

EKONOMIA I PRAWO. ECONOMICS AND LAW Volume 19, Issue 1, March 2020 p-ISSN 1898-2255, e-ISSN 2392-1625 www.economicsandlaw.pl

ORIGINAL ARTICLE received 13.07.2019; revised 13.01.2020; accepted 31.03.2020 Citation: Pasionek, J. (2020). Countries of BRICS group on Forex market. *Ekonomia i Prawo. Economics and Law*, 19(1): 99–117. doi:10.12775/EiP.2020.008.

Countries of BRICS group on Forex market

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Abstract

Motivation: The globalization process has deepened the links between economies in the global socio-economic system. It has resulted in the shift of economic power from high developed countries to economies that have entered the path of fast socio-economic development, especially emerging markets. The emerging economies' dynamic economic growth empowers the reduction of the development gap in relation to high developed economies. In the context of emerging markets, the special importance is dedicated to socalled BRICS countries. The share of BRICS countries in total world production as well as in total global trade, increases. The huge population and the GDP growth per capita make these economies the important markets nowadays. The financial market, especially the foreign exchange market becomes more and more important in the world economy.

Aim: The aim of the paper is to examine the participation of the BRICS countries in the global foreign exchange market. The paper assumes that the increase of the BRICS group importance on the global markets does not correspond with the increase in the importance of these economies currencies on the Forex market. The BRICS group's turnover in global foreign exchange turnover will be examined. In addition, the share of these cur-

rencies in the segments of particular types of transactions will be examined. Results: The importance of the BRICS group in the global economy is growing. However, this growth is not accompanied by growth of interest in currencies of this group on Forex market. The share of transactions concluded with the use of currencies of BRICS group was only 5% in 2019. Whereas, total currency turnover of the BRICS group countries was only 3% in 2019. The share of BRICS countries in individual market segments can be considered stable, yet insignificant.



Keywords: foreign exchange market; transaction instruments; BRICS countries; emerging markets JEL: G1; G13; G15

1. Introduction

In the modern world economy, considerable changes in the structure of economy which result from globalisation processes are observed. Significance of economies that dynamically enter the path of socio-economic development is successively growing. New important entities that are gaining strong competitive position emerge on the international arena.

These new rapidly growing economies are becoming nowadays a driving force for the global economy. Special importance is attributed to several countries, in which the rate of economic growth shows that they have aspiration to achieve the domination over the world. The economies include Brazil, Russia, India, China and the Republic of South Africa, i.e. the BRICS countries. Growing economic significance of the countries all over the world is the element common for BRICS countries.

2. Literature review

In the literature on the subject matter there are many publications concerning changes in structure of the world economy. Some research (Zielińska-Głębocka, 2012) revealed the changes which had been taking place in the global economy in the last decade and it also described changes in the structure of the modern global economy. A large part of this study was also devoted to the situation of the most important emerging markets. Similar research was carried out by Liberska (2013, pp. 192–215), which examined the changes in the strength and position of emerging markets on the international arena and their position in the near future.

The idea of changes in the world economy structure was also explored by the Asian Development Bank (2011) and Dadush & Shaw (2011). They discussed the growing importance of BRICS countries nowadays and in the future.

Each of these studies confirmed the growing importance of BRICS countries in the international arena which caused the shift of economic power from high-developed countries to the BRICS economies. These countries have entered the fast path of socio-economic development, causing a reduction in the development gap towards high-developed economies.

In the modern literature it is difficult to find many studies on the participation of the BRICS countries on the Forex market. The issue was analyzed in the work of Jagadeesan & Swanson (2018), in which the relations between BRICS currencies and the US dollar were examined. This study facilitated better understanding of the currency relations between these countries. Similar research was also carried out by Bhattacharya et al. (2017). Similar issues were also considered in their study by Markiewicz & Szmelter (2015). The authors analysed the significance and role of selected Asian currencies on the Forex market. The research conducted by Caporale et al. (2016) focused on the importance of macro news on the exchange rate of BRICS countries. Another study focusing on the role of the Asia and Pacific region was carried out by Markiewicz & Szmelter (2016). The authors proved that the growing significance of the region economies is inadequate to the development of the Forex markets located in this region.

3. BRICS group in world economy

Nowadays BRICS acronym represents a group of countries of extremely rapidly growing economies in which enormous human resources prevail. Chief economist of Goldman Sachs bank, O'Neill (2011) is considered to be the precursor of the BRICS name. He was the first to use the acronym of BRICS in his case study entitled *Building better economic BRICS*. O'Neill (2011) stated that in the perspective of several decades, these countries will outclass most of currently leading economic powers. The notion of BRICS quickly gained great popularity while becoming a commonly used notion.

In existing literature among the most important macroeconomic indicators reflecting the importance of the economy on the international stage are indicated, among others: the volume of domestic production, the rate of economic growth, share in the global trade, population, or GDP per capita (Knapińska, 2016; Kubiczek, 2014; Liberska, 2010; Parysek, 2018; Siudek & Drabarczyk, 2015).

The countries of BRICS group noticed their common economic potential, and their growing importance can be evaluated on several levels. The greatest attention should be paid to demographic determinants and the changes occurring in the economic sphere. Currently over 40% of the world population live in BRICS countries. As regards the number of people in 1997, the population of BRICS countries was over 2.5 billion. In 2017 it was over 3.1 billion. Chart 1 shows the population of BRICS countries in comparison with the world population and in comparison with G7 group. China was the largest world economy with respect to the population. The number of people of this one of BRICS countries reached in 2017 over 1.39 billion. India is another country equally densely populated.

Apart from the numbers associated with demographic dimension, economic conditions that BRICS group achieves are extremely important. It is interesting that BRICS countries generate considerably higher mean economic growth than well-developed economies (chart 2). Opening up of these countries to trade and financial integration can be the cause of their dynamic growth. Mean cumulative value in the studied period for this group of countries reached almost 5%, whereas for G7 group it was 1.6% and for the whole global economy 2.9%. Among the economies of BRICS group, China and India are the largest and most dynamically growing. The mean value of Chinese economic growth in the ana-

Over the studied period, the share of BRICS group in global GDP also increased. In 1997 BRICS group generated little less than 18% of the global GDP according to purchasing power parity. In 2017 this share grew to almost 32% in PPP. Between 1997 and 2017, the share of G7 group in the world production measured in PPP declined from 44.10% to 30.31%. Chart 3 shows the share of BRICS group and G7 group in the world GDP. In 1997–2015 the share of domestic production of G7 group was higher than BRICS group. However, over the whole studied period, this share was regularly declining, whereas the share of BRICS group was regularly growing. Between 2016 and 2017 the share of domestic production of BRICS group was higher than the share of G7 group in the world product. Since the beginning of the studied period China has been generating the greatest share in production of BRICS group.

From economic point of view, the value of GDP per capita which expresses the purchasing power of an average resident is also highly important. In 1997, GDP per capita in PPP in BRICS group was USD 7719. This value grew to USD 14578 in 2017. Thus, the growth reached almost 89%. Chart 4 shows the size of GDP per capita in PPP in BRICS group, G7 group and the world. In the countries of G7 group the value that currently is USD 42293 still clearly exceeds BRICS economies. However, the dynamics of growth of this value since 1997 (USD 34201) in the countries of G7 group reached less than 24%, so it was considerably smaller than in BRICS countries.

Integration with world economy in the sphere of international trade is highly important for BRICS countries. In the global economy, the total share of the countries of BRICS group in global export in 1997 was slightly over 7% (chart 5). This share was successively growing year after year and in 2016 it reached 18.5%. In the same period, the share of the countries of G7 group in export was, and is still big, however it was successively declining. In 1997 the countries of G7 group exported almost 48% of the world export and in 2016 only 32.5%. It is true that the share in the export of G7 countries is still higher than in BRICS group, however, the rate at which the export of BRICS countries is growing leaves no doubts about the future global trends.

As regards the values related to import in 1997, the share of economies of BRICS countries in the world import reached slightly over 6%, however this value was successively growing year after year. In 2016, the share reached almost 15% which represents the growth by 150%.

As regards the share of the countries of G7 group, in 1997 the share was over 47%, however by 2016 the share declined to 37% (chart 6). Nevertheless, G7 economies import a remarkable part of the global import. China is the largest importer in BRICS group. Its share in 1997 reached 39% and in 2016 67%. Other economies characterised by significant share of import in 1993 are Russia and Brazil, with the share of 22% and 18% respectively in the import of the group. In 2016, India, following China, had the largest share of 15% in import among the group.

Economies of BRICS group contribute to production of a considerable part of the world production and with their dynamic economic growth they became the main driving force of global growth in recent decades. They are also perceived as an attractive place for capital investments.

4. Foreign transactions in the countries if BRICS group in comparison with global foreign exchange

International monetary market is commonly known as Forex. The word occurred as the combination of two words of a full English name of Foreign Exchange. Forex market is mainly an OTC market, i.e. over-the-counter type of market (Bieliński, 2013, p. 108; Klecha, 2006, p. 178). Contemporary currency market is not geographically located, and currency transactions can be made in various world regions (Rubaszek, 2009, p. 122; Świerkocki, 2011, p. 188). Therefore, Forex is a decentralised market in economic, geographical and technological terms (Klecha, 2006, p. 178).

The largest financial centres are located in Europe. With no doubts they include London, Paris, Frankfurt and Zurich. Their share in investments on Forex market reached 56% in 2019. On the other hand, the biggest financial centres from Asia and Pacific are located in Japan, Singapore, Hongkong, Australia and New Zealand. The share of the countries of Asia and Pacific in investments on Forex market reached 24% in 2019.

The biggest financial centres if the Northern America are located in New York and Chicago. Their share in investments on Forex market in 2019 was 18%.

Since the beginning of 1980s a spectacular growth of mean daily turnover on Forex market has been noticed. It grew from USD 539 billion in 1989 to USD 6.6 trillion per day in 2019 (BIS, 2019, p. 3). Such a dynamic growth of the total turnover on Forex market does not translate at the same time into the growth of turnover of BRICS group countries. Their share in transactions is still small. Chart 7 shows the share of BRICS countries in transactions of Forex market in comparison with global turnover.

The share of BRICS countries reached in 2019 only 3%. In 2016, 2013 and 2007, the share of these economies in the total transactions on the Forex market was 3%. In the period between 1986 to 1998, the BRICS group countries did not execute any transactions on the Forex market. Whereas, in years 2001–2004 and in 2007, their share was only 2%. The interest in the currencies

shown by this group of countries in the period from 1989 to 2019 was also low. Chart 8 shows the average daily value of currency transactions of the BRICS group in relation to total daily turnover on the Forex market. The value of these transactions was only USD 307 million in 2019. To compare, the total value of transactions was USD 6.289 trillion in 2019. Despite gradual increase of daily currency turnover of the BRICS countries, their share in the total turnover is still negligible. The value of currency transactions of the BRICS countries accounts only for 5% of all transactions on the Forex market. Therefore, there is no direct translation of the dynamic economic growth of these economies into interest in these currencies in transactions on international currency market.

According to the definition applied by Bank for International Settlements (BIS, 2016, p. 17) the following types of transactions are distinguished: spot, (spot transaction), outright-forward, foreign exchange swap, (FX swaps), cross-currency interest rate swap (CIRS, currency swaps), FX option. Table 1 shows the share of BRICS countries with regard to individual instruments in 1986–2019. As it is shown in table 1 the BRICS countries do not predominate in any segment. Their share in individual market segments can be considered stable, yet insignificant. In 2019 only 94 mln USD of spot transactions were concluded of BRICS countries. This results in only a 4% share in the total spot transactions. To compare, total spot transactions in 2019 amounted to USD 2379 trillion. Outright forward transactions in 2019 amounted to 22 million which accounts only for a 2% share in the total outright forward transactions. Similarly to currency swaps and options constituted only 2%. Only 3% of foreign exchange swap transactions were concluded of BRICS countries in 2019. The structure of currency transactions of the BRICS countries does not deviate from the world structure. The share of FX swap transactions in the global turnover was 52% in 2019. Furthermore, BRICS countries conclude most currency transactions using the FX swap transactions. They account for 51% of all transactions of the BRICS countries.

5. Description of exchange market of BRICS countries

The activity of individual BRICS countries on Forex market over the analysed years changed. In this group of countries, only South Africa was active in years 1989–1995 on the Forex market (chart 9). In 1989, South Africa was again on the leading position with a 38% share. The next position was taken by Russia with a 29% share. In 2001 Republic of South Africa and Russia with the share of 35% and 34% showed the largest activity among this group of countries. The share of RSA was declining year after year and in 2019 it reached 8%. In years 2001–2013, the highest activity in the group of countries was demonstrated by Russia whose share in 2001 was 59%. The share of Russia was declining to 23% in 2019. On the other hand, China became an undisputed leader in this group of countries with the share of 38% in 2016 and 52 in 2019.

On Forex market transactions can be concluded with any currency. Currencies of BRICS countries belong to the third group of currencies, i.e. the currencies of growing countries; apart from the currencies of BRICS countries they include for example Mexican peso, Hungarian forint or the Czech koruna. Chinese currency abbreviated as CNY enjoys the greatest interest on Forex market among the currencies of BRICS countries. Since the moment of liberalisation of the currency law in China that was related to the release of the currency for free circulation, i.e. free access to it on Forex market, the share of this currency in transactions grew from USD 0.095 billion to USD 285 billion (chart 10). A spectacular growth was recorded for the Chinese currency since introduction of the option to use it in investments. Currently, the share of the BRICS group, is 46% (chart 11). The currency of this country has the highest chances to gain presence on the international arena. Other currencies of the BRICS groups were denominated by CNY.

However, growing significance of Chinese yuan does not change the fact that American dollar is still an undisputed leader being in the first place in the ranking continuously since 1989 (table 2). Table 2 shows that also the position of other main currencies remains stable. The second place belongs to Euro, followed by Japanese yen in successive positions.

Transactions on Forex market can be concluded with the use of several instruments. In 1992–1995, spot transactions in the BRICS group countries were concluded exclusively in South Africa. In 1998-2013, most spot transactions were executed in Russia. Whereas, in years 2016–2019, China took the position of the leader in this group of countries (table 3). In 1992–1998, the highest number of outright forward transactions was concluded in South Africa. In 2004-2010, the highest number of these transactions was concluded in India. In 2001 as well as in 2013–2019, these transactions were dominant in Brazil. The structure of FX swap transactions is very similar to the structure of spot transactions. This type of transactions was most popular in South Africa (1992–2004), Russia (2007–2013) and China (2016–2019). On the other hand, currency swaps, similarly to outright forward transactions, were most popular in South Africa (1998 and 2016-2019), Brazil (2001-2004 and 2010-2013) and India (2007). Options were most frequently chosen in South Africa (1992–1995), Russia (1998) and Brazil (2001). On the other hand, this type of transactions was dominant in India in 2004–2013. Whereas, in 2016–2019, the highest number of option transactions was concluded in China. The particular countries of the BRICS group show the greatest interest in FX swap and spot transactions. They account for 52% and 36%, respectively, of all transactions. Therefore, the transaction structure of the particular BRICS countries corresponds to the world structure. On a global scale, FX swaps account for nearly 51% and spot transactions — 28% of all transactions. Whereas, in terms of the type of currency transactions executed in the BRICS currencies, the transaction structure does not reflect the world structure. The BRICS group currencies are most frequently exchanged on the FX swap, outright forward and spot market (table 4). FX swaps are the main currency transaction for the Chinese yuan and South African rand. In the case of the Brazilian peso and Indian rupee, forward transactions are prevalent. Whereas, the Russian ruble was most commonly exchanged for other currencies on the spot market. The biggest number of spot transactions were concluded with the use of Chinese currency; their value reached USD 79 billion in 2019. The most outright forwards transactions were concluded with the use of Indian rupee (USD 63 billion). As regards FX swaps Chinese yuan is an undisputed leader again — USD 137 billion. The biggest number of currency swaps transactions were concluded with the use of Brazilian real (USD 2 billion) and Chinese yuan (USD 2 billion) and FX option transactions with the use of Chinese yuan which is the most popular among this group of currencies.

6. Methods

The necessary analysis was carried out based on data and information obtained from subject literature, statistics of the World Bank (2019) and International Monetary Fund (IMF, 2019). In research the method of statistical data analysis is used, the used data is collected by the BIS in a three-year cycle. Based on data provided by the national central banks and financial institutions of individual countries, BIS prepares a report on Forex investment. Institutions providing information are called reporting institutions (reporting dealers). The data also contains information on transaction methods popular among market participants as well as the type of transactions. Currently, about 1300 institutions from different countries participate in the research. The studies were carried out using the desk research and statistical data analysis methods.

7. Conclusion

The comparison of the level of development in activity of transactions concluded with the use of currencies of BRICS countries with global currency transactions leads to the conclusion that the dynamic economic growth of the countries of this group is not accompanied by proportional growth of the volume of currency transactions. The share of transactions concluded with the use of currencies of BRICS group was only 5% in 2019. Whereas, transactions of the BRICS group countries were only 3% in 2019. The growing significance of economies of the BRICS countries on the global scale is inadequate to the development of the Forex markets located in these countries. Inconsiderable interest in these currencies on Forex market firstly results from the fact that they are currencies perceived on Forex market as exotic currencies. These currencies are characterised by extremely low dynamics and due to this, high transaction costs, i.e. spreads. The high costs discourage investors to become interested in these currencies. Trading in these currency is intensive only at the moment of open-

ing of local markets. The reasons for such a small share could be seen in trade inertia.

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Acknowledgements

Author contributions: author has given an approval to the final version of the article.

Funding: this research was funded by the University of Economics in Katowice, Faculty of Economics, Department of Economics statutory sources.

Note: the results of this study were presented at 8th International Scientific Conference: Contemporary Economic Problems 'Social-economic problems in the era of globalization: theory and practice' (May, 22, 2019, Torun, Poland).

Appendix

Table 1. The share of BRICS countries with regard to individual instruments in 1986–2019 (in USD billion)

Voor	Sp	oot	Outright forwards		Foreign exc	hange swaps	Currenc	y swaps	Options		
rear	BRICS	world	BRICS	world	BRICS	world	BRICS	world	BRICS	world	
1986	0	123	0	0	0	0	0	0	0.0	0	
1989	0	428	0	0	0	0	0	0	0.0	0	
1992	2	539	0	69	1	456	0	0	0.0	38	
1995	2	677	1	115	2	775	0	5	0.2	55	
1998	16	746	3	152	4	1048	0	13	0.2	117	
2001	17	502	2	162	9	925	1	9	0.3	79	
2004	32	807	3	258	15	1313	1	25	0.3	151	
2007	65	1240	9	425	39	2211	1	39	3.9	249	
2010	57	1773	13	546	44	2309	1	56	2.9	244	
2013	77	2383	17	797	75	2871	3	65	2.0	395	
2016	74	1980	20	810	88	3120	5	100	6.1	309	
2019	94	2285	22	1161	136	4099	3	140	7.2	364	

Source: Own preparation based on BIS (2016, p. 13; 2019, pp. 67-71).

Table 2.

The share of currencies of individual countries of BRICS group in transactions on Forex market in comparison with the first-class currencies (in USD billion and %)

Year	BR	L	RU	В	INR		CNY		ZAR		USD		EUR		JPY	
	in USD	in %														
1989	0	0	0	0	0	0	0	0	0	0	485	90	0	0	151	28
1992	0	0	0	0	0	0	0	0	2	0	668	82	0	0	190	23
1995	0	0	0	0	0	0	0	0	4	0	981	83	0	0	291	25
1998	3	0	5	0	1	0	0	0	6	0	1325	87	0	0	332	22
2001	6	0	4	0	3	0	0	0	12	1	1114	90	470	38	292	24
2004	5	0	12	1	6	0	2	0	14	1	1702	88	724	37	403	21
2007	13	0	25	1	24	1	15	0	30	1	2845	86	1231	37	573	17
2010	27	1	36	1	38	1	34	1	29	1	3371	85	1551	39	754	19
2013	59	1	86	2	53	1	120	2	60	1	4662	87	1790	33	1235	23
2016	51	1	58	1	58	1	202	4	49	1	4438	88	1591	31	1096	22
2019	71	1	72	1	113	2	284	4	72	1	5819	88	2129	32	1108	17

Source: Own preparation based on BIS (2019, pp. 72-73).

Instruments	Countries	1992	1995	1998	2001	2004	2007	2010	2013	2016	2019
	Brazil	0.00	_	5.13	3.65	2.55	5.08	8.74	7.61	7.45	6.97
	Russia	0.00	0.00	6.04	9.43	23.64	34.00	22.54	25.88	18.92	22.43
spot	India	0.00	0.00	1.16	1.58	3.42	14.35	13.41	15.48	15.00	18.78
	China	0.00	0.00	0.21	0.00	0.59	8.34	8.60	23.15	29.43	43.30
	South Africa	1.93	2.34	3.73	2.08	1.76	3.41	4.04	4.82	3.08	2.21
	Brazil	0.00	0.00	0.00	0.99	0.37	0.35	3.80	6.41	8.74	9.11
	Russia	0.00	0.00	0.66	0.15	0.91	1.10	0.59	1.15	1.01	1.13
outright	India	0.00	0.00	0.38	0.45	1.21	6.30	4.89	3.74	4.53	4.71
101 wat us	China	0.00	0.00	0.00	0.00	0.00	0.04	3.05	4.09	3.83	5.47
	South Africa	0.47	0.79	1.62	0.49	0.42	0.92	0.69	1.51	1.46	1.40
	Brazil	0.00	0.00	0.00	0.21	0.38	0.03	0.29	0.50	0.18	0.35
foreign	Russia	0.00	0.00	0.07	0.00	5.24	15.07	18.42	33.05	24.93	22.72
exchange	India	0.00	0.00	0.90	1.39	2.01	13.44	7.70	11.17	13.79	15.58
(FX swaps)	China	0.00	0.00	0.00	0.00	0.00	0.90	8.02	16.64	36.62	84.35
、 I /	South Africa	1.00	1.86	3.50	7.28	7.51	9.53	9.11	14.03	12.84	12.56
	Brazil	0.00	0.00	0.00	0.49	0.39	0.27	0.42	2.60	1.64	0.74
currency	Russia	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.15	0.05	0.08
swaps	India	0.00	0.00	0.00	0.00	11.00	0.48	0.03	0.31	0.15	0.06
(CIRS)	China	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.16	0.34
	South Africa	0.00	0.00	0.03	0.01	0.03	0.04	0.04	0.12	3.29	2.15
	Brazil	0.00	0.00	0.00	0.19	0.11	0.04	0.84	0.09	1.74	1.59
options	Russia	0.00	0.00	0.15	0.00	0.00	0.02	0.11	0.50	0.18	0.21
	India	0.00	0.00	0.00	0.00	0.12	3.80	1.32	0.58	0.86	0.80
	China	0.00	0.00	0.00	0.00	0.00	0.00	0.09	0.36	2.79	2.56
	South Africa	0.03	0.19	0.06	0.09	0.07	0.08	0.50	0.47	0.48	2.05

Table 3.
The share of BRICS countries by individual instruments in 1992–2019 (in USD billion)

Source: Own preparation based on BIS (2016, p. 13; 2019, pp. 67–71).

Table 4.	
The share of currencies of BRICS countries by individual instruments in 2004-2	019
(in USD billion)	

Instruments	Courrencies	2004	2007	2010	2013	2016	2019
	USD	528	790	1187	1691	1385	1687
spot	FUR	273	420	691	754	519	616
	IPY	130	206	300	612	395	360
	BRL	3	-00	8	11	13	14
	RUB	10	18	18	37	24	34
	INR	3	9	13	15	19	30
	CNY	9	9	8	34	68	97
	ZAR	2	6	9	19	16	27
	USD	170	289	392	588	600	883
	EUR	88	137	150	178	178	256
	IPY	47	61	115	123	151	145
outright	BRL	1	5	13	34	27	43
forwards	RUB	0	1	2	9	6	10
	INR	2	6	14	24	23	63
	CNY	1	5	14	28	28	36
	ZAR	1	3	3	7	4	7
	USD	74	1580	1600	2030	2160	2906
	EUR	98	582	610	766	807	1142
formite	JPY	182	242	279	332	458	516
exchange	BRL	0	1	1	1	1	1
swaps (FX	RUB	2	6	14	37	27	26
swaps)	INR	2	6	7	10	13	15
	CNY	0	1	7	40	86	137
	ZAR	11	19	16	31	24	30
	USD	17	27	38	50	74	102
	EUR	10	11	18	18	22	26
	JPY	3	3	6	11	18	24
currency	BRL	0	0	0	3	2	2
swaps (CIRS)	RUB	0	0	0	0	1	1
(0110)	INR	1	0	1	0	0	0
	CNY	0	0	0	1	3	2
	ZAR	1	1	0	0	4	1
	USD	92	158	160	293	218	246
	EUR	51	81	87	70	64	90
	JPY	37	60	54	153	74	63
	BRL	0	1	5	11	8	11
options	RUB	0	0	1	3	1	2
	INR	0	2	4	3	3	6
	CNY	0	0	5	17	18	14
	ZAR	0	1	1	2	2	7

Source: Own preparation based on BIS (2001, p. 11; 2007; 2013, p. 11; 2016, p. 13; 2019, p. 13).



Source: Own preparation based on World Bank (2019).



Dynamics of economic growth of BRICS countries, G7 group and the world in 1997–2017 (in %)



Source: Own preparation based on World Bank (2019).



Source: Own preparation based on World Bank (2019).



Source: Own preparation based on World Bank (2019).



Source: Own preparation based on IMF (2019).





Source: Own preparation based on IMF (2019).







Source: Own preparation based on BIS (2016, p. 14; 2019, p. 14).

Chart 8.

Mean daily turnover in currencies of BRICS countries, in comparison with total turnover in 1989–2019 (in USD billion)



Source: Own preparation based on BIS (2016, p. 72; 2019, p. 72).



The share of individual BRICS countries in transactions on Forex market in 1989–2019 (in %)



Source: Own preparation based on BIS (2016, p. 14; 2019, p. 14).



The share of currencies of individual countries of BRICS group in transactions on Forex market in 1992–2019 (in USD billion)



Source: Own preparation based on BIS (2016, p. 13; 2019, p. 72).

Chart 11.

The share of currencies of individual countries of BRICS group in transactions on Forex market in 1992–2019 (in %)



Source: Own preparation based on BIS (2016, p. 13; 2019, p. 72).