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Impact of a BRICS integrated payment system on cross-border e-commerce

Daniel Coelho Barbosa,*
Universidade Federal do Rio de Janeiro (Federal University of Rio de Janeiro, Brazil)

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Abstract

This article examines what a BRICS integrated payment system can be and how it may affect the cross-border e-commerce dynamics. First, we show how the current international transaction system works, its geopolitical consequences and what a BRICS independent payment system implies. Second, we examine the current e-commerce scenario in BRICS, its main challenges, and what can be improved in it with the help of the proposed exclusive financial network. In conclusion, we review the current situation and make some necessary comments.

Keywords: BRICS Pay, cross-border, e-commerce, SWIFT.

JEL: L81, F52, F63, O19.

Introduction

The objective of this article is to better understand and analyze how a possible development of international payment platforms may affect the trade of the BRICS countries in the international arena. The motivation was to research the already known initiatives concerning greater independence of the BRICS bloc, such as BRICS Pay, and the possibility of an alternative to SWIFT transaction platform. After understanding how these initiatives can work and what they mean, the next step was to understand their impact on the digital trade between BRICS, what could be expected, and what should be considered a challenge. In this sense, the article is essentially a comment on how technological development of payments systems can affect the BRICS digital trade in the future.

The materials used during the research were mostly government declarations, international organizations' reports (such as UNIDO and SASS), enterprise research, and some information from newspapers. The article is based on the analysis of these materials,

* E-mail for correspondence: barbosadaniel1105@gmail.com

identifying factors that were constantly mentioned as challenges to the development of financial sovereignty in BRICS, as well as individual problems of the e-commerce structure in each country of the bloc. Finally, after highlighting each of the most relevant obstacles in these areas, the idea was to comment on them, providing some insight into potential outcomes of investing in possible solutions.

1. Current operation of the international payment system

Before 1973, there were various problems related to international transactions, which were mainly carried out via Telex (an international transaction platform that predates SWIFT). The system had many problems with its communication speed and user safety due to its communication structure, which required sending lots of messages and check-ups only to complete a single transaction, not to mention the lack of unification in payment instructions (Scott & Zachariadis, 2012). These various factors motivated a group of six international banks to create SWIFT (Society for Worldwide Interbank Financial Telecommunication), the currently dominant payment mechanism.

SWIFT is both a system and a Belgium based company that relies on its top methods of security, payment monitoring, and standardization. It represents a significant improvement over Telex, as it uses a unique BIC code to identify each institution that enters the system, and uses FIN messages that narrow the financial order to just one message per payment. Even so, a factor that dictates its relevance is the international community's adherence to this system, given that more than 200 countries and more than 11.000 institutions *directly* use the platform. An important characteristic of SWIFT to keep in mind is that it is a communication system, not a bank, so institutions exchange messages through it, not money (SWIFT Institute, 2020).

"Directly" is an important word in understanding the level of penetration of the platform since various transactions between smaller banks in different countries (which in this case aren't members of SWIFT) are made in an "indirect" form, involving communication with larger banks. To better illustrate this dynamic, imagine four different banks (small bank A, large bank A, small bank B, and large bank B), and banks with the same letter are located in the same country. Small bank A wants to make a transfer to small bank B, and to do this, it has to establish a connection with large bank A for it to pass the message through SWIFT to large bank B so that it finally concludes the transfer to small bank B. The importance of understanding this process is to see how small banks depend on large banks for international transactions, and these latter, in turn, must be included in SWIFT so that they can execute payment orders. This represents the dynamic in which banks need a system to carry out their transactions, and SWIFT draws its importance from the number of direct and indirect users (SWIFT Institute, 2020).

Although SWIFT is currently being updated, being the most popular platform and getting new functionality, including improvements to the 2017 SWIFT gpi, its susceptibility to external influences creates a serious imbalance in the international payment dynamics. After threats of excluding Russia from the system during the 2014 Crimean crisis, it became a BRICS's (and BRICS allies') demand to develop mechanisms to reduce dependence on the US dollar and institutions influenced by it, such as SWIFT. It is also worth mentioning that this scandal wasn't the first to highlight dubious practices concerning the SWIFT system, for instance, the TFTP (Terrorist Finance Tracking Program) scandal in 2006, which affected EU countries (European Commission, 2007).

The idea of a functioning BRICS independent payment system would be very relevant for independent financial sovereignty. The implementation of this project could at least represent a safety measure against the pressure of the dominant United States and, at a maximum, become a channel for developing trade relations, including a related inter-BRICS trade project and, possibly, an alternative to the dollar currency.

BRICS currently accounts for about 42% of the world's population and 18% of global trade (BRICS Brazil, 2019) and have the potential to change the world order in the coming decades. Although the creation of an independent payment system poses a lot of challenges, it is always useful to develop an understanding of the implications and possibilities of relevant events. Considering the context of a "digital economy" and a possible BRICS transaction network, the question arises as to how a new tool like this might affect the international trade scenario and, more specifically, how it might affect cross-border e-commerce trade rates and logistics.

2. E-commerce in BRICS and its importance for international trade

To discuss e-commerce, we first need to define what this term means and what its current economic importance is for BRICS. Taking into account various possible definitions of e-commerce, this article will define the concept as any transaction that is stimulated, assisted, or performed through an Internet platform. As for its importance in the BRICS context, we can pinpoint its potential to promote SMEs sales growth and better visualize more diverse markets, especially through the marketplace model (which reduces the costs of maintenance and marketing that are normally an obstacle to smaller businesses).

The potential that e-commerce marketplaces have for promoting sales and visibility of SMEs derives precisely from the way their models work, which have characteristics of what is called a "two sided market" (Eisenmann et al., 2006)). It's important to note that e-commerce is not limited to the marketplace model, and not every marketplace works in the same manner. Essentially, the marketplace structure operates as an intermediary between buyers and sellers, functioning as a unified environment, in which these two parts can make a sale.

Factors that make a marketplace relevant are its ability to attract consumers to its platform and announce various products. The idea is to progressively construct a movement of enterprises entering the system that are normally looking for a cheaper and more efficient way to announce their products, as well as consumers who are looking for a single platform where they can easily encounter interesting products. That is precisely the value an e-commerce marketplace model can have in promoting international trade — it can unite consumers from various countries with sellers who would otherwise probably never reach these clients.

No matter how relevant the marketplace structure is, it is also important to take into account the macro-trend of digitalization and e-commerce in general. In recent years, we can see a growing trend in digital trade. Based on the latest reports from UNCTAD, we should notice that: “UNCTAD estimates that 1.45 billion people, or one quarter of the world’s population aged 15 and older, made purchases online in 2018... This is 9% higher than in 2017” (UNCTAD, 2020). And perhaps even more important: “The share of cross-border online shoppers to all online shoppers rose from 17% in 2016 to 23% in 2018” (UNCTAD, 2020), demonstrating not only the growth of digital commerce, but the trend of cross-border purchases as well.

Finally, the social impact of e-commerce on underdeveloped areas of the BRICS countries should not be taken for granted, and initiatives such as China’s rural e-commerce (Ali Research, 2017) demonstration project and eNam (Digital India and Ministry of Eletronics and Information Technology (2019)) in India, serve as proof of this. These are two actual examples of investments aimed at fighting poverty and obtaining information in the agricultural market that show how e-commerce can be a unique integration tool.

Although e-commerce has great potential for the promotion of international trade, there are various problems that are common for the e-commerce scenario in the BRICS countries. Three of the most illustrative challenges are the legal perspective, the international trade logistics, and cultural specificities that always influence and complicate the first two challenges.

The first of these problems is the lack of specific laws concerning the regulation of e-commerce. With the possible exception of China´s numerous legal programs and, more specifically, India´s recent Draft National e-Commerce Policy (Department for Promotion of Industry and Internal Trade, 2019), the legislation of the three remaining countries still lacks specificity or maturity. This problem not only leads to new enterprises’ uncertainty in entering the e-commerce model, but also contributes to the existing lack of trust in online shopping and payment, which in turn affects the process of digitalization.

As an example, we can picture a brick-and-mortar store that is considering entering an e-commerce model. It will probably end up participating in a larger company’s marketplace, or maybe create its own sales website. If there is no clear regulation that defines what type of agreement is or is not legal to be made with this large company or even what information should be provided on a sales website, the trend in the long run is to create lots of standardization inconsistencies that cause the consumer to distrust the model.

Second, there is the logistics problem, which is a two-sided problem. One side of the problem is the internal infrastructure of the BRICS countries, which in some cases is underdeveloped, creating obstacles for enterprises to do business with the country. And the other side is associated with international export logistics, bureaucracy and lack of knowledge of the players. The first side can be worked out with the help of the NDB, given its focus on infrastructure investments; the second side is a bit more complicated.

A large part of the problem with international logistics is the number of bureaucratic procedures and taxes that must be paid, considering also different fees that can vary depending on the country to which the product is exported. These numerous procedures may discourage new players from entering a cross-border e-commerce market. With this problem in mind, some Chinese markets came up with solutions, such as offering third-party services to meet international export standards and, more specifically, Alibaba's Electronic World Trade Platform initiative. In essence, this is the creation of consulting centers in the BRICS+ countries (currently present in Malaysia, Rwanda, Belgium, and Ethiopia) to promote cross-border e-commerce practices (Electronic World Trade Platform.., 2020).

Finally, as an example of cultural perspective, it is worth mentioning the lack of trust in digital payments among Russians, which makes cash on delivery the main transaction method in Russia, accounting for about 80% of all transactions and generating a more complex logistic scenario for e-commerce (Ecommerce News Europe, 2019). Another example is the gender gap in mobile device usage in India. It is reported that "women are now 20% less likely than men to use mobile Internet" (GSMA, 2020). This creates an obstacle to digital integration in India and, consequentially, to e-commerce.

3. Possible solutions and comments

The final solution that needs to be disclosed for a full understanding of the BRICS financial scenario is BRICS Pay. Essentially, this is a project to create a mobile app for better integration of businesses in the BRICS countries, which promotes the use of national currencies of participants as an alternative to the dollar (even the use of a unique BRICS cryptocurrency that would combine payment means into a single form was considered). Regardless of how the BRICS Pay initiative would work, promoting cross-border e-commerce could be an opportunity for every country in the bloc.

To emphasize the importance of alternative payment capacity for creating consumers habits in the e-commerce model, it's useful to briefly point out and discuss some of its characteristics and definitions. In this paper, alternative payment systems should be defined as: "...a way of paying for goods or services which are not made via cash or major card schemes (Visa, MasterCard, American Express). This includes prepaid cards, mobile payments, e-wallets, bank transfers, and 'buy now, pay later' instant financing" (Banking Circle, 2019). Normally, these types of systems have their own value based on the customer's experience in using the service, guaranteeing simpler, scalable, and unified solutions, which makes the process of paying for a product or service much easier. The general idea is to minimize the possibility of a client not buying a product due to the lack of payment options in the digital platform, as well as to create a trustful and understandable way to transfer money online.

Analyzing the issues raised in the two previous parts of the article, one can understand that these two topics complement each other. The independent SWIFT transaction system and possibly BRICS Pay will become a form of communication between countries, essentially, a foreign policy measure that can be used as a basis for further economic relations. As for the e-commerce part, the situation is somewhat different since e-commerce can work perfectly at the national "internal" level but shows its true potential to stimulate trade at the cross-border level.

Thus, it is clear that the link between e-commerce and financial protection mechanisms can function better together. The independent SWIFT payment system can be an environment for secure trade, and BRICS Pay can promote a unique alternative form of payment, luring consumers and businesses to participate in inter-BRICS international trade. Of course, these exchanges will be carried out through e-commerce, which is a cheap way of advertising small businesses internationally and providing easy access to products for customers. This also creates a collaborative way for enterprises to grow with the bloc.

An example of how national security measures and cross-border e-commerce are intertwined is the abovementioned Indian Draft National e-Commerce Policy. Specifically, there is a part that refers to FDI and its restrictions: "The policy aims to invite and encourage foreign investment in the 'marketplace' model alone. An e-commerce platform, in which foreign investment has been made, therefore, cannot exercise ownership or control over the inventory sold on its platform. In this manner, foreign investment is not seen as a threat by small offline retailers of multi-branded products" (Department for Promotion of Industry and Internal Trade, 2019).

Other issues that are relevant to comment on are the prevalence of SWIFT, the diverse e-commerce situation in each country, and various international pressures. Bearing in mind what the BRICS countries currently can and cannot do, there will be some comments on these issues.

Let's start with SWIFT and pay attention to some important factors. The positive aspects for SWIFT are its accession to the international payment system and its current development (such as SWIFT-gpi). The negative aspects that a BRICS payment system could benefit from are its vulnerability to external factors, such as pressure from the United States, the fact that it is a message system (not a proper payments system), and fees associated with communication between banks. Perhaps a good advantage of creating a separate transactions network, given that it will be state sponsored, will be better control over both the external influences and the technical structure of the platform.

Following the e-commerce challenge, given the different scenarios in each country and its unique stage of digital development, is probably the best alternative in promoting international agreements. An example of how this can become more complex is the current problem in b2b and b2c e-commerce exposed by Hongfei Yue et al.: "In the traditional B2B trade mode, the single insurance policy is huge and only one kind of commodity is traded. It is efficient since customs clearance products are in bulk. However, for the cross-border e-commerce B2C model, the individual demand of buyers is strong, single orders are small and the cross-border trade is especially fragmented. If the 'one by one in and out' model is taken as the major model for customs clearance, batch checks are not possible. This greatly increases the number of customs clearance inspections and work. Therefore, the 'one by one in and out' model cannot meet the rapidly rising demand of clearance" (Yue et al., 2017).

It is also necessary to consider the above-mentioned "macro" implications of establishing an international system alternative to SWIFT. Due to the already mentioned level of use of SWIFT, the process of implementing an alternative system will not stop its use; the most likely possibility is that we will get a competitive scenario. The specifics of such a situation are not entirely predictable, but there are some characteristics that are more probable. First, the system is likely to start working only within BRICS, but it is important to plan for adding more members (possibly related to the BRICS Plus initiative), avoiding creating an isolated system, which would be bad for BRICS. With this in mind, the turning point will be to create a "mass" connection to this new system, similar to what SWIFT already has.

This level of commitment could be attempted by creating a structure better adapted to the needs of banks, and reaching out to countries suffering from dollarization of economy could also be a strategy for bringing new players into the system. Assuming that it has gained considerable relevance, this would lead to another possible specific point in which the alternative BRICS system could effectively compete with SWIFT to attract more countries to it. There is also a possibility of cooperation among this new system and SWIFT; and this last case may occur if the alternative system is already developed and has a niche to position itself in the international "market" of transactions.

Another problem that should be noted is the lack of a single statistical center for e-commerce development since various data can only be obtained by buying them from big consulting companies. With the creation of a single system such as BRICS Pay, cross-border trade information could be organized to better formulate new e-commerce and academic research policies.

Finally, it is important to consider not only the pressure that external countries still exert on international institutions, but also the importance of foreign e-commerce companies and what they can do in national markets. Even with these various challenges, it is always useful to think about what policies can be created and what opportunities we have to promote the growth of our nations.

4. Results and discussion

The importance of discussing the BRICS situation in the context of international financial sovereignty and its development in digital trade is largely related to two bigger factors — the emergence of the BRICS countries and the process of digitalization taking place all over the world, respectively.

First, as for the growing influence of BRICS. As mentioned earlier, these countries take part in a very significant segment of international trade, and their policies have considerable impact on the world. Given this and the growing influence of this bloc, it is possible to justify why it is so important to discuss possible initiatives that could change the international payments structure.

Second, about the process of digitalization and why the discussion of digital trade is so important. Currently, the world is in the process of digitalization not only in payment systems and trade, but also in all sectors of the economy and society. The reason this article focuses on e-commerce specifically and not on trade in general is that these two things are becoming more and more inseparable (taking into account the definition of e-commerce used in this article). With this in mind, the objective was not only to perceive how the development of a new digital platform could increase transactions between countries, but how a digital platform could (through an integrated system) possibly affect the way countries trade using digital commerce.

Finally, the results of the research can be summarized in the diagnosis of the BRICS situation concerning financial sovereignty and the development of digital trade, which, considering its growing projection on the international arena, still has a great unexplored potential. The results can be divided into the abovementioned two topics that were explored throughout the article in order to objectively define the findings of the study.

Conclusion

The major factor that was considered in this article as the problem of financial sovereignty of the BRICS bloc is the very existence of SWIFT. The conclusion that can be drawn after understanding what this system is and how it is affected by the pressure on the part of the United States is that it can pose a serious threat in terms of international sanctions. The system has its strength based on the adherence of countries and banks all over the world, and this is probably the biggest challenge for any opposing initiative. The potential of the BRICS countries to counter this is to create an alternative structure of payments messages, as already discussed, and possibly to create a channel for further promoting de-dollarization and establishing a reliable project such as BRICS Pay.

There are lots of factors that make e-commerce between the BRICS countries very difficult to develop, including the lack of international regulation of e-commerce (at least between the BRICS countries), as well as cultural factors that further complicate transactions and force enterprises to adapt to diverse situations. The problem of e-commerce in BRICS can be defined as a challenge to integration and standardization, and adjusting the foreign policy of each BRICS country to the unique pace of development of each part of the bloc seems to be at least an important part of this challenge.

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