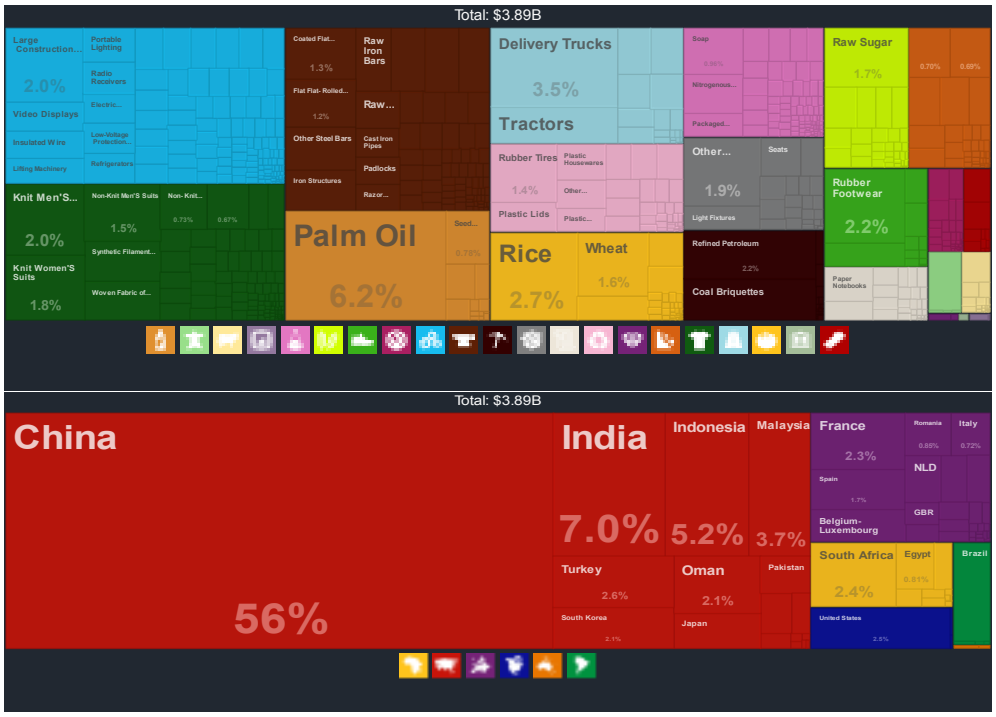


From the Observatory of Economic Complexity

legumes (4.1%). The main destinations of Djibouti's exports are European countries. The exports have been decreasing at an annualized rate of 2.6% from $63.3 million in 2012 to $56.6 million in 2017.

Djibouti's main imports are palm oil (6.2%), delivery trucks (3.5%) and rice (2.7%). Its imports increased 6.7% from $2.82 billion in 2012 to $3.89 billion in 2017. Djibouti's top suppliers are China, India and Indonesia.

Figure 2 The Imports and Import origins of Djibouti



From the Observatory of Economic Complexity

One major project in Djibouti is the $3.5 billion Chinese-built free trade zone started in January 2017. The free trade zone covers 48 square kilometers and was built by China's Dalian Port Corporation. A new Doraleh Multipurpose Port, beside the free trade zone, has been completed and is in operation. The port was built by the state-owned China Merchants Ports Holdings Company, and cost $580 million[13] (Ports, 2017). The free trade zone is designed as "front port-middle zone-rear city," which combines a deep-water port, free trade zone and city center. The development of the free trade zone can make Djibouti a logistic center, manufacturing zone and service campus. Djibouti holds the neck of Eastern Africa. This important strategic position helps Djibouti to become the Central Business District (CBD) in Eastern

[13] "One Belt One Road-China's Merchant Ports Holdings Company's Project in Djibouti" http://www.sohu.com/a/140291579_664818.

Africa. The other project in Djibouti is Addis Ababa-Djibouti railway (CCGP, 2017). It connects Ethiopia's capital and port of Doraleh in Djibouti and provide Ethiopia with sea access. The railway was in service in October 2016 and will serve 95% of trade in Ethiopia. The project costs $4 billion including train purchase. The Exim Bank of China financed $2.9 billion of the whole project, covering 70% funding in Ethiopia and 85% funding in Djibouti. Both countries bought credit insurance for loans from China Export and Credit Insurance Corporation. The loan in Ethiopia was lent to railway corporation, backed by Ethiopian government. The loan in Djibouti was lent to Department of Treasury, backed by Djiboutian government.

This railroad contract is Engineering Procurement Construction plus operations and maintenance (EPC+OM), which grants Chinese companies the rights to purchase all materials required and to manage the railroad after construction[14] (CCGP, 2017). In EPC+OM, the contractor is fully responsible for design, purchase and construction; while Djibouti is not involved in the construction until the project is transferred to Djibouti government. The contractors are China Civil Engineering Construction Corporation (CCECC) and China Railway No.2 Group. All trains on Addis Ababa-Djibouti railroad were built by NORICO International, a Chinese construction engineering company participating in the BRI. The operators are CCECC and China Railway Group, who will also provide technical support and training to local employers in the following 6 years after 2016. The Ethiopia-Djibouti Standard Gauge Rail Transport S.C. was jointly established by governments of Ethiopia and Djibouti in 2017, and it will take over the administration in 2024. African Railway

[14] "One Belt One Road PPP Project Case Study- Addis Ababa-Djibouti Railway", June 2017http://www.ccgp.gov.cn/ppp/gj/201706/t20170630_8454535.htm.

Academy was also founded to train rail engineers for preparation of the railway's administration.

Pakistan

According to the IMF, Pakistan's external debt was $95.4 billon or 30.3% of GDP in 2017. In 2018, its foreign debt jumped to $104.2 billion which was 345% of its export receipts. The IMF projected that Pakistan's external debt will be rising to $130 billion in four years.

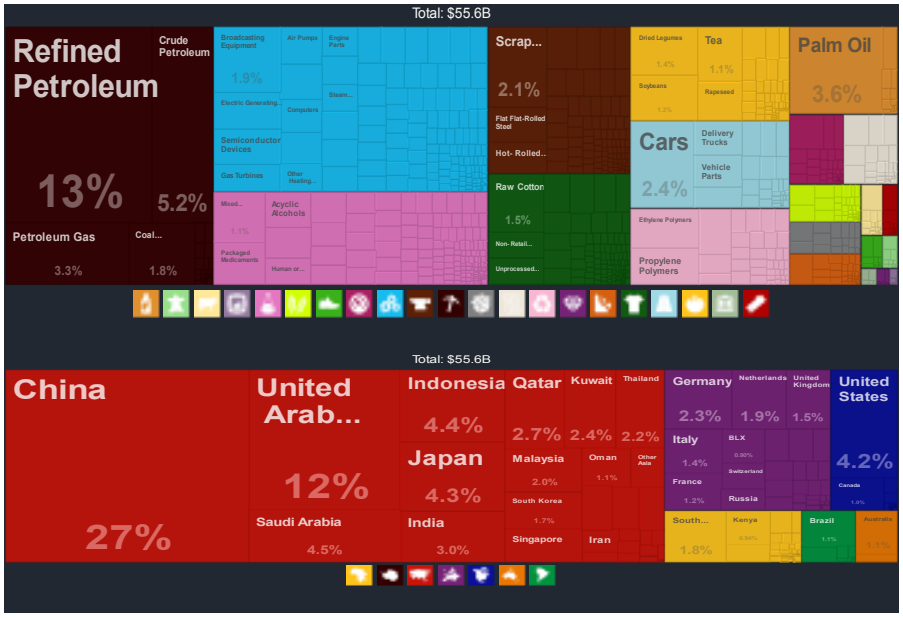
As the 68th largest export economy, Pakistan mainly exports house linens (13%), non-knit men's suits (7.7%), and rice (6.6%). Its top destinations of exports are the US, Germany and China. In 2017, its trade balance was negative $30.9 billion with $24.8 billion exports and $55.6 billion imports. Pakistan is a good example of a less developed exporter who mainly exports primary products. From the following chart we will find most of its exports are related to cloth and food which bring in fewer profits compared with manufactured goods. More importantly, Pakistan has been stuck in the role of primary goods producer and has not seen the large spread of secondary and cumulative effects.

Figure 3 The Exports and Export Destinations of Pakistan

From the Observatory of Economic Complexity

Pakistan mainly imports refined petroleum (13%), crude petroleum (5.2%), palm oil (3.6%), petroleum gas (3.3%), and cars (2.4%). Its top imports are from China, the United Arab Emirates, Saudi Arabia, Indonesia and Japan.

Figure 4 The Imports and Import Origins of Pakistan



From the Observatory of Economic Complexity

China-Pakistan Economic Corridor (CPEC) is the main investment project in Pakistan. It was valued at $62 billion in 2017[15] (Zhang, 2018). China intended to cooperate with Pakistan on energy, transportation and maritime access though CPEC. China-funded projects are 21 projects in energy, 8 projects in infrastructure, 12 projects in port Gwadar, three projects in digital cable, four projects in rail-based mass transit, six projects in new provinces, nine projects in special economic zones and four projects in social development. An estimated $45 billion will be invested in transportation and oil pipeline connection between Kashgar (China) and Gwadar (Pakistan) (CPEC, 2019).

CPEC can increase the communication between China and Pakistan, which would endow Pakistan with a lower cost in order to be a station of entrepot trade. CPEC also serves as a new essential energy pipeline to China. The Strait of Malacca and the South China Sea comprise the current maritime line for imported energy to China. However, disputed islands in the South China Sea are causing uncertainties to the safety of China's energy, which requires China to build a new energy trade road through CPEC.

Port Gwadar is the flagship in CPEC. It was involved in CPEC in February 2014 after China Overseas Ports Holding Company (COPHC) repurchased the right of operation of Port Gwadar from PSA Singapore. PSA Singapore was the contractor and operator of Port Gwadar in 2007 (Authority G. P., 2019), but its operation did not generate sufficient profits. COPHC used a combination of port and free zones to attract businesses and investments. Several projects related to Port Gwadar have been

[15] Zheng, Sarah, "Is China's US$62 billion investment plan fueling resentment in Pakistan?", July 2018. https://www.scmp.com/news/china/diplomacy-defence/article/2153609/chinas-us62-billion-investment-plan-fuelling-resentment.

agreed according to Gwadar Port Authority, in which a water supply system, power plant, and expressway will be built in Gwadar (Authority G. P., 2019). 80% of Construction funds were from China. China and Pakistan will receive 91% and 9% of profits respectively from operation of the port (Yiping, 2017). The profits of the free zone will be split into 15% for Pakistan and 85% for China.

Port Gwadar was constructed under the "Build-Operate-Transfer" (BOT) model. The BOT model is an agreement on infrastructure between government and company. Within a concession agreement, the contractor company is responsible for investment, finance, construction, operation and maintenance. The contractor company can charge customers of the port operation fees for using the infrastructure during the agreed period; and local government has the right to supervise the operation of the infrastructure. After the agreed period, the contractor must return the infrastructure to local government with or without some compensation (Zhiku, 2019). BOT can effectively reduce government investment in infrastructure and ease its fiscal burden. Risks of government investment can also be eliminated by using the BOT model as the contractor is fully responsible for the project. China's COPHC has the right of operation of Port Gwadar for 40 years (Authority G. P., 2019).

Port Qasim Power Plant Project is one of the priority projects in CPEC. It started in May 2015 to resolve the problem of power shortage in Pakistan. Exim Bank of China is the fund provider, and the government of Pakistan provides a sovereign guarantee. This project is insured by overseas investment insurance of China Export and Credit Insurance Corporation. The total investment will be $2 billon in which 74.6% is funded through borrowing. The project was built under "Building-Owning-Operation" (BOO) model. Its contractor is jointly established by China's Power Construction (51% of capital) and Qatar's Al Mirqab Capital (49% of capital)

(Yidaiyilu, China's Power Construction Invested in Qsiam Power Plant in Pakistan, 2019). China's Power Construction is totally in charge of planning, designing, purchasing, construction and operation. The construction lasted 36 months in total. Like many other projects China invested overseas, the contractor will operate the Qasim Power Plant for 30 years. Qasim Power Plant has been in commercial operation since April 25, 2018 with the power price of $8.21, approved by Pakistan's power regulatory authority.

However, Pakistan's government intended to reconsider some agreements in CPEC. Pakistan's external debt increased from $96,735 million in the third quarter of 2018 to $99,108 million in the fourth quarter of 2018 (Economics, 2019). CPEC contributed the majority to the debt increase. The Pakistan's Finance Minister had to seek help from the IMF, which sent staff to Islamabad to discuss situations with local authorities trying to stabilize the economy. Besides, Pakistan also turned to Saudi Arabia and China for more funds[16] (Aamir, 2019). Saudi Arabia signed a $20 billion investment package with Pakistan. Pakistan also approved issuing Panda bonds worth $1 billion in China for the first time (India, 2018). A Panda bond is Chinese currency RMB-dominated bond issued by non-Chinese issuers. Pakistan is also appealing to overseas Pakistanis to invest in diaspora bonds, which were launched by the government of Pakistan. Because of subdued expectations for economic growth and heightened external and fiscal risks, Standard & Poor downgraded Pakistan's credit rating from B to B-.

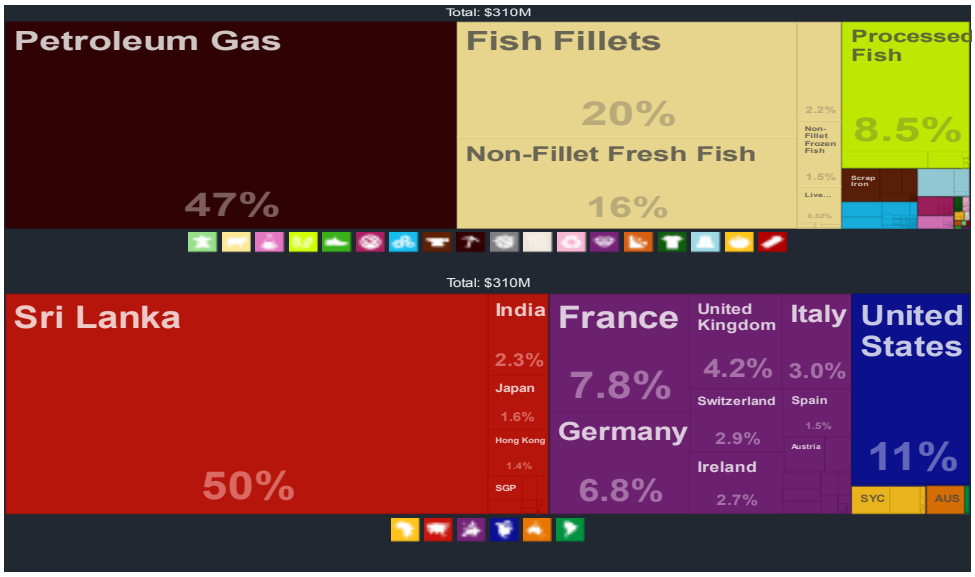
[16] Aamir, "China's disappointing aid offer dashes Pakistan's hope of debt rescue". https://asia.nikkei.com/Politics/International-relations/China-s-disappointing-aid-offer-dashes-Pakistan-s-hope-of-debt-rescue.

Maldives

The Maldives government owes $600 million directly to China and has been guaranteed another $935 million in loans. The total obligations are equal to one third of Maldives' GDP. According to the Maldives Ministry of Finance, funds directly borrowed from China went to three sectors: airport expansion ($370 million), housing ($160 million) and bridge construction ($65 million). Loans guaranteed by Maldives' government went to five sectors: housing ($540 million), power infrastructure ($180 million), Sun Siyam resort ($120 million), airport extension ($40 million) and road construction ($30 million). In "Fiscal and Debt Strategy" given by the Ministry of Finance and Treasury, Maldives' rate of debt over GDP was 54.1% in 2015, and it will steadily grow to 64.9% in 2022. The rate of external debt over GDP was 18% in 2016, 23% in 2017 and 28% in 2018. The average annual growth in external financing from 2014 to 2018 was 41%.

Maldives ranks as the 166th largest export economy in the world. It exported $309 million and imported $1.39 billion in 2017, which resulted a negative trade balance of $1.08 billion. Its top exports are petroleum gas (47%), fish fillets (20%) and non-fillet fresh fish (16%). As stated in the literature review, the volatile oil price can largely affect Maldives' trade; and further change its capability of debt service. If we take into consideration the record low price of oil in March 2020, Maldives has to produce more barrels of oil to maintain its foreign exchange reserves. This challenge is similar to what Mexico faced during its debt crisis. In terms of Maldives' exports, its products are mainly exported to Sri Lanka, the US, France, Germany and the UK.

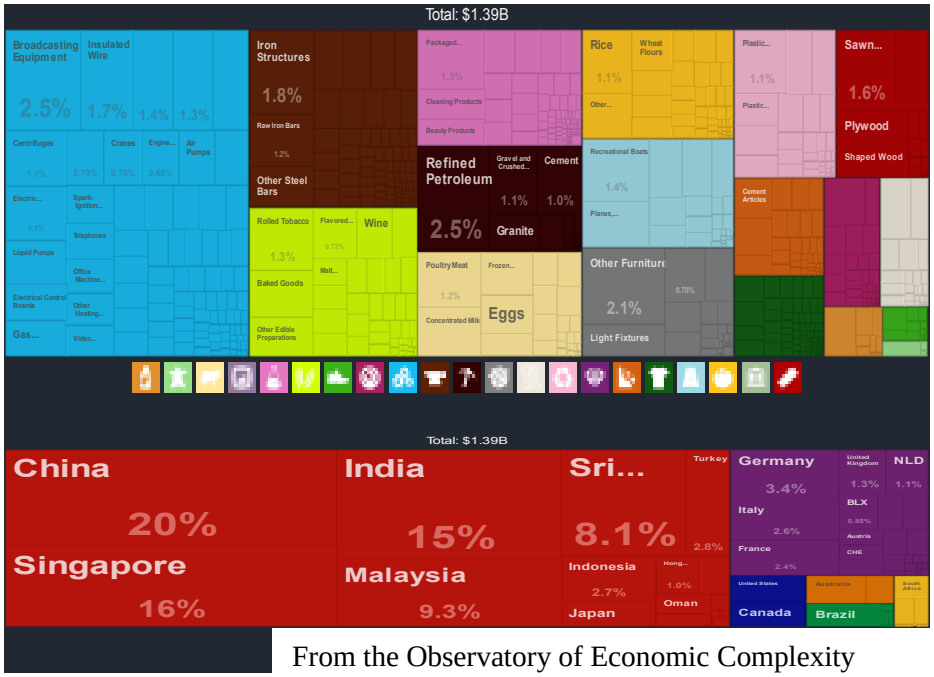
Figure 5 The Exports and Export Destinations of Maldives



From the Observatory of Economic Complexity

Maldives imports industrial products involving refined petroleum (2.5%), broadcasting equipment (2.5%), furniture (2.1%), iron structure (1.8%) and insulated wire (1.7%). Its principal import countries are China, Singapore, India, and Malaysia.

Figure 6 The Imports and Import Originations of Maldives



From the Observatory of Economic Complexity

On September 18, 2018, a new runway of the international airport was put to operation. The construction was done by Beijing Urban Construction Group (BUCG) through the "Financing + Design and Construction" model. The Exim Bank of China was responsible for financing, and BUCG was responsible for design and construction. However, the problem of corruption might have led to the high cost of projects[17] (Service, 2018). Former President Yameen Abdul Gayoom cancelled the original $500 million airport upgrade contract with India and paid $271 million in damages. $200 million sovereign bond was raised by Yameen through a Chinese investment bank, Bocom. As a result, the contract was given to BUCG at the cost of $1 billion. Many projects signed by previous government are at an inflated price, according to the new government administration. The cost of a hospital built by a Chinese company at Male cost $140 million compared with anther rival's $54 million (Reuters, 2018). The mismanagement of public assets is obvious in Maldives. Another state-owned Maldivian developer who was the contractor of $370 million public housing project was close to bankruptcy. Maldives' government had to fund another $24 million to the project, which weakened the government's ability to repay its external loan. Maldives is considered at high debt risk by the World Bank and the IMF.

However, given the fact that Maldives needs to develop its infrastructure, it has to renegotiate with China about lowering the repayment. Maldives cannot afford delaying any project, because it will increase unnecessary costs of repayments to its creditors. The average period of Maldives' projects varies from 3 to 5 years. If any

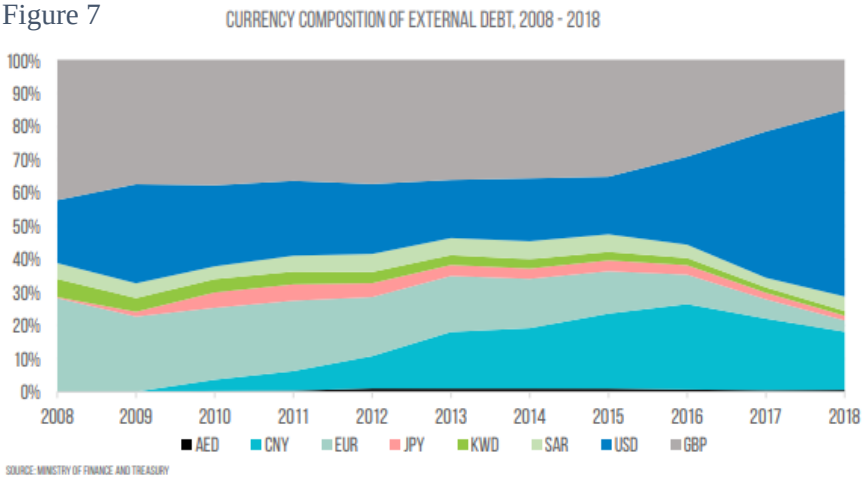
[17] "New Maldives government to begin untangling secrete building deals with China amid warnings of 'land grab' and US$3 billion debt". https://www.scmp.com/news/asia/south-asia/article/2172236/new-maldives-government-begin-untangling-secret-building-deals

project in the BRI is extended, there will be more debt burdens on this country's economy.

The debt of Maldives is sustainable according to its Medium-term Debt Strategy 2019-2021 in its Fiscal and Debt Strategy[18] (Treasury, 2018). The strategy clearly states that "At the end of 2017, total public debt stood at MVR 43,785 million, equivalent to 61 percent of GDP, and 211 percent of total revenue." The Maldives' government is realizing the importance of developing a domestic debt market as of the debt service costs and risks in 2017. It will expand domestic debt market by introducing intermediate-term treasury instruments and by eliminating barriers to Maldives' financial market. The estimated debt will be 20% higher than that of 2017 at the end of the strategy period, but the rate of debt to GDP is expected to be lowered by 4.6% to 56.4% by the end of 2021. Among Maldives' external debts in 2018, 56% of it is denominated in United States dollars (USD), 18% in Chinese yuan (CNY), and 15% in Special Drawing Rights (SDR). The rest is denominated in Saudi riyal (SAR), Euro (EUR), Kuwaiti dinar (KWD), Japanese yen (JPY), and United Arab Emirates dirham (AED). The SDR is a form of currency maintained by IMF as a weighted average of major currencies (USD, EUR, CNY, JPY AND GBP at 41.73%, 30.39%, 10.92%, 8.33% and 8.09% respectively). The Medium-term Debt Strategy also states that "With consideration to the external debt in the current pipeline and the government's medium-term debt management strategy, it is expected that the CNY denominated debt will continue to lose share against the USD in the years of 2018 and 2019." The currency composition of Maldives' external debt is as follows:

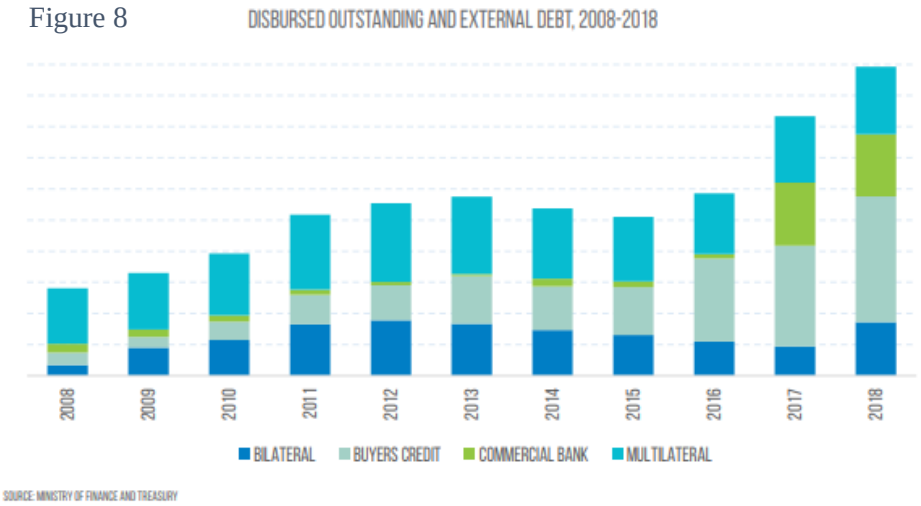
[18] Fiscal and Debt Strategy, Ministry of Finance and Treasury

Figure 7



External debts are comprised of loans and grants from multilateral and bilateral agencies and financial institutions providing the buyer's credit facility. A multilateral funding agency is established by a group of countries to help developing countries with financing. Maldives receives funds from the major multilateral agencies like the World Bank and the OPEC Fund for international development. Bilateral funding agencies are individual countries providing funds to countries who are in demand. Maldives' bilateral funding agencies are the Saudi Fund for Development and the Abu Dhabi Fund for Development. The Exim Bank of China is also the main institution providing buyer's credit to Maldives. Buyer's credit is a

Figure 8



short-term loan facility extended to an importer by an overseas lender such as a bank or financial institution to finance the purchase of capital goods, services and big-ticket items (Investopedia). Buyer's credit provides relatively cheaper funds to importers compared to what may be available locally. There was a spike for Maldives' buyer's credit as well as for commercial loans from 2016. The multilateral funding has been kept to a relatively high level since 2008. In 2011, Maldives was removed from the list of Least Developed Countries who have more access to concessional funding. As a result, Maldives started its independent funding in the international market through bonds. A $250 million bond with a 7% fixed coupon and 5-year maturity was issued in the Singapore Stock Exchange in 2017; and another 5.5% fixed coupon with 5-year maturity was issued in the Abu Dhabi Stock Exchange at the same time.

Sukuk is an Islamic bond that has gained popularity in recent years. Its method of repayment is similar to BRI loans in that both rely on the profits of the investment instead of its yield. Sukuk is a "Sharia compliant" bond that pays back investors with profits (not interest) generated by the projects invested with Sukuk. Sukuk represents ownership of involving assets with an expiration date. If a property generates profits, then the investors of Sukuk can receive the profits until the date of expiration. According to Maldives' Housing Development Finance Corporation, it issued 150,000 Sukuk with 10-year maturity in July 2017. The issue price was MVR 1,000 per Sukuk for a total value of MVR 150 million. The target project was a mortgage housing, and 65% of total profits will go to the holders of Sukuk. Payment will be conducted every six months. There was $97.9 billion Sukuk issued in 2017, and Malaysia was the country issuing the most Sukuk in 2016 (Ellyatt, 2018).

3.2 Countries with "Healthy" Indebtedness

Kenya

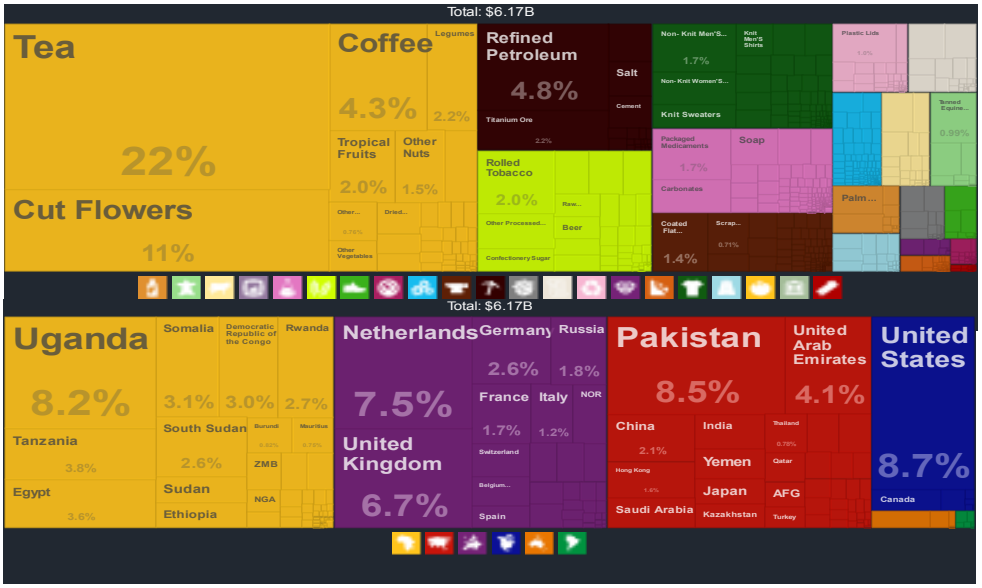
According to the South African Institute of International Affairs (SAIIA), there is an estimated $130 billion annual deficit in infrastructure investment. In 2016, overall financing for infrastructure in Africa amounted to $62.5 billion. Institutional investors, particularly pension funds and sovereign wealth funds, represent important sources of funds for this type of investment because of their relatively long-term investment horizons and their need to diversify and spread their risk[19] (Barnor, 2018). But the investments of these funds have been very low. Most funds would like to invest in traditional low-risk government bonds, equity and treasury bills. According to the Bank of Botswana's 2017 Annual Report, it is necessary to create more financial instruments that allow more liquid investment opportunities. Lack of prescriptive regulations also erodes the investment in infrastructure. Fund managers are not fully ware of bidding process of projects, which decreases the total amount of investment in infrastructure.

Kenya's rate of debt to GDP is 58.97% according to Central Bank of Kenya in 2017. In its bilateral debt, China is the biggest creditor, holding $5.53 billion, followed by Japan with $1 billion as of June 2018. The portion of Chinese debt in total external debt is 20.76%. The multilateral debt of Kenya is $8.88 billion compared with $8.1 billion bilateral debt.

[19] Barnor, J. (2018). *The case for infrastruture as an asset class.*

Kenya is the 101st largest export economy, with $6.17 billion exports and $17.1 billion imports in 2017. Its trade balance in 2017 was negative $11 billion. Its main exports are tea (22%), cut flowers (11%), refined petroleum (4.8%) and coffee (4.3%). The principal customers of Kenya are the US, Pakistan, Uganda and the Netherlands.

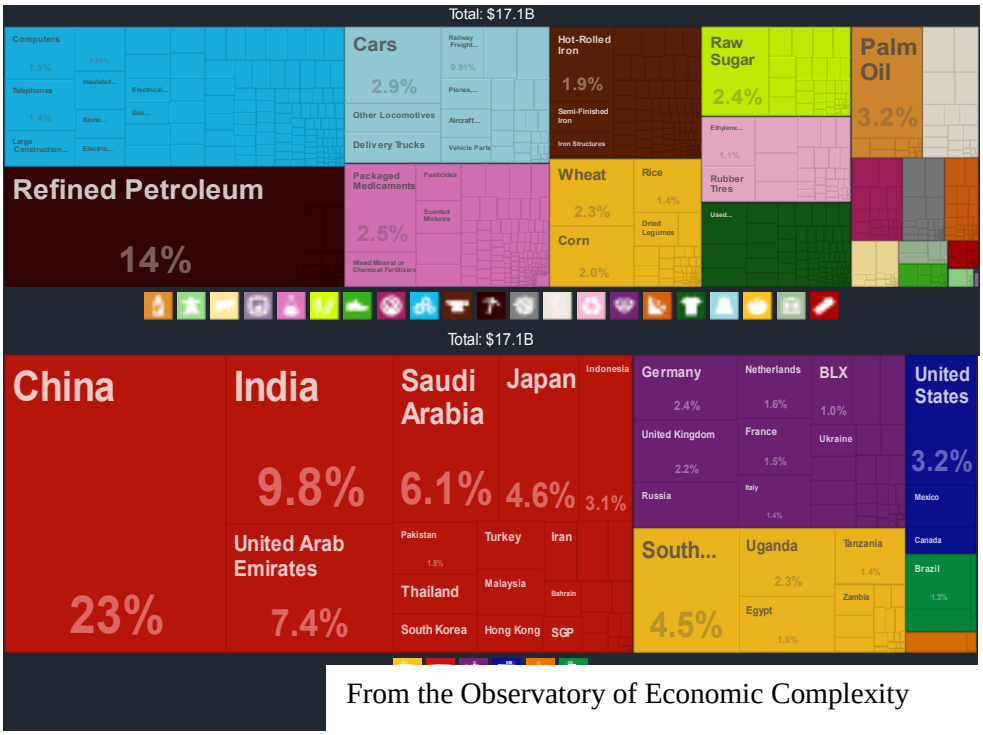
Figure 9 The Exports and Export Destinations of Kenya



From the Observatory of Economic Complexity

The top imports of Kenya are refined petroleum (14%), palm oil (3.2%), cars (2.9%), packed medicaments (2.5%) and raw sugar (2.4%). Like other BRI members, Kenya's top foreign goods supplier is China, followed by India, the United Arab Emirates, Saudi Arabia and Japan.

Figure 10 The Imports and Origins of Kenya



From the Observatory of Economic Complexity

The Mombasa-Nairobi Railway is a 480-kilometer railway connecting the capital of Kenya, Nairobi, and its port, Mombasa. Construction began in 2014 and started operation on May 31, 2017. The railway was invested $3.8 billion in total. 90% of the investment is a loan offered by the Exim Bank of China, while 10% is funded by Kenya's treasury. The contractor of the railway is China Road and Bridge Corporation (CRBC. The CRBC will operate the railway for 6 years after the construction is accomplished. This railway replaced the old Uganda Railway which was built in 1899. Mombasa-Nairobi railway is estimated to increase local GDP by 1.5% and provides around 46,000 jobs. The cost of ground transportation in Kenya is about 45% of total cost of production, which directedly pushes up the price of middle and high-end goods. The new Mombasa-Nairobi railway can effectively lower the

cost of shipping. The cost of shipping a 20-foot container from China to Mombasa is $1,700, while the cost of ground transportation from Mombasa to Nairobi is $800.

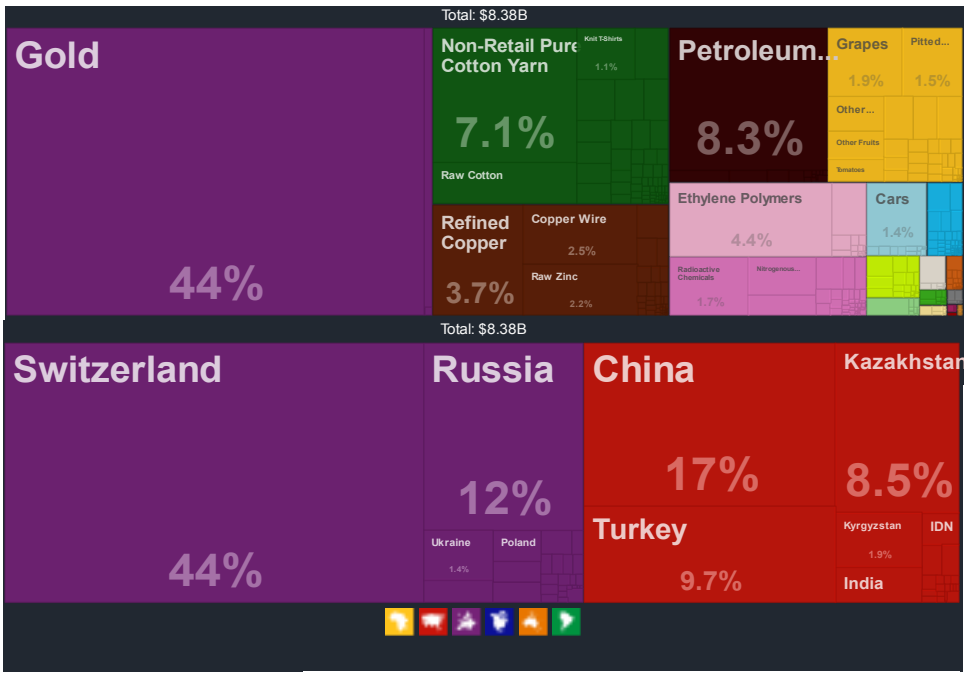
Mombasa-Nairobi railway also generated high profits for Chinese contractors. 60% of the total cost of the project came from the operation cost of Chinese companies, including payment for Chinese workers and equipment, which means 60% of the total investment would contribute to the Chinese economy. 40% of the total cost went to compensation for land, payment to local workers and the purchase of concrete and steel. The 6-year operation, beginning in 2017, is predicted to generate large profits for the CRBC. The tickets from Nairobi to Mombasa cost $30 for first-class and $10 for second-class (Kenya Railways). The cost of ground transportation of 1-ton goods in Kenya will decrease from $0.2 per mile to $0.08 per mile. Furthermore, the CRBC can still benefit from the operation of the railway because of the higher price of transportation in Kenya compared with $0.02 per mile in China. The annual throughput of Port Mombasa is 27 million tons, which creates high demand and potential surplus for the Mombasa-Nairobi railway and prevents the government from being stuck in debt to the railway.

Investments in the BRI address three thresholds of African development: backward infrastructure, lack of funds and shortage of human capital. Based on the experiences from past decades, the railways should be developed hand-in-hand with industrial parks and special economic zones, so that infrastructure and industrial development can reinforce one another. Thus, to stimulate industrial growth, the development of the Mombasa-Nairobi railway, Port Mombasa and the Mombasa special economic zone have been combined into one development plan.

Uzbekistan

Uzbekistan is a landlocked country located in the center of the China-Central Asia-West Asia Economic Corridor[20] (Qoraboyev, 2018). The Asian corridor extends through five Central Asian countries to Western Asian countries Iran and Turkey. As a pivot point of Central Asia, Uzbekistan is seeking to export its agricultural and mineral goods to foreign countries. As the 89th largest export economy, Uzbekistan had a negative trade balance of $2.84 billion in 2017; its export value was $8.38 billion and the import value was $11.2 billion. The primary exports of Uzbekistan are gold (44%), petroleum gas (8.3%), non-retail pure cotton yarn (7.1%), ethylene polymers (4.4%) and refined copper (3.7%). Uzbekistan's main trade customers are Switzerland, China, Russia, Turkey and Kazakhstan.

Figure 11 The Exports and Export Destinations of Uzbekistan

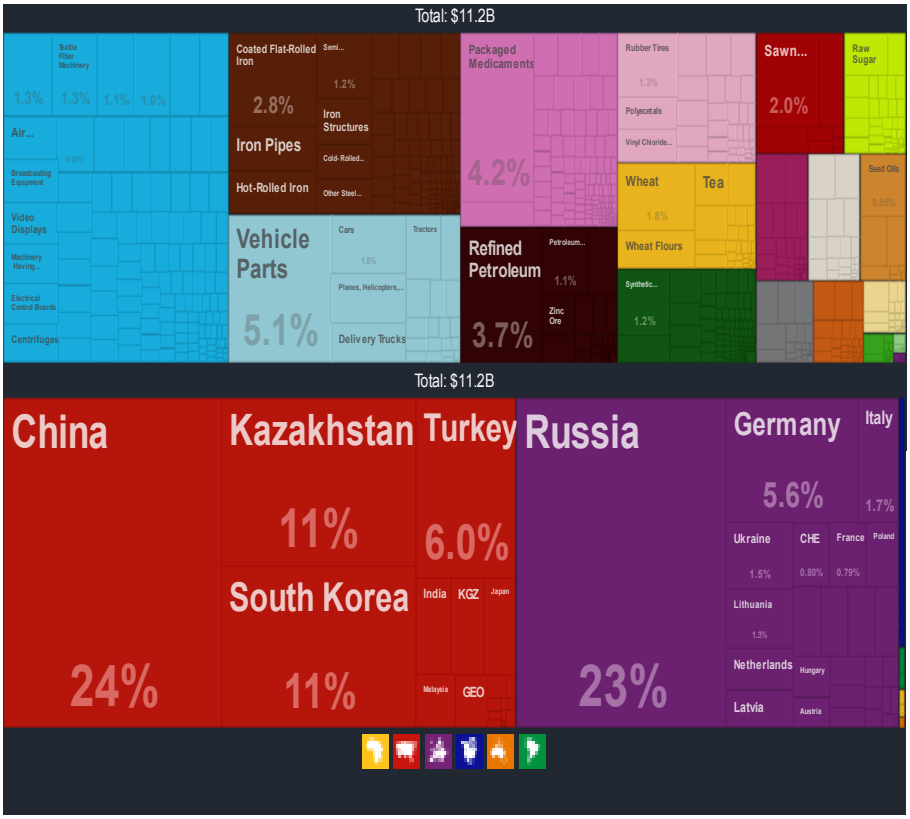


From the Observatory of Economic Complexity

[20] Qoraboyev, "The Belt and Road Initiative and Uzbekistan's New Strategy of Development: Sustainability of mutual relevance and positive dynamics", page 6, (2018).

Uzbekistan mainly imports vehicle parts (5.1%), packed medicaments (4.2%), refined petroleum (3.7%), coated flat-rolled iron (2.8%) and sawn wood (2%). Its principal import partners are China, Russia, Kazakhstan, South Korea and Turkey.

Figure 12 The Imports and Import Origins of Uzbekistan



From the Observatory of Economic Complexity

The BRI initiative echoes Uzbekistan's new development strategy spanning years 2017-2021, the primary goal of which is to maintain macroeconomic stability and high economic growth. In May 2017 two countries signed 115 deals worth more than $23 billion to enhance their cooperation in electrical power, oil production, chemicals, architecture, textiles, pharmaceutical engineering, transportation, infrastructure and agriculture[21] (Eurasianet, 2017). China Railway Tunnel Group

[21] "Uzbekistan: President's China Trip Yields Giant Rewards", EurasiaNet, 16 May 2017 https://eurasianet.org/uzbekistan-presidents-china-trip-yields-giant-rewards

(CRTG) is the contractor of two projects in Uzbekistan: Kamchiq Tunnel and the modernization of the Sharg'un coal mine. Before the construction of Kamchiq tunnel, trains running between Tashkent and Margilan needed to detour to Tajikistan. The 19.2-kilometer long tunnel is the longest in Central Asia. It shortens the travel time from one hour to 15 minutes. Because of the project, 1,000 jobs were also created in the local economy (CCTV, One Belt One Road-Uzbekistan, 2019). The other project under construction by CRTG, the Sharg'un coal mine, meets 25% of Uzbekistan's demand for coal. 25% of employees were hired locally. Many locals used to work in Russia, but now the Sharg'un project saves them the trip and provides employment opportunities that pay around $142 per month. 2021 is the estimated time start time for the Sharg'un mine project, which will create 6,000 jobs. The Sharg'un mine is currently operated by Sharg'un Coal Mine Co., Ltd (CCTV, One Belt One Road-Uzbekistan, 2019).

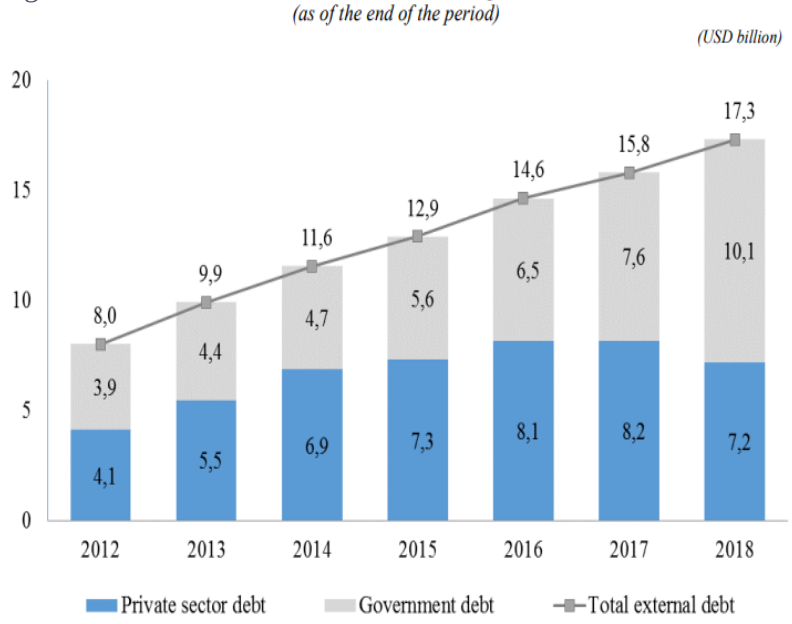
The railway is the most important mode of transportation in Uzbekistan, but most trains are internal combustion locomotives inherited from the Soviet Union. China National Technical Import and Export Corporation (CNTIC) conducted electrification reform for 550 kilometers of local railways. The speed of trains can increase from 80km/hr to 160 km/hr. Uzbekistan imported electric locomotives from CNTIC in 2013 because of the upgrade of the railway (CCTV, One Belt One Road-Uzbekistan, 2019). BRI not only enables massive infrastructure promotion by state-owned companies, but also introduces investment from private companies. Like many BRI countries, Uzbekistan has many favorable policies for foreign companies who invest in the country. The government offered a private Chinese company, Jin Sheng, 839 acres free land to build an industrial park (Yidaiyilu, Uzbekistan Peng Sheng Industrial Park, 2017). Jin Sheng is a private company based in Zhejiang province

where Alibaba Group comes from. The total investment was $90 million, covering businesses distributing products such as tiles, leather, shoes, cellphones, faucets, pet food, etc. The industrial park provided around 1,300 job opportunities. A total of 16 Chinese companies in the park contributed $2.21 million in taxes, which accounted for 25% of total tax revenue in the Sirdaryo region. Local workers in the industrial park are paid about $142 per month. Take tile production as an example of the impact of the industrial park: residents in the Sirdaryo region tended previously to install carpet floors in their homes, but since the increase of local tile production, tile has become more popular in local construction materials as it is more available and is easier to clean. The price of tile has also been reduced by 40% since 2009. Modernization of agriculture was also on the investment list of the industrial park. Cotton has been a major commercial crop in Uzbekistan, but the traditional cultivation method did not help its modernization. As a result, drip irrigation and membrane technology were introduced from China as a stepping stone to increase production and reduce utilization of water. Local peasants' monthly income is around $120. By working in a cotton test field, they can earn extra $10 a day.

The growth of Uzbekistan's external debt was kept at a constant rate and the structure of the debt was optimizing. Uzbekistan's external debt was $17.3 billion in 2018 according to Central Bank of The Republic of Uzbekistan. Beginning in 2017, its government external debt increased at an accelerated rate due to financing state development programs, and this trend will continue in the coming years[39] (Uzbekistan, 2018). The total external debt increased by 9.5% ($1.5 billion) in January 2019 compared with the beginning of 2018. Although the private external debt decreased by $977 million in 2019 from the 2018 amount, the public external debt increased by 58% ($2.4 billion). 88.6% of external debt has maturity of more than 10 years; only

0.8% has one-year maturity. The long maturity of debt represents a low default risk and provides the government more time to focus on spurring its economic growth. Additionally, the principal debt payments and interest payments made by the government was much lower than the forecast given by the central bank; the principal payment will decrease from $1.3 billion in 2019 to $199.5 million after 2026. The interest payment will also drop from $331.6 million to $28.8 million after 2026. In next 5 years, the burden of repayment will be gradually alleviated for Uzbekistan's government.

Figure 13 **Time series of total external debt of the Republic of Uzbekistan**[6]
(as of the end of the period)



Among Uzbekistan's trade partners, China and Russia are the main players. Uzbekistan effectively diversified its imports by having more trade partners. Although imports from China increased by 30% in 2018, China's share in total volume has decreased due to the increase in imports from other countries. The share of imports from Japan and Korea jumped by 3.5% and 1.5%, respectively. Machinery and equipment were the major imports in last three years. For imports of services, the growth of transport services was associated with the increasing import. Its main export

countries are Switzerland, China and Russia. In 2018, around 30% of exports went to Switzerland, 20% went to China and 15% went to Russia. Gold is Uzbekistan's most popular export at 25.5% of total exports. Oil and gas products occupy 23.3% of that total. Uzbekistan's current account went from surplus ($1.5 billion) to deficit ($-3.5 billion) in 2018 due to the implementation of regional development and capital construction programs, increasing external borrowing and repayment of direct investment obligations[22] (Uzbekistan, 2018). Its current account deficit is 7% of its GDP. The 46% increase in imports in 2018 contributed most to the deficit. Because of the government's active lending policy, more foreign goods are needed to support its domestic construction. Despite of the deteriorating current account, reinvestment of earnings by foreign companies increased 46% in 2018. The amount of Uzbekistan's exports was also kept constant with an increase of 21% in 2017 and 28% in 2018. The net portfolio investment by foreign investors in 2018 also increased over 300% from 2017. The steady inflow of capital is a sign of strong confidence of foreign investors in Uzbekistan's future economy. It also provides sufficient capital for its further economic development.

[22] "Balance of Payments, International Investment Position and External Debt of the Republic of Uzbekistan", 2018, page 11.

4. Comparations and Analysis: Is History Repeating Itself?

4.1 Mexico's Debt Crisis in 1982

Although the oil price change provoked Mexico's debt crisis in 1982, the underlying factors stemmed from Mexico's huge public sector; from massive state intervention into the economy, and from restrictive trade and investment policies[23] (Hudgins, 1986). The government consumed about 26% of Mexico's GNP in 1970 and 50% in 1986 (Luis, 1986). To increase employment in public sector, the number of state-owned enterprises jumped from 86 in 1970 to over 1,000 in 1986. The compensation of public-sector employees was 7% of Mexico's GDP in 1982 (Carlos Cantu, 2015). Mexico's economic policy did not help the country in realizing economic growth, which is the key element for debt repayment. The public sector in Mexico's economy was not helpful for improving production efficiency, especially in manufacturing. The low efficiency of manufacturing is well demonstrated in the low percentage of the country's exported goods, which in 1982 was 24%. The greatest rest value of Mexico's exports came from oil.

Capital flight also worsened Mexico's debt crisis. Mexico's peso was overvalued before the crisis, which concerned foreign capitalists about its devaluation. Mexico's inflation rate was over 20% from 1978 to 1980, while its exchange rate was kept constant. When inflation happens in a country, the demand for its goods and currency will decrease due to higher prices within the country. The country's citizens

[23] Hudgins, "A US Strategy to Solve Mexico's Debt Crisis", 1986.

tend to purchase goods from other countries whose prices are lower, which leads to the increase of the currency supply in international market. Investors' perceptions—the ultimate determination of a currency's value and exchange rate—of the peso were influenced chiefly by Mexico's overvaluation of the currency. From 1980 to early 1982, the peso depreciated by 16% while Mexico's inflation was 30%. The real exchange rate appreciated. The real exchange rate is the product of the nominal exchange rate and the ratio of prices between two countries. If the ratio of prices increases, the real exchange rate appreciates. Mexico's real interest rate became negative, which seduced debtors to borrow more. By June 1982, the peso had depreciated by about 50%. In 1981 and 1982, capital flight was estimated at respectively 3.4% and 4.2% of Mexico's GDP (Brinke, 2013). Nationalization of Mexico's banks in 1982 also accelerated foreign capital outflow.

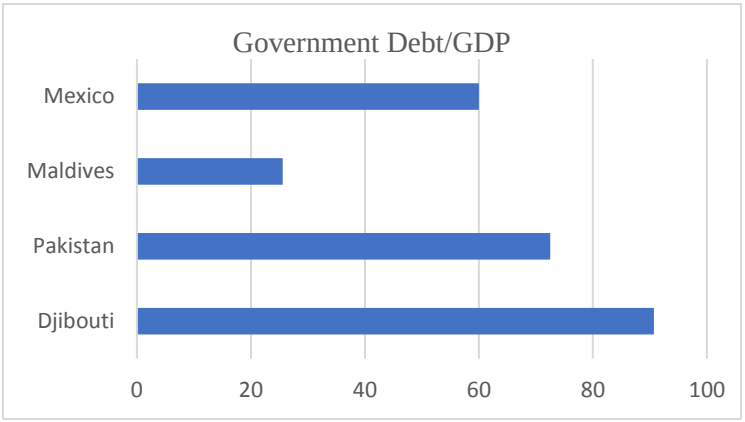
4.2 Comparations

The following chart compares current situations of debtors in the BRI to Mexico's debt crisis in 1982. The data of Mexico in the chart below is from the year 1982, while the other three countries' data is the most updated information. Given the reasons of Mexico's debt crisis, four types of data are demonstrated: ratio of government debt over GDP, ratio of current account over GDP, ratio of government budget over GDP and GDP growth rate.

Countries	Government Debt/GDP	Current Account/GDP	Government Budget/GDP	GDP Growth Rate	Debt Risk
Mexico (1982)	60%	2%	-17.60%	-0.60%	n/a
Djibouti	90.70%	-26%	-4.40%	4.10%	High
Pakistan	72.50%	-23.70%	-6.60%	5.70%	High
Maldives	25.60%	-25%	-5.50%	8.80%	Low

4.2.1 Ratio of Government Debt to GDP

Figure 14



Source: Central Bank of Djibouti, State Bank of Pakistan, Maldives Monetary Authority, voxeu.org, and tradingeconomics.com

Debt to GDP measures a country's ability to carry the debt in relation to its annual productive capability (Appleyard & Field, 2017). For developing and emerging economies, 40% is the suggested debt-to-GDP ratio that should not be breached on a long-term basis (Chowdhury & Islam, 2010). The optimal rate of debt for advanced economies is 60%. Countries are offered these benchmarks to maintain their debt sustainable in an April 2010 report by the Fiscal Affairs Department of the IMF. The IMF puts efforts into its fiscal policy to smooth out business cycles in the short run and meet targets for debt sustainability in the long run.

In terms of the scale of government debt, Pakistan and Djibouti have a higher ratio of debt over GDP in comparison to Mexico. Maldives has relatively lower rate of debt. Like the booming economy of Mexico prior to 1982, Pakistan and Djibouti were both experiencing fiscal expansion as of BRI projects. Theoretically all three countries (Mexico, Djibouti and Pakistan) are over the reasonable debt level. However, there are currently many countries with high debt ratios in the world, and they are not in debt crisis due to this high level of debt. The benchmarks are not an optimal rate,

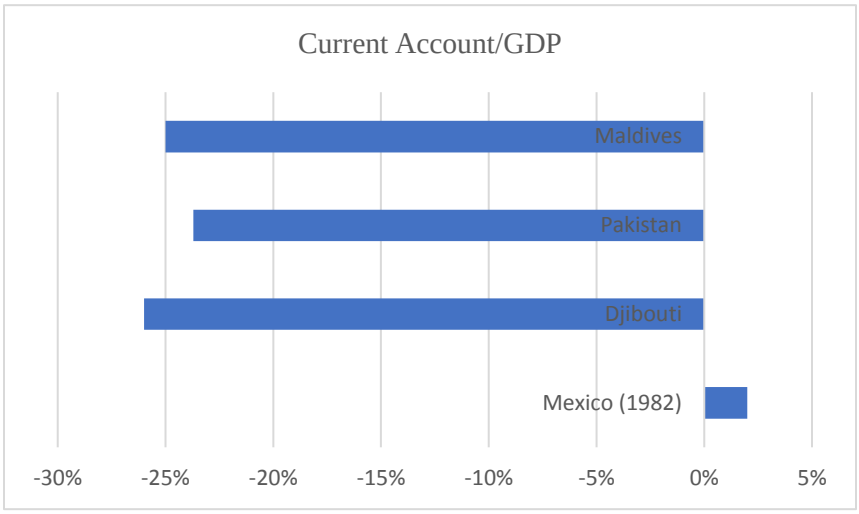
but merely a median ratio. The IMF uses the word "useful" to describe the benchmarks, but does not explain their basis. The authors of the IMF report, "Assessing Sustainability" (IMF 2002), explain the benchmarks thusly: "It bears emphasizing that a debt ratio over 40 percent of GDP by no means necessarily implies a crisis. There is an 80 percent probability of not having a crisis even when the debt ratio exceeds 40 percent of GDP" (Chowdhury & Islam, 2010). A high debt level does not necessarily imply debt crisis, but a country with high debt is relatively less capable to absorb external shocks. It is assumed that when the debt gets very large, it may be difficult to generate a primary balance that is sufficient to ensure sustainability, and external shocks can push countries beyond their debt limit. Mexico was negatively affected by the oil price fall in 1982, which directly jeopardized the country's debt sustainability. If any external shock strikes Djibouti or Pakistan, they are more likely to be exposed to the risk of bankruptcy.

However, it is a weak argument that Djibouti and Pakistan will be in debt crisis if we assess solely their high level of debt. According to Universal Generalization in Discrete Mathematics, if any high debt country is vulnerable when facing external shocks, then all countries with high ratios of debt over GDP are vulnerable to external shocks in comparison to countries with sustainable debt. Apparently, it is not the case that all countries with high debt in the world are exposed to external shocks, because there are many other financial vehicles used by sovereign governments to protect their financial security. People tend to have a preoccupation that a ratio of high public debt to GDP has a negative impact on economic growth. But it is not uncommon that fiscal policy is ignored in promoting economic growth. It is out of prudence that countries are advised to keep their debt ratio below the benchmarks. In reality, very few countries can keep to the prudence of this

recommendation. Again, the question of high debt falls on whether the debt will contribute to economic growth in the long run. As economist Evsey Domar points out, "The problem of the burden of debt is essentially a problem of achieving a growing national income."

4.2.2 Ratio of Current Account to GDP

Figure 15



Investopedia gives the definition of "current account" as that which "records a nation's transactions with the rest of the world—specifically its net trade in goods and services, its net earnings on cross-border investments, and its net transfer payments—over a defined period of time, such as a year or a quarter." From the chart above, we can see that Mexico performed much better in its current account than the three other countries. Mexico's current account had a surplus in 1982, while the others are all in deficit. The current account deficit is not helpful for their debt repayment. Unless Maldives and Djibouti have other sources of income for debt repayment, the high ratio of current account deficit to GDP will not bring more foreign exchange for debt services. The direct reason of Mexico's insolvency in 1982 was the falling price of oil, which decreased the surplus of the current account. If we assume that Mexico

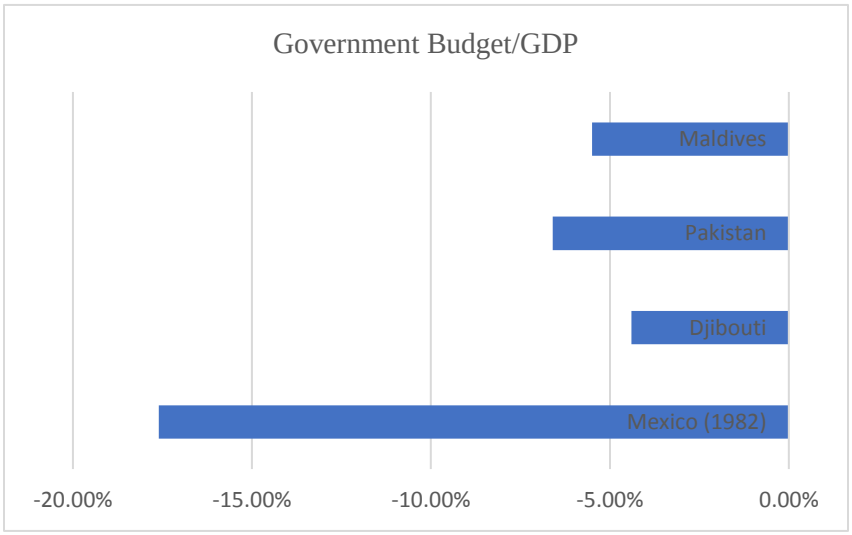
was losing points in its international trade in 1982, then all other three BRI countries already lost the game of trade. The long period of current account deficit will add more burdens for debtors.

Maldives' current account to GDP has been in deficit since 2000, and it averaged -14.12% from 1997 to 2018 according to the Maldives Monetary Authority. Pakistan's current account to GDP averaged -2.35% from 1980 to 2018; the number for Djibouti was -8.89% from 1991 to 2018. Before Mexico's debt crisis in 1982, the current account had been deteriorating steadily for several years. Similar scenarios are happening to the three BRI countries above, which can hint at coming debt crises. Take Pakistan as an example: its current account deficit has hit a record high of $18 billion, which indicates a roughly $1.5 billion monthly loss for foreign exchange reserves. Pakistan has $13.5 billion of foreign exchange reserves of which $7 billion are held by the State Bank of Pakistan and the rest is with commercial banks. If the current account deficit lasts for another one or two years, Pakistan will face a reserve so low that it will be a difficult time for the government to repay its external debt. Mexico had the exact same problem in 1982, and unsuccessfully attempted to raise foreign exchange reserves by devaluating the peso. The government of Pakistan is negotiating with the IMF and is trying to increase its reserves. The coincidence should be alarming to Pakistan given the experience of Mexico in the 1980s.

In the case of Maldives, its current account deficit increased because of subdued exports and rapid growth of imports linked to investment projects. In 2015, Maldives' current account deficit was 7.4% according to the data of Maldives Monetary Authority, but it rocketed to 23.5% in 2016. Maldives's current account balance deteriorated 541% from 2013 to 2018. Decades-long deficit will not help their debt services, especially during these years when debt is piled up quickly.

4.2.3 Ratio of Government Budget to GDP

Figure 16



One primary difference between Mexico and the other three countries is that, prior to the debt crisis, the Mexican government controlled 900 of the country's businesses, including aviation and steel companies. In 1980, 1,155 state-owned enterprises contributed 10.5% of the GDP, 3.9% of total employment and 26.7% of the gross capital formation. In 1982, Mexico nationalized all private banks. As a result, more than 100 businesses would be controlled or partially controlled by the government, which was responsible for 35% of private industry. One would see the government's presence in petrochemicals, hotels, real estate, mining and even food production. Mexico owned 66% of shares of the world's largest silver mine, Real de Angeles. Due to restricted policies, all of these government-owned enterprises had very limited access to foreign investment. To gain funds for these enterprises, Mexico's government had to raise funds on its own through borrowing. Unprofitable state-owned companies also presented a barrier to the government's ability to repay debt. Nationalization of private banks led to the outflow of foreign capital and unprotected private property due to a loss of trust in the Mexican government. Fleeing

foreign capital rubbed salt into Mexico's debt wounds. There was no additional capital Mexico could borrow for its debt service. The large size of the public sector directly contributed to the government budget deficit in Mexico.

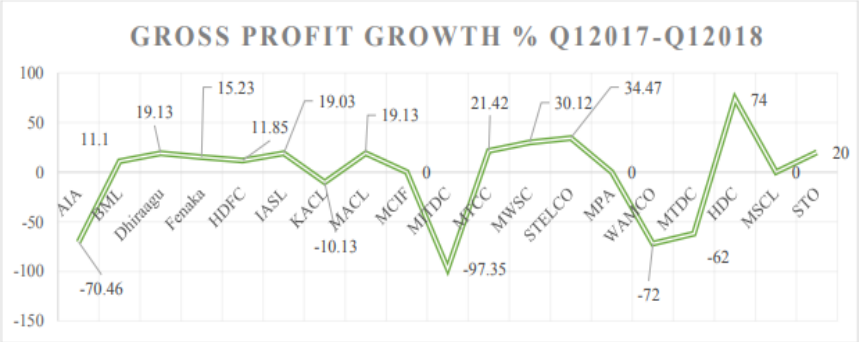
The three BRI countries' government budget deficits are in reasonable scale compared with that of Mexico in 1982. Since most BRI projects are in the public sector, some data of the performance of state-owned enterprises (SOEs) is gathered. According to Pakistan's Federal Footprint of the 2013-2014 fiscal year, it had a total of 190 SOEs with around $1.37 billion net profit. Among the 190 state-owned entities, there were 175 public sector companies, 8 development finance institutions and 7 federal authorities. In the energy sector, the changes from the last period to the next in net profits of hydrocarbon and power were 29.5% and -39.3%, respectively. The financial sector had a 68.6% net profit increase; the industrial and engineering sector had a 4.8% net profit decrease. The transportation sector experienced a 22.5% net profit loss. The general condition of Pakistan's public sector was profitable in the fiscal year of 2013-2014, although net profit loss happened in some sectors, i.e., energy and transportation.

A Maldives' Summary of Quarterly Review for the first quarter of 2018 showed SOEs are generally in good condition. 12 out of 19 SOEs who comprise a great portion of the economy had an increase in revenue from the first quarter of 2017. Out of these 19 major SOEs, 10 SOEs' gross profits increased over 10% in 2018 from the same period of 2017. 5 SOEs had over 60% gross profit loss. 12 companies' liquidity ratios were over 1, which means they are capable of covering their short-term debt. Better performance of SOEs in Pakistan and Maldives endows the governments with stronger capability to repay their debt. Compared with SOEs in Mexico, Pakistan and Maldives do not have many unprofitable public enterprises. As

a result, public enterprises will not crowd out government's spending on other projects to maintain the running of public facilities. A relatively low government budget deficit in three BRI countries does not give us a sign of debt crisis as that which happened in Mexico in 1982.

Figure 17

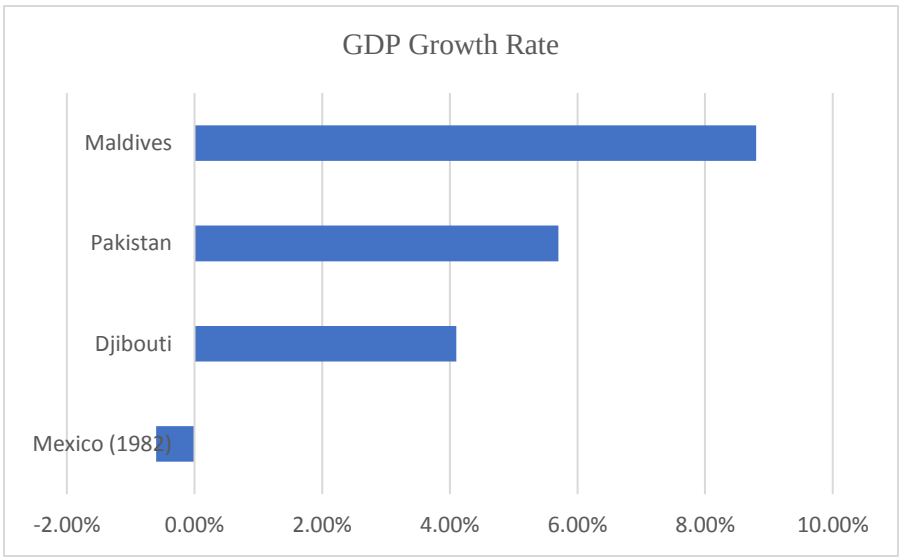
Gross Profit



Source: Ministry of Finance, Republic of Maldives

4.2.4 GDP Growth Rate

Figure 18



Mexico's economy was prosperous prior to the debt crisis. From the mid-1950s to the beginning of the 1970s, the average annual economic growth was 7%, and the inflation rate was never exceeded. Its GDP growth rate even reached to 9.7% in 1979. As an oil exporter, Mexico benefited from its oil reserves. But its other exports were negatively influenced as the world economy stepped into recession in 1979. The decades-long prosperity was washed off by the recession, which led to negative economic growth upon the debt crisis. In the cases of the three BRI countries, all have had long periods of constant growth with slight differences. According to the data of the World Bank, the GDP growth rates of Pakistan and Maldives wandered within the range of 2% to 8% in the past ten years; Djibouti's GDP growth rate jumped to 9.7% in 2015 and dropped down to 4.1% in 2017. The estimated GDP growth rate for Djibouti will be 7.3% in 2019 and 7.5% in 2020. Pakistan is also expected a better economy with 3.7% in 2019 and 4.2% in 2020. Maldives might face a slowing down economy with 6.3% of GDP growth rate in 2019 and 5.6% in 2020. Given the growth volatility of these countries, they are having a relative high growth compared with the

debt-buried Mexico of 1982. If we take inflation into account, Djibouti's inflation rate will be 0.8% in 2019 and 1.2% in 2020 (IMF). In 2019, Pakistan and Maldives will each have an inflation rate of 2.9% and a 2.2%, respectively. The low inflation rate is different from Mexico's experience, where in 1981 the rate of inflation was 27%. The inflation rate of Mexico grew progressively out of control, rising to 101.8% in 1983 and 132% in 1987. If we assess debt risks from GDP growth rate, the economic conditions of these three BRI countries are in much better positions than that of Mexico in the 80s.

The differences between GDP growth rates of the three BRI countries and Mexico lie in the structural differences in their national economies. Mexico's industries were protected by its trade policies, and import quotas covered 100% non-oil production before debt crisis[24] (Brinke, 2013). Foreign investment was not allowed to come into Mexico freely. The economy of Mexico in 1982 was not as open as the three BRI countries above, which is understandable given the different time periods and global relationships. Liberalization of the economy was a goal of Mexico's, and it joined the General Agreement on Tariffs and Trade (GATT) shortly after the debt crisis. From then on, Mexico began to raise more liberal policies on trade and foreign investment. All these actions taken by the Mexican government were to ease past restrictions on the economy. On the other hand, the three BRI economies welcome foreign investments. They are more involved in international economy compared with Mexico in the past. The openness provides more alternatives to foreign loans and more solutions to debt services. When a relatively open economy repays its debt, it can use the funds not only from domestic revenue but also from bridge funds from foreign

[24] Brinke, "The Mexican 1982 Debt Crisis", 2013.

countries. While an open economy can use a variety resources to realize economic growth, the only way for Mexico to maintain foreign funds was by continuing to borrow loans.

4.3 Other Similarities

Djibouti and Pakistan have some other symptoms that can also be found in Mexico's debt crisis. First, these countries have experienced or are facing debt-for-equity swap. In Mexico's debt crisis, the foreign banks sold portions of their debts to foreign companies who could exchange the loans for government-owned equity (Hudgins, 1986). Debt for equity swaps also happened in one of the BRI participants, Sri Lanka, which leased the Port of Hambantota to China for 99 years because it was not able to repay its debt. China has a military base in Djibouti now, and is operating Gwadar Port in Pakistan. It is possible for Pakistan to repay its debt by equity if it has difficulties in servicing its debt (Mourdoukoutas, 2018). In November 2018, Pakistan's Minister of Finance said the country's financial gap stood at $12 billion. Pakistan is seeking financial help from China, Saudi Arabia, United Arab Emirates and the IMF. Second, Pakistan is also experiencing declining foreign exchange reserves like Mexico was in 1982. According to data from Trading Economics, Pakistan's foreign reserve reached a peak in late 2016 and has been falling since then. Pakistan's central bank said its foreign exchange reserves stood at $18.2 billion, not enough to cover imports for two months (Aamir, 2019). A drying foreign exchange reserve also triggered Mexico's debt crisis in 1982. This is why Pakistan is so eager to seek help in order to avoid its next debt crisis.

4.4 Are BRI Members Repeating History?

At the beginning of China's Reform and Opening Up, Japan offered tremendous technology support and low or no-interest loans. Japan exported equipment in sets and construction machineries to China; China exported raw materials like oil and coal to Japan. The loans to China are not tied with any requirement. According to the Ministry of Foreign Affairs of Japan, Official Development Assistance (ODA) to China started in 1979. A total amount of 3.3 trillion yen of loan aid, 157.2 billion yen of grant aid and 181.7 billion yen of technical cooperation have been supplied to China. The ODA projects were mostly infrastructure such as roads, airports, power stations and assistances in medical and environmental sectors. A total of 5,200 km of railway have been electrified. China Baowu Steel Group, with an annual production of 3 million tons, was built by Japanese Nippon Steel. Japan International Cooperation Agency (JICA) accepted a total of 35,000 Chinese trainees for industrial promotion and dispatched 9,027 experts to China.

However, the cooperation between these two nations, who have a complicated history, did not go smoothly. China suddenly suspended the Baowu Steel project, labeling it a fiscal deficit, claiming it would cause inflation and lead to the dissatisfaction of Chinese citizens. Large investments were pushing China, who had few foreign currency reserves, into piles of debt. The Chinese leader then, Xiaoping Deng, said that "China is uncapable and advancing rashly." There were worries of Japanese colonialism bought with low-interest loans. Another Chinese leader, Mu Gu, was called "traitor" by his mother. The Chinese government invited a Japanese economist, Saburo Okita, to advise Chinese development. Okita advised that China should not solve current problems at the cost of future development. If Japanese

projects were canceled, there would be permanent jeopardies on the China-Japan relationship. China would face negative effects on credits at the same time. With another 300-billion-yen in financing, all projects resumed.

The BRI countries fall in the same position that China was in during their Reform and Opening Up. Anxiety caused by large external debts is testing the host countries as it did China. These countries can remain in their current situations without external debts, or they can improve their economies with external debts. It is not practical for non-Western, less-developed countries to incubate their economic development by relying solely on internal resources. The centered countries are adopting peripheral countries into the global supply chain and extracting surpluses from them. The peripheral countries are providing raw materials and products with low surpluses to developed economies. If these less developed countries cannot improve their infrastructure and realize industrialization, they will be trapped in their subordinate positions for a longer period than they might otherwise.

The initiation of Chinese Reform and Opening Up starting in 1979 can be viewed as an example of industrialization in a broken economy. There were severe debates about whether to have the Reform and Opening Up in China in the 1980s, given the fear of fading socialism in the country. Deng Xiaoping recommended, "We should free our minds and be realistic." When asked if China was still following socialism during the Reform and Opening Up, he explained that the Chinese economy was using a "cat story"; a capable cat catches rats, no matter the color of the rats. Deng also pointed out that Chinese socialism was not equal to poverty. For a country that underwent a ten-year economic turmoil during the Cultural Revolution, Deng's leadership vitally changed the Chinese economy and the life of ordinary Chinese people. In the past 40 years, 800 million Chinese people were raised out of poverty,

and the country has been among the fastest-growing economies in the world. There have not been many opportunities for China to develop its economy after the Qing dynasty, and Deng Xiaoping seized the opportunity of Reform and Opening Up. Nowadays, there are both opportunities and risks in the BRI infrastructure projects. The immediate benefit will be the improvement of local industrialization and peoples' livelihoods. It will be a start for peripheral countries to be industrialized and to upgrade their industries. But the debt problem that comes with external investments can tunnel the country's economy if there is no reasonable debt scheduling. Host countries should carefully assess the related projects and develop a suitable plan for local economies.

5. Discussion of Findings

5.1 Why BRI?

When we talk about the debt level of countries participating in BRI, the ratio of government debt to GDP is often cited. According to the following chart in which countries with high ratios of debt level are listed, Japan is leading the countries, with the highest government debt to GDP of 253%. In the top 10 countries, there are 6 high-income countries. In the top 20 countries, there are 11 high-income countries. These high-income countries have a relatively lower default risk even if their debt level is high. The higher production and high value-added products bring more benefits to high-income countries than to low-income countries. Cash flow can be generated continuously to repay the public debt, and the better credit rating can also help these high-income countries to borrow more debts as needed.

Country List Government Debt to GDP
(tradingeconomics.com as Dec 2017)

	Country	%		Country	%
1	Japan	253.00	15	Cyprus	97.50
2	Greece	178.60	16	France	97.00
3	Lebanon	152.00	17	Jordan	95.85
4	Italy	132.10	18	Djibouti	90.70
5	Portugal	125.70	19	Bahrain	90.60
6	Cape Verde	125.30	20	Canada	89.60
7	Congo	117.70	21	Mozambique	88.20
8	Singapore	110.60	22	Sao Tome and Principe	87.50
9	Bhutan	108.64	23	Euro Area	86.70
10	United States	105.40	24	United Kingdom	84.70
11	Jamaica	103.30	25	Yemen	83.50
12	Belgium	103.10	26	European Union	81.60
13	Egypt	101.20	27	Mongolia	79.40
14	Spain	98.30	28	Austria	78.40

A country like Djibouti has no manufacturing base or the necessary infrastructure for economic development. Still, Djibouti ranked the 18th among countries in heavy debt. Do they really need to borrow a large amount of external debt for development? How do these developing countries repay their debt?

An independent sovereign country has enough intelligence to plan its own route of development. When a country makes its fiscal plan, the demand for funding should be carefully considered. If factories in a country do not have enough electric power to produce, then clearly this country needs to build more power plants. However, a country should carefully assess the demand for further construction of power plants if it already has the necessary infrastructure. For example, it takes five to seven days for goods from Ethiopia to be transported to Djibouti by trucks. The railway connected Addis Ababa and Djibouti can shorten the shipping time to 15 hours. The old railway between these two countries was built by the French in 1897, so the decision of building an Addis Ababa-Djibouti railway is reasonable. Take Malaysia as another example: it cancelled three out of six BRI projects as of high-level debts. Given Malaysia has over five times GDP per capital than Djibouti, Malaysia is not as desperate as Djibouti to have infrastructure for transportation. It is the country's free will to participate in BRI projects.

Servicing external loans is a global issue. In recent years it has become painfully clear that nonfulfillment of the contractual terms of international debt as originally agreed upon can spread beyond the immediate debtors and creditors so as to disrupt international trade and the international banking system[25] (James Barth, 1987). Countries participating in the BRI are mostly low-productive countries, and

[25] Barth, Bradley, and Panayotacos, "Understanding International Debt Crisis", 1987, page 32.

BRI projects are mostly infrastructure that will take a long time to be break even. If these projects cannot help in achieving economic growth, then the debtors cannot repay the debt in time. Sri Lanka, Pakistan and Djibouti all experienced hardship of repayment and they had to either borrow more to cover the original debts or go the path of debt-for-equity.

BRI is not only lending loans to other developing countries for development of infrastructure, but also sending its excess productivity and technology to gain Chinese companies more contracts. Financing is one link of the whole BRI chain. As the first reason of BRI, China's excess productive capacities cannot be eliminated overnight. When it is not economically reasonable to building more bridges and high-speed railways domestically, there is still great demand for them in the international market. Therefore Chinese construction companies often go overseas, hand-in-hand with Chinese capital. Prior to BRI, China had been providing tied aid to other countries. China foreign aid is directed towards infrastructure development, requiring 50% of the construction contracts be awarded to Chinese contractors and 50% of the materials be produced by Chinese business[26] (Kjollesdal & Welle-Strand, 2010). BRI projects are business investments with loans instead of financial aid. All loans play a role of assistance to BRI projects constructed by Chinese contractors. Furthermore, Asian Infrastructure Investment Bank (AIIB) was established in 2016 to solve deficiency of capital for improving infrastructure. By December 2018, the AIIB had gained 93 members.

For many Chinese construction companies, financial institutions and insurance companies, BRI is not a risk-free program. Many projects bind construction

[26] Kjollesdal and Welle-Strand, "Foreign aid strategies: China taking over?", *Asian Social Science*,6(10),3-13.

and operation together to prevent immediate default after construction. From railways to hydropower stations, Chinese contractors' operations might make some benefits and relieve financial burdens for local governments. The more important issue is that most projects are insured by the China Export and Credit Insurance Corporation. If one recipient defaults on investment, the negative shock will spread through the financial system to whoever are involved in overseas investments. The Export-Import Bank of China, the sovereign country, the construction companies and the China Export and Credit Insurance Corporation will all face severe default risks. The BRI will confront a financial crisis, which happened in 2008. Given all connections with all sovereign countries joined in the BRI, these Chinese companies are too big to fail. But the loss will be tremendous for China and other countries involved.

In terms of countries with "unhealthy" indebtedness, the three BRI countries examined here share some similarities with Mexico. However, these similarities are not sufficient to trigger a debt crisis. Although the three BRI countries possess the worst ratio of current account over GDP, the better performance of economies is the fundamental element that can provide cash flows to service their external debts. It is possible that these three countries have learned from the Mexico's debt crisis; that their economic policies are more liberal and more prepared for external shocks. In addition, there are more alternative methods to solve the liquidity problem nowadays. Three BRI countries are striving to seek alternatives when there is a sign of illiquidity; more options of bilateral and multilateral borrowing can decrease their illiquidity risk. Finally, China tends to avoid BRI members' illiquidity in the name of the success and reputation of its first global strategy. Chinese SOEs are also flexible in the renegotiation of repayment to ensure the accomplishment of the BRI.

5.2 If Repayments Well Arranged

If China and BRI participating countries arrange the loan repayments well, do we still consider BRI a debt trap? The outcomes of debt renegotiations between China and borrowers are deferment, forgiveness, refinancing and asset seize[27] (Kratz, Feng, & Wright, 2019). Given the total debts to a country, a very limited amount of debts, ranging from $5 million to $160 million, were written off. Sudan's $160 million debt, which is 2.5% of total debt owed to China, was written off, according to the data of China Africa Research Initiative at Johns Hopkins. However, the forgiveness did not really help in easing the borrowers' debt burdens. The debts written off are commonly accompanied by new lending. When Botswana's $7 million was forgiven in 2017, a new $1 billion worth of infrastructure was alleged by China.

An official of the China Railway No.2 Group signaled debt-for-equity when he was asked about the default of Djibouti on Addis-Ababa-Djibouti Railway. China Railway No.2 Group can operate businesses on Djibouti's land if the government of Djibouti cannot make payments on time. This method will certainly diminish some obligations of the local government, but it might spur objections of residents if Djibouti's government does not properly arrange relocated households. The similar problem already happened in the construction of a hydropower station in Myanmar. Residents protested against unjust compensation during removal for new construction.

Another method of avoiding default is commodity-backed loans. How does the repayment of a commodity-backed loan work (Collins, 2019)? Take Venezuela's oil-backed loans as an example: China Development Bank (CDB) lends to Venezuela;

[27] Kratz, Feng, and Wright, "New data on the 'Debt Trap' question", 2019. https://rhg.com/research/new-data-on-the-debt-trap-question/

Venezuela's oil company Petroleos de Venezuela sells oil to Chinese oil companies at prevailing market price. Then Chinese oil companies sell the oil and send the income to CDB, which will maintain the funds needed for the loan services. During the process, one risk involved is whether or not the market price prevails; because oil is pledged for the loan at a fixed price, if the price of oil decreases, Venezuela has to produce more barrels of oil to service the debt. The volatile commodity price is an unstable factor in commodity-backed loans. In the case of Venezuela, there was a grace period from 2016 to April 2018, which allowed the Venezuelan government to pay back only the interest of the loan. African countries also have taken commodity-backed loans from China, as China used to repay Japan with crude oil and coal in compensatory trade. Through this mutual benefit loan, China has issued $28.8 billion in commodity-backed loans. Angola repaid 127 public projects with four oil lines to China Eximbank. Ghana repaid the loan for Bui Dam with cocoa beans; Ethiopia used its sesame seeds. Kenya repaid the railway loan with its revenue from the railway. These natural resources are highly demanded in China these years, which can prevent debtors' default. However, these commodity-backed loans are causing the concern that China is plundering raw materials from its debtors or exploiting benefits overseas for its multinational companies.

Third, contracts with BRI countries usually ensure Chinese construction companies and financial services will be involved in those countries' businesses. It is not uncommon to see Chinese companies operating trains in host countries. If a host country cannot fulfill its obligations, extension of operation can be discussed in their renegotiation. However, it (tied loan) restricts international competition in the projects and programs financed in this way and may mean that because of higher prices the potential real transfer of resources to the developing country will be lower and the

growth effects smaller[28] (Holthus & Kebschull, 1985). Most BRI countries lack the technology necessary for infrastructure construction; the model of "build + operation" attached in loans exclude technologies from countries other than China. When Maldives cancelled the airport upgrade project with India and resigned a new contract with China in a tied loan, the tied loans limited Maldives' options of contractors only to Chinese companies. Other companies who might maintain better technologies or lower cost cannot compete with Chinese companies fairly. The problem of corruption related to tied loans was also addressed by the newly elected Maldives government. On the other hand, the tied loans effectively increased exports of China and established Chinese political influence in the recipient countries. Jobs related to exports can also be secured in China. It gives China more time to gradually diminish excess production capability and improve its industrial structure. Not only construction but other industries are impacted by the tied loans. More low-value added industries are being moved to trade-free zones in other countries where cost of labor is lower than in China. A Chinese shoemaker, Huajian, is now the biggest private company in Ethiopia. It hires over 7,500 people and contributes exports worth over $122 million to Ethiopia.

In the beginning of the 1980s, countries like France and the UK heavily attached their own interests to bilateral aid. The greater weight attached to a country's own interest is reflected in the increasing concentration on bilateral aid, which the donor country can influence (Holthus & Kebschull, 1985). Because of low efficiency and politicization of multilateral funding, tied aid normally happens in bilateral aid. Prior to the bilateral cooperation between some countries in Africa and China, the

[28] Manfred Holthus and Dietrich Kebschull, "The Effect of Tied and Untied Development Loans", 1985.

borrowers borrowed multilaterally from Western banks[29] (Bavier & Shepherd, 2018). Djibouti borrowed $268 million from seven banks at 9% over nine years, but its first Chinese loan was $620 million over 20 years at 2.85%. Some countries turned to the capital market, which also has a relatively higher interest rate. It is more attractive for borrowers to have financing with lower and longer-term rates. According to data of OECD, Federal Republic of Germany gave out $3,530 million bilateral assistance loans with 15.8% tied-loans from 1978 to 1982. Japan's aid was $6,829 million with 40.7% tied loans. The most tied loan was issued by the US in which 79.3% of total $6,649 million were tied.

In 1960, only 41% of American aid was spent on American goods. The proportion went up to 79% and 94% in 1963 and in 1965 respectively (Payer, The Debt Trap: the IMF and the Third World, 1974). In general, tied loans can reduce the costs of foreign exchange, which occurs in purchasing products from the creditor country. If all tied loans are used by the recipient country to import goods or services from the donor country, there will be no costs of foreign exchange in this trade. The tie is effective when the recipient country spends entire loans to import the donor's products that are not previously imported. The more the donor succeeds in tying loans to projects that require large quantity of foreign exchange and in financing projects that would not have been undertaken without the loan, the more effective the tie will be (Holthus & Kebschull, 1985). In the case of tied loans of Addis-Ababa-Djibouti Railway, all trains made by Chinese NORICO International can create more foreign exchange reserves for China.

[29] Joe Bavier, Christian Shepherd, "Despite debt woes, Africa still sees China as best bet for financing", https://af.reuters.com/article/commoditiesNews/idAFL3N1VK24N.

Among the outcomes of renegotiations, asset seizure is considered the least favorable to debtors; the write-off is the most favorable outcome. The availability of alternative financing sources is the most influencing factor[30] (Hopkins, 2019). The role of the IMF and Eurobonds in renegotiations with Ghana, Mongolia and Zambia helped these countries gain more leverage for borrowing terms. But in the case of Sri Lanka, the country was compelled to use asset seizure due to limited borrowing resources. Leadership changes in borrowing countries also can influence renegotiations with China. New governments tend to alter contract terms with China. Maldives and Ecuador both claimed the contracts made with China by their predecessors were unfair and needed to be reformed, which made commodity-backed loans not guaranteed during renegotiations. Venezuela is showing itself increasingly illusioned by underpinning the oil-backed loans from China (Collins, 2019). The unstable political situation created a "geo-economics gone wrong" problem for China. If the new government derecognizes the loans made by the former president, it will create a woe to the BRI.

Although there are many risks involved in BRI's investments, the strong political and economic wills of donors and recipients are pushing forward the construction of infrastructure. The investments made by SOEs are not only business plans but national strategic planning for participants. The projects will serve as national strategies like reducing poverty, providing sufficient electric power and better transportation in the future. The high demand for infrastructure in developing countries has tested local governments. If making money is not the only goal of BRI

[30] Johns Hopkins School of Advanced International Studies, China Africa Research Initiative, http://www.sais-cari.org/data.

in the short run, participants will concern less about the temporary performances of investments. The long-term economic growth fueled by infrastructure is the ultimate goal of local governments. During Chinese prime minister Li Keqiang's visit Africa in May 2014, he stated that infrastructure should be placed in an important position in cooperation between China and Africa. China will support Africa in building a network of high-speed railway, a network of highway, a regional network of aviation. In January 2015, a "Memorandum of Understanding of Three Networks and Promoting Industrialization" was signed by African Union and China. The memorandum effectively improves the agreement based on African Agenda 2063, which is a vision for next 50 years in Africa. The vision of infrastructure construction by 2063 is given in the Agenda:

> By 2063, the necessary infrastructure will be in place to support Africa's accelerated integration and growth, technological transformation, trade and development. This include high-speed railway networks, road, shipping lines, sea and air transportation, as well as well-developed ICT and the digital economy. A Pan-African High-Speed Train Network will connect all the major cities/capitals of the continent, with adjacent highways and pipelines for gap, oil, water, as well as ICT Broadband cables and other infrastructure. This will be a catalyst for manufacturing, skills development, technology, research and development, integration and intra-African trade, investment and tourism.

5.3 Cooperation between BRI and the International Institutions

The cooperation between BRI and other international institutions was incubated under concerns about opacity of contracts. Compared with loans granted by the IMF or the World Bank, the terms of many BRI loans are not released to the public. This is also the reason that the IMF is reluctant to help BRI members to service their BRI loans. China gradually realized the importance of cooperation with the international agencies for eliminating concerns. China has funded the China-IMF Capacity Development Center, which will train development officials and support BRI under the lead of the IMF. In order to have one agency to make decisions about BRI, China also built the International Development Cooperation Agency. Western-backed institutions also co-founded the Asian Infrastructure Investment Bank (AIIB), who announced a memorandum of understanding with the World Bank in April 2017.

The desirable economic policies from the IMF perspective would be liberalization of foreign exchange and import controls, devaluation of the exchange rate, anti-inflationary programs and greater hospitality to foreign investment. The recipients will be asked to control bank credit, raise the interest rate and reserve requirements. Government spending needs to be curbed, with taxes increases, to control government deficit. All these measures are to promote freedom of trade, exchange and investment.

However, measures that are good for the IMF might not be beneficial to aid recipients; foreign-owned companies benefit largely from the liberalization of imports. They will have access to more raw materials, machinery and spare parts. Furthermore, if these foreign-owned companies are purchasing products from another branch of the same multinational company, they can transfer benefits out of the host country by accepting the inputs at a higher price. Compared with local companies, these foreign-

owned companies are more competitive. The local companies may go out of business or cut down production and lay off employees because of liberalization of imports. In this case, foreign-owned companies did not create productive power for local economy rather than transferring resources to foreign ownership. In the long run, remittance of profits by foreign companies will increase developing countries' debt burden.

The wage earners and poor consumers are victims of the failure of local businesses. Some employees of local companies will be laid off, and those still working will have to accept reduced real income which is a key part of IMF wage restraint program. One of the basic aims of the IMF is to discourage local consumption in order to free resources of export. If more products are exported, then the price of products for the domestic market will increase due to the decreasing supply within the country. Workers with less income will have to curtail their consumption, and the local consumption will decline. In addition, the IMF also strives to cut consumer subsidies that are viewed as distortions to the market. Local government is required to raise public utility rates if the IMF considers countries below the "economical" level.

Criticism of the IMF's aid focuses on how the IMF does not advise nations how to reduce imports and develop their own economies. The IMF displayed an indifference to the fact that the aid became recipients' repayment burden of future years. The Fund even helped recipients to apply for increased quantities of new credit. On one hand, devaluation in developing countries increased the income of producers of raw materials, which directly intensified the economic pattern that developing countries were trying to escape from. The IMF and developed economies tended to rationalize the pattern that the third world economies are suppliers of raw materials.

On the other hand, when countries with debt burden are submissive towards the IMF, the IMF reschedules their debt repayments. Thus the developing countries did not receive suggestions of healthy and diversified economies, but a guidance of temporary relief for debt burden. However, rescheduled debts and new aid will still be paid back by recipients in the future. The aid recipients are stuck in a vicious circle created by the IMF: the IMF releases aid to developing countries for debt repayments, but enhances the colonial economic pattern in which the developing countries are left at the periphery and will never be able to fully pay back the aid. The poor countries will have to run faster and faster just to stay in the same place (Payer, The Debt Trap: the IMF and the Third World, 1974).

The developing countries will find themselves in a dilemma when they borrow external debts. The borrowers must accept scrutiny if they decide to borrow from the IMF. As a result, the essential projects to national welfare (like BRI projects) might need to be given up, and the industrial development might be disturbed by the IMF's dictation. If the borrowers turn to commercial loans, to which the IMF objects because of the high interest rates, they will be exposed to even higher interest rates. "Debt slavery" is the term used by Cheryl Payer in the book "The Debt Trap" to describe developing countries' situations. The aim of the IMF is neither financing developing countries once and for all, nor starving the people of these countries to death. The IMF indentures developing countries closely to developed countries by debts, and orders the debtors to labor on plantations. The developing countries are refused to finance building their own businesses by the IMF. The debt slavery system keeps developing countries in underdevelopment, or makes them the servers of multinational enterprises at the expense of their own development of economy.

The World Bank and the IMF have different functions in theory: the IMF provides short-term loans to maintain healthy balance-of-payments, and the Bank is a creditor and guarantor for specific projects. However, there is overlap between functions of these two institutions in practice. The World Bank also provides support on balance-of-payments with liberation and financial discipline attached. The IMF is also an aid organizer and member of aid consortia.

The World Bank helps the expansion of private capital to developing countries by measures that are similar to those used by the IMF. The Bank supports exports which benefit multinational corporations. It also opposes minimum wage and trade union activity. Any protection of local businesses, as well as local government's control of basic resources, will be refused by the World Bank. All these measures can be used to pry away developing countries' control over the national economy, and will ultimately benefit international capital and local elites. There are four levels that the Bank can influence (Payer, The World Bank, 1982): the individual projects, the sector, the national policies and the indirect influences. It is straightforward that the World Bank can make changes to the funded projects and industries through cooperation with local governments. The direction of national policies can also be changed under the efforts of the Bank, the IMF and local governments. Alleviation of poverty—the indirect influence—is not well realized through the World Bank's funds. The funded countries are usually corrupt, unjust and inegalitarian, which makes it difficult for the Bank to run a progressive and beneficial project. However, the Bank's indifference to extremely inequitable income distribution in local societies is detrimental to the poor in local countries. Only a few people, local elites, benefit from the World Bank's projects. Besides, the priority to the benefits of foreign investment is well considered by the World Bank, who can force local governments to give up progressive policies.

There are six stages that the borrowers must go through when they borrow form the World Bank: identification, preparation, appraisal, negotiations, implementation and supervision, and evaluation. These stages ensure feasibility of invested projects, but they are time consuming. The second step, preparation, usually takes one to two years for the World Bank. The Bank staff will review the projects from technical, institutional, economic and financial aspects; almost all appraisals include an economic cost-benefit analysis. The costs and benefits to a society are taken into account and the Bank will lend the funds when the benefits of the loan are greater than the opportunity cost. However, the sophisticated analysis is difficult to use in the field. Because shadow prices, wages and interest rate are used in the analysis, the processes are largely arbitrary. The role of "hunch, guesstimate and judgement" is enormous (Stewart, 1978). The use of distributional weights is rarely used in the analysis. And there are enormous externalities to be calculated so that the choice of what to include in the calculation is wide. After all, in the cost-benefit analysis, a decision made on political grounds, not an objective investment analysis.

Negotiations happen between the World Bank staff and the executive directors of borrowing countries in which the United States and other developed economies have interests. These negotiations are normally not documented, but extremely important. In the step of implementation and supervision, the World Bank supervises the procurement of projects by progress reports sent by the borrowers. The Bank also sends its staff into the field for short supervision missions. For the last step, evaluation, the Operation Evaluation Department will review and audit projects in the borrowing countries. The audit is mainly to estimate the time and cost of the projects in order to determine whether the anticipated rate of return is achieved.

However, the cooperation between BRI and other institutions is limited to mutual understanding and is difficult to be deepened. First, it is not practical for a country to have a co-funded project by multilateral institutions and bilateral institutions in terms of the dominance of the project. Like the saying "one nation cannot have two queens," China and the IMF/World Bank will have to negotiate over ultimate control of the project. All BRI projects are being arranged by Chinese state-owned enterprises currently. Some Chinese small private firms are also participating in the BRI but mainly focus on subcontracts overseas, they do not directly contract with local governments in infrastructure construction. The Chinese SOEs, who enjoy a central government's privileges, dominate the BRI projects. If other international institutions join the funding of the BRI projects, these institutions will have to share voting rights with the Chinese SOEs. In terms of the process of decision-making, it is not necessary and goes against the wills of the Chinese SOEs to give up the dominance over the projects. Keep in mind that this step of preparation for funding by the IMF will take one to two years. The low efficiency of the IMF will not be accepted by the Chinese SOEs. Second, Western economies who back the IMF/World Bank are cautious about the expansion of the BRI. Given all the negative news of the BRI, it is hard to imagine that the IMF supports the BRI projects. The political and economic foundation for this international cooperation is not solid enough to help pushing forward the Chinese global strategy. The major supporter of the IMF/World Bank, the United States, has no initiative to improve its competitor's global influences. On the side of China, it also lacks mutual benefits and experiences for the cooperation. There has been no sign of cooperation with the Western World to develop the BRI in the main stream of consensus in China. Most Chinese think tanks are still in the stage of

conquering critiques from the West, which builds up an invisible curtain between China and the West on BRI issues.

6. Conclusion

This research paper is conducted for a popular topic in both western and eastern media nowadays. The key question is whether the BRI a debt trap. This paper starts with introducing the current conditions of external debt of three BRI members. Based on analysis on these countries' financial ratios in comparison with Mexico's debt crisis, some similar scenarios associated with debt crises in three selected BRI members are explored. With the help of causes of debt crisis and relief solutions in the literature review, the findings of this paper present the deep reasons for three selected BRI members to patriciate the program, as well as some measures already taken for prevention of debt crisis. Generally speaking, the BRI cannot be defined as a debt trap according to this research. By comparing external debt conditions of different BRI countries, I found certain countries do have possibilities of debt crisis due to BRI. However, the number of these countries is limited. And many countries who are vulnerable to debt burdens have already eliminated the risks by self-corrections. By the end of January 2020, 138 countries will have participated in the BRI program. Only eight countries, which are introduced by the Center for Global Development in the first chapter, are exposed to debt risk. Furthermore, the analysis of the three selected countries among the eight targets shows that the symptoms of debt crisis are not severe enough to overthrow the economic foundation of three BRI countries or the whole BRI project. The concerns of the Western world will be reasonable if we consider the rare situations of certain struggling countries are general conditions for all BRI members. Most members are well leveraging the BRI projects

and improving their infrastructure. The roles of international institutions are also discussed to explore more borrowing methods for developing countries. Readers can better understand the current situations of BRI members and the role of BRI financial institutions by comparing multilateral borrowing with bilateral borrowing.

The gap for infrastructure investment in developing countries does exist and there has not been an effective way to fulfil it. Developing countries need capital to develop their infrastructure and to escape from the fate of the periphery. It is rare that a country's economy takes off without taking on any foreign debt, especially for the developing countries after World War Two. Singapore, Korea and Taiwan all started with heavy external funds to achieve their development. BRI countries who borrow external debts are taking the same route that China undertook in the 1980s. The strong political connections between China and BRI members lay the foundations for BRI projects; the BRI cooperation models provide necessary tools for execution. To avoid potential debt crises, BRI members ought to efficiently manage and utilize their external debts. Investment in their vital projects, various sources of borrowing and timely debt solutions can all benefit local people and economies. If we use a metaphor for the BRI, we might imagine a junior-year college student with student loan is a BRI member who is going to take on external debt. The student needs to borrow more from the Department of Education to receive a degree. There is no doubt that the student should finish their college education with the help from the Department of Education if no other accessible funds exist. But the challenge is that the student should maintain the student loan under solvency, because after graduation the department will require the student to repay the loan after a grace period. The student should ensure their education will facilitate their job hunt in order to generate cash flow for the loan repayment. Otherwise, the student will be buried beneath the loan till their bankruptcy.

In reality, most students graduate with a certain amount of student loans and start repaying those loans after they are employed. It will be a matter of time before the student can pay off the loan, no matter what industry they work in. The infrastructure in BRI projects, as the student loan to student, should be matched with the size of local economy, fully utilized to eliminate poverty and to improve local living conditions.

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