

Management of International Reserves of Russia: Modern Practice, Directions of Improvement

I. V. Kudryashova

Institute of Economics and Finance
Chair of the Economic Theory, World and Regional
Economics
Volgograd State University
Volgograd, Russia
kudryashovaiv@volsu.ru

V. V. Batmanova

Institute of Economics and Finance
Chair of the Economic Theory, World and Regional
Economics
Volgograd State University
Volgograd, Russia
batmanovavv@volsu.ru

O. N. Izyumova

Economic Department
Volgograd Institute of Business
Volgograd, Russia
izyumira@yandex.ru

Abstract — The necessity of the formation of the international reserves in any country is determined by its need in the security reserve in case of the crisis situations in the currency and financial sphere. In this respect the monetary authorities may face the goal of the evaluation of the optimal volume and the structure of the reserve assets from the point of view of the specificity of the economic situation of the country. In the article on the basis of the analysis of the dynamics of international reserves, their correlation with the GDP and also the coefficient of the coverage of imports the adequacy of reserve cash holdings of Russia is assessed. The obtained results are compared with the values typical of some groups of countries. The distribution of the official reserves of Russia into currency cash holdings and monetary gold and the choice of separate currencies is analyzed. The conclusion is drawn about the necessity of the change of the structure of the international reserves in the whole and of their currency composition. The main directions of the improvement of the modern practice of the management of the official reserve assets by the Bank of Russia the restraint of their growth rate and the increase in the structure of the currency reserves of the share of the Chinese yuan are suggested.

Keywords — *international reserves; monetary gold; currency reserves; management of reserve assets; adequacy of official reserves*

I. INTRODUCTION

Under the conditions of the gold standard the international reserves were thought to be as a guarantee for a banknote emission. And although they encompassed also currency holdings they consisted mainly from the gold.

Within the period of the gold exchange standard the diversification of the asset reserves due to the increase in their structure of a share of foreign currencies and also the widening of their functions took place. During this period the monetary authorities of separate countries started using them

for the regulation and support of the rate of national currencies.

Even more considerable changes took place in the composition and role of the official reserves after the establishment of the Jamaican currency agreement. At present moment the international reserves besides the monetary gold and currency holdings include a reserve position in the International Monetary Fund and also the governmental accounts denominated in SDR. The necessity of international reserves in modern conditions arises both in the countries with any type of a fixed and managed float of the national currency. The contemporary transactions of central banks concerning the purchase and sale of international currency reserves are connected with the maintaining of the rate of the national currency guaranteed by the monetary authority by means of its fixation to a foreign (regional) currency and also at the prevention of its sharp fluctuations at the floating currency rate. The need of their accumulation is also determined by the necessity of the support of the banking sector under the conditions of the liquidity crisis. Besides a sufficient volume of the reserve assets guarantees the implementation by the country of the international financial and foreign trade obligations and it characterizes the solidity of its financial position.

At the beginning of the XXI century the volume of the international reserves in the world grew at a fast pace. Thus only for the period 2000-2007 it grew 3.3 times to 7527.7 billion US dollars. After the global economic crisis the growth of international reserves decelerated and in 2008-2016 made up 1.5 times. As a result their total volume in the world reached 12226.1 billion US dollars [1].

A favourable economic situation contributed to a fast accumulation of reserve assets also in Russia. And although a constant trend was not observed in the dynamics of its volume

Russia is among the countries possessing a significant amount of official reserves.

However the created reserve assets in its essence present a part of national savings diverted from the economy.

Thus the monetary authorities of every country face the goal of the management of the official reserves taking into account the following circumstances. Before all it is the necessity of the creation of the reserve cash assets of such volume and structure which would be as a safety in case of crisis situations. Besides it is necessary to avoid the situation of the creation of excess reserves by means of the reduction of the volume of investment resources in the country.

The theoretical and practical questions connected with the creation and management by monetary reserves are studied by both foreign and Russian scientists.

The dynamics and the structure of the reserve assets in the world is analyzed by T. Green [2], A. Horii [3], and also by J. Horne and D. Nahm [4].

The changes in the functions of the reserve assets in modern conditions is studied by the Russian researcher A. V. Navoi [5].

The critical assessment of the approaches to the assessment of the adequacy of international reserves created by the current moment is presented in the paper of E.A. Leontieva and S.S. Narkevich [6].

The study of the practice of the official reserves management in Russia is made by such national scientists and experts like A.V. Navoi [5], G. Fitsov [7], D. Klimov [8], M. Malkina [9] and others.

Meanwhile there is no common opinion about an optimal volume and structure of the reserve assets of Russia. This situation encourages the additional research of this question.

The aim of this research is the analysis of the contemporary practice of the management of reserve assets in Russia and also the suggestion of the measures for its improvement.

II. MATERIALS AND METHODS

In the paper the analysis of the Russian practice of the management of international reserves is carried out in two main directions:

- volume management;
- diversification of the structure.

The analysis of the adequacy of the cash assets of Russia is made on the basis of the indices which are used independently from the currency rate regime used in the country:

- percentage ratio of international reserves to the GDP,
- coefficient of the import coverage.

It is worth mentioning that the International Monetary Fund at the calculation of the minimal necessary amount of international reserves for a country takes into account two more relative coefficients: coefficient of the provision of the

monetary base in the national currency by reserve assets and the ratio of the international reserves to a short term external debt of a country.

The first index is calculated in the countries where the currency management exists i.e. the monetary authorities are obliged to convert the national currency and coins into a foreign currency at a fixed rate. That's why for a normal functioning of such a regime of a currency rate it is necessary to have an amount of official reserves that would fully supply the monetary base in a wide sense.

In Russia the regime of the floating currency rate is used. The Bank of Russia does not have any obligations concerning the exchange of the Russian ruble into foreign currencies at a fixed rate. That's why the necessity of the analysis of the coefficient of the provision of the monetary base by international reserves does not exist.

The ratio of the reserve assets with a foreign liability is as a rule considerably studied in the countries where the currency and financial crises are often related with the growth of the unsecured external debt including the short term one. The amount of the foreign liability of Russia in the whole and also its short term and long term constituents over the last ten years did not have a constant trend. Nevertheless Russia makes payments in a timely manner both of the principal and the interest for its servicing. In this respect the assessment of this index in this paper is not carried out.

The analysis of the structure of the reserve assets of Russia is made in two directions: their division into the currency and the gold and also the selection of separate currencies for their inclusion into the currency reserves.

The assessment of the obtained results is made on the basis of the comparative analysis with the use of the values of analogous indices of different groups of countries.

The empirical base of the research became the statistical data published by the Bank of Russia, International Monetary Fund (IMF), World Gold Council.

III. RESULTS AND DISCUSSION

A. *Dynamics of the international reserves*

The growth of the volume of the reserve assets in Russia started in early 2000s. During the period 01.01.2000–01.08.2008 their volume grew almost 48 times and made up 596.6 billion US dollars. Later their dynamics was not always positive. Nevertheless during recent years Russia is stably among the ten countries possessing the largest volumes of international reserves. By 01.01.2017 the Russian Federation accumulated 377.7 billion US dollars, what corresponds to the 8th place in the world (Table 1).

By the present moment the widely accepted standards of an optimal volume of international reserves do not exist. Their low level can become the reason for the situation that in a moment the country will not be able to cover the needs of the country at the expense of imports or will not be able to service its obligations of foreign creditors. At the same time the

availability of reserves in excess of an optimal level leads to a reduction of the investment potential of a country.

As different countries vary from one another in its size, the absolute value of the official reserves cannot be an objective criterion of their importance for the national economy. That's why for the assessment of their scale the relative indices are used.

One of them is the percentage ratio of the international reserves to the GDP showing how long a country can exist at a completely destroyed (not functioning) national economy assuring an earlier standard of living using the accumulated reserves [8].

As a rule in the developed countries with a floating currency rate the volume of the reserve assets to the scale of the economy is still low [5]. Among 10 country leaders in accordance with the volume of their official reserves the USA have this index at the level of 2.2% (Table 1). However there are exceptions. Thus in Switzerland such a ratio is 102.5%, and in Japan it is almost 26%.

A high volume of international reserves in reference to the GDP is typical of the countries with an emerging market and developing countries where the regime of the national currency exists and this regime is different from a floating one [8]. For instance, in the Saudi Arabia, Taiwan (China) this ratio makes 86 and 87% correspondingly.

TABLE I. Absolute and relative volume of international reserves in countries leaders in accordance with the volume of the accumulated reserves by 01.01.2017.*

Country	International reserves		Ratio of reserves to the GDP		Adequacy of reserves	
	In billion US dollars	Rank according to the volume	%	Rank according the value of the international reserves to the GDP	In months of the imports	Rank upon the adequacy of reserves
China	3098.6	1	27.2	18	19	4
Japan	1216.9	2	25.7	21	19	5
Switzerland	679.4	3	102.5	2	23	2
Saudi Arabia	547.4	4	85.8	4	34	1
Taiwan (China)	450.0	5	86.7	3	18	6
USA	406.7	6	2.2	66	2	56
Hon Kong	386.2	7	122.2	1	8	21
Russian Federation	377.7	8	29.2	16	17	7
Korea, republic	370.2	9	26.4	19	19	9
Brazil	365.0	10	20.6	29	22	3

*The assessment of the gold reserves in the reserve assets of the countries [China, Republic of Korea, Saudi Arabia, USA, Taiwan (China)] is made according to a market value considerably differing from the national one. In other countries the national assessment of the gold used for the accounting purposes in the whole corresponds to the market one.

Made on the basis of: [10].

The countries which faced over recent years the problems at the currency market generated by a sharp change of the volumes of the export revenues, limitation of the access to international capital markets also have considerably high volumes of international reserves. Such countries are the states which suffered from the financial crises in late 1990s or early 2000s for instance Hon Kong, Republic of Korea and others [8].

In Russia the regime of the floating currency rate is used and this type of regime does not require significant volumes of official reserves.

Meanwhile its narrow export diversification in case of lowering of world prices for the exported goods increases the risk of the considerable shortage in the account of current transactions. In such situations the use of international reserves can allow counteracting to external shocks of the balance of payments. This fact explains a high absolute volume of reserve assets in Russia and also their percentage ratio to the GDP (29.2%) by 01.01.2017 (16th rank in the world).

As a traditional criterion of the adequacy of reserve assets the coefficient of coverage of imports by exports is used. The author of this approach to the assessment (Triffin R.) of the volume of international reserves initially spoke about the necessity of the coverage of the yearly volume of payments abroad by asset reserves. For the moment it is thought that the volume of the official reserves should exceed its three month volume calculated as an average mean from the volume of the import receipts taken monthly [6]. It is meant that during three months the country needs to adapt itself to the shock of the balance of payment and to replace the imported goods by national goods and services.

The value of such an index in Russia constantly grew from 2000 to a global financial crisis of 2008-2009 and made up in 2008 20.4 months. Later it did not have a stable trend but still remained high. In the beginning of 2017 the volume of the international reserves covered the import taken for 17 months [10]. In compliance with this criterion the excess of the international reserves made up 311.1 billion US dollars.

B. The structure of cash reserves of the Russian federation

At present moment two approaches for the creation of the structure of international reserves are used [7]. One group of countries has considerable reserves of the international reserve assets the largest part of which consists of currency reserves and the share of gold herewith remains insignificant. This group comprises mainly the countries with the emerging market and the developing countries. The share of gold in reserve assets of this group of countries in the beginning of 2017 was 3.9%. In Taiwan (China) it made up 3.7%, in Saudi Arabia it was 2.5%, in China it was 2.4%, in Brazil it was 0.7%. Similarly the reserve assets of some developed countries were created. For instance, Japan occupied the 2nd rank in compliance with this parameter among all countries of the world. However the share of the gold in them kept at a relatively low level of 2.3%. In the structure of the international reserves (3rd rank in absolute volume) the share of gold makes 5.7%.

Another group of countries considerably yields to the first group in the absolute volume of the official reserves. However in their structure the monetary gold has a significant share. Such an approach for the formation of the reserves has its explanation. The quantity of the currency in reserve assets is not expected to be great than it is determined by a current need of the country for the implementation of short term transactions. The gold is a highly liquid asset possessing its own value. Despite the absence of a direct relation between the supply of a national currency and gold reserves and despite an official demonetization of gold it is still used as extraordinary world money under the conditions of the worsening of the geopolitical situation and under crisis situations. The gold can be sold at the exchange of any currency. A country can get an international loan using gold as mortgage or via swap transactions can get currency at the disposal of a government for a period [11]. And finally the gold reserve assets are subject to a political risk to a lesser degree. The gold cannot be frozen at the accounts in foreign banks as it is possible only in theory. At the same time the blocking of the currency reserves of separate countries is carried out in practice.

In compliance with this approach the official reserves of the most part of the developed countries were formed. Thus the share of the gold in their total volume by 01.01.2017 made up 15.8%. The leaders of the world economy have even a higher ratio: in the USA it was 74.5%, the European economic and currency union (including the European Central bank) had 53.8%. In some countries it was even higher. In Germany it exceeds 69% and in France it was more than 64%, in the Netherlands it makes 64% [10].

The gold cash reserves of Russia have a positive dynamics both in absolute and in relative terms. For a decade from 2007 to 2016 the volume of the monetary gold in Russia increased more than 4 times and made 1615.2 tons. The USA (8133.5 tons), Germany (3377.6 tons), Italy (2451.8), France (2435.8 tons) and China (1842.6) have even larger gold reserves.

The share of gold in the total volume of reserve assets of Russia considerably grew. The goal of the increase of the share of gold holdings in the structure of the international reserves till 10% was announced by the Bank of Russia still in early 2000s (2004) [11]. By that moment the share made about 4%. However later till the middle of the year 2007 it reduced and reached the minimal value of 2.1%. Its constant growth started only since 2009. This ratio reached the level of 10% only by the end of 2014. In total for the period of 2009-2016 the share of the monetary gold in the total volume of the international reserves grew more than by 3 times and reached the level of 15.8% in 2016. By this value Russia ranks the 19th among other countries of the world. (Figure 1) [1].

Despite the growth of the share of gold in the structure of gold holdings of Russia, its currency constituent is still exposed to an inflationary depreciation, currency rate, credit and political risks. The justification of this fact is the following. Only during the latest 10 years the correction of the rates of foreign currency respectively to the US dollar in 2008, 2010, 2011, 2014-2016 showed a negative impact on the dynamics of currency holdings of the Bank of Russia [12].

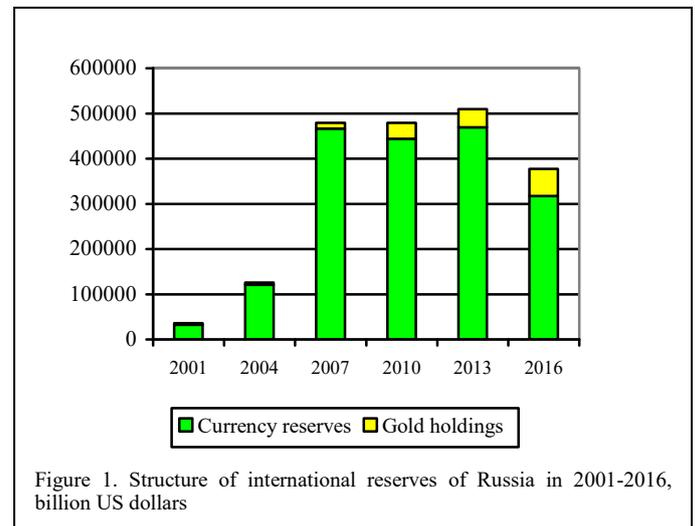


Figure 1. Structure of international reserves of Russia in 2001-2016, billion US dollars

C. Distribution of currency reserves into different currency groups

Distribution of currency holdings of Russia groupwise corresponds to the requirements set by the IMF to their safety, liquidity and reliability. In compliance with these requirements it is necessary to place the currency holdings (consisting first of all from liquid and marketable currency holdings) in the markets having considerable capacity and liquidity and also capable of providing the transactions by means of a secure and efficient way. For the assurance of the liquidity of these holdings and their free use in the trade finance it is reasonable to hold them as the claims to the non residents in the convertible foreign currencies [4].

The implementation of such requirements implies the use for the creation of currency holdings of different countries of the world of mainly freely usable currencies (US dollar, euro, yen, pound sterling, Chinese Yuan).

The results of the works of J. Frankel [13], a conjoint paper of B. Eichengreen with D. Mathieson [14], and also the research of study made by E. Papaioannou, R. Portes, G. Siourounis [15] show that the determinants of the choice of foreign monetary units in the process of the formation of currency reserves of different countries of the world are the fundamental macroeconomic indicators such as the share in the world production and exports, the level of the inflation in the country and groups of countries issuing them, stability of their currency rate.

The largest producer in the world economy is the United States. They accounted for almost 25% of the world production of commodities. The European economic zone which was created in 1999 became a serious rival to the USA upon the share of the country in the world production and it had 15.5% in 2016. Besides the value of this coefficient considerably grew in China and in 2015 China had almost the same ratio as the European zone. Japan and Great Britain rank 4th and 5th upon the intensity of the participation in the creation of the world GDP (6.4 and 3.4% correspondingly) [16].

At present time among all the countries of the world and their associations issuing their own currencies the European economic zone occupies the leading position upon the share in the international trade. Its contribution into the world export made up 26% in 2016. It considerably advances China upon this coefficient (2nd rank in the world, more than 13% in 2016) and the USA (3rd rank, more than 9% in 2016). The volume of the world exports of Japan and Great Britain was considerably lower and in 2016 it made up 4.0% (4th rank for Japan) and 2.6% (7th rank for Great Britain) [17].

The variability of the rates of modern freely usable currencies in recent decades was not significant [18].

The requirements of the IMF and also the factors determining the choice by the monetary authorities of countries and regions of the world of the monetary units for the creation of currency reserves predetermined the dominant use of the world currencies for this goal.

The data published by the IMF about the structure of the currency reserves in the world evidence the domination of these monetary units in the official sector. The share of the American dollar in recent decades is reducing but still remains the dominating currency (65.3% of the total volume of the open currency reserves in the world). The euro remains the second monetary unit upon importance in the creation of the currency reserves in the world. Its share made 19.1% in 2016. The Japanese yen and pounds sterling accounted for 3.9% and 4.3% of the international reserves correspondingly, the Chinese yuan accounted for 1.1% of the reserve holdings. Besides the world currencies the IMF also calculates currency holdings in Canadian and Australian dollars, Swiss francs. In 2016 the currencies mentioned above accounted for 1.9%, 1.7% и 0.2% of the international reserves in the world correspondingly [19].

The information about the composition of currencies in the currency holdings of separate countries is as a rule confidential. However the available statistical aggregates show the domination of the American national currency in the structure of currency reserves of separate group of countries. According to this data in early 2015 the countries with the emerging markets and the developing countries kept 67.7% of their currency reserves in US dollars, 18.3% in euro, 4.6% in pound sterling, 2.8 in yen. The currency reserves of the developed countries mainly consist of the US dollars and the euro. Thus, during the 1st quarter of 2015 these monetary units accounted for 64.4 and 21.6% of international reserves correspondingly. The yen and pound sterling accounted for 4.7 и 3.1% [19].

The distribution of different currencies in the currency holdings of the Bank of Russia is analogous to the world practice (Table 2). However it is worth paying attention to a higher share of euro (35.1% in 2016) in comparison with the world practice. Such a situation is quite explainable by the significance of the countries of the European Union in the foreign trade of Russia. Even though over recent years their share has a negative dynamics but still the countries mentioned above remain the leading trading partners. In 2016 the countries of the European Union accounted for 43% of the foreign trade turnover of the Russian Federation [20, 21].

TABLE II. The structure of currency reserves of the Bank of Russia in 2007-2016, %*

Currency	2007	2010	2013	2016
US dollar	47,0	45,9	45,4	47,7
Euro	42,0	45,2	41,1	35,1
Pound sterling	10,0	9,2	9,2	9,1
Japanese yen	1,0	1,6	–	3,1
Canadian dollar	–	0,8	3,2	3,8
Australian dollar	–	–	1,1	1,1
Chinese yuan	–	–	–	0,1

* 2007-2013 – data for the 4th quarter. 2016 – data for the 3rd quarter of the year

Made on the basis of: [12].

Since the 4th quarter of 2015 the Bank of Russia started the transactions with assets in the yuan. China is one of the main foreign trade partners of the Russian Federation. Its share in the foreign trade turnover of Russia over 10 years grew almost 2 times and made in 2016 more than 14% [20]. Taking into account this circumstance we suppose that the share of the Chinese national currency in the currency reserves of the Bank of Russia remains low.

IV. CONCLUSION

The improvement of the management practice by international reserves of Russia in our opinion it is practical to regulate the international reserves of the country in the following directions.

A.

Taking into account a high percentage relation of the international reserves of Russia with the scale of the economy and also their significant excess in compliance with the coefficient of import coverage it is reasonable to limit the further increase of reserve holdings. For a national economy it is more efficient to use financial resources for the increase of the imports of the high technology goods, new technologies and industrial equipment etc.

B.

For the diversification of the structure of the international reserves and also the reduction of the inflationary, currency and political risks it is indispensable to increase the percentage of gold holdings in their total volume.

C.

Taking into consideration an important role of China as a foreign trade partner of Russia and a relative stability of the rate of the Chinese national currency it is practical to increase the share of the yuan in the foreign currency holdings of Russia.

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