THE IMPORT OF INSTITUTIONS TO THE BRICS COUNTRIES

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This article explores the potential approaches to optimising the way the institutions of mutual common use by the BRICS countries are constructed. The topic is time-relevant, for it reveals the need to work out a new institutional basis to understand the workings of the BRICS institutions as a result of recent transformations, such as Brexit, in the phenomenon of international and regional economic integration. The article is founded on the hypothesis that the import of institutions by the BRICS may be a more effective approach to the member countries' convergence than the conventional approach. The originality of the theme lies in the fact that the modern economic literature has not studied to the full extent the impact of this exogenous factor on financial integration. There is also a need for the further development of the least-studied areas of regional monetary integration, namely the lack of the ability of current world institutions to manage the common monetary policies and debt of the member countries. The author proposes principles for creating and operating a virtual contractual republic of the BRICS contrary to the exploitation-state model of the EU. The article rediscovers the institutionalist idea about democratic decisions by a group of subjects such as the member countries of a particular integration agreement. The author maintains that the new institutions of the BRICS may cause dramatic changes in the world monetary system, international liquidity and international reserves. The general conclusions of the article encompass the significance of creating integration institutions on the basis of the experience of the BRICS as a way to more economic and financial stability in the world. The results contribute to the search for opportunities of optimal operation of the BRICS regional debt market. In his closing remarks, the author outlines the prospects of settling the debt problems in the BRICS based on the virtual debt market.

Keywords: BRICS intergovernmental institutions; contractual state (republic); consensual economic policies; regional integration agreement; virtual market; virtual common *monetary instruments; common debt market; common payment infrastructure; common currency; exploitation state.*

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Introduction: International Economic Integration Today

The early 21st century has seen a number of country groupings come into being that do not classify as regional integration agreements (RIAs) as they were understood by academics in the 1950s and 1960s when, for example, the European Economic Community was created. In the 2000s, economists, professional traders, equity and fund managers, policymakers and others have been quite inventive in creating acronyms for such groupings, such as the BRIC, which encompassed Brazil, Russia, India and China (later renamed the BRICS when South Africa became a member country), Next-11, IBSA, etc. These groupings came into existence as a response to a series of economic and financial crises the world suffered in the first decade of the 21st century, namely the dotcom bust and the sub-prime mortgage crisis that later spilled over into the world economic and financial crisis, as well as from repercussions related to acts of global terrorism. It was as if the very emergence of these groupings questioned the world economic order in the way it was structured after the Second World War.[1]

The post-war era was characterised by liberalisation, decentralisation, easy cross-border trade, investment and various sorts of other global economic transactions.

[1] Pierre-Olivier Gourinchas & Maurice Obstfeld, *Stories of the Twentieth Century for the Twenty-First*, 4(1) American Economic Journal: Macroeconomics 226, 237 (2012).

After years of harsh separatism, countries came closer together and loosed a mania which resulted in hundreds of RIAs that were thought to be a sort of panacea for prosperity and economic growth. However, the challenges of the early 21st century made people realise that there was something wrong in the globalisation and integration trends, and that there were limitations. The limitations of the RIAs were put in place by neoclassical market fundamentalism.[2]

These limitations involve several contradictions. For example, capitalism requires free enterprise, free competition and well-established property rights. However, the RIA in Europe supposes that the European Union (EU) countries will band together to provide financial stability facilities to support and bail out weaker member states such as Greece or Portugal.[3] This common policy means there must be some elements of a command economy present to, in effect, make the rich EU countries pay for the poor countries, which is certainly not capitalism, rather something closer to communism or socialism. Such common policies eventually constrain national sovereignty. Additionally, international and regional integration as part of globalisation bring with it a couple of surprises for economists to think about.

First, the world was shocked by the great European debt crisis that revealed the financial weaknesses of the regional economic integration in Europe. The crisis damaged the image of the euro as a currency that could rival the supremacy of the U.S. dollar in the international monetary system. The euro turned out to be a real disappointment for many traders who had invested heavily in assets denominated in the euro since the start of the 21st century. The euro also disappointed many countries that had diversified their official foreign exchange reserves in currencies other than the U.S. dollar.

As soon as the global financial crisis of 2008 broke out, most countries of the world increased the share of the dollar assets in their portfolios fearing a steeper downturn in the global financial system. They put more trust in the U.S. authority in international financial affairs than in the collective European body (the European Central Bank) that does not even have the authority to issue the common currency (euro). Countries finally decided that at the end of the day a national government is more responsible for keeping the currency safe than a number of governments that have the authority to print the euro all on their very own. As a result, the dollar strengthened as the world's reserve currency, whereas the euro has come to be seen by many as a currency that no one is willing to guarantee as a safe-haven asset.[4]

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2 Menzie D. Chinn & Hiro Ito, *A New Measure of Financial Openness*, 3(10) Journal of Comparative Policy Analysis: Research and Practice 309, 319 (2008).

3 Jacques Miniane, *A New Set of Measures on Capital Account Restrictions*, 51(2) IMF Staff Papers 276, 301 (2004).

4 Wilhelm Hankel & Robert Isaak, *Brave New World Economy: Global Finance Threatens Our Future* (Hoboken, N.J.: Wiley, 2011).

The blow to the common currency also meant a partial loss of competitiveness for the European Union, an issue that was first seriously and openly addressed by David Cameron, the then British Prime Minister, in January 2013 at the World Economic Forum in Davos, Switzerland and later in a notable speech of his delivered in April that same year. In the speech, he communicated the idea that if the EU did nothing to strengthen its competitiveness, Britain would leave the Union.[5]

That was the second shock for the world community, because it shook the foundations of regional economic integration as something worth undertaking by other countries, and it sent waves of political, economic and social distress across all of Europe. The possibility of Britain's exiting the EU raised the question of whether the EU was as competitive as the European supranational institutions claimed it to be. And many euro proponents, who had supported the introduction of the single currency in the first place, came to believe that there was no evidence for both the EU being a competitive grouping of countries and the European Monetary Union being an optimal currency zone.[6]

These shocks and surprises clearly damaged the reputation of regional integration as a process bringing economic prosperity to weaker countries that join. Instead, the poorer countries of southern Europe went into deep recession in 2010. Today, their economies still greatly lag behind those of the industrial core countries of the EU. And they are likely to find it difficult for their standards of living to catch up with those of their richer neighbours even in the long run.

The problems just mentioned raise the question as to whether it is actually worth creating regional integration 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 directions for macroeconomic policies and fiscal and budgetary policies without sacrificing national sovereignty.

However, to follow consensual or common economic policies, the BRICS still require the import of some sort of supranational mechanisms and supranational institutions, the ones that do not constrain national sovereignty.

The theory that tries to look into the issue of importing institutions is called institutionalism.

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5 Hans-Werner Sinn, *Buffering Volatility: A Study on the Limits of Germany's Energy Revolution*, 99 European Economic Review 130, 141 (2017).

6 Wilhelm Hankel et al., *Die Euro-Illusion. Ist Europa noch zu retten?* [*The Euro Illusion. Can Europe Still Be Saved?*] (Reinbek: Rowohlt Tb., 2001).

1. Theoretical Background

1.1. History of the BRICS Countries' Approaches to Importing Institutions

In order to help the developing countries increase the efficiency of their institutions, economists have offered the European way. It is commonly believed that only Western-type institutions can effectively regulate the political, economic and social spheres.

In the 19th century, Western-like institutions were created in Africa, Latin America, Eastern Europe, East Asia and Oceania during the process of colonisation led largely by Great Britain, France and Germany, among others. However, these imported institutions in the colonies showed poor efficiency and brought very few positive results.

For centuries, the countries that form the BRICS have been importing the European-type institutions of governance based on the principles of territorial integrity, liberalism, democracy, convergence and the common interests of trading partners.

The Western techniques used to establish institutions in the BRICS countries met with only partial success. For example, in the late 19th– early 20th century, Brazil imported the institutions of North American federalism, British parliamentarism and liberal democratic principles for the economy and society. At first the country made great progress and became a rapidly developing economy. For quite some time in the early 20th century, the new social and political model laid the foundation for the Brazilian economic miracle. However, a static attitude towards the imported institutions and the reluctance to modify and adapt them to local specifics led to stagnation in the economy of Brazil and required radical reforms in the late 20th– early 21st century.[7]

For a long time, Russia, India, South Africa and China were considered by Western civilisation as barbarian and outdated countries which badly needed European-like institutions. In the 19th century, India and South Africa found themselves under the influence of British missionaries. To some extent, even presently the whole structure of their government, territorial organisation, communications, culture and language resembles the English model.

China had for a long time been an isolated country. Despite this, the teachings of Western missionaries penetrated the country. There were attempts to acquaint the country with the Western lifestyle. But unlike India and South Africa, China vigorously opposed the import of Western-type institutions. The opposition was suppressed only during the opium wars, which led to very poor performance of the Western institutions in China. China was soon converted into a truly underdeveloped country whose future prospects appeared to be bleak.

Contrary to that experience, India and South Africa adopted the English language, created English-like parliaments and established capitalist enterprises, banking institutions and the system of central banks or reserve banks.

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7 Mohamed A. El-Erian, *Shrinkage*, 172 Foreign Policy 88 (2009).

Russia in the New Age also imported Western-type institutions and tried to introduce them in all spheres of government, beginning with the reforms of Peter the Great. What distinguished the Russian approach to dealing with foreign institutions from that of the other BRICS countries, though, was that the ruling class and a large part of the elites as well as the largest landlords and aristocracy basically supported the introduction of the new institutions. In most cases, they actually imposed them upon the public. Another important distinction was that the institutions were copied in a chaotic way and simultaneously imported from a number of different European countries. This resulted in setting up Anglo-Saxon collegial government bodies, a Dutch-like commercial fleet, a Swedish-looking army and navy, Amsterdam-like city buildings and Italian-style architecture.

Later, Russia borrowed from Germany ministerial governance, chancelleries and even the uniforms for civil service and military use. However, at the same time Russia remained extremely impervious to democratic principles in politics and parliamentarism. In the end, in this multicultural mosaic, the Russian institutional structure came to be characterised as trying to "compliment the uncomplimentable," i.e. on the one hand, the façade of government was Western-like, but, on the other hand, the rule inside was despotic and totalitarian with the very strong central power of an absolute monarch.

The efficiency of such an import of institutions to Russia has been the subject of heated debate. Some critics say that this policy was a complete failure, and the experiment ended up in a series of revolutions. Yet others speak about big benefits the country gained from Western institutions in manufacturing, education, science and technology. The experiment, they say, was so successful that U.S. President Theodore Roosevelt once described the pre-revolution government system of Russia as the most perfect in the world.

However, a number of dramatic events forced the BRICS countries search for their own path to future development. These included socialist revolutions in Russia and China, the decolonisation process in South Africa and India as well as the world financial crisis of the 1930s and the increasing gap between the rich and the poor in Brazil after World War II that persisted all the way up to the late 20th century. The result of this search in Russia, India and China was the breakaway from socialism. These nations embraced Western-like capitalism, opened their economies to foreign markets and foreign investments, initiated contractual relations and advocated the idea of free enterprise, private property and the principles of a free market economy.

After achieving independence, South Africa continued to operate according to the political, economic and social principles that had been adopted during the colonial period. Today, the country has still not yet discovered fully what its national path to development is.

The Brazilian approach to importing institutions has been mainly attributed to the fact that the country first and foremost came into being as a result of emigration from Europe. Brazil managed to absorb different institutional models of several European countries, principally Spain and Portugal. Perhaps this is the reason for the circumstance that just as Spain and Portugal are said to be on the periphery of the European Union, so Brazil is thought to be inherently on the periphery of the world economy, despite the fact that its economy is the largest and strongest in Latin America.

The effectiveness of importing institutions to the BRICS countries and other developing countries has been dictated by the willingness of the exporters to reproduce their own government models there in order to eventually create the relationship of a patron-client type and also to restore a semblance of colonial influence in their former colonies in the form of neo-colonialism.

The basic social groups most interested in importing institutions to the BRICS countries include new political elites, who want to keep and strengthen their power, and intellectuals, who would like to break away from traditionalism to a more open-minded way of life. Most notably, this interest on the part of the elites in the BRICS countries revealed itself in China in the late 1970s, and in Russia and India in the early 1990s.

For example, Russian liberal democrats and cosmopolitans carried out radical market reforms that resulted in a deep economic, social and political crises, which necessitated a change of the political regime to strengthen the central power. The economic reform in China in combination with Western technology and capital created an economic boom and helped the country to go global.

However, China and Russia differ greatly in terms of the ways of implementing imported institutions. Russia embraced liberalism in an absolutely illiterate and vulgar sense. To make the transition quickly from central planning to a free market economy, Russia used shock therapy. The government did not make any attempt to localise Western ideas. They were simply implemented without much consideration and whatever the cost; whereas in China, Western institutions and technology were gradually adjusted to the national particularities.

Overall, the transfer and application of foreign institutions are said to have a positive effect on both the exporters and the importers.

First, an exporter benefits from trading with the recipient country, since the convergence of different institutional systems and the application of common standards help reduce transaction costs connected with doing international business and making foreign investments.

Second, an importer benefits from getting technologies that have already been applied elsewhere and proved their reliability. Thus, the importer may avoid the mistakes that would necessarily occur if it had to develop the technologies itself by means of trial-and-error.

Third, the world market has different institutions on offer to choose from. For example, if an importer borrows the American banking system, which prevents banks from making investments in corporate equities, and it does not properly work in the recipient country, then the latter may make use of the German model, or any other model.

Finally, there are no national and international regulations preventing the importers of institutions from copying them, i.e. they are not obliged to pay compensation or royalties to the countries of origin.

A major factor ensuring the efficiency of imported institutions is the congruency of the recipient country's formal and informal norms which become the basis of their performance.

1.2. What Should the BRICS Do Differently from the EU?

As famously elaborated by John Locke and Thomas Hobbes, states are formed according to the theory of the social contract. 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. This authority in turn sets the boundaries of social behaviour and establishes specific institutions to perform necessary functions. According to the theory of civil choice, these set boundaries encompass a collection of legislative norms, from a constitution to simple acts and regulations.[8]

F.A. Hayek's democratic image of society depicts government as built on the sequence of choices in a chain of actions starting from the acceptance of a constitution to acts, regulations and other norms of a bureaucratic procedure.

At the beginning of the regional integration process in Europe in the mid-1950s, policymakers applied the general principles of Locke and Hobbes to set up the European Coal and Steel Community (ECSC). And they continued in this manner until this body eventually transformed into the European Union.

The policymakers who came after them believed that all other integration groupings, international agreements, consulting organisations and forums should also be formed according to the best practices of the EU. However, the Brexit case has shown that there are limits to what extent this theory can go to integrate nations that have developed separately for centuries and have established their own sovereign institutions to perform the conventional functions described above.

Therefore, in the case of the BRICS, it means that they should not necessarily adopt the same approach as the EU. They should not develop a common constitution and common law. This approach characterises the highest form of integration called a political union.

Yet, it is clear today that no grouping of countries, including the EU, will ever reach political integration, at least peacefully, because there is no European state in

8 George G. Kaufman, *Emerging Economies and International Financial Centers*, 4(4) Review of Pacific Basin Financial Markets and Policies 365 (2001).

existence and no sovereign with responsibilities for nations as different as the countries of Europe, although the relations of the member states are regulated by the common and democratically agreed-upon norms and institutions there. The potential to adopt such documents depends on the consensus between the entities wanting to integrate on the issue of delegating respective powers to supranational institutions.[9]

For example, the ratification of a constitution implies the highest degree of consensus between the participants on the key issues of social organisation, political leadership and economic life in a group of countries. A unified super-state breaks political and economic borders, the independence of monetary, fiscal and financial policies as well as national currencies. In the late 20th and early 21st century globalisation and international (or regional) economic integration have forced countries to address such issues.

After seven decades of the seemingly seamless unification process and growing interdependence and interconnectedness in Europe, member states became reluctant to give up full sovereignty to their supranational institutions. This unwillingness was caused by the world financial and economic crisis of 2008 and the euro debt crisis of 2010 which showed that the member states could not stand the test of staying united on the proper actions to take. Some expressed unwillingness to pay for the debts of other countries of the Union. Some were deeply concerned by the inability to control the flow of goods and services, labour and financial capital across their borders. Initially they had wanted this, because they thought that this process was to be voluntary under the Union's agreements.[10]

Finally, some grew seriously weary with the bureaucracy telling the member states what to do and how to do it. They started to look into the past when they could do what they wanted, when they had their own currency, when they produced the goods they were used to, when they exported and imported the goods they required and when budget deficits were covered with no regard for the willingness or unwillingness of other nations to give permission to do so. This is one of the reasons for the currently increasing role of more independent and democratic institutions in the EU which have more rights at the national level, especially parliaments.

Nevertheless, the significance of international consensus and agreement on general issues of national and regional development has not entirely lost the attention of society. That is why the role of consulting groupings such as the BRICS is becoming more significant in the world economy and international economic relations. Groupings such as this usually consist of independent, sovereign states with broad responsibilities given to national legislative and social institutions.

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9 Hans-Werner Sinn, *The Euro Trap: On Bursting Bubbles, Budgets, and Beliefs* (Oxford: Oxford University Press, 2014).

10 Frank Schäffler, *Nicht mit unserem Geld! Die Krise unseres Geldsystems und die Folgen für uns alle* [*Not with Our Money! The Crisis in Our Monetary System and the Consequences for All of Us*] (Munich: Finanzbuch, 2014).

It is purposeless and inefficient for groupings such as the BRICS to work out documents which may lead to the formation of sophisticated monetary or political unions, since a common constitution and law are a standard collection of universal norms and general rules of play that restrict many activities. These rules and regulations are the basis of the interaction between integrating countries that have very specific, hardly complimentary and hardly converging characteristics in the spheres of politics, economy, society, culture and language. All attempts to harmonise these spheres may lead to opposite results contrary to all purposes and expectations. They will eventually produce autarchy or abhorrence. This process also gives birth to nationalist sentiments aimed at restoring independence, national identity and national currency. Britain's exiting the EU is one of the most striking examples of this.[11]

The bottom line is that there is a need to find an alternative approach that can help create the toolkit to achieve a consensus at the international level without establishing groupings such as the EU. This process should be driven only by economic and geopolitical (or geo-economic) benefits for the countries participating in the integration agreements. These benefits may include advantageous conditions for mutual trade, low-cost international transfers, easy access to markets and areas of interest, mutually profitable allocation of wealth and diversification of costs as well as solid economic growth.

Geo-economic benefits can be achieved through effective norms which require unanimous consensus between the participants in the international exchange of goods and services. Their consensus can be achieved on the basis of direct democracy. Otherwise, any attempt to delegate a choice to a third party will lead to a situation in which representative democracy reduces the efficiency of norms and rules of play.

This means that there is a need to develop the norms that will ensure the effectiveness of the decision-making process at the international level. This is very difficult to do, because the choice of effective norms relates to the problem of false infinity. Its essence can be expressed in the following terms: first, adopting an effective, internationally agreed-upon and consensus-based norm first necessitates working out specific bureaucratic procedures and rules; next, an algorithm of those procedures should be created; and finally, specific rules should be developed to guide the algorithm of the above procedures.

Thus, the process of coming to a consensus on something becomes a bureaucratic nightmare or a vicious circle of bureaucratic absurdities that come to life due to the fact that in order to agree on something, the participants require a common ground which is supposed to harmonise different national legislative systems that have existed for centuries, some systems which may sound ridiculous to other nations, but are important to the people of the nation where they are customary.

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11 Hans-Werner Sinn, *Auf der Suche nach der Wahrheit* [*In Search of the Truth*] (Munich: Herder, 2018).

The worst thing of all is that one cannot eliminate the peculiarities in the law by creating a new common law for many nations simultaneously. And the harmonisation of the peculiarities will produce more absurdities at the supranational level. These common absurdities will resemble an arithmetic average. The outcome will be more bureaucratic peculiarities and absurdities, because the people of different countries will not be able to accustom themselves to the arithmetic average of their legislative absurdities plus the absurdities of other nations divided by a certain harmonising denominator created by a group of technocrats who do not understand national differences at all.

2. The Model

2.1. The Model We Propose for the BRICS to Optimise Their Decision-Making

To come to a consensus for countries as different as those that constitute the BRICS, a choice has to be made. The choice is based on the regular procedure of people expressing their preferences through votes. This procedure will inevitably lead the countries to confront the Condorcet Paradox or Arrow's 'impossibility' theorem, both referring to making a democratic choice. According to Arrow's Theorem, it is impossible to propose the procedure acceptable to a very diverse group of countries without a non-dictatorial decision by simply 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 are trying to make a choice of which 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 below.

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

Source: Compiled by the author

12 Peter L. Rousseau & Paul Wachtel, *What Is Happening to the Impact of Financial Deepening on Economic Growth?*, 49(1) Economic Inquiry 276, 281 (2011).

Table 1 ranks the BRICS preferences when they choose which of the public goods they want most. And of course, each of the BRICS countries would rather build at home. Under these circumstances, no infrastructure project will be realised. 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. This happens because Russia, South Africa, India and Brazil rank the power station among their top preferences, and only China ranks it at the very bottom of its preferences.

Thus, the decision to construct the electric power station has been taken. It was comparatively easy to do, since all five countries participated in the election, and the number of electors in this case is enough for the process of democratic election to occur. But if only three of the BRICS participate in the election, on the other hand, then the situation shown in Table 2 would occur.

Table 2: The procedure of the BRICS partial vote on infrastructure projects

Public good	**Voters' preferences**		
	Russia	South Africa	Brazil
A school in Brazil	1	3	2
A park in South Africa	2	1	3
A road in Russia	3	2	1

Source: Compiled by the author

Table 2 demonstrates that Russia and Brazil would prefer a school to a park. Like Brazil, South Africa would also want to build the park. The collective decision would then be that the park is more preferable than the school (P>S). Choosing between the park and a road, three of the BRICS would decide for the road, since Brazil and South Africa prefer it, and only Russia wants the school (R>S). Finally, when choosing between the park and the road, Russia and South Africa would rather prefer the park, whereas Brazil would vote for the road (P>R). So, in this instance, the BRICS will decide to build the park.

The outcome of this partially democratic vote is that the preferences of such a common decision are intransitive. In this vicious circle, a final decision cannot be taken. A paradox emerges, the Condorcet Paradox, which was later subsumed in Arrow's "impossibility" theorem.

The axiom of transitivity means that to take a decision a voter should transfer his or her preferences from one good to another to make their voice heard, e.g. if Russia's preferences prevail over South Africa's preferences, and South Africa's preferences prevail over those of Brazil, then there will always be someone who will have the advantage to take a final decision within the intransitivity. This eventually means that the final decision will have to be taken directly, according to the bargaining power of the strongest negotiator. In the BRICS, it is China. And although China did not participate in the hypothetical partial vote, the consensual decision of the BRICS may rely on its opinion.

This decision excludes a mutually beneficial consensus. Hence, the BRICS may fall apart, since a large country does not usually want to take into consideration the opinion of a small one, and the latter believes that its interests are being sacrificed for the sake of the common good. This is what most weak countries fear when they think about entering a regional integration organisation such as the EU. And the strong countries are wary of the moral hazard that may result from the inability of the weak member nations to pay for their debts provided by the rich nations.

This may lead one to 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. This means that there is only one instrument in existence which helps take consensual decisions in the BRICS. Its name is the common market which guarantees sufficient freedom for actions to be taken under the conditions of voluntary observed directives and other norms that are declared and agreed upon during the BRICS Summits.

2.2. What Makes the BRICS so Effective Compared to Other Groupings?

Right from the start of its existence the BRICS created a number of institutions of common use that were very effective for the decision-making mechanics. One of them is a consultation body called the BRICS Summit, the first of which was held in April 2010 and which later acquired the status of an informal forum without any underlying legal regulatory framework or specified articles of conduct.

The 2010 BRICS Summit aimed at creating common rules of play to coordinate their relations on a wide range of political, economic, social, cultural and scientific issues in the modern world economy. The economic issues related to the reform of the international financial architecture and the world system of currencies, broader participation of the emerging economies in the global institutions and a new multilateral world economic and political order. The BRICS also discussed poverty, environmental issues and inequality between the developed and developing nations as well as the use of energy preservation technologies.

These goals and objectives are revised and renewed at each of the BRICS Summits and are stated in common documents, mutual declarations and communiques.

The main regulations of the common declarations issued on behalf of the leaders and heads of state of the BRICS are not imperative by nature. They are recommendations similar to most resolutions adopted by the international economic and political institutions that are part of the United Nations.

The BRICS declarations take the shape of additional norms parallel to the existing rules of international commercial, economic and humanitarian law. However, unlike the U.N., the BRICS Summit does not have a strict set of articles of conduct and strictly prescribed procedures to be followed by the member countries. There are other features that distinguish the BRICS Summit from the U.N.

For example, the number of the participants in the BRICS is fixed in comparison with the U.N. The number of the U.N. member states may change depending on the willingness to expel existing members and welcome new states or territories. From this perspective, the consulting body of the BRICS, having a certain similarity to the U.N. General Assembly, is not a flexible format of international cooperation.

The significance of the BRICS Summit in the system of informal international consulting institutions is revealed in the constancy of the membership and mutual declarations. A change in the principle of constancy and sustainability and the introduction of flexibility may lead to the loss of the purpose and the general idea of the BRICS Summit as a closed grouping of countries. From this perspective, the BRICS concept is opposed to open regionalism propagated by the Asian Pacific Economic Cooperation (APEC). On the other hand, the BRICS Summit is open to participation in the resolution of international problems of social and economic inequality and oppression.[13]

Apart from the Summit, the BRICS have set up institutions with functions to regulate specialised activities. Examples of such institutions would be the New Development Bank and the Pool of Foreign Exchange Reserves.

It should specifically be noted that the New Development Bank (or, the BRICS Development Bank) is a financial institution that has the status of a true international organisation whose principles and rules are stated in the articles of conduct. The BRICS Development Bank works in close contact with and parallel to international financial institutions such as the International Monetary Fund and the World Bank.

It was for objective and clear reasons that the BRICS Summit and the BRICS Development Bank emerged. The BRICS Development Bank was founded in response to the global financial crisis of 2008 that showed there was a need to create additional international financial organisations which could address the problems of the troubled developing and emerging countries. The funds provided by the IMF and the World Bank were not sufficient to satisfy the growing demand for investment on the part of the emerging and rapidly growing economies.

Moreover, the way the funds were distributed among the member states of the IMF and the World Bank was seen by many as unjust. Most of the funds were given to the advanced nations, which gave them a competitive advantage. Such allocation of financial capital allowed the advanced countries to more quickly overcome the crisis. The developing countries, on the other hand, had to struggle.

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13 Marcos Galvão, *Brand BRIC Brings Change: Brazil, Russia, India and China*, 66(8-9) The World Today 13, 14 (2010).

Thus, it was good timing for the BRICS Development Bank to come up with a more attentive and sensitive approach unlike the existing international financial practices of the IMF and the World Bank. Those two institutions usually represent the interests of the advanced countries due to the simple fact that their funds are distributed according to quotas and voting rights. And the privileged access to the funds is given to the countries that hold the largest quotas, i.e. the advanced countries. It has been thus ever since the mid-1940s, and despite the recent revisions in the quotas, it is still the case.[14]

The BRICS Development Bank has tried to find its own niche in the system of international financial institutions. It has created rules of play and clear boundaries within which it works to provide more flexible conditions for drawing loans and making schedules of repaying debt, etc.

> The flexibility does not mean, however, that the BRICS Development Bank is going to make loans for free. It just does not force upon the borrowing nations the structural adjustment policies and conditionalities. It may also reschedule the repayment of debt if a country is unable to service the debt right now, and charge less than the IMF or the World Bank do.

2.3. Assessment of the Performance of the BRICS's Institutions

We recommend that the BRICS, being an international grouping which largely works on the basis of informal norms, should arrive at a consensus by 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 trade and economic ties, the digital exchange of information and electronic signatures, cross-border movement of financial capital and labour, a gross settlement transfer system, a common virtual currency, virtual common monetary and fiscal policy, the mechanism of a consensual, agreed-upon rate of refinancing and taxation, 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 which is going to function across borders.

First, there must be clear and specific boundaries of the member countries' 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 nor the norms and rules on whose basis the apparatus of the contractual republic itself is going to work.

Second, there must be mechanisms for the BRICS member countries to participate in the activities of the contractual republic of the BRICS. These include, for example,

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14 Philip R. Lane & Gian M. Milesi-Ferretti, *The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004*, 73(2) Journal of International Economics 223, 245 (2007).

political mechanisms, democratic procedures and norms of economic democracy which rely on the sustainable and long-standing traditions of public participation and which constitute the social capital of the member countries, since they are intended to ensure the growth of overall well-being and prosperity.

Third, there must be an institution of a common virtual market as the leading mechanism allocating property rights. The virtual republic of the BRICS should focus on ensuring such property rights allocation across the member countries 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 property rights. This means that each member country should be provided with the alternative option to appeal to other guarantors apart from its vote within the grouping, i.e. it should have the 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.

The newer the institutions are, the less freedom of action the contractual republic has and the more of aggregate revenue ends up in the hands of the member countries. Thus, the participants can make a choice between the alternatives on the common virtual market of the BRICS.

The newly created institutions should also take into account the alternative rules and norms of the member countries of the BRICS. And, finally, they should analyse analogues from the past and academic research of the BRICS.

The performance of the virtual contractual republic and the common virtual market of the BRICS can be assessed on the basis of comparative analysis of two organisation types – a contractual republic and an "exploitation union" (Table 3). One of these two options can be used to establish a republic or a union of the BRICS.

Table 3: Comparative analysis of the two organisation types for the BRICS

The characteristics of the BRICS as a republic or a union	**Contractual republic**	**Exploitation union**
Purpose	To maximise GDP and GNI, and reduce transaction costs	The most influential member state seeks to maximise the rent in the union through exploitation, including larger tax revenue compared to other member states of the grouping

Objectives (functions)	To set up a guarantor in transactions between the member countries and to ensure their property rights	The leading state of the group aggressively intervenes in economic and social relations in the labour and capital markets that do not play the role of sole guarantors
Means (making use of the monopoly for coercion)	The means are limited by social agreement and consent	The means depend on the political will of the member state which controls the union
Mechanisms used to solve the principal-agent problem	If a principal is a member country, then the mechanisms of democratic control are determined by consensual, agreed-upon rules and by means of looking for alternatives. If, on the other hand, the principal is the virtual contractual republic, then the preference is given to the norms of voluntary subordination on the part of the member countries to the common law, including the tax code	If the principal is a member state, then the mechanisms of democratic control fail. If the principal is the union, it tends to use coercion and power, and it also attempts to use excessive control which leads to an extreme version of exploitation in a union – a totalitarian state
Budgetary constraints	Democratic procedures to agree on a common, consensual budget are very precise	Procedures to adopt a common budget are very lax, and the member states are free to set tax rates and tend to have very broad fiscal competences
Major revenue posts	The member countries generate tax revenue by collecting taxes they receive from their activities on the common virtual market	The revenue is generated mostly through confiscation taxes and non-tax receivables
Major expenditure posts	Much of the budget revenue is spent to ensure justice and social order. The member countries make expenses commonly agreed upon in consensual documents and treaties	Most expenses are committed to defence, social control, police, justice, governance and also to impose obedience to the directives and rules adopted at the supranational level

Regular means to finance budget deficits	To finance budget deficits, the member countries take loans on the common virtual money market	To cover budget deficits, the member states use the loans of a common central bank loaned out to the government as well as loans taken on the inner (or regional) market. Also, the leading member state may evade the obligations to cover the deficits and repay the debts as a type of a confiscation tax

Source: Developed by the author

Taking a closer look at the features that characterise the exploitation union, almost all of them can be attributed to the European Union, because, first of all, the leading EU member states receive the largest benefits from integration. Second, they influence the decision-making process in the supranational bodies and national parliaments. Third, they make weaker member states follow the decisions of their legislative, judicial and administrative institutions. Fourth, the most advanced member states of the euro zone may freely use their printing presses to issue the common currency. And finally, all EU member states are still free to set specific tax rates and pursue independent fiscal and budgetary policies.

The core member states of the Union make weaker members follow austerity programmes, while at the same time they are abundant in financial capital, enjoy parliamentary independence and strictly regulate the flow of goods, services, labour and financial capital flows across their borders. However, this may change when Britain finally exits the EU.

To explain this, a short case study may be helpful.

With Britain still in the EU, the distribution of votes in the Council of Europe between the countries of the North (free-trade rich countries) and the poor countries of the South is approximately equal – 36% and 35% of the total EU population, respectively. Now, with Britain's exit, these shares will change to 26% and 42%, respectively. In such circumstances, the countries of the South will gain the upper hand in the EU. The products of these countries are not sufficiently competitive to be exported to the world market, and they will tend to sell them locally. That may eventually mean that the EU will transform into a closed grouping with little or no connections to the outside world. For this reason, many economists of the more competitive countries of the North, which heavily depend on foreign trade, insist on the revision of the Treaties that were agreed upon at the EU level.[15]

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15 Hans-Werner Sinn, *Der Schwarze Juni: Brexit, Flüchtlingswelle, Euro-Desaster – Wie die Neugründung Europas gelingt* [*Black June: Brexit, Wave of Refugees, Euro Disaster – How the New Start of Europe Succeeds*] (Munich: Herder, 2016).

The exploiting nature of the EU's institutions can also be proven by the fact that, although the European Central Bank has no legal right under its mandate to bail out crisis-hit countries, it does this nonetheless through implicit and explicit measures with little or no public knowledge.

The EU's experience as an exploitation union supports the argument that the concept of the contractual republic is a better choice to create a more lasting grouping of countries. 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 countries to take part in all spheres of the group's social and public life. The contractual republic will also ensure freedom in taking key decisions at the parliamentary level, at the level of the central banks, financial controllers and regulators and other domestic authorities.

Here, 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 is equal to its budget revenue and trade deficits are equal to trade surpluses, thus ensuring current account equilibrium, because disequilibrium usually brings financial difficulties and crises with them. Table 4 below shows the BRICS's trade and budget deficits or surpluses by comparing exports and imports as well as budget revenues and budget expenses.

Table 4: The sources of government debt in the BRICS outside integration agreement

Indicator, bln USD, unless otherwise specified	**Brazil**	**Russia**	**India**	**China**	**SAR**
Export	191.1	343.9	264.4	2273.5	69.6
Import	171.4	182.8	390.7	1679.6	79.6
Export-import	19.7	161.1	-126.4	593.9	-10.0
Budgetary revenue, national currency, bln	2,465.8	31,109.9	12,031.3	20,012.8	1,528.5
Budgetary revenue	741.2	510.5	187.5	3,213.6	119.8
Tax revenue of the budget	410.7	257.2	147.2	2,160.6	91.6
Taxation revenue of the budget as a share of the total budgetary revenue, %	55.4	50.4	78.5	67.2	76.5
Budgetary expenses	894.0	498.4	241.3	3,467.2	128.6
Budget balance	-152.8	12.1	-53.7	-253.6	-8.8

State deficit	-152.8	0.0	-180.1	-253.6	-18.8
GDP (nominal)	1,803.6	1,369.1	2,132.8	1,1064.7	316.5
Average weighted tax in the country	22.8	18.8	6.9	19.5	28.9
Expenses as a share of GDP, %	49.6	36.4	11.3	31.3	40.6
Revenue as a share of GDP, %	41.1	37.3	8.8	29.0	37.9
Average annual short-term government bond rates, %	13.3	9.5	6.9	2.3	7.5
Average annual long-term government bond rates, %	13.0	9.1	7.6	3.4	9.7
Budget balance as a share of GDP, %	-8.5	0.9	-2.5	0.0	-2.8

Source: Developed by the author

Table 4 shows that in 2018 the BRICS, apart from Russia, was running budget deficits; current account deficits, though, occurred only in India and South Africa (SAR), and the latter has been chronically running trade deficits for many years. Hence, 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, a deficit may also develop there at any time in the future, so the relevant authorities in the country should be aware of such an event and take the necessary measures beforehand.

The total government deficit of the BRICS can be presented as the sum of the budget deficits and the current account deficits of each individual member country. According to Table 4, in 2018 this amounted to approximately US$153 billion in Brazil, $180 billion in India, $54 billion in China and $19 billion in South Africa.

It is usually the case that in closed economies and in the absence of a common virtual market, governments cover deficits by domestic means. Unlike the rest of the BRICS, China is more fortunate. It may borrow very cheaply domestically, since its government bond rates are the lowest among the BRICS. However, the rest of the BRICS have to face significant costs, because their government bond rates vary between 7% and 13% (Table 4).

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 either raise tax rates or ensure 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.

The first option supposes that the BRICS will have to accumulate more budget revenue by means of higher taxes to keep their share in the aggregate revenue constant. Hence, to achieve fiscal equilibrium, Brazil will have to accumulate about $500 billion in budget revenue, India $190 billion, China $2,300 billion and South Africa $100 billion (Table 4). Although Russia has not been running budget and trade deficits for a couple of years now, for the sake of preventing future financial difficulties, it is worthwhile to take some precautionary measures. Therefore, we have taken an imaginary amount of deficit of $5 billion for Russia to complete the model.

Since tax rates in the BRICS differ both in size and in type, the model takes the weighted average ratio of all taxes in the economy as the basis for the calculations. The average tax in the BRICS is understood as the total amount of taxes collected within one year divided by the cumulative GDP (Table 4).

Table 5 represents the tax rates required to equilibrate the revenues and expenses in the BRICS and cover the deficits. The data show that to do this 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 even have to lower 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 in the following year deficits are not going to occur in the BRICS. They still may occur. In that case, the countries will require even higher taxes, which also is not a very popular choice for the fiscal policies in the BRICS.

Table 5: Periods and economic growth rates the BRICS require to automatically finance the government debt at the expense of the common debt market

Indicator	Brazil	Russia	India	China	SAR
Tax revenue to balance the budget with a share of taxes in total budget revenue left constant, bln USD	495.4	252.2	189.4	2,331.2	98.3
GDP required to balance the budget without any increases in tax rates and any changes in the share of taxes in the total budget revenues, bln USD	2,175.6	1,342.4	2,743.5	11,937.9	339.7
GDP growth rates the BRICS require without increasing taxes, %	17.1	-2.0	22.3	7.3	6.8

New tax rates required to balance the budget without any changes in the share of taxes in the total budget revenues, %	27.5	18.4	8.9	21.1	31.1
The number of years required to achieve a new GDP to automatically equilibrate revenues and expenses without any increases in tax rates	6	0	4	1	6

Source: Developed by the author

According to Table 5, 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 only if they grow by stages, i.e. over the course of 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 engage 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 (Table 5).

Thus, both options have more drawbacks than benefits to finance the deficits in the BRICS.

Consequently, we propose a way to finance the trade and budget deficits by means of the common virtual debt market of the virtual contractual republic of the BRICS (Table 6).

Table 6: Comparative analysis of the variants to finance the debt of the BRICS by means of the common virtual market and internal funds in closed economies

Indicator, bln USD, unless otherwise specified	**Brazil**	**Russia**	**India**	**China**	**SAR**	**BRICS**
Government borrowing to finance the deficit	152.8	5.0	180.1	253.6	18.8	–
Short-term bonds	19.7	2.3	51.2	30.7	16.9	–

Long-term bonds	391.0	9.3	728.6	282.2	9.3	–
Demand curve formulas in the domestic government bond market	y= -0.00087x + 13.31502	y= -0.06341x + 9.666825	y= -0.00108x + 7.6584	y= -0.00455x + 3.571988	y= -0.29858x + 12.4987	–
Domestic average weighted interest rate of government bonds to finance the deficit, %	13.2	9.3	7.5	2.4	6.9	–
Consensual interest rate on the BRICS common debt market, %	2.9	3.5	2.8	2.4	3.5	–
Government debt	1,254.1	176.8	779.8	1,807.0	152.5	4,170.2
Government debt as a share of GDP, %	69.5	12.9	36.6	16.3	48.2	–
Accumulated debt service at domestic interest rates	165.5	16.4	58.5	43.4	10.5	294.4
Accumulated debt in a closed economy	1419.6	193.2	838.3	1,850.4	163.0	4,464.6
Accumulated debt in a closed economy as a share of GDP, %	78.7	14.1	39.3	16.7	51.5	–
Accumulated debt service at the consensual interest rate	36.4	6.2	21.8	43.4	5.3	113.1
Accumulated debt in case of adopting consensual budgetary and fiscal policies	1,290.5	183.0	801.6	1,850.4	157.8	4,283.3
Accumulated debt of an open economy as a share of GDP, %	71.5	13.4	37.6	16.7	49.9	–
Current government debt service at the domestic interest rate	20.2	0.5	13.5	6.1	1.3	41.5
Accumulated current debt of the closed economy	173.0	5.5	193.6	259.7	20.1	651.8
Accumulated current deficit as a share of a closed economy's GDP, %	9.6	0.4	9.1	2.3	6.3	–

Current government debt service at the consensual interest rate	4.4	0.2	5.0	6.1	0.7	16.4
Accumulated current deficit in case of adopting consensual budgetary and fiscal policies	157.2	5.2	185.1	259.7	19.5	626.7
Accumulated current deficit of an open economy as a share of GDP, %	8.7	0.4	8.7	2.3	6.1	–

Source: Developed by the author

Conclusion: The Results of the Research and Recommendations

The BRICS require a general toolkit which will provide the member countries 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. 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 on the vertical axis.

However, we think that an instant introduction of a common rate of debt service for the BRICS can be very dangerous. It may result in a debt crisis like the Greek crisis in 2010. The problem with Greece was that they were too quick to slash interest rates down to an average level of the core countries (such as Germany) of the euro zone. This happened right after the issue of the common currency back in 2002.[16]

The Greeks went immediately into a spending spree, because credit became three to four times cheaper than it had been during the drachma period, and because it became very convenient to purchase neighbour-country, high-quality goods the likes of which had been rare in Greece. The Greeks were also fascinated by the idea that they had no need to exchange currencies or pay duties, for everything was priced in the single currency. Things went well right up to the world financial crisis of 2008. And life seemed very easy in Greece. During the eight years of such spending up to 2010, Greece accumulated huge debts which had to be repaid very dearly and quickly, because failing banks in the U.S. and Europe demanded their cash back.[17]

16 Roland Vaubel, *Das Ende der Euromantik: Neustart jetzt* [*The End of Euromantic: Restart Now*] (Wiesbaden: Springer, 2018).

17 Jonathan D. Ostry, *Managing Capital Flows: What Tools to Use?*, 29(1) Asian Development Review 83, 84 (2012).

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

The instant implementation of a common interest rate is similar to a shock therapy scenario, especially in the case of integrating countries with uneven standards of living and other economic discrepancies. 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.

And EU policymakers believed it should be done very quickly. So they employed shock therapy. Surely that was a mistake, because people who get accustomed to buying everything expensive, especially credit, may go crazy over the whole thing, which was what actually happened in several countries of Europe. Greece is just the most notable example of financial mismanagement.[18]

Hence, 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 that economists generally call gradualism. It is crucial to use this approach 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 could have far-reaching consequences for future global economic growth and might even provoke another world financial crisis that would be much deeper and more 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 called a semi-common, semi-single or semi-harmonised debt interest rate.

Earlier, we mentioned that the lowest interest rates in the BRICS are currently in China. Brazil, Russia, India and South Africa have much higher rates. In these circumstances, there are a number of alternatives as to how harmonisation can be achieved. It is what consensus is for that they agree at least on one of them.

First, the BRICS may together agree on a rate which would be something of an arithmetic average, i.e. it would be higher than the current Chinese rate, but lower than the rates in the rest of the BRICS. For China this may be damaging, because

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[18] Robleh D. Ali et al., *Towards a Common Financial Language*, 552 Bank of England Speeches 5 (2012) (Feb. 2, 2020), available at https://www.bankofengland.co.uk/-/media/boe/files/paper/2012/towards-a-common-financial-language.

higher rates generally lead to stagnation in economic growth. For the other four countries of the group such a rate would be more attractive, because credit would be cheaper and more available, and not produce a heavy debt burden.

Second, China may not consent to any changes in its domestic rate altogether, because changes in both directions cause economic difficulties. They may stimulate economic activity but also create credit bubbles.

Third, Brazil, Russia, India and South Africa may also not consent to a reduction in their debt service rates, because these rates are part of the capital market mechanism that plays the role of attracting foreign investors, and a decrease in the rates will cause capital flight. Also, the debt service rate is an anchor benchmark to determine the repo rate which is a monetary policy instrument that is used to regulate the supply of money. So, any decrease in the repo rate will lead to a larger supply of money and hence to inflation.

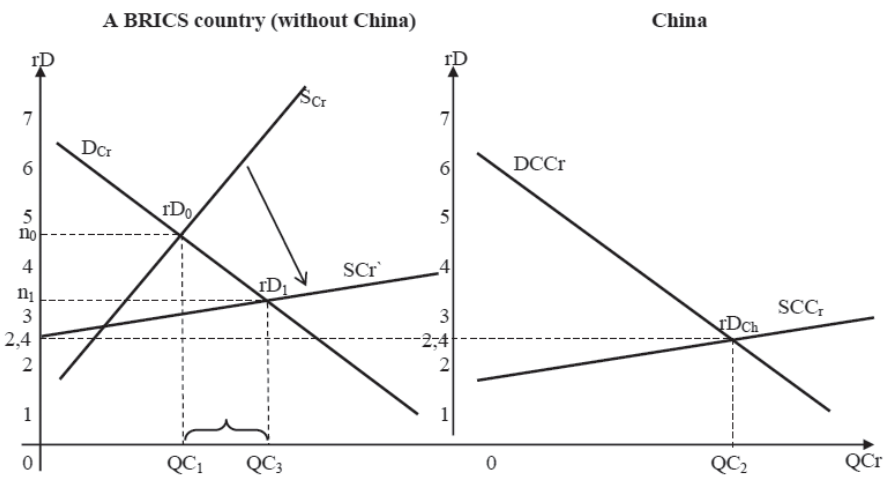
Thus, the above options may be both attractive and unattractive to the governments of the BRICS to agree on the common debt rate. At the end of the day, if the BRICS still attempt to introduce it to the common virtual debt market, the implementation will imply that first the transition rates will be set individually for each of the BRICS using a combination of market-oriented decisions and government policymaking. The market decision is shown in Figure 1 below. As soon as the market decision is taken, the governments then will adjust the resulting rate to the current situation in the BRICS according to macroeconomic circumstances. That means there must be bodies in the BRICS consisting of a group of professionals from different fields including monetary, fiscal, financial and legal authorities. They will conduct surveys of the economies on a quarterly, semi-annual and annual basis, and come to a common decision and set the rate. The purpose of this transition period is to provide the basis for convergence of the individual semi-common rates. As soon as these individual rates get closer to each other, the decision-making process will be entirely left at the door of the virtual common debt market of the BRICS depicted in Figure 2 below. The analytic bodies may still be working even after that, but their responsibility will only be concerned with monitoring the macroeconomic conditions in the BRICS to abide the convergence criteria.

To sum up, the two-stage mechanism of setting the common debt rate in the BRICS means that at first the rate for each individual member of the BRICS will be calculated on the basis of the Chinese average rate of debt service which amounted to 2.4% in 2017. We think that the proposed model should focus on this particular rate since it is the lowest among the BRICS and because China has a competitive advantage in making loans compared to Brazil, Russia, India and South Africa. As is well known, according to the theory of comparative advantage by David Ricardo, countries willing to take part in international trade should export the goods they produce more cost-efficiently and import the goods that cost too dearly to produce domestically. In our example, the expensive good in Brazil, Russia, India and South Africa is capital. Since their interest rates are higher than China's, they will import Chinese loans through the common virtual debt market of the BRICS to the competitive advantage of China in providing capital.

The setting of the semi-common rate of interest or debt service rate implies that the Chinese credit supply curve should be transferred to the charts of Brazilian, Russian, Indian and South African capital markets. There, the credit demand curves will intersect with China's credit supply curve at an equilibrium point. The result would be four equilibrium rates of debt service in Brazil, Russia, India and South Africa.

According to our calculations, the semi-common interest rate for Russia and South Africa will amount to approximately 3.5%, and that for India and Brazil about 3%. The use of that rate will lead to a significant decline in the cost of borrowed capital in Brazil, Russia, India and South Africa. In Brazil, it will fall from more than \$20 billion to about \$4.5 billion. In India it will go down from \$13.5 billion to \$5.0 billion and in South Africa from \$1.3 billion to \$0.7 billion. If Russia ran a government deficit equal to the previously supposed level of \$5 billion, the cost of borrowed capital would fall there from \$0.5 billion to \$0.2 billion (Table 5).

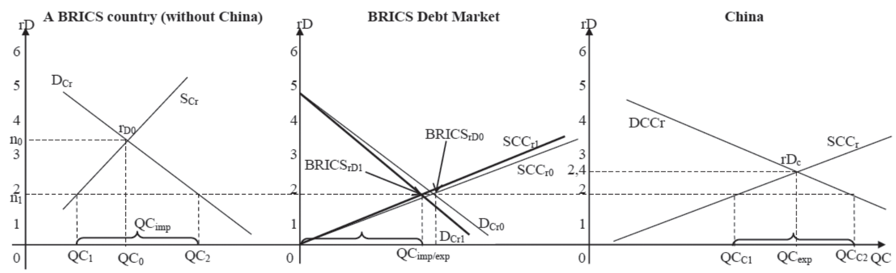
Figure 1: The setting of an individual semi-common rate of debt service in Brazil, Russia, India and South Africa



Source: Developed by the author based on the BRICS official government statistics

It may seem that China neither benefits nor suffers from making loans to Brazil, Russia, India and South Africa, because the Chinese rate does not change. However, in reality, Chinese banks do earn interest income from providing access to its excessive credit capacity which may otherwise not be fully used in China at all. It is true that Chinese consumers and companies might not get any benefits from such operations. They will feel the benefits of this only after the BRICS have introduced the common or single debt interest rate. The final stage of the financial integration of the BRICS would occur when the free market mechanism of credit supply and credit demand has replaced the semi-common debt interest rate, and the eventual rate has settled at a level determined by free market forces. Then the debt interest rate will be unanimously accepted by the BRICS, and our model says the rate will be lower than 2.4% (Figure 2).

Figure 2: The setting of a common rate of debt service in Brazil, Russia, India and South Africa



Source: Developed by the author based on the BRICS official government statistics

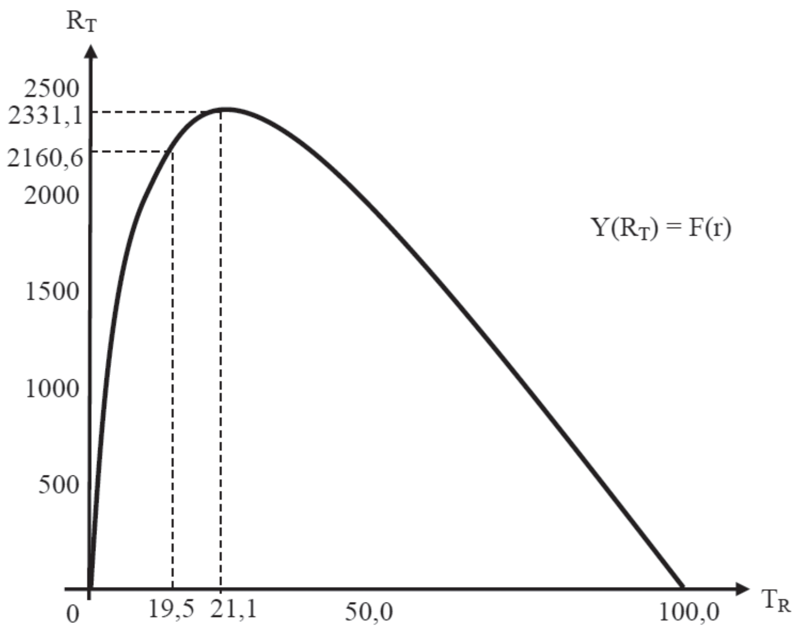
At this point, it may seem that this time the Chinese banks will be the ones that will suffer from the introduction of the common interest rate. That may be the case in the short run. In the long run, Chinese banks and the economy on the whole will benefit, because they will be able to export excessive credit capacities to Brazil, Russia, India and China and use the economies of scale.

Brazilian, Russian, Indian and South African banks may also suffer from the decreasing interest rates. However, the proposed mechanism supposes that it will be done very gradually and by stages. Thus, the banks and economies of the BRICS will have some time to adjust to new competitive business conditions. We believe that there will be much more harm if the shock therapy approach is used, when the sudden drop in interest rates may have a potentially devastating effect.

One more problem with the common virtual market of the BRICS is that of determining the optimal level of debt which can be considered acceptable for the economies of the group. According to classical economic theory, the optimal size of an economy, household or business enterprise is achieved when their total revenue is equal to their total costs. Hence, an optimal level of deficit for an economy is 0% of GDP. This may sound impracticable. But that is the condition of market equilibrium.

The same goes for the government-debt-to-GDP ratio. When it is equal to zero, there is no deficit or debt in an economy at all. However, governments do commit expenditures. In the case of a zero-percent-debt-to-GDP ratio they can be understood as fully covered government debts. To cover the debts, a government usually issues bonds which are used to finance expenditures and equilibrate the budget. Now, when one compares the resulting budget expenses with the fully covered government debt, we get the optimal debt-to-GDP ratio for a particular country. It should also be kept in mind that the government expenses may be unproductive. They may increase and not contribute to GDP growth at all. If that is true, then the expenses are not going to be optimal. That leads to the problem of determining an optimal amount of expenses that can be incurred. This depends on how much budget revenue in the form of taxes can be collected. The optimal tax rate is going to be the rate at which the government is able to cover the expenses. This idea is behind an approach to calculate the optimal debt rate for the BRICS. The level of this rate can be found in Table 5 and expresses the amount required to cover the government's deficit. For example, to equilibrate the budget, China needs to increase tax revenue from the current 2.1 trillion dollars to 2.3 trillion dollars. That will require a subsequent increase in the average tax rate in the country from the current 19.5% to 21.1% (Figure 3 below). Figure 3 is constructed on the basis of the Laffer Curve and shows the optimal tax rate for China.

Figure 3: The optimal tax rate (the case of China)



Source: Compiled by the author

As for Russia, its fiscal and budgetary policies are aimed not at achieving the optimal level, but at an increase in the retirement age and tax burden on the population instead of pursuing stimulating economic reforms. The government is doing this despite the fact that the model proposed here shows that there are still opportunities within the economy to equilibrate the budget without realising any debts. A preferred path for the Russian macroeconomic policy would be turning to intensive economic growth making use of advanced factors of production. But they are scarce in Russia. So, this opportunity is quite difficult to use due to the circumstance that extractive industries dominate in the country's GDP and exports. This eventually means that to avoid the accumulation of government debt in terms of exhaustible development the Russian budget will have to be equilibrated at the expense of more taxes, the introduction of new taxes and the increase in the retirement age of the working population.

It should also be kept in mind that debt service in Russia is quite expensive. This is because Russia's government bond rates are higher in comparison with, for example, China's. Thus, with more borrowing, Russia will soon experience an increase in domestic debt. The common virtual debt market of the BRICS could help solve this problem.

The proposed model of the virtual common market corresponds to the contractual (state) republic of the BRICS. For example, cheap credit and low debt service rates will help the GDP and GNI of the BRICS grow, which is one of the objectives of a contractual republic as described in Table 3.

The BRICS have both formal and informal institutions which perform the functions of the contractual republic. Therefore, they may be the guarantors of the common economic policy, including the fiscal and budgetary policies.

None of the BRICS in the proposed model has a monopoly on making anyone follow certain policies. As was said above, at an early stage of financial harmonisation, each of the BRICS will get an individual rate of debt service which is the basis of the virtual common debt market. The rate will determine the consensual fiscal and budgetary policies of the BRICS.

The given model is also the mechanism by which to solve the principal–agent problem, since the virtual debt market offers a democratic way to deal with tax collection. This is going to ensure that the member countries can use the loans provided at a common debt service rate in accordance with market principles.

The straitjacket of financial discipline in the exploitation-state model will lead to sluggish economic growth in the BRICS. It will diminish social security. The governments will have to continually think about reducing expenses in areas such as healthcare, education and national defence if they exceed Maastricht-like limits.

EU-like fiscal and budgetary policies in the BRICS will require pension reforms which will be very unpopular in the society. For example, even without deeper integration within the BRICS, when Russia increased the retirement age in 2018, this added to the already high level of strain in society which had been caused by international sanctions. EU-like financial integration requires solidarity, which means that a member country is unable to solve internal problems without harming the other member countries or causing a negative response on their part. This inability will unavoidably give birth to growing discontent of the member countries of the BRICS towards each other. At the end of the day, some will lose patience and exit the group.

The model of the contractual republic of the BRICS points out specifically that the member countries will get revenues and commit expenses through the participation in the virtual common debt market built on liberal principles and the common optimal tax rate. Loans in the virtual market of the contractual republic will also be an effective tool to cover deficits.

Finally, the proposed model will work only if transaction costs are close to nothing or amount to zero. Otherwise, to deal with them the BRICS will have to agree on a common budget of the exploitation-state model, the funds of which will be generated by the activities of the common debt market. The transaction costs will also arise because of the necessity to set up additional institutions and guarantors of democratic procedures that will mediate the process of making agreements within the contractual republic.

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References

Chinn M.D. & Ito H. *A New Measure of Financial Openness*, 3(10) Journal of Comparative Policy Analysis: Research and Practice 309 (2008). https://doi.org/10.1080/13876980802231123

El-Erian M.A. *Shrinkage*, 172 Foreign Policy 88 (2009).

Galvão M. *Brand BRIC Brings Change: Brazil, Russia, India and China*, 66(8-9) The World Today 13 (2010).

Gourinchas P.-O. & Obstfeld M. *Stories of the Twentieth Century for the Twenty-First*, 4(1) American Economic Journal: Macroeconomics 226 (2012). https://doi.org/10.1257/mac.4.1.226

Hankel W. & Isaak R. *Brave New World Economy: Global Finance Threatens Our Future* (Hoboken, N.J.: Wiley, 2011).

Kaufman G.G. *Emerging Economies and International Financial Centers*, 4(4) Review of Pacific Basin Financial Markets and Policies 365 (2001). https://doi.org/10.1142/s0219091501000577

Ostry J.D. *Managing Capital Flows: What Tools to Use?*, 29(1) Asian Development Review 83 (2012).

Sinn H.-W. *Auf der Suche nach der Wahrheit* [*In Search of the Truth*] (Munich: Herder, 2018).

Sinn H.-W. *Buffering Volatility: A Study on the Limits of Germany's Energy Revolution*, 99 European Economic Review 130 (2017). https://doi.org/10.1016/j.euroecorev.2017.05.007

Vaubel R. *Das Ende der Euromantik: Neustart jetzt* [*The End of Euromantic: Restart Now*] (Wiesbaden: Springer, 2018).

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