

Trends and Composition of Public Debt in BRICS

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Abstract: The paper analyses the trends and composition of public debt in BRICS countries in the post liberalisation period. The study found that the public debt has been increased gradually over years in the BRICS countries and in some years, there are declining trend. Among the external debt, the short-term debt is highest for China compared to other countries during 2009 to 2018. The South Africa has the highest PPG debt, whereas the China has the lowest PPG debt. The second highest PPG debt is made by Russia then followed by India. Brazil has the highest PNG debt, whereas, the China has the lowest PNG debt during 2009 to 2018. India's debt ratio to GDP (67.27%) is highest among these five nations followed by Brazil (56.8%) and South Africa (46.41%). The least debt ratio to GDP is in Russia (13.41%) and followed by China (22.4%). As the study found that the public debt has been increased in BRICS countries, the government of these countries must try to reduce it by adopting several policies such as reducing the unplanned expenditure, rising the revenues without raising the tax base, encourage the foreign direct investment to boost the production and reduce the investment, increase the public-private partnership (PPP) in the large project investment such as physical infrastructure, etc.

Keywords: public debt, economic growth, BRICS, expenditure

JEL Classification: F01, F02, F34, H63

1. INTRODUCTION

In recent years, public debt is an important subject for policy makers as well as researchers as large volume of public debt increases the interest payment, widen the gap between savings and capital accumulation, and slowdown the economic growth (Modigliani, 1961; Diamond, 1965; and Blanchard, 1985). The available studies have mainly focused on the relationship between public debt and economic growth, and that relation varies from nation to nation (Reinhart and Rogoff, 2010; Eberhardt and Presbitero et al., 2014). The debt payment reduces public spending, which lead to negative economic growth

(Mendoza and Ostry, 2008; and Rogoff, 2015). A high ratio of public debt to GDP reduces the public expenditure in long run generates uncertainty in future (Teles and Mussolini, 2014). On the other hand, high ratio of public debt affects macroeconomic variables and financial stability in a country (Reinhart et al., 2012). In order to change the debt picture of a country, an effective public debt management strategy must be adopted through the interest rate and opportunity cost (Silva, 2014).

The present study has tried to analyse the trend and compositions of public debt in BRICS countries as they have strength in population, resources, and combined GDP is \$16 trillion. Since last couple of years, these countries have been facing severe economic problems due to sharp fall in commodity prices. China has secured the fastest growing economic country and achieved the two-digit economic growth rate in the world, but has slowed down to 6.7% in 2018 and 6% in 2019. Russia is the only country in BRICS, which surely recover the economic growth as it has huge oil and mineral deposits, \$ 379 billion of foreign exchange and gold reserves, and has developed the advancement of science and technology. Similarly, Brazil is rich in huge natural resources, but the country is facing very bad economic growth due to high corruption and mismanagement of state finances. The present study is analysing the recent trends and composition of public debt in BRICS. The rest of the paper is as follows: Section 2 discusses the origin and composition of BRICS. Section 3 analyses the growth and trends of public debt in BRICS. Section 4 provides conclusion of the study.

2. PUBLIC DEBT IN BRICS: COMPOSITION, TRENDS AND GROWTH RATE

The term BRIC represents four combined economies such as Brazil, Russia, India and China originated in 2003, after joining South Africa to the group in 2011, it becomes BRICS. Currently, it is one of the most powerful economic blocs as it is accounted that the BRICS has 3.12 billion populations as of 2019, which is 41% of the total world population, and having 24 per cent of the world GDP (BRICS Report, 2020). To strengthen the alliance, a business Council (BBC) was established in 2013 at the 5th Summit of BRICS in Durban, South Africa to bring together the private sector. The BBC has five national sections, each has five leading CEOs, a secretariat and a set of members including companies and business organizations led by a chairperson (BRICS Report, 2019). The BBC presidency and chairpersonship are rotating annually. BBC presidency would be rotating to India in 2021. In the last BBC in 2019, there was discussion on various issues such as on the cooperation for modern biotechnology, network for innovation hubs, rural digital inclusiveness, energy integration, PPP on infrastructure projects, strengthen logistics connectivity between BRICS countries, waste management, Aviation products & services (BRICS Report, 2019). There is established New Development Bank to increase the investment, has started functioning

in Shanghai and disbursed \$811 million to all the BRICS countries in the first round of Green Energy loans. In India, the Canara Bank has received \$250 million for green infrastructural development in the country.

Figure 1: Population and GDP in BRICS Countries, 2019

BRICS Countries	Population (Billion)	GDP (\$ Trillion)
Brazil	0.21	1.84
China	1.4	13.61
India	1.36	2.8
Russia	0.15	1.7
South Africa	0.06	0.36

Source: World Bank online data base

The total external debt of BRICS countries is broadly classified into three; use of IMF credit, long-term debt and short-term debt. Further, the long-term debt is categorised into two such as PNG (i.e. private sector non-guaranteed), and PPG (i.e. public and private sector guaranteed) which includes public sector of which general government, and private sector guaranteed by public sector (Figure 1).

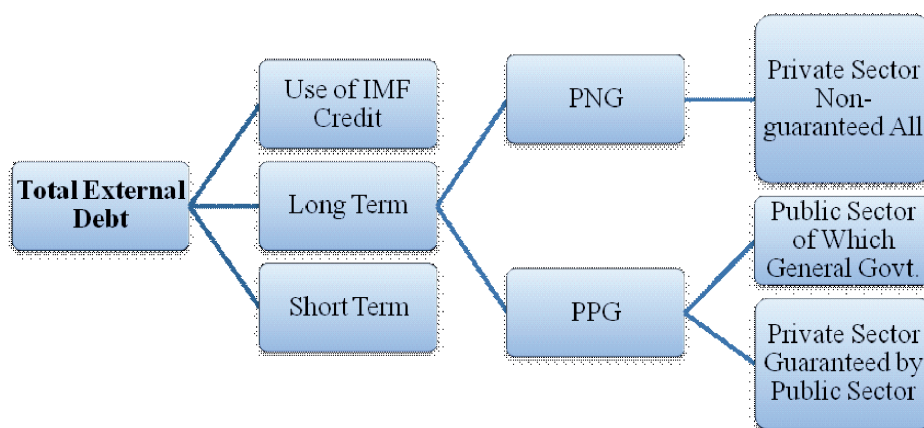


Figure 1: Classification of External Debt in BRICS

Source: World Bank International Debt Statistics online database

The total external debt of the BRICS countries was \$1471.14 billion dollar in 2009, after four years, the external debt has increased more than double \$ 3191.3 in 2013, and further increased to \$ 3674.4 billion in 2018 (Table-1). Among the countries within the union, China has received the highest amount of external debt, followed by Russia and Brazil, and the lowest external debt by South Africa. China has received \$448 million external debt in 2009, which was increased to \$1045 million dollar in 2011, and again

increased to \$1962 million dollar in 2018. On the other hand, South Africa has the lowest external debt of \$79.0 million in 2009, that has increased to \$179.3 million in 2018. India's external debt has increased slowly from \$478.8 million in 2015 to \$511.5 million in 2018. Brazil had the external debt of \$281.7 million dollar in 2009, which has been increased to \$557.8 million in 2018. Whereas, the Russia had external debt of \$406.4 million in 2009, has gradually increased to \$453.9 million in 2018 respectively.

Table 1: BRICS Total External Debt from 2009 to 2018 (in Billion \$)

YEAR	BRIZIL	RUSSIA	INDIA	CHINA	SOUTH AFRICA	BRICS
2009	281.7	406.4	256.3	448	79.0	1471.4
2010	352.4	417.9	290.4	735	108.4	1904.1
2011	404.0	544.3	344.4	1045	116.9	2454.6
2012	440.5	591.8	392.6	1138	145.0	2707.9
2013	483.8	668.5	427.2	1472	139.8	3191.3
2014	556.9	549.6	457.5	1771	141.6	3476.6
2015	543.4	467.7	478.8	1326	138.1	2954.0
2016	543.3	533.2	455.5	1416	146.0	3094.0
2017	543.0	518.2	511.5	1710	180.5	3463.2
2018	557.8	453.9	521.4	1962	179.3	3674.4

Source: International Debt Statistics, World Bank, 2020

The annual growth rate of external public debt indicates a gradual increase of external debt of Brazil up to 2014, then there was negative growth rate of external public debt during 2015 to 2017, then it reached 2.73% in 2018. In Russia, the growth rate of external debt is more volatile during the period of 2009 to 2012. The external debt has grown up from 2.83% in 2010 to 30.25% in 2011, and then it declined to -12.41 in 2018. On the other hand, the growth rate of external debt of India has increased during 2009 to 2011, and then there has been declined of -4.87% in 2016, and slightly increased

Table 2: Growth Rates of Total External Debt of BRICS 2009 to 2018 (in %)

YEAR	BRIZIL	RUSSIA	INDIA	CHINA	SOUTH AFRICA	BRICS
2009	-	-	-	-	-	-
2010	25.10	2.83	13.30	64.06	37.22	29.41
2011	14.64	30.25	18.60	42.18	7.84	28.91
2012	9.03	8.73	14.00	8.90	24.04	10.32
2013	9.83	12.96	8.81	29.35	-3.59	17.85
2014	15.11	-17.79	7.09	20.31	1.29	8.94
2015	-2.42	-14.90	4.66	-25.13	-2.47	-15.03
2016	-0.02	14.00	-4.87	6.79	5.72	4.74
2017	-0.06	-2.81	12.29	20.76	23.63	11.93
2018	2.73	-12.41	1.94	14.74	-0.66	6.10

Source: International Debt Statistics, World Bank, 2020.

(1.94%) in 2018. Similarly, the growth rate of China's external debt has declined during 2009 to 2012, and then there was grown up external debt during 2013 to 2018. In South Africa, in the beginning growth rate of total external debt was positive during 2009 to 2012, then there has been declined of external debt from -3.59% in 2013 to -2.47 in 2015. Thereafter, the growth rate of public debt was positive during 2016 and 2017, then it becomes negative (-0.66%) in 2018.

The share of external debt to total external debt of BRICS countries are reported in Table 3 indicates that the China has the highest share of external debt in BRICS countries during 2009 to 2018. The countries other than China have seen a dramatic fall of their share of external debt to total debt of BRICS in the study period.

Table 3: Share of external debt to Total External Debt in BRICS Countries (in percentage)

YEAR	BRAZIL	RUSSIA	INDIA	CHINA	SOUTH AFRICA	BRICS
2009	19.15	27.62	17.42	30.45	5.37	100.00
2010	18.51	21.95	15.25	38.60	5.69	100.00
2011	16.46	22.17	14.03	42.57	4.76	100.00
2012	16.27	21.85	14.50	42.03	5.35	100.00
2013	15.16	20.95	13.39	46.13	4.38	100.00
2014	16.02	15.81	13.16	50.94	4.07	100.00
2015	18.40	15.83	16.21	44.89	4.68	100.00
2016	17.56	17.23	14.72	45.77	4.72	100.00
2017	15.68	14.96	14.77	49.38	5.21	100.00
2018	15.18	12.35	14.19	53.40	4.88	100.00

Source: International Debt Statistics, World Bank, 2020.

Trends of External Debt in BRICS

The total external debt of BRICS countries is categorized into three types; short-term debt (ST), public & publicly guaranteed debt (PPG) and private non-guaranteed debt (PNG). The ST debt has the maturity period of one year or less, whereas the PPG debt has a long-term maturity period, and the PNG debt has long term external obligation of private debtor that are not guaranteed for repayment by a public entity (World Bank Report, 2018). The short-term debt (ST) trends (in %) of the BRICS countries are shown in figure-2 indicates that the China has received the highest percentage of short-term debt compared to other countries during 2009 to 2018. It indicates that the ST debt of China was growing till 2011, and then it has declining trend. Initially, the short-term debt of India was rising and after 2012 it has declining trend. In South Africa, the ST debt was fall in 2010 and thereafter it has rising trend. The ST debt of Russia has been slowly increased to the year 2012, then it has declining trend, whereas, the Brazil's ST debt has declined in the year 2010 to 2013, thereafter, it has rising trend.

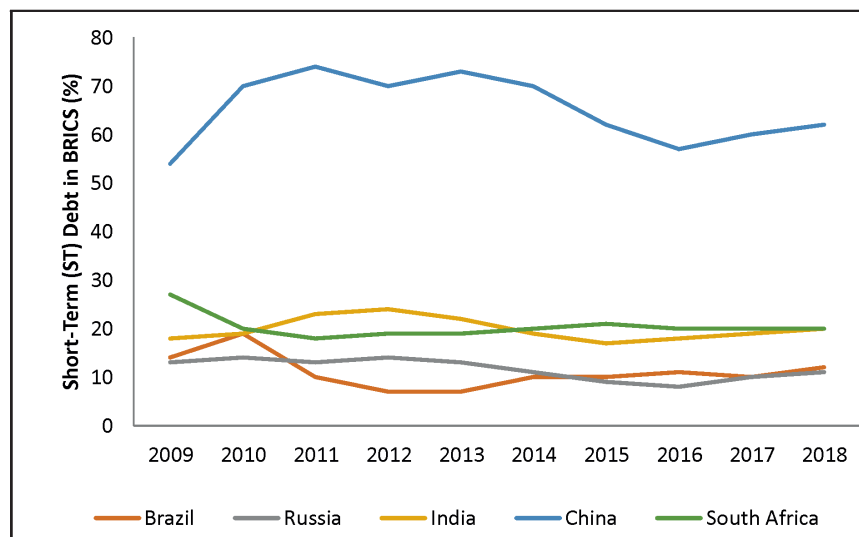


Figure 2: Trends of Short-Term (ST) debt in BRICS (in %) from 2009 to 2018

Source: Authors estimated using IMF Data

The trends of public & publicly guaranteed debt (PPG) of BRICS countries are shown in Figure 3. It indicates that both the South Africa and Brazil have upward trends of PPG debt, but South Africa has the highest PPG debt, whereas, the China has the lowest PPG debt as compared to other countries. The second highest PPG debt was taken by Russia, which is followed by India. These two countries have more fluctuation in PPG debt compared to other BRICS countries during the period. The trends of private non-guaranteed debt (PNG) of BRICS countries have shown in Figure-4, indicates that Brazil has the highest PNG debt, whereas, the China has the lowest PNG debt during

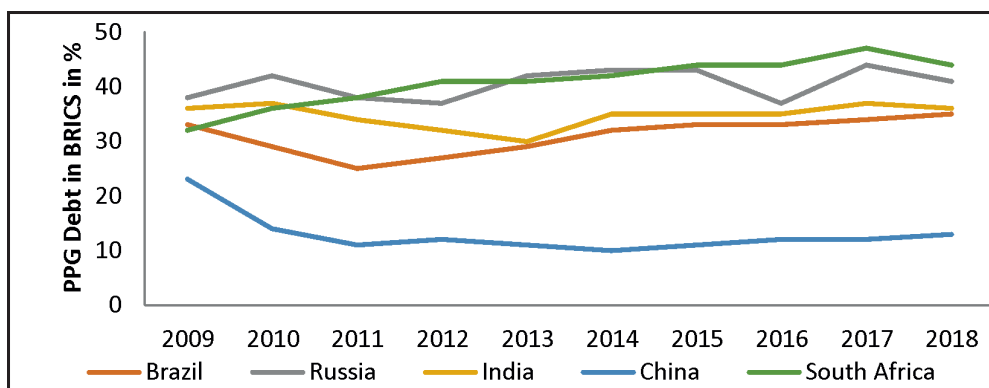


Figure 3: Trends of PPG debt in BRICS (in %) from 2009 to 2018

Source: Compiled from the IMF Data

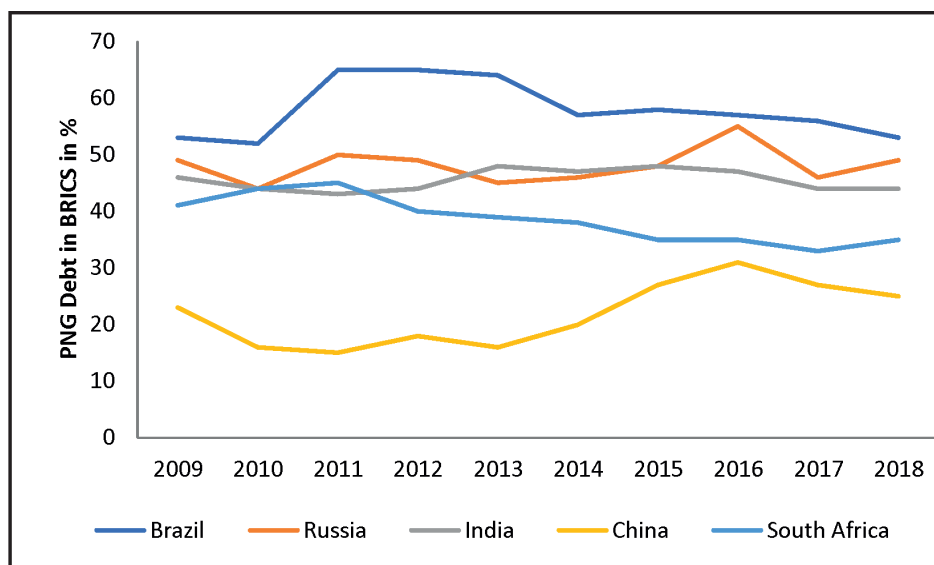


Figure 4: Trends of PNG debt in BRICS (in %) from 2009 to 2018

Source: Compiled from the IMF Data

2009 to 2018. Since 2010, the PNG debt has been increased in China and it has declining trend after 2016. The Brazil and Russia have dramatic trends as they have up and down of PNG debt trend. In case of India, the PNG debt was rising to the year 2013, and then it has declining trend.

4. TREND OF EXTERNAL DEBT TO GDP IN BRICS

The GDP growth rates of the BRICS countries (Figure-5) indicate that both India and China's economy are growing very faster than the Brazil, Russia and South Africa. Since 2016, it has been recorded that India's economy is growing faster than other nations in the BRICS. Both Brazil and Russia have experienced negative economic growth during 2014 to 2017. It indicates the India's growth rate was highest in the year of 2015, whereas, China had highest economic growth rate in the year 2014. In the year 2015, when most of the economies in the BRICS had lower economic growth, India was realising the highest growth rate. The projected GDP for the year 2018 indicates that India may overtake to China in 2018 and other nations will have positive growth rate.

The debt to GDP ratio (Figure 6) indicates that India's debt ratio to GDP (67.27%) is highest among these five nations followed by Brazil (56.8%) and South Africa (46.41%). The least debt ratio to GDP is in Russia (13.41%) and followed by China (22.4%). It is obvious that public debt in India will be more as their economy grows more than other nations but it is surprised that Brazil, whose growth is very low but they have more debt

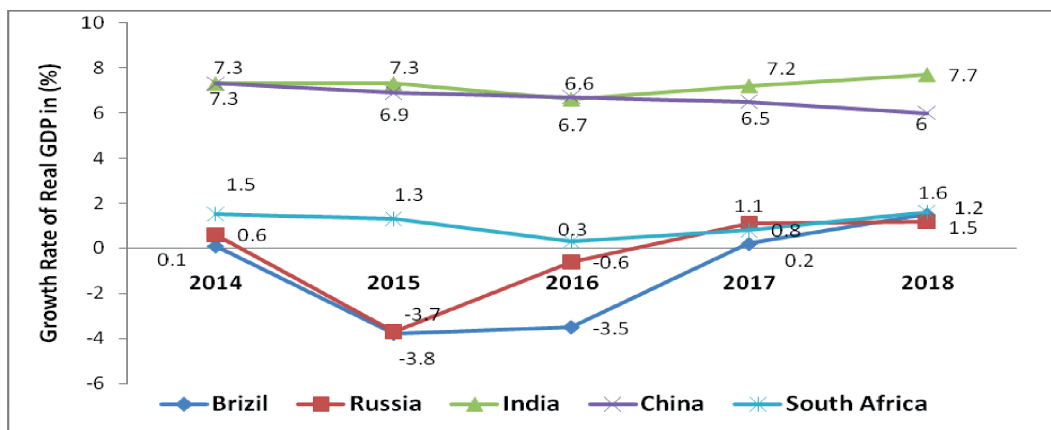


Figure 5: Average Annual Real GDP growth rate of BRICS 2014 to 2018

Sources: International Monetary Fund (World Economic Outlook, October 2016, January, 2017). Note: 2017 and 2018 Real GDP growth is Projected, whereas other years data are actual, see details for Appendix.2.

than other nations. Therefore, it is an important issue to empirically examine the debt dynamics in BRICS.

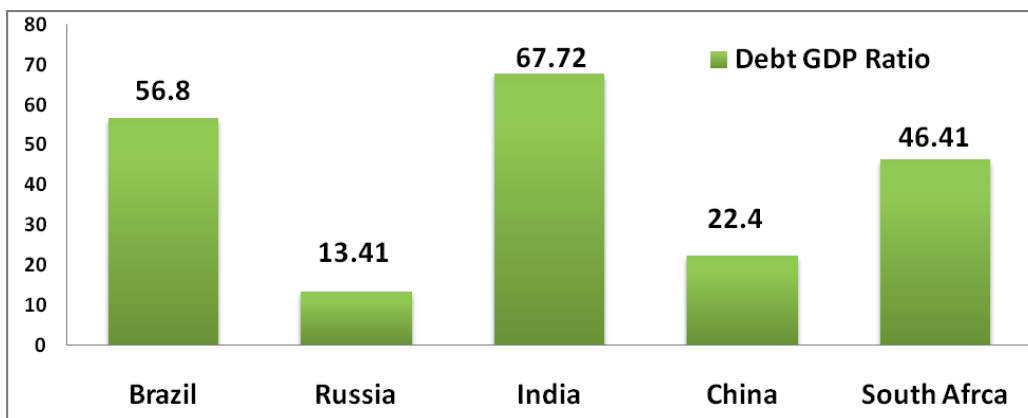


Figure 6: Debt and GDP ratio in BRICS Countries

Sources: International Debt Statistics, World Bank, 2017

If we look at the foreign direct investment (FDI) in BRICS nations (**Figure-7**), we find that the China was on the top of FDI inflow during the period 2007 to 2014 years. South Africa had the lowest accessibility of FDI. Both in India and Russia more or less the FDI inflow was stagnant over the year from 2007 to 2014, except the fall in Russia.

Table 7: Share of external debts to GDP in BRICS (in %)

BRICS	2007	2008	2009	2010	2011	2012	2013	2014	2015
Brazil	14.1	12	12.2	12	12	13.3	12.7	14.6	18.9
Russia	34.3	34.2	36.3	32.1	29.1	28.9	33.6	43.3	46.5
India	17.5	18	20.3	18.2	18.2	20.9	22.3	23.6	23.8
China	11	8.5	8.4	9	9.2	8.6	9	17	12.9
South Africa	25.8	26.1	27.9	29.6	28.3	35.7	37.3	41.4	0

Sources: BRICS Joint Statistical Publication, 2016.

5. CONCLUSION

The paper analyses the trends and composition of public debt in BRICS countries in the post liberalisation period. The study found that the public debt has been increased gradually over years in the BRICS countries and in some years, there is declining trend. Among the external debt, the short-term debt is highest for China compared to other countries during 2009 to 2018. The South Africa has the highest PPG debt, whereas the China has the lowest PPG debt. The second highest PPG debt is made by Russia then followed by India. Brazil has the highest PNG debt, whereas, the China has the lowest PNG debt during 2009 to 2018. India's debt ratio to GDP (67.27%) is highest among these five nations followed by Brazil (56.8%) and South Africa (46.41%). The least debt ratio to GDP is in Russia (13.41%) and followed by China (22.4%). As the study found that the public debt has been increased in BRICS countries, the government of these countries must try to reduce it by adopting several policies such as reducing the unplanned expenditure, rising the revenues without raising the tax base, encourage the foreign direct investment to boost the production and reduce the investment, increase the public-private partnership (PPP) in the large project investment such as physical infrastructure, etc. If all these measures are taken with urge and devotion by the BRICS member countries, then the very purpose of public debt management will be proved successful.

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