

OPTIMAL MONETARY AREAS AND MONETARY POLICY. AN ANALYSIS OVER WORLD POWER CENTERS

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Abstract: *The phenomenon of power in international relations has always caused interest. The current international environment is extremely amplified and interconnected, and developments in recent decades have led to the foundation of a multipolar system. At present, the competition between power centers in the world economy is manifested at all levels of power, especially from an economic perspective. There is a clear desire for the Western European states that are members of the European Union and the BRICS to detach from their financial dependence on the US dollar and the United States financial instruments. We propose to analyze whether there are correlations between the monetary policies adopted by these entities and the characteristics of the optimal monetary areas. If monetary policy moves closer to the optimal monetary area specifications, then does that global influence increase?*

Keywords: power centers; monetary union; economic power; optimal monetary area; monetary policy

JEL classification: E42; E52; E58; F02; F33; F45; F50; O50

1. Introduction

In the academic environment and politics, there are many debates about the power relations in the world economy. The topic is interesting and generates different approaches of specialists from different structures of society. Associated with terms such as force, influence, domination and authority, power has a broad framework of definition and interpretation depending on the domains in which it manifests itself. Thus, in a sociological view, power manifests itself in social relations as an imposing of own will despite the resistance encounter (Zamfir and Vlăsceanu, 1998: 478). On the other hand, from a geopolitical perspective, power is considered a way for society to guarantee its survival (Nivaldo, 2001: 24), in military terms speaking; it expresses the ability to carry out the military actions necessary to promote its own political interests and its own security, but also of its allies (Ancuț, 2009).

From a philosophical point of view, power is regarded as a change in the inner state of a person or group of people (Foucault, 2005: 416-417), while in a political vision it is seen as the possibility of generating changes and to react to change (Nye, 2011: 5).

A more synthetic view is that of Gerard Kebabdjian, according to which power is the ability of economic or political entities in the world economy to significantly influence international relations. This capacity includes five plans: physical (existence of natural resources), military, economic, political and cultural. Of all this, the most important is the economic dimension, divided into four plans: industrial and service, monetary-financial, IT and research – development (Kebabdjian, 1994: 297).

With these considerations, we believe that power has an essential role in social and international relations, being represented by an actor which through economic, moral, political, military and cultural methods, imposes his own will on the behavior of other actors. But of all the components of power, the economic dimension remains the most important, being a helpful ingredient for the manifestation of the other elements of power. Over time, it has been expressed through other varieties of power and the historical evolutions of international political and social conditions have caused changes in power structures.

Usually, the economic power is measured by different indicators from various economic areas, such as the economic and financial stability, demographic factors, labor market and quality of economic infrastructure, technology and innovation. The most common indicators in order to study the economic power are the Gross Domestic Product (GDP), foreign trade indicators, foreign direct investments, inflation rate, interest rate, fiscal balance, exchange rate fluctuations, public and external debt, unemployment, labor productivity, population, R&D expenditure and high technology investments.

However, there are some composite indicators used by specialized institutions and international organizations for power quantification. The most significant institutions and organizations are: World Economic Forum, World Bank, World Intellectual Property Organization (WIPO), United Nations Development Programme, Heritage Foundation, Central Intelligence Agency, European Statistical Office (Eurostat) and The Business School for the World.

2. Power politics and optimal monetary areas - theoretical foundations

The transition from US-Soviet bipolarity to American supremacy, followed by current multi-polarity, has increased interest in studying economic power on all its plans. These phenomena have been studied by many authors, depending on the international environment. In the last decades, the international system is shaped as a multi-polar structure. It is believed (Huntington, 1999: 35-36) that there is a superpower (United States) and a series of regional powers (China, Russia, Germany, Japan, France, India, Nigeria and South Africa). At the same time, a US-based pyramid structure (Gelb, 2009) is being set up, followed by European countries (Germany, Great Britain, France), Asia (Russia, China, India, Japan) and Brazil. On the other hand, the United States, the European Union and China are seen as entities capable of influencing the international environment through their decisions, which can be confirmed or blocked by Russia, Japan and India, viewed as secondary powers (Khanna, 2008: 17-21).

Although international organizations and companies influence transnational policy, and while United States dominates military dimension, (Nye, 2011: 14-15) power relations have a multipolar structure, grounded in the influence of the US, the EU and the BRICS. Their actions over different economic forms, including monetary ones, are correlated with the degree of financial development of each.

The most widely used indicator to quantify the economic power between states is Gross Domestic Product. The role of this indicator is to study the world power centers through it.

In the table below, it can be observed that GDP increased in 2017 compared to 2016 for all three power centers. The highest values of GDP, both as purchasing power parity and per capita was registered by BRICS countries. However, BRICS countries cannot be seen as a unitary power center. Brazil, Russia, India, China and South Africa cooperate in different areas, but not at the same level as European countries. The BRICS cooperation is mostly in foreign trade, investments and finance, but the decisions are not taken at central level or by a central authority. Therefore, it is better to study them individually.

Even if the BRICS countries are treated separately, China remains the country with the highest value of GDP as purchasing power parity, having \$21.41 trillion in 2016 and \$23.30

trillion in 2017, more than the other BRICS countries combined. China is followed by European Union with \$20.25 trillion in 2016 and almost \$21 trillion in 2017 and by United States, with \$18.62 trillion and \$19.39 trillion in the reference period.

Table 1: The GDP for world power centers in 2016 and 2017

Power Center	GDP, PPP (current international trillion \$)		GDP per capita, PPP (current international \$)	
	2016	2017	2016	2017
United States	18.62	19.39	57,589	59,532
European Union	20.25	21.07	39,625	41,126
BRICS	37.64	40.55	75,356	78,377
Brazil	3.15	3.24	15,181	15,484
Russia	3.64	3.81	24,819	25,533
India	8.70	9.44	6,574	7,056
China	21.41	23.30	15,531	16,807
South Africa	0.74	0.76	13,251	13,498

Source: The World Bank, World Development Indicators, last update 14th November 2018

But it is necessary to take a look at GDP per capita, which provides a much better determination of living standards than GDP value. Even if China produces a lot, it generates less per person than United States, European Union or Russia. A low GDP per capita indicates lower standard of living while a high GDP per capita means a more efficient economy. Thereby, from the table above, it can be observed that United States and European Union have the most favorable standard of living. The United States GDP per capita is over \$57,000 and twice than the value of Russia for both years, followed by European Union with almost \$40,000 in 2016 and \$41,126 in 2017. From the BRICS countries, Russia has the highest value of GDP per capita, almost \$25,000, while China's value is close to the Brazil's value and over twice than India.

Another way to study the hierarchy between power centers is to compare them by foreign trade indicators and foreign direct investments. Even if China has the highest value of GDP as purchasing power parity and United States the best GDP per capita, the foreign trade is dominated by European Union, which in 2017 exports and imports more than United States and BRICS countries together. According to Table 2, European Union's exports reach almost \$7.95 trillion, while imports are about \$7.3 trillion, generating the largest trade surplus of \$653.8 billion. European Union is followed by BRICS countries, with less than half of the European Union's values.

Table 2: The foreign trade for world power centers in 2017

Power Center	Exports of goods and services (BoP billion \$)	Imports of goods and services (BoP billion \$)	External balance (billion \$)
United States	2351.07	2903.34	-552.27
European Union	7949.18	7295.39	653.79
BRICS	3679.13	3422.08	257.05
Brazil	251.72	221.54	30.18
Russia	411.27	326.95	84.32
India	489.40	561.61	-72.21
China	2422.91	2213.18	209.73
South Africa	103.83	98.80	5.03

Source: The World Bank, World Development Indicators, last update 14th November 2018

Considering that BRICS are not a unitary power center driven by a central authority, the second position is occupied by China, whose exports reach \$2.42 trillion and trade surplus counts \$209 billion. Only on imports of goods and services, China is overtaken by United States with almost \$700 billion. But, United States has a big problem, just like India, because of the trade deficit situated at \$552.27 billion. India, which is the fourth importer and exporter among the analyzed countries, has a trade deficit of \$72.21 billion. The other BRICS countries have trade surplus due to the superiority of exports to imports. So, Russia has a trade surplus of almost 84.3 billion, followed by Brazil with \$30 billion and South Africa with \$5 billion.

Regarding foreign direct investments, European Union is the world's largest investor and the power center that attracts the most foreign investments. Actually, European Union invests twice more than United States, as it results from Table 3. The European Union's FDI outflows are almost \$769 billion, while United States invests \$379 billion on foreign markets. They are followed by China with almost \$102 billion, whilst the other BRICS countries invests together only \$61.5 billion. The hierarchy is the same regarding FDI inflows. European Union benefits from investments worth of almost \$605 billion, followed by United States with \$354.8 billion and China with \$168.2 billion.

Table 3: The foreign direct investments for world power centers in 2017

Power Center	FDI net outflows (BoP billion \$)	FDI net inflows (BoP billion \$)	FDI net (BoP, billion \$)
United States	379.22	354.82	24.4
European Union	769.11	604.92	164.19
BRICS	163.45	308.78	-145.33
Brazil	6.26	70.68	-64.42
Russia	36.75	28.55	8.20
India	11.09	39.96	-28.87
China	101.91	168.22	-66.31
South Africa	7.44	1.37	6.07

Source: The World Bank, World Development Indicators, last update 14th November 2018

But, a few differences are related to net FDI, where only Russia and South Africa have positive values among BRICS countries, \$8.2 billion and \$6 billion. China has the largest investments deficit of almost \$66.3 billion, followed by Brazil with \$64.4 billion. Overall, the BRICS countries have an investments deficit counted at \$145.33 billion, while United States and European Union have a surplus of \$24.4 billion and almost \$164.2 billion.

However, it is, also, important to analyze the financial environment and the monetary stability for these three power centers. Beyond the measurement of financial indicators, a more essential aspect is to find out if at least one of these three power centers can be considered an optimal monetary area.

"The optimal monetary area is why the cost of giving up flexible exchange rates or the realignment option is lower than the benefits of a single currency." (Marinas, 2008, p. 156) According to the same theory, a deeper monetary integration leads to a larger commercial opening of the economy (Marinas, 2008, pp. 155-213).

According to Radu Golban and Grigore Silasi, the optimal monetary area represents the path to be followed between stable and flexible exchange rates. The dilemma of the best option has a direct correlation with the balance of payments disequilibrium. They explain that the methods of preventing and eliminating the imbalance are based on the exchange rate. First, in the case of a stable exchange rate, the intervention of the Central Bank in the foreign

exchange market leads to the removal of imbalances. This willingness of financial policy impedes an autonomous trade policy. In the second case, when there are flexible exchange rates, the elimination of the disequilibrium of the balance of payments is done through the exchange rate. Exchange rate fluctuations lead to an increase or decrease in the competitiveness of domestic products, ultimately leading to a balance of payments adjustment. Thus, in the case of flexible exchange rates, the country can pursue an autonomous monetary policy (Golban and Silași, 2009: 18-21).

The more the monetary union approaches the characteristics of an optimal monetary area, the greater the chances that the union will impose itself as a worldwide power center. An optimal monetary area implies that Member States' economies are synchronized or tend towards synchronization, which gives the whole union greater stability and increased protection against various internal or external shocks. Such a monetary union may focus on other objectives, such as its imposition on the world stage, as a center of power.

3. Optimal monetary areas in relation to the main global power poles

In acquiring the status of world power, the monetary policy of the states also involves an important role. Global power is also characterized by a coherent monetary policy, a strong currency and a strategy for imposing the single currency as a coin used in international trade. Mundell believes that there must be fixed exchange rates between participants in an optimal monetary area, aiming at introducing a single currency. At the same time, flexible exchange rates must be maintained in relation to other partners that are not members of the optimal monetary area (Mundell, 1961: 659-660). In our analysis we have stopped on three entities that have a significant influence over the world economy, giving it a multipolar structure (Nye, 2011, pp. 14-15). Each analyzed entity is totally different in the monetary integration process. On the one hand, we have the BRICS countries as emerging power centers, but which do not have a common monetary policy; on the other hand, we have two traditional powers: the European Union, which is in the process of implementing a monetary union with a common monetary policy and the United States of America, where we are talking about a political union, the next step after the monetary union.

3.1. BRICS – lack of a common monetary policy

Within this "group of states" we cannot discuss a common monetary policy, because each state has its own monetary policy, namely its own currency. In the following, we can observe discrepancies between BRICS member states through monetary policy. Each analyzed state has its own views on the monetary system. As we can see, some states have managed to impose their monetary policy in the region, while others have failed in their attempt.

Brazil had the national currency (the Brazilian real) linked to the US dollar for five years. Only after a series of events that affected the Brazilian economy, Brazil's Central Bank decided to set up an exchange rate to the dollar. Still, the stagflation faced the discrepancies in development between regions and political instability cannot create the conditions for predictability of monetary policy.

The Russian Federation, by the nature of the formation of the state, is a monetary union. We are talking about a unique currency, ruble, which has an unpredictable evolution. In the last 25 years, the ruble has gone through two major depreciations against the dollar. These events, correlated with an incoherent policy of the Russian Central Bank and oligarchic system in the private banking system, led to the exclusion of the currency on the world trade scene. The ruble has only a regional influence; it is used in trade with Russia by the so-called "satellite state", like former members of the Soviet Union.

India, with its Indian rupee, is facing a high level of corruption and an extremely high poverty rate. We are talking about a developing economy that has managed to attract many

investors, even if India still have a large population that lives with less than a dollar per day. India has still failed to impose its currency and monetary policy as a benchmark in the region, but India's potential is still high.

China, among all BRICS countries, plays the role of world power through monetary policy, although Yuan is not a widely used currency in the world. China has the second largest GDP in the world, but it is at half the world's list of GDP per capita. Even if it is the world's largest exporter, most of the Chinese currency reserves are in US dollars. At the same time, China has the most American debts. So, in China's case, we cannot talk exclusively about acquiring power through monetary policy. However, China has managed to make the US dollar addicted on Chinese regime decisions.

The last of the BRICS members, South Africa is the most developed country in the African continent. We cannot say that it plays an important role in the world economy because the national currency is not a currency used in world trade.

In conclusion, we can observe that the lack of a common monetary policy of the BRICS member countries makes it harder for them to be remembered worldwide as standards in the monetary field. As long as we are not talking about a BRICS monetary union, we cannot even discuss of fitting this entity into an optimal monetary area. As we can see, there are very large discrepancies between the monetary policies of the BRICS constituent states, so that a potential monetary union cannot be outlined in the future.

3.2. European Union - a monetary union under construction

The second world power on which we stop is the European Union. At present, the European Union plays an important role in world trade, and at the heart of its development is the European single currency. The euro is the second most used currency worldwide after the US dollar.

Out of the 28 countries, only 19 EU countries have joined the euro area, other countries using the euro have been negotiated with other euro zone countries under the approval of the Council of the European Union: Vatican and San Marino (both countries have an agreement with Italy and use customized coins), Monaco (agreement with France, uses customized coins), Andorra (uses euro coins from France and Spain). Without the agreement of the Council of the European Union, the euro is still used in Montenegro and Kosovo. The European currency is also used in the former French, Portuguese and Spanish colonies, which have retained their dependence on European countries. Even if they met all the criteria for joining the Euro zone, the Great Britain and Denmark received derogation from not adhering to the single currency, so they did not give up monetary sovereignty but joined the community (Padoa-Schioppa, 2000, pp. 168-181). Although it has not formally received any derogation, Sweden is not interested to join the European single currency.

Fortunately, joining the European Union is also not conditional on joining the European Monetary Union. However, EU Member States have assumed that they will join the euro area at the appropriate time. In order to join the European Monetary Union, states must meet the nominal criteria set out in the Maastricht Treaty, but the most important issue is to want this change. Abandoning the national currency and adopting the common currency is a political decision, and states do not make this a priority. At the level of the European Union, we have a monetary policy assumed by all states, but that is not an immediate priority, and the member states can only join at the time they consider to be a good one. The European Monetary Union is not an optimal monetary area, but it is on a favorable path. Within the monetary union, we are talking about fixed exchange rates between members, and a fluctuating exchange rate is used in relations with foreign countries.

3.3. The United States - an example of good practice

The last world power analyzed is the United States of America. The world's main power has the most influential currency in the world. The US dollar is the most used currency in world trade. We can consider the United States as a monetary union, a union that is the closest to what an optimal monetary area should look like in theory. The main advantage of the United States is represented by the lack of a development gap between the constituent states. Within the union, we speak of a free movement of all factors of production.

In addition to all these features, the dollar has been and still is being used as a reference currency. This also comes from the backing of the golden dollar in the past. The strong economy of the United States of America and its dominant power in the world is also due to the consistent and predictable monetary policies that the governments had it over the time.

3.4. Differences in monetary policy

As we have seen through this theoretical approach to the theme, between the three world power centers, there are differences in the perspective of monetary policy. Each of the three world powers places at a different stage in the implementation of a monetary union. We can see that the world power status is related to the proximity of the union of what the needles are optimal monetary areas.

The United States currently holds the status of a major powerhouse. At the same time, the United States is the closest example of the optimal monetary area. The US dollar has succeeded in imposing itself at the international level as the main currency used in international relations.

Unlike the United States, the European Union is characterized only by an economic and monetary union; it has not reached the status of a political union. The European Monetary Union cannot yet be considered an optimal monetary area. The economies of the Member States are not yet fully synchronized, and at present, not all the Member States of the European Union are also members of the monetary union. However, the European Union is considered a global powerhouse and the euro is an international standard. The euro is the second most important currency in international relations, after the US dollar.

On the other hand, the BRICS countries have a special status. We may consider some member countries, such as China or Russia as world power centers, but we cannot consider BRICS as such a center. First, there is no economic or monetary legally binding link between the member countries. Another element is the lack of a common currency, which prevents this entity from imposing itself globally. However, perhaps the most important element is the lack of a common monetary policy, which prevents BRICS from imposing itself through the coins used worldwide.

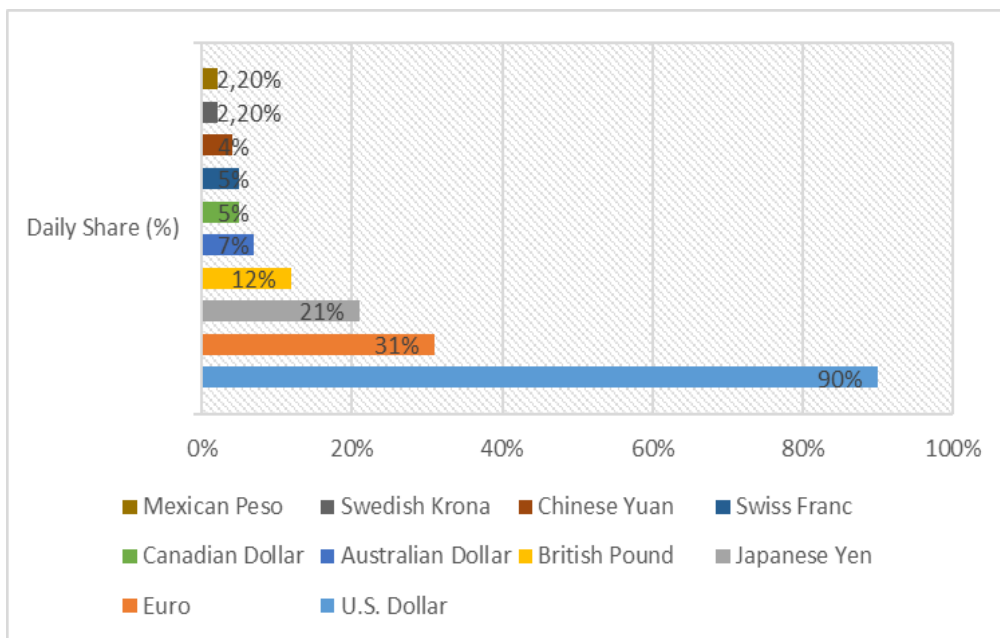


Figure 1: The most traded currencies in 2018

Source: Bullmarketz.com, The 10 Most Traded Currencies in 2018, available at: <https://bullmarketz.com/the-10-most-traded-currencies-in-2018/> [accessed 13.01.2019-]

In Figure 1, we can see which the most traded currencies are in 2018. The total percentages are 200%, because two coins are involved in an exchange relationship. As we can see, the US dollar is by far the most used currency in 2018. Most of the world's trades were conducted through this currency, about 90% of transactions.

Also from Figure 1, we can see that the second most used currency in 2018 is the euro, about 31%. As a result, 121% of all transactions have the two currencies in the center. This gives both the United States of America and the European Union the status of major players in the foreign exchange market. This dominance overlaps with the status of power centers of the two state entities.

The single currency of a BRICS member country present in the top 10 is the Chinese Yuan, ranked 8 with only 4% of global transactions what denotes again the lack of monetary policy by both the BRICS and each member sharing. Until the BRICS countries implement a cohesive and sustained monetary policy, even if they do not go as far as a single currency, they cannot be imposed as world leaders in the currency field. The lack of a strong voice in monetary policy diminishes the status of world power center for BRICS.

4. Conclusion

In conclusion, we have three world center powers with their own distinguishing features. Because the Gross Domestic Product is the most widely used indicator to quantify the economic power, it is necessary to study the world power centers through it. Even if, BRICS countries have the highest values of GDP as purchasing power parity, per capita and cooperate in different areas, these countries cannot be considered a united power center as European countries. Therefore, China remains the country with the highest value of GDP as purchasing power parity, but it cannot be translated in favorable standard of living. United States, followed by European Union, have the most favorable living conditions due to high

levels of GDP per capita. Despite that China has the highest value of GPD; European Union remains the strongest power center regarding foreign trade and foreign direct investments. Therefore, European Union has the largest trade volume, is the world's largest investor and the power center which attracts the most foreign investments. In addition, European Union has a positive external balance, twice as high as BRICS countries and benefits by a FDI surplus bigger than that of American economy. Regarding United States, it has the best living conditions, it is the world's second investor and importer, but have problems with trade deficit.

Following the analysis of the various hypotheses in the literature, we can conclude that we have three great powers with their own monetary policy overlapped with the characteristics of an optimal one. If the BRICS countries do not have a common monetary policy - so we cannot discuss that they are characterized by a single currency - the situation is different for the European Union and the United States. The European Union has in its composition a monetary union. Although we can consider at the moment that the euro area is at a relatively early stage, it has gone through many challenges. However, the euro is an important currency of today's importance. On the other hand, we have the United States, the single currency that meets most of the features of an optimal monetary policy. This is also reflected in the dominant US dollar position in the global economy.

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Bio-note

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