

# Approaches to Institutionalise the Virtual Market of the BRICS

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**Abstract.** The purpose of this article is to find potential approaches to establishing institutions of the mutual common use by the BRICS. The topic is time-relevant, because there is a need to look for ways which could help create the toolkit to make a consensus at the international level without establishing groupings such as the EU. The author believes that this process should be driven only by economic and geopolitical (or geo-economic) benefits for the countries participating in the integration agreements. It means that there is a necessity to develop the norms which would ensure the effectiveness of the decision-making process at the international level. The theoretical significance of the article's outcomes is that it lays the foundation to the concept of the BRICS as organised in a form of a contractual state. The results are recommended in the practice of establishing integration groupings on the basis of the virtual market. To prove the practical significance of the results the author has conducted the calculations of a debt service mechanism based on the common virtual market of the BRICS which allows to finance the deficits at the virtual market's loan rate. One of the principles identified as effective to implement the virtual debt market mechanism of the BRICS is to use a gradualist approach to harmonising the common rate of debt service, since the instant transition to common macroeconomic policy will create an inflationary bubble as a result of slashing interest rates.

## 1. Introduction

The early 21<sup>st</sup> century has seen the emergence of a few country groupings in the world that do not classify into the category of regional integration agreements (RIAs) as they are understood by the academia. A number of query acronyms have been created such as BRICs that encompasses Brazil, Russia, India and China (later to be called BRICS, i.e. BRICs plus South Africa), Next-11, IBSA (India, Brazil and South Africa), etc. A number of economists think that the international and regional integration as part of globalisation seems to have taken quite a different pattern in the world economy today [1, 2].

The disappointment about the euro and the Brexit severely damaged the reputation of regional integration as a process bringing economic prosperity to all participating countries. These problems pose a question as to whether it is worth creating regional integrated groupings of countries altogether. Perhaps it is much more prudent to establish informal groupings such as the BRICS aimed at just coordinating consensual economic policies. Consensual economic policy implies setting mutually

agreed-upon directives for macroeconomic policies, fiscal and budgetary policies without sacrificing national sovereignty [3].

However, to follow consensual or common economic policies, the BRICS still require supranational mechanisms and institutions that do not harm national sovereignty. The BRICS have created by now a few institutions of common use [4]. One of them is a consultation body called the BRICS Summit. However, unlike the United Nations, the Summit of the BRICS does not have a strict set of articles of conduct and strictly prescribed procedures to be followed by the member states. There are other features that distinguish the BRICS Summit from the UN [5].

Apart from the Summit, the BRICS has set up institutions with functions to regulate specialised activities. The example would be the New Development Bank and the Pool of Foreign Exchange Reserves. The New Development Bank (or the BRICS Development Bank) is a financial institution that has the status of a real international organisation whose principles and rules are stated in the articles of conduct. The BRICS Development Bank works in close touch with and parallel to the international financial institutions like the International Monetary Fund or the World Bank [6]. The BRICS Development Bank was founded in response to the global financial crisis of 2008 that showed that there was a need to create additional international financial organisations which could address the problems of the troubled developing and emerging countries.

## **2. The theoretical background. The institutional basis of social organisation**

It is well-known that states are formed according to the theory of social agreement which had been elaborated by John Locke and Thomas Hobbes. The essence of this theory lies in the objective want of the public to delegate certain functions (national defence, social organisation and control, administration, government, etc.) to a higher specialised authority [7]. This authority in turn sets the boundaries of social behaviour and establishes specific institutions to perform these functions. According to the theory of civil choice, these boundaries encompass a collection of legislative norms from a constitution to simple acts and regulations [8].

Policymakers applied the general principles of Locke and Hobbes to set up the European Council on Coal and Iron. And they did it until this body eventually transformed into the EU. The policymakers who came after them believed that all other integration groupings should also be formed according to the best practices of the EU [9]. However, the Brexit case has shown that there are limits to what extent this theory can go to integrate nations who have developed separately for centuries and have by now established their own sovereign institutions to perform the conventional functions described above.

Therefore, in case of the BRICS, it does not mean that they should necessarily adopt the same approach. They should not develop a common constitution and common law. This approach characterises the highest form of integration called a political union. Despite several successful stories there is no European state in existence and no sovereign with responsibilities for nations as different as the countries of Europe, although the relations of the member countries are regulated by the common and democratically agreed-upon norms and institutions there [10].

This is very difficult to do, because the choice of effective norms relates to the problem of false infinity. To come to a consensus for countries as different as the BRICS, they will have to make a choice. It is based on the regular procedure when people express their preferences through votes [11]. This procedure will inevitably lead the countries to face the paradox of Condorcet or the Arrow's impossibility theorem all referring to making a democratic choice. According to the theorem, it is impossible to propose the procedure acceptable for a very diverse group of countries without a non-dictatorial decision by just ranking their collective preferences in accordance with the degrees of the preferences of individual voters participating in the process of coming to a consensus [12].

For example, during a hypothetical summit, the BRICS is trying to make a choice of an infrastructure project to be built as a first priority and to decide where it should be built. The results of the hypothetical vote are presented in table 1.

**Table 1.** The procedure of the BRICS' collective vote on infrastructure projects.

Public good	Voters' preferences				
	Russia	South Africa	Brazil	India	China
A school in Brazil	1	1	5	2	3
A park in South Africa	2	5	3	1	4
A road in Russia	5	4	1	3	2
A power station in India	4	3	4	5	1
Residential housing in China	3	2	2	4	5

Table 1 ranks the BRICS preferences when they choose which of the public goods they would most likely want. And of course, each of the BRICS would rather build at home. Under these circumstances no infrastructure project will materialise. But since the decision must be taken anyway, and the funds are available and ready to be used, the BRICS collectively will choose the construction of an electric power station in India. It happens because Russia, South Africa, India and Brazil give it their utmost preferences, and only China least of all wants this.

It may make someone believe that there is no choice, because at present there is no other mechanism to achieve a consensus but to obey some directive of a supranational institution. This consensus is based on the constitution of the market, i.e. a collection of interacting, interdependent and deterministic norms of behaviour that create the conditions to settle international transactions and to achieve market equilibrium [13].

### 3. The model of the virtual market of the BRICS

The BRICS, being an international grouping, which largely works on the basis of informal norms, should achieve a consensus making use of the principles of a contractual republic. We define the contractual republic of the BRICS as a predominantly virtual area which functions at the supranational level and is formed by the trade and economic ties, digital exchange of information and electronic signatures, cross-border movement of financial capital, gross settlement transfer system, and the common virtual money market and the common virtual debt market. We think that the contractual republic of the BRICS should be based on the common virtual market.

In this sense, the BRICS may build a better foundation for the contractual virtual republic, because this form of a union will allow the member states to take part in all spheres of the group's social and public life [14]. The contractual republic will also ensure the freedom in taking key decisions at the parliamentary level, at the level of the central banks, financial controllers and regulators and other domestic respective authorities [15].

It is worth considering an example of administering the state finances of the BRICS built on the principles of the virtual contractual republic by means of the common virtual market. Any country is financially stable if its budget expenditure equals to its budget revenue and trade deficits equal to trade surpluses ensuring current-account equilibrium, because disequilibrium usually brings financial difficulties and crises with them. Table 2 shows the BRICS' trade and budget deficits or surpluses by comparing exports and imports as well as budget revenues and budget expenses.

Table 2 shows that in 2017 the BRICS, apart from Russia, was running budget deficits. Current-account deficits occurred only in India and South Africa. In combination with the budget deficits, the government debt problem in South Africa is becoming more acute from year to year. On the contrary, Brazil and China have trade surpluses. But their problem is that their surpluses are not sufficient in size to equilibrate the revenues and expenses of the budgets due to very large volumes of deficits. Although in Russia this problem is less acute, the deficit may also happen there any time in the future, so the authorities in the country should be aware of this and take the necessary measures beforehand.

**Table 2.** The sources of government debt in the BRICS outside integration agreement.

Indicator, bln \$US, unless specified	Brazil	Russia	India	China	South Africa
<b>Export</b>	191.1	343.9	264.4	2,273.5	69.6
<b>Import</b>	171.4	182.8	390.7	1,679.6	79.6
<b>Net export</b>	19.7	161.1	-126.4	593.9	-10.0
<b>Budgetary revenue, local currency, bln</b>	2,465.8	31,109.9	12,031.3	20,012.8	1,528.5
<b>Budgetary revenue</b>	741.2	510.5	187.5	3,213.6	119.8
<b>Tax revenue of the budget</b>	410.7	257.2	147.2	2,160.6	91.6
<b>Taxation revenue of the budget as a share of the total budgetary revenue, %</b>	55.4	50.4	78.5	67.2	76.5
<b>Budgetary expenses</b>	894.0	498.4	241.3	3,467.2	128.6
<b>Budget balance</b>	-152.8	12.1	-53.7	-253.6	-8.8
<b>State deficit</b>	-152.8	0.0	-180.1	-253.6	-18.8
<b>GDP (nominal)</b>	1,803.6	1,369.1	2,132.8	11,064.7	316.5
<b>Average weighted tax in the country</b>	22.8	18.8	6.9	19.5	28.9
<b>Expenses as a share of GDP, %</b>	49.6	36.4	11.3	31.3	40.6
<b>Revenue as a share of GDP, %</b>	41.1	37.3	8.8	29.0	37.9
<b>Average annual short-term government bond rates, %</b>	13.3	9.5	6.9	2.3	7.5
<b>Average annual long-term government bond rates, %</b>	13.0	9.1	7.6	3.4	9.7
<b>Budget balance as a share of GDP, %</b>	-8.5	0.9	-2.5	0.0	-2.8

The total government deficit of the BRICS can be presented as a sum of budget deficits and current-account deficits. According to Table 2, in 2017, they amounted to approximately \$US153 billion in Brazil, \$US180 billion in India, \$US54 billion in China and \$US19 billion in South Africa.

It is usually the case that in closed economies and in the absence of a common virtual market, governments would cover the deficits by domestic means. Unlike the rest of the BRICS, China is most fortunate. It may borrow very cheap domestically, since its government bond rates are the lowest among the BRICS. However, the rest of the BRICS will have to face significant costs, because their government bond rates vary between 7% and 13% (Table 2).

In the absence of the virtual contractual republic and the common virtual market, the BRICS may turn to at least two options to reach equilibrium, namely it can either raise tax rates or it can do it by ensuring economic growth rates at which the government would be able to collect more taxes without increases in tax rates, because a booming economy generates more GDP, companies get more profits and employees get higher wages [16].

The first option supposes that the BRICS will have to accumulate more budget revenue by means of larger taxes to keep their share in the aggregate revenue constant. Hence, to achieve the fiscal equilibrium, Brazil will have to accumulate about \$US500 billion in budget revenue, India \$US190 billion, China \$US2,300 billion and South Africa \$US100 billion (table 2).

To equilibrate the revenues and expenses in the BRICS and cover the deficits, each member should adopt a special tax rate. The data show that to do that Brazil will have to increase the average weighted tax rate by almost 5%, and India, China and South Africa – by 2%. Russia, a surplus country, may have even lowered the average weighted tax rate by 0.4%.

Rising taxes in the deficit countries may have negative consequences and lead to social unrest. Also, an increase in the tax rates to cover the budget deficits may not be a good option. This may decide the problem in one year. But it does not necessarily mean that next year the deficits are not

going to happen in the BRICS. They still may occur. So, the countries will require even higher taxes, which also is not a very popular choice for the fiscal policies in the BRICS.

According to the model, the second option seems more attractive, because it is about achieving equilibrium in the BRICS by simply sustaining GDP growth rates high enough to cover the deficits without any increases in tax rates. But for countries such as Brazil, India and South Africa, this option is unrealistic, since to balance the budget and the current account, Brazil will have to grow 17% in one year, India 22% and South Africa 7%. This option would be feasible in these countries if only they grow by stages, i.e. during several years. For example, realistically Brazil and South Africa will be able to grow that much in six years' time. For India to do the same, it will take four years. Among the BRICS, only China will be able to achieve 7% growth rate in one year. And even then, it will have to put up all its capacity to do so in view of decreasing GDP growth rates. As for Russia, again, it does not have to grow at all, because it is running surpluses. The country may well balance the budget and the current account deficit with no increases in the GDP growth rates or taxes.

So, both options have drawbacks in terms of financing the deficits of the BRICS. Therefore, we propose a way to finance the trade and budget deficits at the expense of the common virtual debt market of the virtual contractual republic of the BRICS.

We believe that the BRICS requires a general toolkit which will provide it with loans by means of the common virtual debt market. This toolkit is a consensual rate of debt service. It is consensual because the BRICS will have to agree on a mechanism that would help determine the amount of loans demanded and supplied on the market. In theory, it can be calculated by means of the free market price mechanism [17]. In it the curves of the supply and demand of loans appear in a chart of the common debt market of the BRICS. In the chart the volumes of loans supplied and demanded are shown along the horizontal axis and the debt interest rate is set at the vertical axis [18].

However, we think that an instant introduction of a common rate of debt service for the BRICS can be dangerous. It may result in a debt crisis like the Greek one. The problem with Greece was that they were too quick to slash interest rates down to an average level of the core countries of the euro zone such as Germany. This happened right after the issue of the common currency back in 2002 [19].

We think that if the BRICS were to introduce a common debt interest rate soon after ratifying a sort of a regional integration agreement, they would have eventually suffered a similar debt crisis or perhaps even a worse one, since they are too populous to fail. There was the dramatic social unrest in Greece because of the crisis and austerity measures. We can hardly imagine, though, what could happen in the BRICS in the same circumstances.

The instant implementation of a common interest rate is similar to a shock therapy scenario, especially in case of integrating countries with uneven standards of living and other economic discrepancies [20]. It had been part of the idea behind the European integration plan that to help weaker countries grow faster and catch up with the more industrialised members of the union it was necessary to erase trade barriers, implement common interest rates, introduce a single currency, establish a common system of central banks, etc.

To prevent a situation such as this from happening in the BRICS, it is necessary to introduce the common rate of debt service and common interest rates very cautiously and by stages. In the beginning of this article we appealed to an approach which economists generally call gradualism. It is crucial to use it in very large countries such as the BRICS. Speedy harmonisation in the BRICS may result in complete chaos and be very dangerous not only for the group but for the entire world as well. It might have far-reaching consequences for the future global economic growth and may even provoke another world financial crisis which would be much deeper and devastating than the recent one.

We propose, therefore, that there must be some sort of an intermediary or a transition rate of debt service for each of the BRICS that should first be introduced at the initial stage of financial harmonisation. It could be named a semi-common, semi-single or semi-harmonised debt interest rate.

#### 4. The basic outcomes and recommendations

The research has shown that, first, there must be clear and specific boundaries of the member states' activities that should be detailed in common documents and specifications and converted in the rights delegated by the BRICS to the virtual republic. These rights cannot under any circumstances be withheld from the member countries as well as the norms and rules on whose basis the apparatus of the contractual republic itself is going to work.

Second, there must be the mechanisms for the BRICS member countries to participate in the activities of the contractual republic of the BRICS. These include things such as political mechanisms, democratic procedures and norms of economic democracy which rely upon the sustainable and solid traditions of public participation and which constitute the social capital of the member states, since they are supposed to ensure the growth of the overall wellbeing and prosperity.

Third, there must be an institution of a common virtual market as the leading mechanism allocating the property rights. The virtual republic of the BRICS should focus on ensuring such property rights allocation across the member states which could be done by means of the common virtual market under zero transactions costs.

Fourth, there must be alternative mechanisms to specify and protect the property rights. It means that each member country should be provided with an alternative option to appeal to other guarantors apart from its vote within the grouping, i.e. it should have a possibility to turn to a third party for conflict resolution. The alternative guarantors within the BRICS may be the previously mentioned institutions and forums, including the BRICS Summit and the BRICS Development Bank, as well as new institutions and bodies that may be created in the future.

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