## Ministry of Education and Science of Ukraine Ukrainian-American Concordia University

Department of International Economic Relations, Business & Management

## Bachelor's Qualification Work

## **Currency Wars in the Competitive Strategy of Open Economies**

(on the basis of Baroque Style (ASP) Ltd.)

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#### Abstract:

Currency wars are attempts of two or more countries to improve their competitive position among other countries by devaluing their national currencies. For each country, devaluation provides at least a temporary value advantage that increases the competitiveness of domestic firms. The aim of this paper is to study the role and significance of currency wars for the formation of competitive strategies of open economies. The main tasks are to identify the role of currency competition in today's globalized world, to investigate the historiography of unleashing the currency wars, to establish cause-and-effect relationships in the process of currency wars, to analyze international monetary relations as integration and competition at the macroeconomic level, to reveal the problems of modern currency wars formation, and to investigate the international practice of preventing the currency wars.

This work deeply analyses currency wars from a theoretical perspective, looks at ways current currency competition has impacted business development, studies the historiography of three currency wars and suggests ways of preventing their formation in the framework of competitive economies.

Keywords: currency war, exchange rate, competitive economies, dollar, euro.

Валютні війни — це спроби двох або більше країн покращити свої конкурентні позиції серед інших країн шляхом девальвації своїх національних валют. Для кожної країни девальвація забезпечує принаймні тимчасову перевагу у вартості, що підвищує конкурентоспроможність вітчизняних фірм. Метою даної роботи є дослідження ролі та значення валютних війн для формування конкурентних стратегій відкритих економік. Основними завданнями є виявлення ролі валютної конкуренції в

сучасному глобалізованому світі, дослідження історіографії розв'язання валютних війн, встановлення причинно-наслідкових зв'язків у процесі валютних воєн, аналіз міжнародних валютних відносин як інтеграцію та конкуренцію на макроекономічному рівні, розкрити проблеми формування сучасних валютних війн, та дослідити міжнародну практику запобігання валютним війнам.

Ця робота глибоко аналізує валютні війни з теоретичної точки зору, розглядає способи впливу поточної валютної конкуренції на розвиток бізнесу, вивчає історіографію трьох валютних війн та пропонує шляхи запобігання їх появі в рамках конкурентних економік.

Ключові слова: валютна війна, курс валют, конкурентоспроможна економіка, долар,  $\epsilon$ вро.

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## TASK FOR BACHELOR'S QUALIFICATION WORK

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1. Topic of the work

Currency wars in the competitive strategy of open economies (on the basis of Baroque Style (ASP) Ltd.)

Supervisor of the work

Associate professor, Dr. Nataly Amalyan

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- 2. Deadline for bachelor's qualification work submission "16" May 2022
- 3. Data-out to the bachelor's qualification work

Materials received during the internship and consultations with the representatives of Baroque Style (ASP) Ltd

- 4. Contents of the explanatory note (list of issues to be developed) There are three main tasks for the thesis:
  - to analyze theoretical foundations and reasons foe currency wars,
  - to research macroeconomics of currency wars, paying special attention to methods and implementation practices currency wars and develop recommendations for improving the international monetary system

5. List of graphic material (with exact indication of any mandatory drawings)

To design tables, demonstrating: Elements and procedure for regulating the world monetary system in competitive conditions and Share of currencies in the turnover of the world currency market (in % of the average daily turnover); to draw a Figure reflecting Dynamics of the official exchange rate and the exchange rate calculated at purchasing power parity of US dollar / yuan

6. Consultants for parts of the work

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7. Date of issue of the assignment

#### Time Schedule

No	The title of the parts of the bachelor's	Deadlines	Notes
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1.	I chapter	14.02-13.03.2022	
2.	II chapter	14.03-10.04.2022	
3.	III chapter	11.04-24.04.2022	
4.	Introduction, conclusions, summary	25.04 - 01.05.2022	
5.	Pre-defense	06.06.2022	

Student		
	(signature)	
Supervisor		
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Conclusions: The bachelor qualification work was designed according to the requirements: it contains all necessary parts of scientific research with the practical recommendations. Too much attention was paid to the historiography of the first, second and third currency wars at the expense of insufficient volume of the analysis of the company Baroque Style (ASP) Ltd. Nevertheless, causal relationships in the processes of currency wars and International practice of preventing currency wars were highlighted and the practical recommendations were formulated correctly.

Supervisor

(signature)

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#### INTRODUCTION

At the beginning of the 2000s at a G20's finance ministers and heads of central banks summit in Gyeongju, South Korea, an issue regarding a coordinated monetary policy was addressed. The final communiqué stated that countries would refrain from competitive devaluations of national currencies. This statement was made against the background of rumors that are constantly being discussed about the resolution of currency wars by developed countries against each other and developing countries. Officials from the United States, the European Union, and Japan are making a lot of effort convincing everyone that there is no cause for concern and no evidence of such wars. However, many questions remain on the agenda: what are currency wars, what are the goals, methods and consequences of their conduct and most importantly - why is the problem of currency wars became so relevant nowadays?

Currency wars can be resolved only by the state, and its actions aimed at regulating the external flow of goods and capital, help in devaluing national currency. In this case, the devaluation leads to more expensive imports and reduction of its volumes, cheaper exports and its growth, resulting in an increase in aggregate demand and gross domestic product (GDP). Currency wars are attempts of two or more countries to improve their competitive position among other countries by devaluing their national currencies. For each country, devaluation provides at least a temporary value advantage that increases the competitiveness of domestic firms. Firms can either keep the prices of their products in the national currency and reduce them in foreign currency, or raise prices in the national currency and use the increase in income to improve the quality of their products. Any country can maintain an advantage of this kind only until the next competitor devalues its currency.

Any war is based on the long-standing contradictions between the parties, which

transform into an antagonistic conflict. It can be solved by destroying the structures of the participants or the refusal of all parties to participate in the conflict. A special type of conflict is economic confrontation, when some countries seek to have material, labor, credit, financial and other resources, and use them to the detriment of others. The primary cause of economic conflicts is the limited factors of production, the number of which within one system with existing technologies is constant. The desire of at least one structural unit to improve its resource position at the expense of others leads to a violation of a certain balance.

Globally, when several countries simultaneously implement the use of undervalued national currencies to stimulate exports of goods and services, restrain imports, balance trade and balance of payments, and stabilize the general economic situation in their country, currency war immediately gains momentum. This term came into circulation in 2010, when Finance Minister of Brazil, Guido Mantega, said that leading Western countries have launched a currency war against the Brazilian real, which strengthened by 30% against other leading world currencies in 2009-2010. The Brazilian minister stressed that this is not the result of a spontaneous market game, but a conscious policy of countries issuing world currencies. Apart from Brazil, many other countries have become victims to such currency war, and in October 2010, IMF Executive Director Dominique Strauss-Kahn warned about the threat of a global currency war. This case proved that currency confrontations have lost their relevance, but are also gaining new shape in macroeconomics.

The aim of this work is to study the role and significance of currency wars for the formation of competitive strategies of open economies. In accordance with the goal, the following tasks were formed:

- 1. Identify the role of currency competition in today's globalized world.
- 2. Investigate the historiography of unleashing of the first, second and third currency wars.
- 3. Establish cause-and-effect relationships in the process of currency wars.

- 4. Analyze international monetary relations as integration and competition at the macroeconomic level.
- 5. Reveal the problems of modern currency wars formation.
- 6. Analyze the currency war between China and the United States.
- 7. Investigate the international practice of preventing the currency wars.
- 8. Give recommendations for improving the international monetary system.

The object of the study is currency wars and their impact on competition between countries at the macroeconomic level.

The subject of the study is causation, methods of conducting and recommendations on the possible avoidance of currency wars between the leading players in macroeconomic relations.

In the process of research, a number of general scientific and specific methods were used, including: *structural and functional analysis* – the formation of the vision of currency wars as a multifaceted, systemic phenomenon that has various manifestations; *historical and legal* – the disclosure of the genesis of currency wars, legislative and other state means of overcoming it, as well as the implementation of the study of international law; *dialectical method* – used in the analysis of the concept of "currency war"; *expert assessments* – formulation of conclusions on measures to prevent and combat currency wars; *method of observation* – the direct perception of social, economic and political processes, related to currency wars in society; *study of documents*, media and NGOs *reports*, including Transparency International, as well as reports of the Ministry of Economy, European Union institutions and the World Bank as sources of information which allowed to identify the key areas and problems in preventing and combating currency wars as part of economic and social development.

Scientific novelty of the obtained results is demonstrated by the comprehensive investigation of the impact of currency wars on the process of social and economic development of the world through the implementation of prevention and response measures at the macroeconomic level.

The work consists of an introduction, three sections, conclusion, a list of references.

## CHAPTER 1. THEORETICAL FOUNDATIONS AND REASONS FOR CURRENCY WARS

## 1.1. Currency competition in today's globalized world

There are two most widely used currencies in the world: the US dollar and the euro. This situation is due to the influence of three key factors: the logic of market competition, the strategic advantage of national governments and the projected technological development. If we consider the logic of market competition, these currencies dominate primarily because of their attractiveness to market participants with different financial goals. The main signs of competitive attractiveness of the currency on the international trading platform are familiar to experts and indisputable. They are distinguished by three features [1].

Firstly, the general confidence in the future value of the national currency, supported by the stability of the economy of the issuing country/union. In fact, this means a proven track record of low inflation. High and fluctuating inflation rates complicate the process of obtaining information about the situation and direct forecasting of prices. Currency is expected to be accepted for international or domestic use, if its purchasing power can be predicted with a certain degree of reliability.

Secondly, the attractiveness of the currency as a means of circulation and reservation is determined by such qualities as "exchange convenience" and "confidence in capital", i.e. the degree of business liquidity and reasonable predictability of asset value. The key to both qualities is a number of well-developed financial markets, open enough to guarantee full access to them by foreigners. Such markets should not be burdened with high operating costs, formal or informal barriers, i.e. affordability is a way of large-

scale activity. Attractiveness also consists of a wide range of instruments available for short-term or long-term investments, and the availability of deep and flexible, full-fledged operational secondary markets that meet all financial requirements.

Thirdly, the reputation of the currency is created by the presence of a wide business network. This represents a significant share of the economy in world GDP as well as in international trade. A large economy creates a natural and convenient environment for the movement of currency. Savings increase due to the scale of activity if the country issuing the currency is a major player in the world market. The greater the volume of transactions conducted by this country, the greater the potential external effect will be obtained as a result of the use of its national currency by the business network. The considered signs allow to draw a conclusion that at present there is no candidate with a certain chance in the near future to challenge the main roles assigned by the business network of the US dollar and the euro.

Currency competition creates the conditions for geopolitical confrontation between historical allies. Europeans, as expected, do everything possible to raise the status of the euro as an international currency. Currently, the euro is the only currency that can be an alternative to the US dollar. However, overcoming the benefits of the US dollar worked out over the years is quite difficult. The American currency, even in the European region, threatens the euro, given the attractiveness of the US dollar that occurred due to long-term international application [2].

Eurozone countries remain vulnerable during fluctuations in the euro exchange rate against other currencies exchange rate. Problems in the economies of some eurozone member states have affected the competitiveness of the euro. In order to restore the stability of the euro, debt securities were issued, which somewhat improved the state of the EU stock market.

Lacking political support, eurozone member states cannot develop an effective strategy to address the mismatch between the single currency area (across the whole eurozone) and the ability of individual states to regulate the monetary and financial sphere (countries within the euro area have no control over euro circulation). The euro is a

currency without a country, a product of an intergovernmental agreement, rather than an expression of a single supreme power. Thus, the abilities of individual countries to eliminate existing financial imbalances in their national economies are significantly limited. Currently, the issue of creating a single authorized body to circumvent this legal and technical obstacle is being considered. The dominance of the US dollar remains unchanged in categories such as foreign currency trading and banking. However, the global position of the US dollar may weaken under the weight of balance of payments deficits and rising foreign debt of the country. The position of the US dollar in the global foreign exchange market strengthening in the medium-term perspective is unlikely [3].

Thus, the global financial crisis, problems in the national economies of the United States and some eurozone member states are likely to lead to mutual restrictions in the struggle for influence on international financial markets and reduction of the shares of leading world currencies in international settlements. In the future, it is possible that competitors of the US dollar and the euro will strengthen their positions in international currency markets. The role of the British pound, the Japanese yen, the Swiss franc, the Chinese yuan and other BRIC countries' currencies may be strengthened. The US dollar cannot remain the world's currency equivalent. However, there is currently no national currency that can replace the US dollar in international settlements. Weaknesses of the euro at this stage are obvious, as in other potential contenders. The probable path is the emergence of a global currency, able to effectively perform the basic functions of world money [4].

Currency competition is a set of economic currency relations for transactions carried out in the currencies of different countries in the economic system of individual countries, regions or the world market in order to capture and maintain long-term high competitive positions. The development of international competitive monetary relations at the globalized world level is due to the division of labor, the creation of capital markets and various financial instruments, and the evolution of means of production and labor. The state of international monetary relations, on the one hand, depends on the development of the world economy, political and military-political situation in the world, on the other

- the state of the economy and political system of individual states.

In the context of globalization of world economic relations, the flows of national and foreign capital of different states are increasingly intertwined. Economic and currency crises and unfavorable trends in the dynamics of world currency markets have a negative impact on the state of exports and imports, the investment climate, the development of the securities market of countries involved in the international division of labor. Positive trends in the global foreign exchange market stabilize international trade, effective development of industries, investment in the economy of many countries and, as a result, provide a positive balance of payments [5-7].

Over time, international monetary relations have acquired certain forms of organization in the form of monetary systems of individual states, their regional associations and the world monetary system. At each of these levels, relationships are built that can be called competitive. At the same time, competition can be both fair and shady. The "Modern Economic Dictionary" gives the following definition of the currency system: "Currency system is a set of currencies, rules and regulations for their use and mutual exchange, use as a means of payment, as well as monetary relations related to currency" [8]. The currency system is a form of organization of currency relations at the national, regional or global level and is a part of the economic system of a state, group of states in one region or the world economic system.

The national monetary system can be defined as a form of organization of monetary relations of the country, enshrined in national law, which takes into account interstate agreements. The national monetary system is a component of the monetary and payment systems of any state, but has a number of features. The national monetary system goes beyond domestic economic relations and interacts with the monetary systems of other countries, and thus depends on the internal state of the economy (e.g., monetary policy, currency restrictions, international settlements, international lending) and foreign economic factors (e.g., devices of the monetary system, the impact of international institutions on foreign exchange liquidity, etc.) [9].

In the twentieth century, we observed a tendency of uniting the monetary systems of

individual states and creating currency unions. Thus, the European Economic and Monetary Union now has not only a single monetary policy pursued by the European Central Bank, but also a single currency in 19 European countries – the euro. In this case, we can state the fact of the creation of a regional monetary system, which includes monetary relations between a group of states bound by mutual agreements, and is a set of national monetary systems, each of which is part of the regional monetary system.

The regional monetary system can be considered more stable than the national one, as it is based on a single interstate currency regulation and currency control of a group of countries. On the other hand, within the regional monetary system there is no currency restrictions system between the participating countries.

The world monetary system is a form of organization of international monetary relations, due to the historical development of the world economic system and enshrined in international agreements. Most often, the competitive wars take place at the level of the world monetary system, where two to three independent entities with their own monetary systems take part. It should be noted here that currency wars are formed and implemented as an accompanying element to maintain the competitive strategies of both states and unions; herewith, the currency war is not an independent element but always accompanies political decisions or long-term strategic measures [10-11].

The world monetary system began its formation in the XIX century. Its stability depends on the compliance of the principles of its functioning with the needs of the world economy. With changes in the world economic system, the world monetary system must also undergo appropriate adjustments. If this does not happen and the old principles of the world monetary system hinder the development of the world economy, it leads to its crisis and the feasibility of creating a new competitive world monetary system. As we know, the world monetary system has gone through four stages of its formation. The transitions from stage to stage were caused by global economic and currency crises, accompanied by changes in the military and political situation [12].

The world monetary system is a set of interconnected national and regional monetary systems. This connection is made through central banks, which conduct national and

regional monetary policy and participate simultaneously in the development and implementation of international monetary policy and the organization of interstate monetary regulation. The monetary system as a form of organization of monetary relations involves the presence of subjects and objects of these relations, tools and the ultimate goal of management, which are specific depending on the type of monetary system. The subjects of currency relations are their participants and regulatory authorities.

Participants can be individuals, legal entities in the form of enterprises of various sectors of the economy and forms of ownership, financial institutions, the state and others. Participants in foreign exchange relations, depending on their impact on the situation in the foreign exchange market are divided into two categories. The first category is active participants, or market makers, which are central and commercial banks, multinational companies that constantly operate in the foreign exchange market, their activities influence the supply and demand for currency in the current period and in the future. For example, the Central Bank carries out foreign exchange interventions in the domestic foreign exchange market in order to protect and ensure the stability of the national currency from the competitive influence [13]. The European Central Bank, for example, has the same functions.

The second category is passive participants which are commercial banks, legal entities and individuals who conduct foreign exchange transactions and do not affect the state of the foreign exchange market as a whole.

Regulatory bodies are the bodies of currency regulation and currency control within the relevant monetary system – central or national banks and the government, as well as international monetary and financial institutions.

The objects of currency relations are: exchange rate formation mechanisms and exchange rate modes; terms of conversion, currency restrictions, international loans and settlements, investments; the procedure for the participation of foreign capital, etc. The ultimate goals of managing monetary relations within the monetary system are its stability and positive impact on macroeconomic indicators, i.e. growth of gross

domestic product, gold and foreign exchange reserves, foreign investment involvement, expanding export-import operations and more.

Different levels of monetary systems differ in the degree of coverage of monetary relations, the level of goals and mechanisms for achieving them. The main components of the world monetary system are presented in Table 1.1.

Table 1.1 – Elements and procedure for regulating the world monetary system in competitive conditions

Element	Characteristic		
Subject	International organizations and financial institutions; governments,		
	national banks, credit institutions, legal entities and individuals		
Object	Exchange rate of reserve currencies and international units of account,		
	credit and settlement operations, modes of movement of foreign capital		
	between countries		
	The procedure for regulating currency relations		
exchange rate	Regulation of exchange rate modes and international units of account. In		
mode	any mode, the exchange rate can be set using the mechanism of		
	currency management or currency basket		
conversion	Conditions of mutual convertibility of major world currencies.		
conditions	Currency convertibility is associated with the transfer of one currency to		
	another, with the possibility of exchanging national currency for the		
	currency of other countries not only in the domestic but also in the		
	global foreign exchange market		
currency	Interstate regulation of currency restrictions.		
restrictions	Currency restrictions are traditionally imposed in order to stabilize		
	currency relations during the economic crisis		
organization of	Unified rules for international settlements, credit transactions,		
international	investment of foreign capital		
settlements,			
lending and			
investment			
regulation of	Interstate regulation of international currency liquidity is carried out by		
international	the International Monetary Fund (IMF)		
currency liquidity			

Source: [14]

Thus, as already mentioned, the subjects are divided into participants in monetary relations and regulators. The participants are governments, national banks and credit organizations of the countries worldwide, as well as legal entities and the population of the world community. The regulator for the world monetary system is, for example, the

IMF.

The objects of regulation in the world monetary system are the exchange rates of reserve currencies - the US dollar, euro, pound sterling, Japanese yen and other freely convertible currencies; credit and settlement operations between states; modes of movement of foreign capital in the world economy, etc. Thus, international monetary relations are part of economic relations. Their peculiarity is that they arise during economic transactions with the currencies of different countries. The form of organization of monetary relations is the monetary system. As the movement of foreign currencies occurs both within a country, region and in the world economic system, there are national, regional and world monetary systems.

At the end of this section we can conclude that the monetary system is a form of organization of monetary relations at the national, regional or global level. Next we will study the stages of formation of the world monetary system and their characteristics.

## 1.2. Historiography of the first, second and third currency wars

The first "Currency War" (1921-1936). The First Currency War began spectacularly, in 1921, on the background of the recently ended World War I. It reached its unfinished end in 1936. The war was fought in several rounds on five continents and had a great impact on the XXI century. The first move in 1921 was made by Germany, which consisted of hyperinflation that was created purposefully in order to increase competitiveness. However, Germany has gone so far that it destroyed its economy which was already bent under the weight of preparing for war. Then France made a move, in 1925, using the devaluation of the franc before returning to the gold standard. As a result, it has gained an export advantage over countries such as the United States and Britain. In turn, these countries returned to the gold standard before World War II. England returned to the gold standard in 1931. [15]

Germany accelerated its development when President Herbert Hoover announced a moratorium on post-war debt payments. The United States made its move in 1933, devaluing the currency in favor of gold, thus regaining the advantage in exports. Finally,

France and England resorted to devaluation again. In 1936, France abandoned gold and became the last great power to emerge from the Great Depression, while Britain again used devaluation to catch up with the United States.

In the next round (after rounds of devaluations and defaults), the world's largest economies entered the war when they were at the bottom, undermining trade, production and wealth. The volatile nature of the international financial system of that period made the First Currency War a prime example for present time, when the world is once again threatened by large unpaid debts.

The First Currency War began in 1921 in the city of Weimar, German when the Reichsbank, Germany's central bank, prepared to destroy the value of German marks by printing huge amounts of money leading to hyperinflation. Inflation controlled by the head of the Reichsbank, Rudolf von Havenstein, was carried out through the purchase of government bills in order to provide the state with the money needed to subsidize the budget deficit and cover government spending. This has become one of the most destructive falsifications in the history of the economy. There is a myth that Germany deliberately destroyed its currency to avoid paying off the debts to Britain and France. However, these debts were pegged to "gold marks", characterized as a certain amount of gold or its equivalent in non-German currency, and the protocol of the agreement was based on the export ratio, expressed as a percentage, regardless of the value of the paper currency. These values, based on the amount of gold and exports, were not affected by inflation. However, the Reichsbank saw an opportunity to increase German exports by devaluing the currency to ensure the availability of its goods abroad and to promote tourism and foreign investments. Such funds would provide Germany with the necessary foreign currency to pay off its debts.[16]

The outflow of capital is traditional in response to currency depreciation. Those who had the opportunity to exchange German marks for Swiss francs, gold or other currencies did so, thus moving their savings abroad. Even the German bourgeoisie did not immediately notice the impending collapse, as the devaluation of the currency was offset by the revenue from the stock exchange. After all, those who worked in state-

owned and trade-union enterprises were insured against the crisis from the beginning, as the state paid a salary proportional to inflation. While hyperinflation was in full swing in Germany, other major countries sent representatives to the Genoa Conference in the spring of 1922 to consider the idea of returning to the gold standard. Until 1914, most states used the gold standard, in which paper currency was linked to gold reserves, which ensured the free circulation of both currency and gold. However, with the start of the war, most states abandoned such economic policies because there was a need to print money in large quantities. Then, in 1922, when the requirements of the Treaty of Versailles have been met and the debts paid off, the world was once again looking to return to the gold standard.

Irrespective of the establishment of a perfected gold standard, currency wars continued. In 1923, the French franc collapsed, although not as sharply as the German mark collapsed. This collapse immediately paved the way for the golden age of Americans who permanently lived in France in the 1920s, such as Scott and Zelda Fitzgerald and Ernest Hemingway, who told about the constant consequences of the collapse of the French currency to the "Toronto Star" newspapers. Americans could afford to live a more comfortable life in Paris by exchanging dollars for francs. [17]

However, gold was a big problem for the United States. In addition to official savings (in the Federal Reserve banks), gold was distributed in the form of coins and used by individuals as legal tender, and even stored as bars and coins in bank branches. This gold could be considered as money, but such as a tool that could only be stored and put into circulation. The Gold Reserve Act of 1934 also approved the establishment of a currency stabilization fund financed by proceeds from the confiscation of gold, which could be used by the treasury for change of the market exchange rate at its discretion, and other market operations. The Monetary Stabilization Fund is sometimes called the Treasury Bribe Fund because the money did not have to be owned by Congress as part of the budget process. The fund was widely used by Finance Minister Robert Rubin in 1994 to stabilize Mexico's short-term credit markets after the collapse of the peso in December of that year. From 1934 till 1994, the currency stabilization fund was little used, and almost no one knew about it, even in Washington's political circles. The

members of Congress who voted for its creation could hardly have imagined that they would help to cope with the crisis in Mexico sixty years after [18].

Britain's break up with gold in 1931 and the American devaluation against gold in 1933 had the expected effect. Both the British and American economies achieved immediate results from the devaluation, as prices stopped falling, money supply increased, credits began to expand, industrial production increased, and unemployment declined. The Great Depression was far from over, and these successes were so small compared to the big picture that businesses and people still had a long way to go. This was the first step, at least for those countries that have devalued against gold and other countries.

It is still difficult to assess the extent to which this imbalance and the wrong economic course contributed to the Great Depression. But it is clear that the failure of the gold standard has led many economists of our time to underestimate the role of gold in the international financial system. It would be appropriate to ask: was gold the problem? Or has the system been ruined by the price of it, which originated with nostalgia for the pre-war value combined with a low rate currency and incorrect interest rates? Perhaps a purer form of the gold standard rather than a mixed gold standard, as well as a more realistic gold price of \$50 per ounce (as in 1925), would help make the system deflationary and stronger [19].

The Second Currency War (1967-1987). Shortly before the end of World War II, the main economic powers of the anti-fascist coalition, led by the United States and Great Britain, began to develop a new monetary order. Everyone felt a desire to avoid the mistakes of the Treaty of Versailles and the period between the wars. These plans were implemented during the Bretton Woods Conference in New Hampshire in July 1944. As a result, a set of rules, norms and regulations, which shaped the world economy for the next three decades were put in appearance [20].

The Bretton Woods era, which lasted from 1944 till 1973, although interrupted by several economic downturns, was generally a period of financial stability, low inflation, low unemployment, and high real income growth. This period was almost the complete opposite of the First Currency War in 1921-1936. Due to the Bretton Woods

Conference, the international monetary system was pegged to gold through the use of gold to the US dollar by trading partners at \$35 per ounce. Other monetary systems in the world have switched to gold indirectly, fixing the exchange rate against the US dollar. The short-term lending to certain countries in conditions of foreign trade deficit was carried out with the help of the International Monetary Fund created by the Bretton Woods Agreement. Countries could devalue their currencies only with the permission of the IMF, and such a right would be granted only in cases of persistent trade deficits, accompanied by high inflation. Although the Bretton Woods Agreement was signed by many countries, the system was in fact governed almost exclusively by the United States: compared to the rest of the world, US military and economic power was at its highest, unprecedented until the collapse of the Soviet Union in 1991.

Despite the effectiveness of the Bretton Woods Agreement, the beginning of the Second Monetary War was already evident in the second half and late 1960s. Conventionally, the year of the Second Monetary War can be called 1967, although its preconditions occurred in 1964, during victory (with an overwhelming majority) of Lyndon Johnson and his political program at the election. The citizens of the United States at that time made the same analytical mistake that their comrades in misfortune made in 1921 in Weimar Germany. They initially assumed that prices would rise, but in fact there was a currency crash. High prices are a symptom, not the cause, of the currency crash. The Second Currency War was nothing more than the inflation of the US dollar and its catastrophe [20].

Bypassing US central policy and progressive inflation in the United States during the Second Currency War, its first shots were fired not in the United States but in Great Britain, where the pound crisis had been brewing since 1964 and boiled over in 1967 from the first major currency devaluation since Bretton Woods Agreement. Although the pound sterling was a less important currency in the Bretton Woods system, it was nevertheless an important reserve and trading currency. In 1945, the British pound constituted a larger share of world reserves – the combined stakes of all central banks – than the dollar. This position gradually deteriorated, and by 1965 only 26% of the world's reserves were in pounds. The British balance of payments has been declining

since the early 1960s, and in late 1964 it reached a negative mark [21].

The Bretton Woods system failed after twenty years of successfully maintaining a fixed exchange rate and price stability. If even Britain could devalue the currency, so could others. The US government has tried to prevent the pound from depreciating, fearing that dollar will be the next. Soon their fears were to be justified. The United States experienced the same combination of trade deficits and inflation that the pound suffered from, with one significant difference. Under the Bretton Woods agreement, the value of the dollar was not linked to any currency other than gold. Therefore, the devaluation of the dollar would mean an increase in the value of the dollar price of gold. Buying gold was a logical step in the expected devaluation of the dollar, so the London gold market attracted the attention of speculators.

Despite the sharp criticism from France, the United States had one loyal ally in the Golden Pool, the Federal Republic of Germany. This was vital as Germany had a trade surplus and accumulated gold, both with the IMF (during pound support operations) and as a buyer in the Gold Pool. If Germany suddenly demanded gold in exchange for its balance of dollar reserves, the dollar crisis would be stronger than the pound crisis. However, Germany has secretly assured the United States that it does not intend to throw dollars in exchange for gold.

The London gold market was temporarily closed on March 15, 1968 to stop the outflow of gold, and remained closed for two weeks. A few days after closing, the US Congress declared the requirements for the provision of gold reserves to support the US currency invalid; this allowed a gold stock to cost \$35 if needed. However, this measure did not bring any results as well. By the end of March 1968, the London Golden Pool had collapsed. Later, it was planned to move to a two-tier gold market, with a market price determined by London, and the international price (according to the Bretton Woods agreement – \$35 per ounce). The resulting "golden window" concerned the ability of countries to exchange dollars for gold at \$35 an ounce and sell on the open market at \$40 or more [22].

The two-tier system directed the pressure on the seller as a result of speculative

agreements with other sellers on the open market, while the price of \$35 was available only to central banks. However, US allies have reached an informal agreement not to take advantage of the "golden window" and not to buy gold at a cheaper official price. The collapse of the Golden Pool, the creation of a two-tier system, and some short-term tough measures by the United States and Britain helped stabilize the international monetary system in late 1968-1969, but the collapse of the Bretton Woods system was obvious.

On November 29, 1968, shortly after the collapse of the London Gold Pool, the Times newspaper reported that one of the problems with the monetary system was that "the world trade was growing much faster than world gold reserves" [22]. Such statements illustrate one of the greatest misunderstandings of the role of gold.

It is wrong to say that there is not enough gold in the world to support world trade, because the problem is not the quantity; the problem is rather the price. There was a shortage of gold at \$35 per ounce but the same amount of gold could easily support the world trade at \$100 per ounce or higher. The problem that the Times newspaper was really referring to, and what it was right about, was the artificially lowered price of \$35 per ounce. When the price of gold was too low, the problem was not a shortage of gold but a surplus of paper money over gold. This surplus was reflected in rising inflation in the United States, Britain and France.

In 1969, the IMF tackled the problem of "gold shortage" and created a new form of international reserve asset called the Special Drawing Rights (SDR). The idea of the SDR was rather vague, as SDR lacked any material support and distributed among the countries according to their IMF quota. It was quickly called "paper gold" because it represented a fund that could compensate for the balance of payments deficits in the same way as gold or reserve currencies did. On June 29, 1972, Germany established control over the movement of capital in an attempt to stop the panicky purchase of German marks. By July 3, the Swiss franc and the Canadian dollar had joined. The process which began as a devaluation of the pound turned into a defeat for the dollar as investors sought the relative security of the German mark and the Swiss franc [23].

In June 1972, John Connally resigned as Minister of Finance, so that the new Minister, George P. Schultz, entered the vortex of the dollar crisis almost as soon as he took the office. With the help of Paul Walker (his deputy) and Fed chairman Arthur Burns, Schultz was able to implement agreements (essentially short-term foreign currency loans) between the Federal Reserve and European central banks and began to intervene markets to quell the dollar panic. So far, all the "ranges", "dirty course fluctuations" and other techniques designed to maintain some resemblance to Bretton Woods have failed. There was nothing left but to move all the advanced currencies into a system of free fluctuations.

Finally, in 1973, the IMF announced the end of the Bretton Woods system, put an end to the role of gold in the international financial system and left the value of currencies alone. The era of one currency is over and another has begun, but currency wars were far from over.

The age of fluctuating exchange rates began in 1973, at the same time as the dollar lost its position, put an end to the tragedies of devaluation, which have been at the heart of all affairs in the international monetary system since the 1920s. Markets have now allowed the currencies to rise and fall on a daily basis as they see fit. Governments intervened in market relations from time to time to make up for what they saw as surpluses or disorderly conditions, but this usually had a limited and temporary effect.

The Plaza Agreement in September 1985 was the culmination of a multilateral attempt to bring down the dollar price. The finance ministers of West Germany, Japan, France and Britain met with the US finance minister at the Plaza Hotel in New York to work out a plan to devalue the dollar, mostly against the yen and the German mark. Central banks have allocated more than \$10 million to this case, which has been operating as planned for several years. From 1985 till 1988, the dollar price decreased by more than 40% against the French franc, by 50% against the yen and by 20% against the German mark. The Plaza deal was a success as a devaluation, but the economic results were disappointing. The US unemployment remained high – at 7% in 1986, while economic recovery slowed to 3.2% in 1987. Once again, a quick solution to the problem proved

impossible and, once again, United States had to pay a high fee in the form of inflation, which began to lag after the Plaza Agreement, reaching 6.1% in 1990. Devaluation and currency wars have never contributed to the rise or emergence of promised jobs, but they have steadily contributed to inflation.

The Plaza Agreement was considered by its participants to be too successful and became the basis for correcting the rapid fall of the dollar from a high 1985 mark. The G7 (which included the Plaza Agreement members, as well as Canada and Italy) met in the Louvre, Paris, in the beginning of 1987 to sign the Louvre Agreement, designed to stabilize the dollar at a new, lower level. Together with the Louvre Agreement, the Second Currency War ended – as soon as the G7 finance ministers decided that after 20 years of turmoil, it was time to say "stop".

By 1987, gold was out of the international financial system, the dollar was devalued, the yen and the mark were rising, the pound fluctuated, the euro was only being planned, and China has not yet taken its place on the world stage. So far, relative calm has flourished in international financial affairs, but this calm has been strong only due to the belief in the dollar as a means of saving in a growing US economy and a stable monetary policy of the Federal Reserve. These conditions largely dominated in 1990s and early 21st century, despite two small recessions during this period. The currency crises that really arose were crises other than the dollar, such as the pound sterling crisis in 1992, the Mexican peso crisis in 1994, and the Asia-Russia crisis of 1997-1998. None of these crises threatened the dollar. In fact, the dollar was a safe haven when they arose. It seemed that either a failure to grow or a rise in competitive economic power would be needed to threaten the dominance of the dollar. When these factors finally converged at one point, in 2010, the result was the international currency equivalent of a tsunami [24].

The third "Currency War" (2010 - ...). The three supercurrencies: the dollar, the euro and the yuan, issued by the world's three most powerful economies (the United States, the European Union and the People's Republic of China), are the three superpowers in the new currency war. The Third Monetary War began in 2010 as a result of the 2007

economic downturn, but its scale and consequences are in the spotlight only now [25].

No one denies the importance of other leading currencies in the global financial system, such as the Japanese yen, the British pound sterling, the Swiss franc, and the BRIC currencies: the Brazilian real, the Russian ruble, the Indian rupee and the South African rand. These currencies derive their importance from the scale of the economies of the countries that issue them and from the volume of trade and financial transactions that these countries deal with. According to these parameters, local dollars issued by Australia, New Zealand, Canada, Singapore, Hong Kong and Taiwan, as well as the Norwegian krone, the South Korean won and the UAE dirham occupy a high position. But the combined GDP of the United States, the EU and China which is 60% of world GDP creates a center of gravity, and all other currencies (and economies) become somewhat peripheral.

Each country has its main fronts and romantic, sometimes bloody, distracting maneuvers. World War II was the largest and most widespread military conflict in history. The perspective of the United States on this war is clearly divided into Europe and the Pacific. And from the point of view of Japan, the war covered the majestic empire from Burma to Pearl Harbor. The British, in spite of everything, fought everywhere at once.

The same is true of currency wars. The main front lines that have formed are the dollar-yuan arena, which stretches across the Pacific Ocean, the arena of the dollar and the euro – across the Atlantic Ocean, and the arena of the euro and yuan in Eurasian territory. These battles are real, but the geographical indications are conditional. The fact is that currency wars are waged everywhere in all financial centers, 24 hours a day, by bankers, traders, politicians and automated systems, and the fate of economies and citizens is suspended [26].

Today, participation in currency wars is not limited to national currency issuers and their central banks. The war involves multilateral and global institutions such as the IMF, the World Bank, the Bank for International Settlements and the United Nations, as well as private legal entities such as hedge funds, global corporations and the private

family offices of the richest people. As speculators, hedgers and manipulators, these private organizations have the same impact on the fate of currencies as the nations that issue them. To see that the front lines are global and not limited to nation-states, it is worth mentioning the old story about a hedge fund managed by George Soros, who "destroyed the Bank of England" in 1992 in a large-scale currency betting. Today, there are much more leverage hedge funds (loan-to-equity ratios) of more than \$1 trillion that Soros could not have even imagined 20 years ago.

The battles in the Pacific, Atlantic, and Eurasian arenas of the Third Currency War began from important distracting maneuvers in Brazil, Russia, the Middle East, and throughout Asia. The war, however, is not expected to be based on the real or the ruble; it will be based on the relative value of the euro, the dollar and the yuan, and this will affect the fate of the countries that issue them, as well as their partners.

The main accusation made by the United States against China was that China manipulated its currency to keep its exports cheap for foreign buyers. But China's export mechanism is a goal. It is a means to an end. The real goal of Chinese politics, which is familiar to all politicians in the world, is jobs. China's coastal factories, assembly plants and transportation hubs have become a center of influx of people from the central and southern rural provinces. This flow carries tens of millions of mostly young people in search of a stable job, with a salary equal to one tenth of a salary in a similar position in the United States.

The United States has chosen the G20 as the main arena for pushing China toward revaluation, both because of the possibility of engaging allies who could join the attempts and because the Chinese are more respectful of world opinion. Recent significant progress towards the yuan's revaluation has shown that it is not possible at the same time as the Dialogue meeting, but rather before the G20 summits. For example, the small but still significant revaluation of the yuan in 2010 (from 6.83 on the 15<sup>th</sup> of June to 6.79 on the 25<sup>th</sup> of June) took place just before the G20 summit in Toronto. The next jump of the yuan from 6.69 (November 1, 2010) to 6.62 (November 11, 2010) coincided with the G20 summit in Seoul. This shows that China is attentive to

the G20, but when it comes to other forums, it may not be such [27].

In the spring of 2011, there was a lull on the US-China Pacific Currency War. However, the main problems are still unresolved. The unemployment oppression in both countries meant that tensions could erupt at any moment. The change of power authority in China in 2012 and the presidential election in the United States in the same year increased the range of domestic political forces that will be a catalyst for further international confrontation.

In addition to the three major arenas of the Third Monetary War – the Pacific (dollar-yuan), Atlantic (dollar-euro) and Eurasian (euro-yuan) – there are many other fronts, minor battles and fights around the world. The most important participant in these peripheral battles in the currency war is Brazil. As early as 1994, Brazil pegged its currency, the real, to the dollar [27]. However, the global infection that resulted from Mexico's "tequila crisis" in December 1994 put pressure on Brazil's real and forced Brazil to defend its currency. The result was the Real Plan in which Brazil participated in a series of successful devaluations of its currency against the dollar. Real was devalued by 30% from 1995 till 1997.

Since China has consistently supported the yuan against the dollar, a 40 percent revaluation of the real against the dollar also meant a 40 percent revaluation of the real against the yuan. Brazilian exports have suffered not only from the upper limit of spending on American technologies, but also to the lower limit of spending on Chinese assembly and textile materials. Brazil fought its central bank's foreign exchange intervention by increasing reserve requirements for any local banks with short positions as to the dollar, and by introducing other forms of capital controls.

In 2010, Indonesia and Taiwan reduced the issuance of short-term investment securities, forcing "hot money" investors to invest for a longer period. South Korea and Thailand have imposed tax deductions on the share paid by foreign investors from government debt as a way to halt such investments and reduce the growing pressure on their currencies. The case of Thailand is ironic itself, because Thailand was a country where the financial panic of 1997-1998 began. In this panic, investors tried to take their money

out of the country, and the country itself tried to increase the value of its currency. Then, in 2011, investors were trying to invest in Thailand, and the country itself was trying to reduce the value of its currency. Perhaps there is no clearer example of the shift in financial power between markets such as Thailand and developed markets such as the United States over the past ten years.

None of these distant, mostly Asian, countries seeking to devalue their currency is the issuer of a common reserve currency, and none of them has the exclusive economic power of the United States, China, or the European Union when it comes to fighting in a currency war in a form of direct market intervention. These countries will also need to convene a multilateral forum to address the challenges posed by the Third Currency War. While the IMF has traditionally provided such a forum, gradually all major trading economies, whether they are members of the G20 or not, are requesting the G20 for guidance or at least rules of the game to prevent a currency war from escalating and causing irreparable damage to themselves and the whole world [29-30].

## 1.3. Causal relationships in the processes of currency wars

Currency wars are macroeconomic actions by governments and central banks of individual countries to achieve a relatively low exchange rate for their national currency to support the country's export potential. The conduct of currency wars is an element of protectionist policies aimed at increasing domestic exports and reducing imports of goods from other countries. Targeted actions of individual countries to depreciate the national currency lead to temporary competitive advantages. In the economic literature, currency wars are also called competitive devaluation. This is facilitated by the development of exports due to the reduction in foreign currency of the cost of production of domestic exporting companies (while maintaining the nominal salary of employees in national currency, exporters receive income from foreign exchange transactions). The reduction of prices of exporters' goods was implemented. The depreciation of the national currency against the currency of payment under foreign goods import agreements increases, which creates a competitive advantage for local

producers. The changes that are taking place characterize the radical changes in the system of economic relations [31]. They reflect the desire of the regime of "geooligarchy" to maintain and strengthen its dominance [32].

Competitive devaluation allows to strengthen the position of domestic producers and to increase exports of goods from the country, which leads to the preservation of positions in the international trade system. When carrying out a competitive devaluation, there is a problem of the value of external borrowings increase, denominated in foreign currency, which leads to a reduction in the inflow of foreign capital. The problems in macroeconomics start to emerge [34-35].

It should be noted that traditionally a strong national currency was a sign of the success of the economic policy of a sovereign state, while devaluation was characteristic, as a rule, of developing countries. At the end of the twentieth century, the International Monetary Fund saw devaluation as a way to solve some of the problems of developing economies, especially those in which the cost of imports exceeds export earnings. Currently, new forms of monetary relations are emerging, including the emergence of the cryptocurrency market [35].

### Main causes of currency wars:

- 1. The desire of the United States to maintain world domination, to realize the idea of a unipolar world.
- 2. Preservation of the dollar as the world's main means of payment and reserve.
- 3. Huge debt of the United States.
- 4. Debts of the largest foreign countries.

The US quantitative easing policy forces other countries to follow the rules of the game to eliminate the threats to the national economy from the devaluation of the US currency. All this has a negative impact on the economic development of developing countries. It should be noted that Japan is not only a developed economy, but also the world's largest debtor. Japan's debt in 2019 exceeds 250% of GDP, i.e. for 2.5 years, all Japanese have to work only to pay off debts. It is unrealistic, but it is a fact of the current economic situation in the world. Even countries with a stable economic system,

such as Switzerland, carry out foreign exchange interventions to maintain the stability of the national currency. All this causes problems for exporters, who have to correctly calculate the exchange rate "price currency" and "payment currency" in the contracts. Risky monetary policy of leading countries causes major problems in the world economy and requires the use of various methods for currency regulation [36].

The main consequences of actions used in currency wars:

- Introduction of currency restrictions;
- Protectionist foreign policy;
- Regulation of interest rates of central banks.

An important method is the eloquence of states, which, for example, was actively engaged by former US President, D. Trump. But this approach to competitive denomination can be attributed to indirect methods. Direct methods include rate cuts and foreign exchange interventions. However, these methods are becoming less effective as many countries have significantly reduced their interest rates (in Japan - up to 0%). A comprehensive quantitative easing using many financial instruments and methods became a new tool. For example, some developing countries use taxes to carry out the competitive devaluation. In Brazil, for example, financial transaction taxes have been introduced, leading to lower real exchange rate. In other countries, the requirements for the purchase or export of national and foreign currency abroad are becoming more stringent [36]. Therefore, when forecasting the foreign exchange market activities, it is necessary to take into account the causes and volume of foreign exchange interventions by central banks, the range of discount policies, and protectionist measures. In the face of short-term benefits, countries with competitive devaluations will inevitably face economic opposition from other countries, which will also depreciate their currencies. Currency war is inevitably associated with trade war, which is accompanied by the introduction of sanctions pressure, customs barriers (in some institutional barriers, direct bans, including embargoes. Exacerbated cases). contradictions lead to ideological, informational and political confrontation.

Consequences of currency wars

According to a well-known investment bank, SaxoBank, the US dollar is the main culprit in the global financial system [37]. This report gives a negative assessment of dollar hegemony, which includes military-political hegemony, which is a source of wars, color revolutions, coups, armed conflicts. According to the author of the report, the chief economist of SaxoBank, Steen Jacobsen, "2019 is likely to be remembered as the beginning of the end of the largest monetary experiment in history – it will be the year that launched a global recession, despite the lowest nominal and real interest rates in history. Monetary policy has come a long way, and its end has been a failure. "[39] The basis of the transformation of the world economy is the need to relieve the largest countries from debt. According to the American publication National Interest, the US national debt is a "debt bomb" that can detonate any moment. "As Stein's law explains, a turning point will inevitably come. Our debt will be too big for the market to bear, and there will be a crisis at the Armageddon level." [39]

In the conditions of the soap debt bubble created by the US administration, there will be no balance in the world economy. There is a saying in the United States, "As long as everyone else has cancer, and the United States only has the flu, America will be fine." However, it is an illusory idea that there are no healthy countries in the sick world. Everything is interconnected. Crisis in one of the major economic systems will inevitably lead to economic downturns in other countries. The global dollar financial system is facing an abyss, and future changes in the world economy are inevitable. This is evidenced by the desire of many countries, including Russia, to de-dollarize the economy. The age of US parasitism based on dollar domination is coming to an end.

# CHAPTER 2. MACROECONOMICS OF CURRENCY WARS: METHODS AND IMPLEMENTATION PRACTICES

2.1. How exchange rate volatility influences the Baroque Style (ASP) Ltd.

Probably the most important characteristic of alternative exchange rate systems is the feature used to describe them, namely fixed or floating. Fixed exchange rates, by definition, are not supposed to change. They are meant to remain fixed, preferably permanently. Floating rates float up and down and down and up from year to year, week to week, and minute by minute. What a floating exchange rate will be a year from now, or even a week from now, is often very difficult to predict. Volatility represents the degree to which a variable change over time. The larger the magnitude of a variable change, or the more quickly it changes over time, the more volatile it is.

Volatile exchange rates make international trade and investment decisions more difficult because volatility increases exchange rate risk. Exchange rate risk refers to the potential to lose money because of a change in the exchange rate. [40]

The effect of exchange rate volatility depends on the exchange rate regimes and financial openness, that is, volatility is more harmful when countries adopt flexible exchange rate regimes and financial openness.[41]

Very often the exchange rate volatility heavily influences the business operations of many companies and their profits as well. Many architectural companies rely on materials, furniture and décor materials from overseas, therefore, the depend on exchange rate. I had my internship practice in such company. In July 2021, I was accepted to Baroque Style (ASP) Ltd for completion of my complex professional qualification practice. This company was founded in the 16<sup>th</sup> of May in 2007 and is a private limited company or limited liability company. The company's organizational form of management is a matrix structure.

The sphere of activities of the company of my internship is an architecture and design. The mission of Baroque Style (ASP) Ltd. is to provide client focused service through their responsible practice of Architecture & Design. Their tradition of dedication, professionalism and outstanding customer service is a testament to that mission as they strive each day for excellence in bringing their valued clients' ideas to life. Company's vision of statement is to be viewed as a respected architectural firm, providing high quality luxurious and expensive design and services to the clients with honesty and integrity.

The exchange rate volatility influences foreign direct investments to Baroque Style (ASP) Ltd and many other architectural companies.

Foreign Direct Investment (FDI) is an international flow of capital that provides a parent company or multinational organization with control over foreign affiliates. By 2005, inflows of FDI around the world rose to \$916 billion, with more than half of these flows received by businesses within developing countries. One of the many influences on FDI activity is the behavior of exchange rates. Exchange rates, defined as the domestic currency price of a foreign currency, matter both in terms of their levels and their volatility. Exchange rates can influence both the total amount of foreign direct investment that takes place and the allocation of this investment spending across a range of countries.

When a currency depreciates, meaning that its value declines relative to the value of another currency, this exchange rate movement has two potential implications for FDI. First, it reduces that country's wages and production costs relative to those of its foreign counterparts. All else equal, the country experiencing real currency depreciation has enhanced "locational advantage" or attractiveness as a location for receiving productive capacity investments. By this "relative wage" channel, the exchange rate depreciation improves the overall rate of return to foreigners contemplating an overseas investment project in this country.

The exchange rate level effects on FDI through this channel rely, on a number of basic considerations. First, the exchange rate movement needs to be associated with a change in the relative production costs across countries, and thus should not be accompanied by an offsetting increase in the wages and production costs in the destination market for investment capital. Second, the importance of the "relative wage" channel may be diminished if the exchange rate movements are anticipated. Anticipated exchange rate moves may be reflected in a higher cost of financing the investment project, since interest rate parity conditions equalize risk-adjusted expected rates of returns across countries. By this argument, stronger FDI implications from exchange rate movements arise when these are unanticipated and not otherwise reflected in the expected costs of project finance for the FDI. [42]

It is worth to pay a particular attention to the relationship between exchange rate volatility as a factor of uncertainty and the dynamics of investment and employment. Serven (1997, 1998) concludes that exchange rate uncertainty justifies waiting and postponement behaviors with regard to investment decisions.

Volatile exchange rates also create exchange rate risk for international investors. Consider the following example. Suppose in October 2020, a U.S. resident decides to invest (i.e., save) \$10,000 for the next year. Given that the U.S. dollar had been weakening with respect to the Ukrainian hryvnia for several years and since the interest rate on a money market deposit was slightly higher in Ukraine at 2.25 percent compared

to the 1.90 percent return in the United States, the investor decides to put the \$10,000 into the Ukrainian account. At the time of the deposit, the exchange rate sits at 23.4 hr/\$. In October 2021, the depositor cashes in and converts the money back to U.S. dollars. The exchange rate in October 2021 was 28.1 hr/\$. To determine the return on the investment we can apply the rate of return formula:

$$R_0 R_{\text{hr}} = i_{\text{hr}} + (1 + i_{\text{hr}}) \frac{\frac{1}{E_{\text{hr}/\$}^{2021}} - \frac{1}{E_{\text{hr}/\$}^{2020}}}{\frac{1}{E_{\text{hr}/\$}^{2020}}}$$

$$= 0.0225 + (1 + 0.0225) \frac{\frac{1}{28.1} - \frac{1}{23.4}}{\frac{1}{23.4}}$$

$$= -0.1475 \times 100 = -14.72\%$$

The rate of return works out to be negative, which means that instead of making money on the foreign deposit, this investor actually loses \$1472. Had he deposited the \$10,000 in a U.S. account, he would have had a guaranteed return of 1.90 percent, earning him \$190 instead.

By depositing in a foreign account, the depositor subjected himself to exchange rate risk. The dollar unexpectedly appreciated during the year, resulting in a loss. Had the dollar remain fixed in value during that same time, the foreign return would have been 2.25 percent, which is larger than that obtained in the United States.

Thus fluctuating exchange rates make it more difficult for investors to know the best place to invest. One cannot merely look at what the interest rate is across countries but must also speculate about the exchange rate change. Make the wrong guess about the exchange rate movement and one could lose a substantial amount of money. [40]

By analogy to investment, when making a hiring decision, Baroque Style company also incurs other sunk costs, such as hiring costs and the costs of providing capital to some jobs. Therefore, an increase in exchange rate volatility often discourages this company from creating jobs.

Of course, the volatility of exchange rate influences the demand on the company's projects. For example, when the US dollar / UA hryvnia exchange rate becomes extremely high in a short period of time, the purchasing power to buy or build real

estate and make the luxurious interior and exterior designs becomes very low. Hence, the demand for Baroque Style (ASP) Ltd. decreases. This leads to lower profits of the company and lower payoffs to employees.

# 2.2. International monetary relations: integration and competition at the macroeconomic level

The single European currency and the Chinese yuan are now, without a doubt, real competitors of the US dollar as the currency of international settlements and the currency of accumulation of foreign reserves. Due to limited convertibility, the Chinese yuan is not yet realizing its huge potential, and the European currency continues to gradually regain its position against the weakening dollar. At the same time, in the process of identifying the range of currencies that can compete with the US dollar in the near future, one cannot ignore the prospects for the emergence of completely new players, such as currency zones. It can be argued that integration processes in different regions of the world have initiated a gradual departure from the dominance of the US dollar in international settlements. Thus, with the introduction of the euro in 1999, this currency partially inherited its share in settlements and foreign exchange reserves from the German mark, the French franc, and some other European currencies. However, during the years of the eurozone's existence, the euro's share of foreign exchange reserves around the world has grown significantly. The increase in efficiency as a result of integration in the economic literature is called the synergy effect. At the same time, this concept has not been used for currency integration before. Thus, we can formulate a new concept of "currency synergy effect", which means an increase in demand from residents and non-residents of the currency area for a new currency relative to the aggregate demand for currencies in the area before its formation. Synergy, synergistic effect is increasing of the efficiency of activities as a result of integration, merging of individual parts into a single system due to the so-called systemic effect. Thus, if we estimate the share of European currencies in the total foreign exchange reserves before the introduction of the euro and the share it won after its "birth", we can see that the "European effect" almost doubled them by 2010 (the share of European currencies in

the total volume of world foreign exchange reserves before the introduction of the euro was 13.9%, and in the second quarter of 2010 the share of the euro was 26.48%) [39]. In other words, at the stage of development of the international financial market, the single currency can solve not so much simplification of calculations and reduction of conversion costs, but the task of strengthening of the position of a particular region, the ability to organize a large financial currency market zone, able to compete with the European and American markets.

The second half of the twentieth century was marked by the deepening of the international division of labor, which can be defined as the specialization of individual countries in the world economy in certain types of products or services, which involves their further exchange in the world market. As a result, the volume of world exports and, accordingly, the volume of foreign exchange transactions began to increase rapidly. Balassa's approach, according to which this process must go through successive stages, had a great influence on the formation of the idea of the process of regional integration of currencies [40]. Consider each of them:

- Stage 1. Preferential trade agreements, when countries provide each other with more favorable terms of trade than third countries.
- Stage 2. Free trade area, which provides for the complete abolition of customs tariffs in mutual trade, provided that national customs tariffs are maintained in relations with third countries.
- Stage 3. Customs union, which provides for the agreed abolition of national customs tariffs and the introduction of a common customs tariff and a single system of non-tariff regulation of trade with third countries.
- Stage 4. Common market, in which the integrating countries agree on the freedom of movement not only of goods and services, but also the factors of production capital and labor.
- Stage 5. Economic union provides, along with the general customs tariff and freedom of movement of goods and factors of production, coordination of macroeconomic policy, unification of legislation in the currency, budget, and monetary sectors.

- Stage 6. Monetary union is the highest, last degree of integration. The single currency creates a stable and predictable situation for the development of mutual trade, countries are beginning to take advantage of economies of scale, which allow to expand the market, support local producers, especially among new industries, reduce international trade costs, obtain other commodity benefits based on economic theory scale.
- Stage 7. Next, in theory, an economic union can be transformed into a political union, which, in essence, means the formation of supranational political institutions, the loss of sovereignty of each member of the union and the creation of a new single state [41].

However, all integration stages are associated with various difficulties which can ultimately be a strong obstacle to their evolution. Modern economic reality forces countries to make mutual concessions in order to achieve common global goals. According to Shchegoleva, the main purpose of creating an integration association, as a form of economic organization, is to minimize transaction costs. All other goals in the process of achieving the main goal are subordinated and realized automatically [42]. Thus, each stage of integration helps to reduce transaction costs, and the introduction of a single currency can increase the usefulness of money as: 1) units of account (the possibility of direct price comparisons); 2) means of exchange (reduction of transaction costs); 3) means of savings (elimination of currency risk and savings on its hedging). Herbert Dieter and Richard Higgot of the Centre for the Study of Globalization and Regionalization at the University of Warwick believe that the unification of countries into a monetary union does not require prior macroeconomic convergence of member countries and the formalization of trade relations [43]. However, it requires the readiness of member states to embark on a process that, if successful, could lead not only to a single currency but ultimately to a political union. Thus, the willingness to give up the central element of the country's sovereignty – the ability to have their own currency – is central to the theory of monetary regionalism. This approach proposes, as a means of protection against financial crises similar to those in a number of developing countries in the late twentieth century, the creation of a so-called regional liquidity fund,

when member countries must send part or all of their currency reserves in the fund created by them. Of course, such an event will require significant political will on the part of the participating countries. This position is similar to the key postulates of Keynesianism, which represents a monetary union as an instrument for achieving macroeconomic convergence, which does not require its provision for the successful implementation of the monetary union project. However, the above approach remains only theoretical, does not have a solid empirical basis, and the main scientific discussions on the possibility of uniting groups of countries into currency zones are concentrated within the so-called theory of optimal currency zones, which will be discussed below.

The discussed above theoretical aspects of currency integration at the macroeconomic level suggest that the features, forms and elements of this process at an early stage of its evolution depend on the structure of the world economy and the balance of power and interests of integrating countries. Currently, there are several regional zones in which the discussion of the transition to the single currency is most active.

Despite the idea to create the North American monetary union and the new currency, the amero, especially among economists predicting the rapid collapse of the US dollar, a union of Canada, Mexico and the United States is politically and economically impossible. Firstly, compared to the euro area, North American countries have a much larger per capita income gap; secondly, the United States is likely to insist on the dominant role of the Federal Reserve and the US Senate to retain its right to ratify appointments to the Governing Council. This approach is shared by Peter Kenen in a book which reviews the prospects for monetary integration in different regions of the world [44].

The West African Economic Community is considering a monetary union that will combine the two currency zones of the franc in West Africa with a number of other countries, including Nigeria. The working name of the future currency is "eco". The participating countries have repeatedly postponed the launch date of the monetary union. It should be noted that the volume of intra-regional trade in the franc area is very small compared to trade with France and other EU countries, which is also fair for the

whole integration unit. Therefore, if the two currency zones are merged, the new currency will focus mainly on the euro area and, as a result, will have a fixed exchange rate against the European currency, so considering it a competitor to the dollar and the euro is rootless.

The position of some Latin American countries, expressed in particular in anti-American sentiment, has led some economists to predict the creation of a monetary union MERCOSUR in South America. However, it is obvious that the MERCOSUR countries have a pretty closed economy, and most of their trade flows are directed outside the region. Finally, this region remains vulnerable to speculative capital flows. The Asian financial crisis of the late 1990s aroused the interest in monetary cooperation in the region, which was aimed primarily at reducing the dependence of Asian countries on the IMF. The cooperation resulted in the signing of the ASEAN Swap Arrangement, which is for foreign exchange interventions without the obligation to support the currency corridor system, and later became known as the Chiang Mai Initiative. Loans are provided on interest or collateral for government securities for a period of 90 days up to 2 years. In May 2000, all ASEAN countries, as well as China, Japan and the Republic of Korea, signed agreements on the corresponding expansion of the scope of this mechanism. At the same time, the lack of institutions capable of shaping the general economic policy in South-East Asia reflects one of the main principles of ASEAN – non-interference in the internal affairs of its members. This principle is completely incompatible with the monetary union, which provides for the transfer of monetary policy management to supranational authorities and makes it difficult to pursue a national-oriented economic policy of ASEAN members, which makes it unlikely to establish a monetary union in this region.

Based on the above, we can state that a world, in which the dollar and the euro remain the dominant currency, is on the verge of division into currency zones. Moreover, their borders will not always coincide with the state ones. And although the integration process is not fast and painless, the vectors of motion are already marked. However, this is not Balassa's narrow approach, according to which only long-term economic evolution can unite the integrating countries to the desired goal — unification into a

single currency area. Despite the fact that the general line along which the integrating countries are moving is in the classical evolutionary paradigm which striving for monetary union, they will force and change the Balassa's approach, realizing that with all of the shortcomings of this process, entry into the currency area may be the only way to meet the challenges of globalization.

## 2.3. US-China currency war analysis

Analyzing the relations between the countries in the modern monetary system, we can not ignore the conflict between China and the United States, which many economists and officials have also dubbed the currency war. In order to answer the question of whether the relations between these states are a war, it is necessary to determine the essence of the contradictions that give rise to the conflict situation; the role of the Chinese currency in the world system, the aggressor and methods of "combat".

Over the past decade, China's economy has grown very rapidly. For the period from 2005 to 2010 GDP growth reached 155%, while the world leaders - the United States and Japan – increased GDP over the same period was 16 and 18%, respectively. In 2010, China ranked second in the ranking of countries in terms of GDP, ahead of Japan - \$ 5745 billion against \$ 5390 billion [46].

China has chosen an export-oriented strategy for economic reform. It has become the world's largest supplier of consumer goods: textiles, clothing, footwear, toys, household appliances. One of the main consumers of Chinese products is the United States. Foreign trade between the two countries is mutually beneficial because they complement each other in the structure of goods, but in absolute terms there is a clear imbalance in favor of China. According to the US Department of Commerce's Bureau of Economic Analysis, imports of goods from China to the United States exceed exports to China by \$ 25.6 billion, with Japan - \$ 5.8 billion, with Mexico - \$ 5.6 billion [47].

The imbalance in foreign trade and the strengthening of the Chinese economy are forcing the US government to seek measures to counter China's active expansion. China is a member of the World Trade Organization (WTO), so the US government cannot use traditional trade policy instruments - tariffs, quotas - to reduce the competitiveness of

Chinese goods and increase demand for its own products. The instruments of monetary policy remain - the devaluation of the national currency to the currency of a trading partner, but even here the Americans faced certain difficulties.

The Chinese yuan has been a convertible currency since 1996, when the country formally acceded to Article VIII of the IMF's Articles of Agreement, lifting restrictions on current transactions. However, there are restrictions on foreign exchange transactions for residents and non-residents, for example, the People's Bank of China (NSC) limits the amount of yuan that can be converted by an individual to \$4,000.

According to the statistics of the Bank for International Settlements, the share of the Chinese yuan in the international foreign exchange market in April 2010 was not more than 0.3%. Chinese currency has been traded in Hong Kong and Russia since 2010 and in the United States since January 2011. Trading volumes are still insignificant, as the yuan is mostly bought to reduce transaction costs in settlements with Chinese partners, and as a means of saving the currency of China is not yet of interest to individuals or officials. Thus, the Chinese currency can be considered a domestic currency that performs the functions of money at the global level in a very limited amount, as a component of SDR basket. This situation in the foreign exchange market for China is now an advantage, because the exchange rate of the national currency cannot be influenced from the outside, its dynamics is determined by domestic policy. Limited admission of non-residents to China's stock and credit markets reduces the impact of interest rate parity on the yuan's exchange rate, so changes in interest rates in trading partner countries have little effect on dynamics. Under such conditions, it is useless to apply direct or indirect methods of currency warfare to the yuan.

The main claim of the United States and other developed countries to China is that the exchange rate is understated, which gives Chinese exporters a competitive advantage and limits the opportunities of foreign importers. As can be seen from Fig. 4, the official yuan exchange rate is below the purchasing power parity rate by 55%, and this trend has continued for five years. Although the official exchange rate is rising against the US dollar (18% in five years), its growth rate is insignificant, and the gap with the rate calculated on the basis of purchasing power parity is not narrowing (Fig. 2.1).

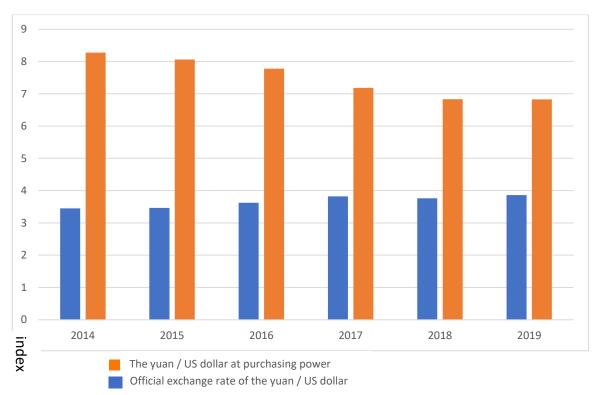


Figure 2.1 – Dynamics of the official exchange rate and the exchange rate calculated at purchasing power parity of US dollar / yuan (according to the World Economic Outlook – International Monetary Fund)

Why is the Chinese government not making concessions to its trading partners on the yuan? There are several reasons. First, the appreciation of the currency will negatively affect small and medium-sized businesses - the main producers of export products. According to Premier Wen Jiabao, "20% increase in the yuan exchange rate could lead to significant job losses and social instability... We cannot even imagine how many bankruptcies among Chinese factories, how many people will lose their workers places and how many people will return from cities to villages if China yields to the yuan's revaluation by 20-40%. China may be in the midst of serious social upheaval. "[48] Secondly, there is a very close financial relationship between the United States and China. Since 2008, China has been the largest owner of US Treasury bonds - 28% of US public debt, followed by Japan, which accounts for 20% of US debt. For comparison: Russia's share in the US Treasury does not exceed 4%.

In addition, private investors from China own US corporate stocks and bonds. Thus, in 2009 they owned assets worth \$ 30.8 billion [49]. China is the world's largest owner of gold and foreign exchange assets: in September 2010 they amounted to \$ 2.6 trillion,

much of the reserves are denominated in dollars (Table 2.3). With the appreciation of the currency, investors' income from financial assets will decline, and given the volume of investments, these losses will be significant. However, we can see the yuan rise by 1.8% in 2010. These actions are not dictated by the "requests" of developed countries, but by the need to reduce the trade surplus, which affects the domestic money supply and increases the risk of high inflation.

What action is the United States doing to force the Chinese government to change its monetary policy? Americans use two tactics. The first can be called persuasion - US government officials are negotiating with Chinese officials, the US president at summits at all levels speaks of the need to raise the yuan and lift currency restrictions. High-ranking officials from the IMF and the World Bank are used to increase their influence, voicing the position of the United States and developed countries on China's monetary policy.

Table 2.3 – Countries which are the largest US Treasury bondholders (\$ billion)

	2017	2018	2019
Total	2376,4	3251,4	3697,2
Including:			
China	486,8	808,3	1036
Japan	616,8	660,1	760,7
OPEC (Asia)	116,1	180,6	177,0
Brazil	135,5	140,1	170,0
Russia	41,1	133,8	156,9
Hong Kong	54,5	78,2	148,3

Source: The International Investment Position of the United States at Yearend 2009 / The Bureau of Economic Analysis (BEA) (http://www.bea.gov/scb/pdf/2019/07%20July/0710\_iip.pdf).

The second tactic is to create conditions of maximum support for the Chinese currency. The United States is promoting the yuan in the global foreign exchange market. For example, a final communiqué following a visit by President Hu Jintao to the United States stated that the United States would support China's efforts to include the yuan in its base SDR basket. Of course, this requires making the yuan a fully convertible currency that circulates freely in the global foreign exchange market. Under no circumstances should the United States be suspected of altruism - this tactic

is aimed at controlling a competitor. China does not have a developed banking system with a large foreign branch network, no large stock market, and most importantly - no experience of competition in the foreign exchange market. However, China is steadily showing increased stability for its currency (Appendix B). By achieving the status of the yuan as a reserve currency, America will have a good opportunity to manipulate the yuan, as it does with the currencies of most developed countries.

Given the events of the last few months, the confrontation in the currency war between Russia and China is also gaining new shape. Given that the "freezing" of Russia's foreign exchange reserves does not include reserves in the yuan, the Chinese currency will be a different story. It still cannot be used effectively to repay excess demand for the dollar and the euro in the Russian foreign exchange market, but it can be spent on buying the same Chinese goods. Especially in those areas where there will be a collapse in the logistics of goods from the EU and the US, and which Russia itself does not produce. And here the prospects of the yuan on a global scale depend entirely on the skill of Chinese diplomats combined with the political and economic interests of China. The yuan's exchange rate will depend on how events unfold in the Ukraine-Russia war and how effective global sanctions against Russia will be (Appendix B).

If the sale of Russian exports to the EU becomes really problematic, it will completely destroy the model of the economy that existed in Russia before the war. And China will become the main buyer of Russian raw materials. And it will be cheap to buy it – the buyer's monopoly is a very tough thing. But in foreign markets, to which China, unlike Russia, will retain access – there will be world prices. And this will allow China to play on the difference in prices and earn a decent living. In addition, servicing such large commodity flows will increase demand for the yuan itself, which will help strengthen it against all currencies. Including the dollar and the euro. For example, if the price of gas to the EU rises to \$3.2-\$3.5 thousand, the price for China will be completely different. Now China buys it at fixed prices up to \$200. And according to the contracts, it will continue to do so for a very long time. This will

create additional commodity supply throughout the Chinese economy and affect the yuan.

According to the forecast of the Ministry of Finance, with such developments, quotations of the yuan against the dollar may strengthen to 6.0–6.10 from the current 6.33–6.37 in the next month or two. Of course, if the People's Bank of China, which is famous for its tough team decisions in the style of administrative-command system, does not intervene.

In addition, due to Russia's external isolation, companies that have fallen in price at times will face the problem of liquidity and capital. This will lead to the fact that their buyer will be the same China, and the Russian economy itself will become even more dependent on China. In this case, the yuan will largely be a priority for the Russian market than the euro and the dollar. The Russian market will be practically monopolized by China with all the ensuing consequences.

And the second option. China is not holding back, and is increasingly embroiled in a conflict over Russia and is responding to new Western sanctions. In this case, given the ongoing trade wars between the United States and China, the behavior of financial markets becomes generally unpredictable and risky for any investor. The collapse of Russian markets will lead to a "zero" of the Russian economy, a severe humanitarian crisis in Europe, the loss of markets for China in the EU and the US, as well as a new wave of sales of Chinese securities on all stock exchanges. In the end, it will hit the yuan. And in order to somehow reduce the impact on the Chinese economy and support its export potential, the People's Bank of China will agree to a gradual devaluation of the yuan to 6.45-6.8 yuan per dollar. This, in turn, will have a significant impact on the Chinese stock market and lead to a new wave of Chinese securities sales by investors due to fears of US and EU sanctions. Thus, we can summarize some results. The essence of the US-China conflict is the imbalance of foreign trade between these countries, as well as the growing economic influence of China in the world, which is a threat to the US monopoly position. The economies of the United States and China are closely intertwined in both trade and finance, so there

are no antagonistic contradictions between them. Neither the United States nor China is showing signs of aggression against each other. The Chinese currency is domestic, there is no free movement of capital, so to apply direct or indirect methods of currency wars in relations between the two countries is completely meaningless. We have before us an example of competition, the feature of which is the size of the economies of the parties. China and the United States must exercise reasonable caution in pursuing domestic economic policies, as all their actions affect the stability of the world's trade and monetary markets.

#### CHAPTER 3. DEVELOPMENT OF THE INTERNATIONAL MONETARY SYSTEM

# 3.1. International practice of preventing currency wars

You don't have to be an economist to understand that currencies can depreciate against the value of gold, land and other real assets, but by definition they can't fall against each other at the same time. If one currency depreciates, the other rises in price. This is where the most interesting and dangerous begins.

There is not much of a significant group of countries in the world interested in strengthening the national currency. Some actively and openly seek to lower the course, some do it more subtly and imperceptibly. It seems that only the eurozone is ready to accept all the consequences of such games, more precisely, translating them into the single currency. There are many studies on why the policy of "neighbor ruin" is harmful to all. However, one state after another is dragging its feet into this game, which poses a

serious threat to the entire world economy. And the worst thing is that this process is not taken seriously at the international level and is not on the agenda of influential organizations.

But if there is still a desire to avoid serious damage to the economy, it is necessary to understand how the situation will develop further. The most likely scenario looks like this:

- The threat of slowing economic growth and a jump in unemployment amid government inaction is forcing a large central bank, such as the Fed, to resort to monetary stimulus. What we are actually seeing.
- Fed Chairman Ben Bernanke reiterated that investors needed to be "put at risk".
   This can be done at zero rates, for example, by providing "artificial" growth of assets in price through the infusion of additional funds into the market. This stimulates consumption, investment costs and job creation.

Central banks, which are conducting stimulus programs, are expanding balance sheets and, at the same time, slightly heating up inflation by injecting new portions of money into the market. Expanding the balance sheets of central banks is thus a powerful weapon of currency wars. Those who do not use it lose, as, for example, loses the euro, which recently reached a 30-month high against the dollar (Fig. 3.1).



Figure 3.1 – The ECB's balance sheet is shrinking and the euro is rising

Source: [55].

But in practice everything is not so simple. Usually, some of the liquidity provided by the Fed or, for example, the Bank of Japan, flows to other markets, provoking capital inflows to developing countries - because investors like to bet on high returns, and here it is just that - in accordance with the risk. Complicating the situation is the fact that these capital flows are rapidly losing touch with the economy and finances of recipient countries, becoming a source of speculative income due to unjustified growth of their currencies.

Not surprisingly, more and more governments are concerned about the strengthening of the national currency - because it affects the competitiveness of industry and services. And the authorities of all new countries have no choice but to begin to actively resist the growth of the value of the currency, or at least slow down the process of strengthening it. The problem can be solved only if the central banks manage to agree on the coordination of their actions and if the government is aware of the need to coordinate the movement of exchange rates, concludes a well-known investor. When officials talk about the dependence of currency on markets, they often mean the state of the trade balance, explains Mark Chandler, head of foreign exchange strategies Brown Brothers Harriman - the oldest private bank in the United States. Japan has slipped from a trade surplus to a deficit. Taking into account the seasonal factor, the trade balance has ceased to be positive since February 2011. In annual terms, exports have been declining since May last year. According to OECD estimates, taking into account purchasing power parity, the yen is now overvalued by almost 15%. [56]

In this situation, one thing is unclear - why the world community is outraged by the actions of the Japanese government, but they do not vent their anger on Switzerland, which in this story played the role of provocateur?

At the end of 2011, the Swiss central bank pegged the franc to the euro to prevent the franc from strengthening, almost instantly reducing the value of the national currency against other major currencies. If this had not happened, Japan would not be forced to weaken the yen now, Chandler said. The global economic crisis has synchronized the slowdown of economies and led to a general weakening of monetary policy in the

world. The G20 summit is likely to officially reaffirm the commitment of the world's leading economies to market principles of exchange rate formation, which will severely limit Japan's choice of actions to weaken the yen. In addition, the country's largest trading partner and main regional rival – China – has not publicly expressed any claims to the statements of the Japanese authorities.

Central banks, fearful of deflation, are taking unconventional steps to protect their economies, which are giving a new impetus to currency devaluation. The consequences of unilateral actions cause markets confusion, provoke capital flight and volatility in oil prices. More and more countries are trying to control the situation by pegging the national currency to another currency. This requires clearer communication and coordination between central banks, as exchange rate jumps increase uncertainty and reduce investment. The G20 has promised not to manipulate exchange rates in order to increase competitiveness, although it has not criticized other countries for similar actions. All this time, American exporters are experiencing difficulties due to the strengthening of the dollar, which jeopardizes the recovery and growth of the world's largest economy. It is unknown how long states will be able to maintain the competitiveness of their economies without another devaluation and when they will make peace on the monetary front.

The topic of "currency wars" became relevant after a number of countries used unprecedented measures to stimulate the economy in the fight against the crisis, which led to the weakening of their currencies. In response, those countries whose currencies did not depreciate on their own tried to deliberately lower their exchange rates. For example, the Prime Minister of Japan Shinzo Abe set the Bank of Japan the task of lowering the Japanese currency to 90 yen for \$ 1 [54]. This caused a new surge of accusations of trying to solve their problems at someone else's expense. The G20 meeting was expected to resolve the issue. But the result was unexpected. The participants of the meeting approved closer cooperation, recognizing the solution of currency problems as an internal affair of the state.

The prospect of developing the world monetary system during the dollar monopoly today seems unlikely. Its temporary strengthening contributes only to the intensification

of the debt crisis in Europe, which maintains the status of the dollar as the world's leading reserve currency. Overcoming the crisis in the Eurozone increases confidence in the euro by economic and financial actors and strengthens its position in competition with the US dollar. In this case, the world monetary system will develop in the scenario of equalization with the share of the dollar and the euro in the volume of international reserves and foreign trade.

One of the scenarios for the development of the international monetary system may be the entry into the global arena of collective currency - special drawing rights (SDRs). Its issuer is a supranational body - the International Monetary Fund. The idea of creating a group currency unit due to the globalization of the international liquid assets system came to stabilize the impact on the world economy, regulate the effects of imbalances in balance of payments, limit the spread of crises and eliminate them at an early stage. The essence of the collective currency issued by a supranational body is to prevent currency speculation in floating exchange rate trends. Fluctuations in currency prices lead to the emergence of speculative finance in the short term, the movement of which can lead to a serious imbalance of economic resources.

Exchange rate stability is an important priority of the governing bodies of any state. It depends on the monetary and financial potential of the country, its export quota, positions in international economic relations and so on. This helped that the exchange rate is considered an object of struggle between states, the cause of currency wars. The collective supranational currency is able to eliminate differences between countries and increase the efficiency of the world monetary system.

- 3.2. Recommendations for improving the international monetary system Summarizing the above, in general, the following recommendations could be outlined for improving the international monetary system:
  - adhere to the principle of gradual transition from economic to monetary integration;
  - start harmonizing economies from the so-called "integration core", and then gradually expand the union by pulling distant countries;

- timely identify and remove barriers to integration;
- coordinate and, subsequently, harmonize the monetary and macroeconomic policies of member countries;
- prepare the preconditions for monetary convergence in a facilitated form: increase confidence in national currencies and reduce the role of the world's leading currencies, ensure full convertibility of member currencies; to ensure financial stabilization through the establishment of a pool of currency swaps to regulate the balance of payments and develop a system of interstate lending, to form a single exchange space, to create its own settlement system; to establish a supranational advisory body on financial and economic issues.

In modern conditions, there is a situation when the world economy is forming a new model of a multifaceted system of transnational and national elements that are part of the world community and the monetary, financial and credit space. International monetary and financial relations are influenced by the process of globalization and cross-border movement of financial flows, which are characterized by speculative nature. New phenomena are being formed in the world economy, which are influenced by such factors as:

- shifts in the nature of cyclical development;
- changes in the sectoral structure of the economy, when there is growth in the sphere of intangible production, in particular the financial sector and monetary and financial relations in the general system of the world economy;
- changes in the nature of the interaction of market and state, national and interstate regulation of the economy;
- changing the balance of power on the world stage, strengthening integration processes;
- opposition to the policy of protectionism and liberalization of economic relations;
- formation of a system of global economic management.

In recent decades, the nature of the world economy has changed significantly. Until 2007, there was an economic boom, which was based on efficient production and active use of innovative technologies. The crisis of 2008 negatively affected international economic relations, including monetary and financial relations, and became the deepest crisis since the "economic depression" of 1933. This stage is characterized by a reduction in capital movements, falling exchange rates, falling world trade, depreciation of financial assets. Such changes are forcing governments to rethink their policies, taking into account the effects of the crisis. In this regard, discussions on the need to reform the world monetary system have intensified.

In March 2016, the IMF announced the launch of a study to identify the nature of the problems facing the international monetary and financial system and the need to identify shortcomings in this system and lay the groundwork for further reforms. The international monetary and financial system is the basis that promotes the exchange of goods and services and the movement of capital between countries and supports sustainable economic growth. For this framework to be effective, it must take into account the needs of both individual countries and the system as a whole, taking into account the changing conditions of economic and financial relations.

Today, the world economy is characterized by a number of structural changes, and its combination leads to increasing tensions and risks.

First, although current account imbalances declined in the post-crisis period, this was due to a contraction in demand in developed economies. Therefore, the problem of current account imbalances is not a thing of the past.

Second, the leading role of one or two major reserve currencies means that changes in one economy can significantly affect others, limiting the choice of domestic policy measures.

Third, as countries become more economically interconnected, the volatility of capital flows becomes a permanent element of the economic landscape.

Fourth, much work has been done on the financial sector, especially financial institutions and the spread of risk, but at the same time non-bank financial institutions have begun to play a significant role, and this must be taken into account.

In view of the above, it is necessary to strengthen the global system of financial protection due to the fact that the three economies with reserve currencies (US, euro area and Japan) will have to gradually move away from unconventional monetary policy, which will lead to volatility of emerging market.

Let's identify the problems facing the world monetary system.

One of the most important problems is the need to accelerate growth in developed economies in the post-crisis period. At the height of the crisis, emerging market countries managed to maintain stability through the use of their buffer reserves, and it was expected that in a few years there would be a kind of "relay" from emerging market countries to developed economies. However, this is not the case. In this regard, it is also important to prevent the collapse of globalization hopes that emerging market and developing countries will eventually approach the level of living in developed economies.

Another problem is the necessary rebalancing of China's economy. Growth will be lower, but probably more sustainable (although this will inevitably have consequences for other countries). There is a historic decline in commodity prices, which requires adjustments by oil-producing countries in the Middle East and other exporters of commodities who need to find a new business model. There are differences in the monetary conditions of major world economies. Asynchronous changes in the monetary policy of the United States, Europe and Japan allow us to expect continued volatility.

As for the role of the IMF in reforming the world monetary system, it should be noted that it remains at the center of the system. The Fund must monitor the development of member economies and prevent imbalances in different parts of the world, especially the growth of financial imbalances. It is necessary to ensure the integration of emerging market countries into the international monetary and financial system in order to achieve a higher standard of living. For many member states, it is important to develop and deepen the financial system, especially during periods of high market volatility. The convergence process requires some emerging market countries to maintain small current account deficits for some time and to use capital inflows to finance these deficits. Therefore, tides need to be more stable over time, and decisions need to be made on

how to ensure their safety. In this case, it is possible to pursue macroprudential policies aimed at achieving stability in the economy as a whole.

The IMF's contribution will also include ensuring an effective global financial protection system. This system of protection, or credit system, must respond to three needs in the world economy: to stimulate more prudent policies, to finance adjustments at a fairly high rate, and to provide insurance for "innocent witnesses" who may suffer from change. Another level of protection of regional financing mechanisms, such as the Chiang Mai Initiative and the IMF, is to find ways to work more closely with them.

Thus, summing up the further role of the IMF in the international monetary and financial system, it should be noted that the program of further work of the Fund includes three areas: improving the security of capital flows, strengthening the global financial protection system and the role of SDRs. Let's dwell on them in more detail.

- 1. Improving the security of capital flows consists of several stages. The first stage is to assess the characteristics of capital flows, their volatility and direction. The second phase, scheduled for mid-2016, includes a review of countries' experience in addressing capital flows issues within the IMF's institutional position. The third stage, which began closer to the end of 2016, focuses on the lessons learned from the experience of countries and the need to review the institutional position.
- 2. As part of strengthening the global financial protection system, the IMF will prepare a review document to be considered for further quota discussions. In this area, the Fund plans to consider the adequacy of the protection system for all categories of member states during crises.

In recent decades, the issue of reforming the world monetary system has been actively discussed by various scholars and various options have been proposed, including:

- Return of the gold standard system;
- Introduction of a new currency equivalent;
- Creating a multi-currency system;
- Creating a multi-currency system;
- creation of a new reserve currency and its replacement by the dollar;
- transition to a two-tier system.

The most promising, according to some economists, is the multi-currency standard, as a basic principle of the new world monetary system. It was caused by the production of 1960-1970 world financial and economic centers (Japan, Western Europe, USA), which led to a change in the balance of power between them, as well as the emergence of new regional centers and their currencies.

The origins of the idea of a multi-currency standard appeared during the creation of the Jamaican monetary system, when instead of reserve currencies, the category of freely used currencies was introduced. Such currencies included not only the dollar or the pound sterling, but also other currencies used in determining the weighted average SDR rate (eg, the euro and the Chinese yuan).

Note that the concept of SDR was not viable. However, her ideas are promising, which corresponds to the trends of multicentrism and regionalism in the context of globalization of the world economy.

The new multi-currency standard must be consistent and clearly define the basic principle of the new system. In this case, mean the composition of currencies and the criteria for their selection.

Proof of the quality and sustainability of world money is the ability to effectively perform three functions of world money, which include: international measure of value; international means of payment and reserves; indicator of competitiveness and recognition in the global financial market.

According to D. Stiglitz, it is necessary to introduce a system of global regulation of financial markets, and, as a consequence, adjust the modern architecture of the international financial system. The reform of the world monetary system should be conducted in the following areas:

- reforming the global regulation of financial markets and the entire financial system, including the regulation of the derivatives and swaps market;
- the formation of the global reserve system, which is the issuer of the global reserve currency, so it is necessary to develop a mechanism for issuing this currency, to determine the issuer, the volume and conditions of issue;

- the necessary reform of institutional structures dealing with the regulation of debt obligations of the world;
- creation of innovative risk management structures in countries and countries with economies in transition, and the creation in this regard of innovative financial instruments.

## **CONCLUSIONS AND SUGGESTIONS**

1. Determining the role of currency competition in today's globalized world, it was found that the global financial crisis, which affected both developed economies and emerging markets, has led to growing differences between national interests. Currency competition has intensified, manifested in competitive devaluation or currency wars, one of the main components of economic wars between countries. In 2010-2011, the global foreign exchange market experienced serious shocks. Many countries have found themselves embroiled in a general competitive weakening of currencies. Such "actions"

are explained by the inability to balance the world monetary and financial system in the global crisis.

- 2. Examining the historiography of the first, second and third currency wars, it was found that currency warfare involves governments and central banks deliberately influencing the national exchange rate, usually to achieve a relatively low exchange rate to expand exports. Countries with "excessive" spending, such as the United States, with trade, balance of payments, and government budget deficits have been forced to reduce spending while reducing domestic demand. In this case, in order to "survive and not fall" into recession, they were forced to devalue their currency. At the same time, countries with "excessive" savings, current account surpluses, such as Germany, Japan, China, opposed the revaluation of their currencies during the 20th century.
- 3. Establishing causal links in the course of currency wars, it was determined that no currency war brings anything good to the participating countries and countries that depend in some way on a particular currency. An interesting fact is that despite the fact that these countries are at war in the international arena with one country against another, they are caused by internal strife. The country is considering this step due to underdevelopment. It usually suffers from mass unemployment, inflation, declining economic development, weakness in the banking sector and deteriorating public finances. Under such conditions, it is difficult to achieve growth only due to the driving forces within the country. Consequently, stimulating exports through currency devaluation is the last possible driver of economic growth.
- 4. The issue of formation of modern currency wars is revealed, which is formulated as the desire of the United States to preserve world domination, implement the idea of a unipolar world, preserve the dollar as the world's main means of payment and reserve, large US debt, debts of major foreign countries. In this context, the US quantitative easing policy forces other countries, such as Japan, to follow the rules of the game to eliminate threats to the national economy from the devaluation of the US currency. All this has a negative impact on the economic development of countries. Even countries with a stable economic system, such as Switzerland, carry out foreign exchange interventions to maintain the stability of the national currency. All this causes problems

for exporters, who have to correctly calculate the exchange rate "price currency" and "payment currency" in the contracts. Risky monetary policy of leading countries causes major problems in the world economy and requires the use of various methods to implement currency regulation. The main methods of state regulation of the economy used in currency wars are: the introduction of currency restrictions; de-dollarization of the economy; protectionist foreign policy; regulation of interest rates of central banks; use of fiscal instruments; effective management of state assets.

- 5. Analyzing the currency wars between China and the United States, it was found that for a long historical period, the power of both countries passed the so-called currency rubicon. This practice was especially popular in China: they allowed their currency to fall below the psychologically important mark, which was still considered a kind of "red line" that Beijing stubbornly defends. Washington sees this as currency manipulation. Thus, he actually accused China of currency dumping. Thus, the trade wars between the United States and China are moving to a new level of escalation.
- 6. Examining the international practice of preventing the formation of currency wars, the recommendations for improving the international monetary system were formulated. Among them were: adhere to the principle of phasing in the transition from economic to monetary integration; begin the harmonization of economies from the so-called "integration core", and then gradually expand the union by pulling distant countries; timely identify and remove barriers to integration; coordinate and, subsequently, harmonize the monetary and macroeconomic policies of member states; prepare the preconditions for monetary convergence in a simplified form.

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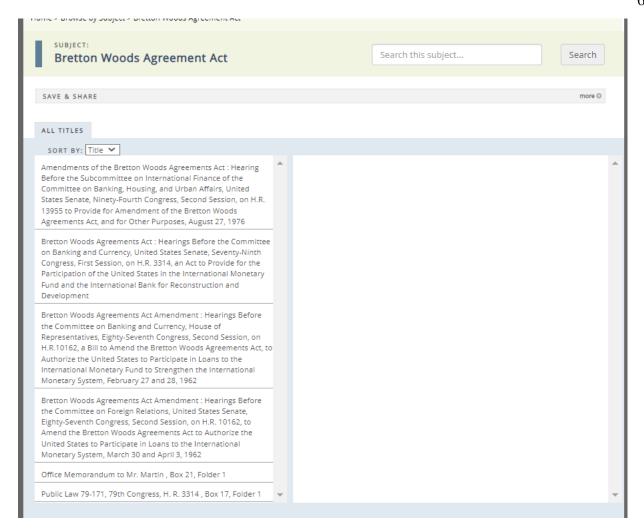
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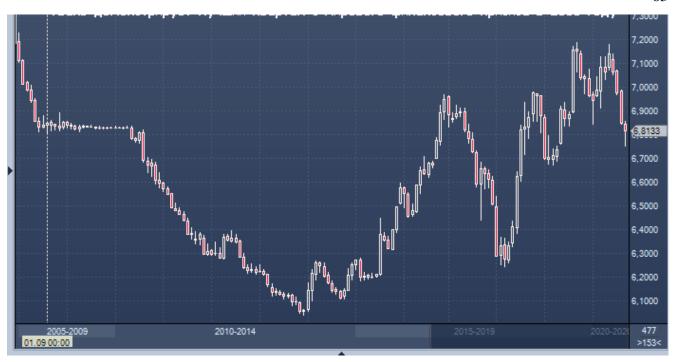
### **APPENDICES**

Appendix A



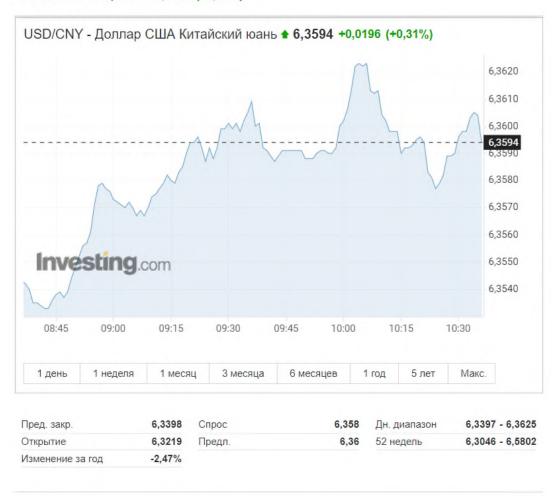
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