FEDERAL UNIVERSITY OF RIO DE JANEIRO

MARINA MORENO DE FARIAS

A changing international monetary hierarchy? The Sino-Russian cross-border financial systems as alternatives to US-led mechanisms

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Master's degree thesis presented to the Graduate Program in International Political Economy of the Institute of Economics of the Federal University of Rio de Janeiro, in partial fulfillment of the requirements for the degree of Master of Arts in International Political Economy.

Supervisor: Prof. Dr. Mauricio Medici Metri

Co-supervisor: Prof. Dr. Bruna Coelho Jaeger

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Rio de Janeiro, 07 of November of 2024.

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“Yet the political scientists in the field of international relations show themselves singularly ill-equipped as well as disinclined to explain, analyze, or illuminate what are still - despite their economic content - essentially political questions. On the other hand, the economists who are much concerned with the technical aspects of the question, with the analysis of the functioning of monetary and other economic mechanisms, unconsciously tend to ignore or overlook the political elements involved. Between them, there is what I have described elsewhere as a "middle void": a no man's land, an empty quarter unwatered by the academic mainstreams, neglected by most universities, and subject only to sporadic forays by a few financial journalists and to isolated expeditions by a few academic hybrid” (Susan Strange, 1971)

Acknowledgements

Writing has been one of my favorite things ever since I perceived myself as part of this world. Verses, poems, chronicles and even an entire book that was never published; usually without much effort, the words would flow and organize what was knotted inside. This passion persisted, and I've been going through academic life reading, discussing and writing more and more. The nature of writing a dissertation, however, is not that smooth. The words don't always flow. Often they fail at expressing what we have so intrinsically come to understand through the transformative shifts of reality. Even so, writing this dissertation was delightful. Not without pain, but with satisfaction. Not without fear, but with courage. Courage fostered and forged through the absolutely transformative encounters with masters, professors and colleagues that the Institute of Economics allowed me to engage with.

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Abstract

This research aims to assess if the Chinese CIPS and the Russian SPFS systems work as bypass tools to the current international monetary hierarchy. The hypothesis of this work is that the internationalization of the RMB and the creation of Russian international financial mechanisms does not in itself put pressure on the international monetary hierarchy. However, they form an institutional bypass by creating alternative channels to those based on the US dollar. In this sense, the central premise of this thesis is that there is a significant difference between an international currency and a global currency. International currencies can be characterized by institutional/market variables, as they meet prerequisites for international usage (convertibility, liquidity and trust) to be used in foreign trade, cross-border transactions and global payments. The global currency, on the other hand, in addition to fulfilling these prerequisites, is 1) a unit of account that denominates the prices of geopolitically relevant assets, such as oil, 2) a store of value that makes up the majority of the reserves of non-issuing countries, and 3) is the unit of account behind an imposed economic order, through which it weaponizes previously neutral international technological/economic/financial mechanisms. We argue that the US dollar fulfills the premises of an international currency and those of a global currency, by creating an international monetary-financial hierarchy that cannot be supplanted by the internationalization of another currency in market/institutional terms.

Keywords: Currency; Hierarchy; SWIFT; CIPS; China; United States of America.

Resumo

Esta pesquisa tem como objetivo avaliar se os sistemas CIPS chinês e SPFS russo funcionam como ferramentas de desvio da atual hierarquia monetária internacional. A hipótese deste trabalho é que a internacionalização do RMB e a criação de mecanismos financeiros internacionais russos, por si só, não pressionam a hierarquia monetária internacional. Entretanto, formam um desvio institucional ao criar canais alternativos àqueles baseados no dólar americano. Nesse sentido, a premissa central desta tese é que há uma diferença significativa entre uma moeda internacional e uma moeda global. As moedas internacionais podem ser caracterizadas por variáveis institucionais/mercadológicas, pois atendem aos pré-requisitos de uso internacional (conversibilidade, liquidez e confiança) para serem usadas no comércio exterior, em transações internacionais e em pagamentos globais. A moeda global, por outro lado, além de atender a esses pré-requisitos, é 1) uma unidade de conta que denomina os preços de ativos geopoliticamente relevantes, como o petróleo, 2) uma reserva de valor que compõe a maioria das reservas dos países não emissores e 3) é a unidade de conta por trás de uma ordem econômica imposta, por meio da qual instrumentaliza mecanismos tecnológicos/econômicos/financeiros internacionais outrora neutros. Argumentamos que o dólar americano cumpre as premissas de uma moeda internacional e as de uma moeda global, criando uma hierarquia monetário-financeira internacional que não pode ser suplantada pela internacionalização de outra moeda em termos de mercado/institucionais.

Palavras-chave: Moeda; Hierarquia; SWIFT; CIPS; China; Estados Unidos.

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Abbreviations

BW - Bretton Woods

BP - Balance of Payments

BRI - Belt and Road Initiative

CBDC - Central Bank Digital Currency

CI - Currency Internationalization

CIPS - Cross-Border Interbank Payment System

CHIPS - Clearing House Interbank Payments System

FED - Federal Reserve System

FDI - Foreign Direct Investment

GWT - Global War on Terror

GFC - Global Financial Crisis

IMF - International Monetary Fund

NSS - National Security Strategy

NSPK - Russian National Card Payment System Joint Stock Company (NSPK)

OFC - Offshore Centers

ODI - Outward Direct Investment

RMB - Renminbi

SBP - Faster Payments System

SPFS - The System for Transfer of Financial Messages

SWIFT - Society for Worldwide Interbank Financial Telecommunication

TFTP - Terrorist Finance Tracking Program (TFTP)

UNSC - United Nations Security Council

UN - United Nations

USD - United States dollar

WB - World Bank

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Introduction

The US dollar is the most used international currency in the world, and under which the contemporary monetary hierarchy is constituted. The dollar is the reserve currency of the International System and it currently represents 59% of the value of foreign reserves worldwide[1], dominating world trade turnover and monetary transactions. More than 60 currencies are pegged to the US dollar and the currency represents 47% of all global payments (SWIFT, 2024)[2]. It is argued that the privileged role achieved by the United States began in the aftermath of the Second World War, with the establishment of the Bretton Woods system, through a strategy based on a liberal order centered on the American currency, without, however, promoting deregulation or having a global reach.

The Bretton Woods system and its financial order collapsed in the 1970s, when US President Richard Nixon (1969-1974) unilaterally suspended the convertibility of the dollar into gold, marking the end of the gold standard and the beginning of a floating exchange rate system. The United States effectively framed the First World countries (partners and competitors) in the 1980s, in the period of the "restoration of American hegemony[3]", but it was only in the post-1991 period, with the National Security Strategy proposing to redesign the international order, that a deregulated global liberal order was established - still, of course, anchored in the dollar as the currency of reference.

Because countries are placed within this hierarchy, and they do not issue dollars, they need to accumulate reserves in US dollars to deal with economic shocks, repayment of debts, management of import payments, and stabilize their currency values. That is to say that not only does the United States not suffer from a Balance of Payment restriction[4], but that it imposes a foreign restriction on all countries - they do not issue US dollars but need to obtain it to operate within this international monetary hierarchy. This privilege is conditioned to the existence of a fiat currency, given that when the dollar was pegged to gold, it could not face current account deficits, promote continuous currency devaluation and the price of gold should always be in parity with the price of the local currency (Serrano, 2002).

[1] Currency Composition of Official Foreign Exchange Reserves, IMF, 2024.
[2] RMB Tracker: Monthly reporting and statistics on renminbi (RMB) progress towards becoming an international currency, SWIFT, 2024.
[3] For more on the re-assertion of American hegemony, see Tavares (1985).
[4] For more details on the balance of payments constraint as an explanation for differences in international growth rates, see Thirlwall (2019)

Once the globalization of a liberal economic order took place, imposing monetary violence on developing countries, through various mechanisms, especially under the umbrella of the Washington Consensus (Williamson, 1991), became the norm, such as taking out loans - external debt - in US dollars (with a flexible exchange rate) through institutions such as the IMF and the World Bank. The international demand for US dollars, through the accumulation of reserves by non-US dollar issuing countries (to ensure supply of imports, manage their exchange rates, repay debts etc.) are the main tool by which the United States increases its deficit capacity[5].

Small wonder the global economic system started experimenting with the complete lack of capital influx control as well as the growth of speculative capital influx. Exchange rates started to accompany the interest rates differentials and monetary authorities from most countries had to acquire international reserves (mainly in US dollars) to defend their exchange rates (Metri, 2023). Private economic groups are also compelled to accumulate international reserves in order to operate within this hierarchy.

The composition of countries' international reserves is mainly characterized by the predominance of dollar-denominated assets, especially US government bonds. Allocation in US Treasuries is crucial for any entity wishing to participate in the global monetary-financial system, given the centrality of the dollar in such a system and its deregulation and liberalization. A study by the International Monetary Fund (Currency Composition of Official Foreign Exchange Reserves) shows that the dollar represented 59% of allocated reserves in 2021, compared to 47% in 1995 and 62% in 2010[6].

However, the past decade has been seeing a series of initiatives seeking to bypass the US dollar and to transform the international financial architecture. The members of the BRICS are looking to reduce their dependence on the US dollar; China has created - and accelerated the development - of alternative payment systems, such as the CIPS (China's Cross-Border Interbank Payment System), where settlement is denominated in RMB; the Asian giant has also been engaging in direct renminbi exchanges with central banks of its trading partners to enhance their reserves of renminbi, especially with Russia. Nonetheless, the New Development Bank (NDB), also known as the BRICS bank, under the leadership of Brazil's ex-president Dilma Rousseff, has reported that one of the main goals was to finance

[5] "[...] Totaling more than $26 trillion in 2023, U.S. federal government debt is now at its highest percentage of gross domestic product (GDP) since World War II." (CFR, 2023).

[6] Currency Composition of Official Foreign Exchange Reserves (COFER) - IMF Data,2024. Retrieved from: <https://data.imf.org/?sk=e6a5f467-c14b-4aa8-9f6d-5a09ec4e62a4>.

development projects in local currencies as mentioned on the bank's general strategy for 2022-2026:

> [...] We will seek to fund a greater share of our projects in local currencies, with the dual objective of strengthening the member countries' domestic markets and protecting our borrowers from the risks of currency fluctuations. Because their currencies are not fully convertible within the current financial architecture, the economies of the Global South often suffer from the negative impacts of sudden fluctuations in their exchange rates. In addition, many infrastructure projects crucial for sustainable development generate their revenues in local currency, and we intend to offer more compatible alternatives for their financing
>
> [...] Currently, local-currency financing represents approximately 22 percent of the Bank's portfolio, largely driven by Renminbi-denominated loans. For the 2022-2026 strategic cycle, our goal is that 30 percent of the Bank's project financing volume will be denominated in the national currencies of our members (New Development Bank, 2023, n/p).

Nonetheless, an increasing number of oil sales are currently being conducted using non-dollar currencies like the renminbi: "Crucially, Russian oil is now either sold in the local currencies of the buyers or in the currencies of countries that Russia perceives as friendly." (J.P Morgan, 2023). In 2012, Iran started selling oil for China in Renminbi (CNN, 2012; BBC, 2012). In 2018, China launched oil futures contracts denominated in renminbi (petroyuan) traded on the Shanghai futures market (South China Morning Post, 2020). In 2015, China put the CIPS (Cross-Border Interbank Payment System) into operation, intending to bypass the SWIFT system, so did Russia by launching the SPFS (System for Transfer of Financial Messages) in 2014. Saudi Arabia is also actively negotiating with China to price their sales to Beijing in Yuan instead of in US dollars (East Asia Forum ,2024; WSJ, 2022). In sum, there have been several initiatives by countries outside the Western world to find less costly alternatives for international transactions. These costs are not only in terms of the value (unit of account) of doing business, but also possible geopolitical costs such as financial sanctions.

The central premise of this thesis is that there is a significant difference between an international currency and a global currency. International currencies can be characterized by institutional/market variables, as they meet prerequisites for international usage (convertibility, liquidity and trust) to be used in foreign trade, cross-border transactions and global payments. The global currency, on the other hand, in addition to being an international currency and fulfilling these prerequisites, is 1) a unit of account that denominates the prices of geopolitically relevant assets, such as oil, 2) a store of value that makes up the majority of the reserves of non-issuing countries, increasing the issuing country deficit capacity, creating dependence on them and increasing their relative power on the international economic and political chessboard, and 3) is the unit of account behind an imposed economic order, i.e it is created to sustain a geopolitical order, through which it weaponizes previously neutral international technological/economic/financial mechanisms.

The question that guides this research is: What are the impacts of the Chinese Cross-Border Interbank Payment System (CIPS) and the Russian System for Transfer of Financial Messages (SPFS) to the current structure of the monetary-financial hierarchy? The objective of this work is to assess if the Chinese CIPS and the Russian SPFS systems work as bypass tools, showcasing that currency internationalization (CI) can be successful in circumventing the current order without actually dismantling it. The hypothesis of this work is that the internationalization of the RMB and the creation of Russian international financial mechanisms does not in itself put pressure on the international monetary hierarchy. However, they form an institutional bypass by creating alternative channels to those based on the US dollar.

The first methodological challenge of this dissertation is building a theoretical-conceptual framework for a topic that has become increasingly relevant and controversial. To this end, the first chapter attempts to lay the foundation of this work's premise, by building an International Political Economy approach to the subject of currency internationalization, through the Chartal theory of money (Knapp, 1924), and Susan Strange's taxonomy (1971) of international currencies. As Chartalism is concerned with national currencies, it is insufficient on its own to deal with the object of this thesis; Strange's taxonomy is useful in this respect. However, as we do not share the same view as the author on what determines the establishment of a monetary hierarchy, the categories are used as a basis for our own elaboration of a taxonomy of the contemporary international monetary hierarchy, differentiating between international currency and the concept of global currency. In regards to the hypothesis, the concept of institutional bypass is the one that better illustrates the ongoing Sino-Russian initiatives, and will be addressed in the third chapter.

The second task at hand is to assess how the international monetary system currently works. In this sense, Chapter 2 seeks to provide a historical and conceptual framework, first on the hierarchy itself, followed by a subsection on the SWIFT system, one on CHIPS, a fourth historical subsection on the weaponization of the SWIFT system, and a final subsection addressing financial sanctions. The third and final step is to describe the Sino-Russian initiatives, both those directly aimed at creating alternatives to financial messaging systems, such as the CIPS and the SPFS, and the other projects, from multilateral development banks to infrastructure promotion initiatives that involve, at some level, the internationalization of the Chinese currency. Chapter 3 therefore seeks to understand whether or not these initiatives and instruments act as a bypass tool to mechanisms based on the US dollar.

We will carry out a bibliographic review to map the state of the art of the international monetary hierarchy discussion within the field of International Political Economy, focusing especially on the discussion made by Helleiner and Kirshner (2011) and Coelho (2023). A qualitative analysis will be performed, using data from the Bank of International Settlements (BIS), The People's Bank of China (PBoC), the World Bank, the International Monetary Fund (IMF), The Federal Reserve Board (FED), the Asian Infrastructure Investment Bank (AIIB), the CIPS (Cross-Border Interbank Payment System), the New Development Bank and others.

Chapter 1: An international political economy approach to international currency

There is a gap in the discussion of the international monetary hierarchy when it comes to the concept of international currency. This gap is left by the orthodox, because they see money as a commodity and therefore neutral, but also by heterodox economists and analysts. Even those who have understood money as a counterpart to taxation, based on the idea of Chartal money (Knapp, 1924), such as L. Randall Wray (proponent of the Modern Money Theory), slip back into the dominant perspective in economics - of money as the general equivalent in the realization of exchanges - when it comes to international money.

Some of these authors agree with the idea that national currency is the result of imposing taxation on subjects within a circumscribed national territory, but when they analyze the International System, due to the absence of a Sovereign State capable of imposing taxes on other countries (the premise under which the State issues currency), they fall back to the metalist conclusion. Those of us who understand currency as a creature of power, and not of the market or institutions, understand that despite the impossibility of imposing fiscal obligations within the interstate system, there are other mechanisms for imposing the use of currency, due to the hierarchy of the International Monetary-Financial System.

We understand that there is no linear path of currency internationalization under which this currency could become a global currency. A currency can fulfill certain functions and henceforth become an international currency. It cannot, from our theoretical perspective, through this process and this process only (which market variables and institutional variables are the determinant) create a hierarchical economic order to become a global currency like the US dollar. This first sub-section aims to delve into the idea of Chartal money. Although the Chartalist Theory addresses national legal tender, we intend to create a correlation between the concept of currency put forth by this theory and the idea of an international currency/currency internationalization. Section 1.2 addresses Susan Strange's approach to international currency; section 1.3 concludes the chapter by analyzing currency internationalization through the lens of the Chartalist theory.

1.1 Knapp's Chartal Theory

For mainstream monetary theories, money is just a way of making the barter circuit more efficient (M-M). In barter, two individuals have specific goods and want to exchange them at the same time. This approach sees the individual as a totally rational and maximizing actor, who makes coherent financial decisions based on self-interest, always prone to bargaining.

> The butcher has more meat than he needs for his consumption, and the brewer and the baker would be willing to buy some of the product. However, they have nothing to offer in return, except the different products of their work or commercial transactions, and the butcher already has the bread and beer he needs for his consumption (Smith, 1996, p. 81).

However, this convergence does not always occur. The possessor of such a commodity must want to exchange that specific commodity for another specific commodity - which another possessor would also want to exchange and receive back - at the same moment.

> In order to avoid the inconvenience of such situations, every prudent person, [...] after adopting the division of labor for the first time, must naturally have endeavored to conduct his business in such a way that at every moment he had with him, in addition to the direct products of his own labor, a certain quantity of some other commodity (Smith, 1996, p. 81).

Currency would then appear as a general, universally accepted equivalent to serve as a means of exchange: "It would just be a specific commodity that stood out from the others due to intrinsic characteristics such as durability, divisibility and transferability” (Torres, 2022, p.75). Because of these specificities, it would become a means of payment more easily than other commodities, as it would serve as a general, universally accepted equivalent means of exchange. This theory was defended by Aristotle, Locke and political economy classics such as Adam Smith[7].

This economic mainstream, due to its conviction in methodological individualism, assumes that the barter circuit (M-M) then naturally produces the commodity circuit (M-D-M), generating a convergence around a general equivalent (unit of account). In this logic, any commodity, if accepted, would become a means of payment. The choices to make money backed by gold and silver, for example, occurred because of their specificity and non-ubiquity. The main function of money for orthodoxy is therefore to be neutral, to act as a medium of exchange and therefore to influence prices - Quantitative Theory of Money.

However, there is no proof that there was such an evolution - from the barter circuit to the commodity circuit - (Graeber, 2011; Kindleberger, 2010; Martin, 2016). Currency has no intrinsic value, i.e. its value is not determined by the material it is made of, such as gold or silver. Instead, its value is derived from the trust people have in its acceptance. There can be no natural consensus around a monetary standard, because everyone would like to have the ability to decide what that standard would be and to arbitrate it - a converging desire. The decision on who defines and controls the monetary unit is determined by the power and the monopoly of force, i.e the central authority: the Modern State.

According to Georg Friedrich Knapp (1924), currency is issued by a central bank and is a legal tender, which means it is recognized by the government as a valid means of payment. Although Chartal money cannot be converted into a fixed weight of gold or silver, as is the case with representative money, it is accepted in the exchange of goods and services because people trust that the central bank will maintain its value. Therefore, the Chartalist theory of money argues that money is political in nature and that its establishment and use are the result of an act of power by the state. According to this theory, the state chooses the unit of account and the means of payment, referenced to this unit, which will be used to settle debts in the economy.

> To think of money as a commodity and to approach monetary exchange as the exchange of goods for a tangible barter may have been intuitive in the days when coins were minted from precious metals [...] In today's modern monetary regimes, there is no gold backing our dollars, pounds or euros - nor any legal right to

[7] Aristotle reiterated that "'money' was invented to be used in exchange" (Meikle, 1995); John Locke also insisted that money served as a means of exchange and a store of value (Locke, 1696).

> exchange our banknotes for it. Modern banknotes are, quite transparently, nothing more than tokens. What's more, most of the currency in our contemporary economies doesn't even enjoy the precarious physical existence of a banknote. The vast majority of our national money [...] consists merely of the balances in our bank accounts (Martin, 2016, p. 23).

To the Chartalist theory, money is a creature of the state, because only the State can impose tax liabilities. In this sense, money would be derived from taxes only in its ontological sense. Money creation, in a practical sense, would only begin with government spending (an autonomous component of aggregate demand), after the unit of account had been established. Money is generated by the government through spending and is credited to the accounts of banking agents. This currency circulates in the economy, facilitating private transactions and playing the roles of medium of exchange, store of value and unit of account throughout its existence, until it is destroyed in the form of taxes (Kelton; Wray, 2002). Taxes, therefore, cannot come before spending: because if the citizen lacks state currency to pay such taxes, currency must be issued beforehand.

Currency then does not come from exchange, but from "the promise (a liability) of the State to accept it as 'redemption' for the taxes imposed" (Vilella, 2022, p. 48). This means of payment issued by the central authority takes place within a defined territory, with an organized society and where the state is constituted as the one with a monopoly on violence. This central authority issues the unit of account in which citizens must settle the debt they have incurred by paying taxes. Only the central authority, which has a monopoly on violence, can issue the unit of account (currency). Keynes, in his book “A Treatise on Money”(1930, p. 3), makes sure to distinguish between money proper and unit of account:

> Money of account, namely that in which debts and prices and general purchasing power are expressed, is the primary concept of a theory of money. Money itself, namely that by delivery of which debt contracts and price contracts are discharged, and in the shape of which a store of general purchasing power is held, derives its character from its relationship to the money of account, since the debts and prices must first have been expressed in terms of the latter. Something which is merely used as a convenient medium of exchange on the spot may approach to being money, inasmuch as it may represent a means of holding general purchasing power. But if this is all, we have scarcely emerged from the stage of barter. Money proper in the full sense of the term can only exist in relation to a money of account.

A modern state follows a specific process to create its sovereign currency. First, it defines a unit of account over which it will have absolute control. It then establishes "shared obligations" for the whole of society, such as taxes. In this context, currency emerges as a system that organizes society, being a mechanism imposed on citizens so that they can pay off their debts and meet their obligations. The last step to be guaranteed is that the state must prevent this currency from being converted into any other item over which it does not have full control. For this same reason, the State has the authority to change the means of payment accepted from time to time, and to impose fees on the conversion from the old and the new means of payment:

> [...] The money of account is the description or title and the money is the thing which answers to the description. Now if the same thing always answered to the same description, the distinction would have no practical interest. But if the tiling can change, whilst the description remains the same, then the distinction can be highly significant (1930, p. 3).

In this sense, Martin (2016, p. 93) describes that “The reliability of the sovereign's credit rests not on our assessment of its ability to obtain credit in the market, but on the strength of its authority and the sovereign's willingness to use it to accumulate credit with its subjects through taxation”. The author goes on to say that “more than its representative size in the market, it is the sovereign's dominant power outside the market that makes its debt promises as effective as money”. It is the counterpart of taxation, based on the monopoly of violence of the Rational-Legal authority of the modern state, that gives currency and money the strength and power they have today.

> [...] The State, therefore, comes in first of all as the authority of law which enforces the payment of the thing which corresponds to the name or description in the contract. But it comes in doubly when, in addition, it claims the right to determine and declare what thing corresponds to the name, and to vary its declaration from time to time—when, that is to say, it claims the right to re-edit the dictionary. This right is claimed by all modern States and has been so claimed for some four thousand years at least (Keynes, 1930, p. 4).

In a world of fiat currencies (1970-), there is no such thing as intrinsic value of money. Nonetheless, even when currency was backed by gold or silver, the process of debasement was a very common practice, where kings would reduce the intrinsic value of the currency during coinage but kept circulating it at face value. The author Felix Martin (2016) delves into this practice, which was historically employed as a tool to manipulate the economy and finance government spending, especially in times of war or economic crisis. In medieval Europe, debasement was also commonly practiced by rulers, who reduced the precious metal content in their coins to increase the money supply and finance military activities. Another substantial historical example of the role of the unit of account as the main expression of money are the Tally Sticks which appeared first in the Old Stone Age to record numbers and quantities and were later used in medieval Europe, especially in England, until the nineteenth century as currency.

> Unsplit tally sticks started as mathematical objects serving as mnemonic aids to counting, but they eventually found another use as commerce developed. Because so few people could read and write, tallies provided the earliest form of bookkeeping for recording both physical quantities and money. By the medieval period, tallies had really come into their own as the English equivalent of today's credit card and as an instrument of internal control (Apostolou; Crumbley, 2022, n/p).

The financial revolution of the 20th century, characterized by the widespread adoption of fiat money, brought about a fundamental transformation in the global economy. Especially with the end of the Bretton Woods System and the dollar-gold standard, the introduction of fiat money provided greater flexibility in the conduct of monetary policy, since governments were no longer tied to the value of gold or other precious metals. This enabled an unprecedented expansion of credit and investment, boosting the economic growth of the major powers (Martin, 2016; Tavares; Fiori, 2017).

> Thus the age of money had succeeded to the age of barter as soon as men had adopted a money of account. And the age of chartalist or State money was reached when the State claimed the right to declare what thing should answer as money to the current money of account (Keynes, 1930, p. 4).

The very existence and maintenance of fiat money reveals this Chartal character (Knapp, 1924), since fiat money is nothing more than money backed by trust in the sovereign state that issued it: all currencies today function according to this fiduciary character, since they are no longer backed by precious metal or minted in some object with "intrinsic" value (as we have seen, there is no object with intrinsic value that has superior characteristics and enables it to act as a medium of exchange). Thus, "any sovereign state that has the capacity to impose unavoidable tax liabilities will be able to issue a fiat currency [...] it will be able to make deficit expenditures, buying goods and services by crediting bank reserves. It will never need to borrow before it can spend" (Wray, 2002, p. 10).

1.2 The Political Economy of International Currencies

Internationalization is the process of using a national currency across borders for various purposes, or "a currency that is used elsewhere beyond its home country" (Hyoung-kyu, 2013, p. 3), such as the US dollar being used as the unit of account to settle cross-border foreign trade transactions between Brazil and China.

> The concept can be further elaborated for more systematic analysis, however, through either of two broadly distinct ways. One is to conceptualize an international currency in terms of its functions, and the other to categorize international currencies in accordance with the natures of the factors supporting their international use. The former approach is widely adopted in economics research, while the latter is used increasingly in political economy study (Hyoung-kyu, 2013 p. 3).

It is widely acknowledged that the internationalization of a currency offers considerable benefits to the issuer. This process is a consequence of state power, but also a cause, as it generates capacities for the issuing country. The very existence of a monetary hierarchy is made possible by the so-called currency internationalization (CI), given that in order for such a hierarchical structure to be built, the country must impose its currency as the unit of account of reference. "The international statuses of currencies shape a fundamental characteristic of the international monetary system, which has significant impacts on the world political economy by affecting the political as well as economic relationships among states." (Hyoung-kyu, 2013).

Authors such as Cohen (1971), develop their concept of international currency according to their functions. These are, at the private level: use in foreign trade (medium of exchange), invoicing and settlement of foreign trade (unit of account and medium of exchange) and financial markets (store of value). At the official policy level, they can be an exchange rate anchor (unit of account), intervention currency (medium of exchange) or reserve currency (Cohen, 2012). “[...] like a domestic currency, an international currency performs the three functions of money—as a medium of exchange, a unit of account, and a store of value” (Hyoung-kyu, 2013, p.3).

Cohen (2011) identifies five “categories" of gains that would be linked to currency internationalization: 1) Reduction of transactional costs; 2) Seigniorage; 3) Macroeconomic flexibility; 4) Influence and 5) Reputation. In terms of reducing transactional costs, the citizens of the country issuing the international currency benefit from their ability to do business abroad with the national currency, reducing risks, as well as increasing profits in the financial sector due to lower transaction costs in foreign trade (Cohen, 2012, p. 365).

In the sphere of seigniorage, macroeconomic gains are generated every time foreigners obtain a quantity of national money in exchange for imported goods and services: “Cross-border accumulations represent an implicit economic transfer that constitutes a real resource gain for the economy as a whole” (Cohen, 2012, p. 365). The transnational use of a currency can also alleviate balance of payment constraints on monetary and fiscal policies: “The greater is the ability to finance external deficits with the country's own money [...] the easier it is for the government to pursue policy objectives at home or abroad. In effect, the autonomy dimension of power is enhanced” (Cohen, 2012, p. 365), allowing for greater macroeconomic flexibility. In the sphere of influence, “leverage” is taken into account as a form of hard power imbued in the internationalization of currency. Cohen establishes that the autonomy generated by the macroeconomic flexibility of issuing and managing an international currency creates a capacity for influence over other currency issuers (Cohen, 2006; Cohen, 2012).

The key aspect is the degree of dependence that is established when foreigners need to subordinate themselves to national currencies in order to carry out various international operations. Finally, as for reputation, at the symbolic level, the widespread use of a currency can promote a good reputation in the International Monetary System (Cohen, 1998; Helleiner, 2003). “Broad circulation may become a source of status and prestige, a visible sign of elevated rank in the community of nations. Influence may then be exercised through co-option and attraction to shape the preferences of others” (Cohen, 2012, p. 365). In macroeconomic terms, the most important thing is that effective internationalization allows the issuing country to finance the external deficit in its own currency. In this process, any balance of payments barrier or limitation on foreign spending is removed (deficit without tears[8]).

> The issuer of an international money that is used as an investment medium alone can aspire to be at best to little more than some modest modicum of power. But add widespread use for trade invoicing and settlement leading to a reserve role, and soon the issuing country becomes much more centrally placed in the global monetary network (Cohen, 2012, p. 368)

There are diametrically opposed views on currency internationalization, especially between mainstream economists and political economists. The mainstream views on currency internationalization, as delved into above invariably assume a currency's main function to be a medium of exchange (and thus, base its analyses of an "effective" internationalization on how much a certain currency is used as a means of payment throughout the world, for example, in comparison to other currencies). As Strange (1971) puts it, economists use a mechanistic taxonomy of international economics, which classifies international currencies only by function. No wonder that when analyzing CI, the main denominator/causal axis to the effectiveness of such internationalization are the size and strength of the domestic economy.

In 1971 (p. 216), the author wrote an article she characterized as a way " to map out in a rough and tentative way a political theory of international currencies". The analysis suggested by the author stems from a study conducted on the pound sterling (Strange, 1971), that may also shed light when it comes to the US dollar. Strange's main concerns are the cause and the consequences of currency internationalization (hereafter, CI). She then raises two questions: 1) What are the political and the economic conditions under which national currencies come to be used beyond national territories? And 2) Which are the political and economic consequences that arise from being an issuer of such currency?

Strange perceives the issue of power and politics as being "inextricably intermixed" to the economic conditions of CI. It is no surprise that this linkage is the approach by which the author analyzes CI, given that she begins her paper by stating that:

> [...] The political scientists in the field of international relations show themselves singularly ill-equipped as well as disinclined to explain, analyze, or illuminate what are still-despite their economic content, essentially political questions. On the other hand, the economists who are much concerned with the technical aspects of the question, with the analysis of the functioning of monetary and other economic mechanisms, unconsciously tend to ignore or overlook the political elements involved. Between them, there is what I have described elsewhere as a "middle void": a no man's land, an empty quarter unwatered by the academic mainstreams, neglected by most universities, and subject only to sporadic forays by a few financial journalists and to isolated expeditions by a few academic hybrids (Strange, 1971, p. 216)

[8] Memorable phrase by French economist Jacques Rueff in 1972 (Cohen, 2018, p.2)

In that paper, Susan Strange attempts to create a political and economic taxonomy to currency internationalization, where she distinguishes four types of international currency: Top Currencies, Master Currencies, Passive (or neutral) Currencies and Political or Negotiated Currencies. According to the author, “each role is distinct but none is exclusive”. Nonetheless, a single currency can perform these four roles at the same time - US dollar’s case - or just one, or two or three. The main takeaway from Strange’s international political economy approach to international currency, however, is the author’s view that the Master currency is “distinguished from the others because the causative factor is primarily political” (Strange, 1970, p.217).

> It is the political domination of the state issuing the currency over other areas, which may include, besides direct and acknowledged dependencies, areas that operate as (and for other purposes are treated as) sovereign and independent political units [...] As a result primarily of this political domination, either the subordinate state or territory uses the Master currency or else its own currency becomes dependent of the Master currency, so that its monetary policies, including the exchange rate with third currencies (or the volume of trade and capital transactions with third parties), interest rates and other policies governing the availability of credit are determined by the exigencies affecting the Master Currency (Strange, 1970, p. 217).

Nevertheless, the US dollar also fulfills the role of Top Currency, which is the currency of the State that has world economic leadership or “the currency of the predominant state in the international economy”. It is the leading currency, which does not mean it is always or even necessarily the “best” currency in terms of market use: “[...] it does not cease to be Top Currency when it leaves something to be desired as a store of value, so long as its predominance as a means of exchange is invulnerable”

Charles Kindleberger attributed the power of the dollar as a vehicle currency precisely to the fact that international capital markets operated in dollars because “the world’s biggest capital market was in New York” and “[...] it was in New York because the United States was the world’s leading economy, had not been twice disrupted by world wars, and was therefore much better able than other developed economies to produce the savings to invest abroad as well as at home” (Strange, 1971, p.222). Strange carefully reminds us that, as much as an economically strong country can develop a Top Currency, there are “strict limits” to the “political power conferred by wealth”. In other words, CI can be effective and take place, generating positive results to the issuing country such as political influence; this influence, however, precisely because it stems from wealth-generated CI instead of the political causative factor, is much more limited than that of the Master Currency: “The moral of the tale is simple. The Master Currency depends heavily on the stick." (Strange, 1971, p.220).

Table 1: International Currency Taxonomy according to Susan Strange (1970)

TYPE OF INTERNATIONAL CURRENCY	**WHY IT IS USED OUTSIDE OF NATIONAL BORDERS**	**HISTORICAL EXAMPLES**
MASTER CURRENCY	By virtue of economic leadership	Sterling in the Sterling area French Franc in the Franc zone
TOP CURRENCY	Due to the issuing state's political position of domination and power	US dollar in 1950s
NEUTRAL/PASSIVE CURRENCY	By virtue of the currency	Swiss Franc Deutschmark in the postwar period
POLITICAL/NEGOTIATED CURRENCY	The issuing state bargains or negotiates politically with other states for the use of its currency	Sterling in the postwar period US Dollar in the 1960s

Source: The Authors, based on Strange (1970)

In other words, a master currency is that of the imperial state and [it] "coerces its use by other states. It thus always derives its status from the political relationships between the issuing and the subordinate states" (Hyoung-kyu, 2013 p. 4). A top currency, on the other hand, gets its status because it is preferred over other currencies by the world market, due to "economic superiority": "Its status is therefore determined primarily by economic factors, and it tends to be the currency of the predominant state in the world economy"(Hyoung-kyu, 2013, p.4). A political/negotiated currency is "when the issuing state bargains or negotiates politically with other states for their use of its currency, offering inducements such as military and diplomatic support or economic benefits". The negotiated currency is usually one in decline, if it was originally a master or a top currency. However, if it is a rising currency, as pointed out by Helleiner (2008), it can be categorized as negotiated in the process of internationalization. Lastly, a neutral/passive currency is “a currency whose international use stems primarily from the strong, but not necessarily dominant, economic position of its issuing state, which has no interest in promoting its international use” (Hyoung-kyu, 2013, p.4).

As the author puts it: “The taxonomy is fluid, not rigid” and “The taxonomy is not hard and fast, nor is each category mutually exclusive. Indeed a top currency is almost always also, to some extent, each of the other three. It is a way of saying that we need to know more about an international currency than its economic function”. (Strange, 1970, p.306). Nonetheless, “even if a certain currency is a top currency for some users, for example, it can also be a master, neutral or negotiated currency for others” (Hyoung-kyu, 2013, p.5).

Other scholars have also created a taxonomy when it comes to CI. In “the future of the dollar”, a book organized by Helleiner and Kirshner (2011), the authors point out that scholars in the field of monetary affairs and currency internationalization derive from different points of view, namely market-based, instrumental (or institutional) and geopolitical.

The authors clarify that the Geopolitical view (Gilpin, 1987; Stranger, 1976) is often pessimistic about the endurance of a monetary hierarchy based on the US dollar, because their rationality conceives a political order under which variables such as the emergence of other countries as new economic rivals would pose a challenge to the hierarchy (Helleiner; Kirshner, 2011) The authors that draw from the geopolitical view, however, can accept market-based variables “[...] —especially US debts and deficits—as providing further support for the expectation that the dollar-based international monetary order will erode in the coming years.” (Helleiner;Kirshner, 2011, p.217).

The market-based approach scholars (Posen, 2008; Cohen, 2011), however, tend to highlight the comparative market strengths of the dollar over potential alternatives; they question the feasibility of the Yuan’s “effective” internationalization given the strong capital controls of the Chinese economy, the issue of convertibility and the seemingly impossibility of the RMB acquiring reserve currency status. It is recognized, nonetheless, that some geopolitical variables help maintain the US dollar status:

> Market-based dollar optimists also tend to emphasize the power of inertia in sustaining the dollar order, and can appeal, for additional reinforcement of their position, to some geopolitical variables that still underpin the dollar order (American military primacy, political rivalries in Asia, and the unwieldy nature of “European”foreign policy) (Helleiner; Kirshner, 2011, p. 217).

Theorists who draw on the institutional/instrumental interpretation of the dollar take the monetary-financial hierarchy as given. In this sense, questions about the political role, behavior and unique benefits of the country that issues the dollar - the United States - are left aside. By analyzing reality as given, they do nothing more than to understand the role of the American currency as more convenient or a more reliable monetary anchor, where countries adopted the US dollar to have their economic strategies facilitated. This approach interprets the position of the international reference currency as one that is adhered to through the conscious and logical choices of countries, and ignores the fact that the mechanism for establishing the dollar as the reference currency was imposed and not "agreed" or "chosen" as the best alternative from a range of options.

> The focus of attention here shifts away somewhat from the behavior of the United States as the issuer of the key currency toward the policy choices of those that have decided (implicitly or explicitly) to depend on it. The expectations of such scholars, therefore, more often than not are contingent. The fate of the dollar depends on whether it is still able to (or is perceived to be able to) deliver the goods; that is, to perform these instrumental functions in the international economic order (Helleiner; Kirshner, 2011, p.217).

If it is assumed, as mainstream scholars do, that currency performs the role of medium of exchange, is neutral and only influences prices in the economy, then all of the structural differences between countries, economies and their monetary, fiscal and exchange rate policies are not taken into account or not seen as hierarchical and deeply unequal. We argue that there are stronger currencies not because they’re more efficient, safe or liquid, even if these things might be true, but because there are historical, geographical, geopolitical and power struggles which define these currencies and their strength in the global economy, creating a monetary hierarchy.

Table 2 Proposed Current International Currency Taxonomy

TYPE OF INTERNATIONAL CURRENCY	CAUSE	CURRENT EXAMPLE

International Currency	Institutional/market variables	US Dollar; RMB
Global Currency	Institutional/market variables + Global hierarchical order	US Dollar

Source: The Authors

Deriving from Strange's taxonomy, we view the US dollar as not only an international currency, but a global currency. International currencies can be characterized by institutional/market variables, as they meet prerequisites for international usage (convertibility, liquidity and trust) to be used in foreign trade, cross-border transactions and global payments. The global currency, on the other hand, in addition to fulfilling these prerequisites, is 1) is the unit of account behind an imposed economic order, 2) a store of value that makes up the majority of the reserves of non-issuing countries, and 3)

We argue that the US dollar fulfills the premises of an international currency and those of a global currency, by creating an international monetary-financial hierarchy that cannot be supplanted by the internationalization of another currency (in this case, the Renminbi), in market/institutional terms.

Western analysts, be it economists, journalists or political science scholars, often point to the number of members in such systems to declare the inability of China's system in challenging the current monetary hierarchy. We argue that since it is a matter of bypassing Western systems, the most important factor for the success of such a system is not the number of members, but which members these are. In this sense, noting that Chinese and Russian institutions are the ones that use CIPS the most demonstrates precisely the central point that guides the hypothesis of this research: the development of alternative systems, based on international but not global currencies, serves the purpose of circumventing the international monetary-financial system, reducing financial and geopolitical costs and increasing the international projection of those countries without supplanting the existing order.

Chapter 2: The International-Monetary Financial System

2.1 Establishing and maintaining a monetary hierarchy (1945-1971/ 1971-1991/ 1991-2024)

The world economy operated under the gold standard until the end of the First World War, maintaining a fixed exchange rate regime and reserve assets in the form of gold as backing. In an open international monetary-financial system, one country's balance of payments deficit is another's surplus, and in this scenario countries had to accumulate gold to adjust their international reserves. At the time, the gold standard provided an exchange parity in the international monetary base. The First World War saw an increase in protectionism, including monetary convertibility (Oliveira et al, 2008), as well as exchange rate fluctuations and the process of competitive devaluation.

The basis for the role adopted by the IMF and the World Bank - at the time called the International Bank for Reconstruction and Development (IBRD) - , stemmed from yet another power demonstration from the United States even before its hegemonic assertion in the post-war context. The economic depression from the late 1920s created a domino effect to such an extent that after Germany, Belgium, Italy and Great Britain stopped paying back its war debt to France in the 1930s, they also stopped paying their external debt owed to the United States (Toussaint, 2004).

In the same interim, the United States cut down on imports and decreased capital exports, which meant the influx of dollars to the rest of the world was essentially interrupted. That meant countries that had contracted debts with the US did not have the US dollars to pay it back. Nonetheless, these countries could not buy US imports.

> The rest of the world owes them money. They will not take payment in goods; they will not take it in bonds; they have already all the gold there is. The puzzle which they have set to the rest of the world admits logically of only one solution, namely, that some way must be found of doing without their exports (Keynes, 1932 apud Payer, Cheryl, 1991, p.20).

The solution designed by the United States at the time, under Franklin D. Roosevelt (1933-1945), was to make its currency available to debtor countries so that their debts could be repaid, given that the country was a major creditor of the rest of the capitalist world-economy. In this sense, it was even preferable, in certain cases, for the United States to make donations rather than loans so that the export industry could make a constant and lasting profit, as in the case of the Marshall Plan.

In this context, the Export-Import Bank of Washington - later known as the Eximbank - was created in 1934 to protect and promote US exports. The bank guaranteed the country's exports and granted long-term credit to foreign buyers.

> At the start, the total amount of loans granted by the Export-Import Bank was a very modest one: 60 million dollars in the first five years. But the volume of loans increased rapidly from then on. In 1940, the Bank's lending capacity was 200 million dollars, and in 1945 it had reached 3,500 million. During its first years of operation, the Export-Import Bank targeted Latin America and the Caribbean, China and Finland, a reflection not only of the economic but also the geo-strategic interests at stake (Toussaint, 2024, n/p).

In 1945, the International Monetary Fund was created, with operations starting in 1947. As explored above, the dollar-gold standard imposed by the United States in the Bretton Woods negotiations required a monetary order centered in the US to promote "mutual assistance" to countries that had instability in their balance of payments. These imbalances, inherent to the type of system that was emerging, had already been addressed and offered solutions by Keynes himself in the BW negotiations, through the creation of the Clearing Union as an international reserve asset, but rejected by the US in the process.

The strengthening of the political and economic power of the United States began to take place in tandem with the creation of the IMF, which at its inception was much less internationalist than desired; for example, the ceding of functions such as liquidity regulator and lender of last resort to the Federal Reserve Bank. Belluzzo (2016, p.13) states that "the IMF's problem is not its excessive power, but its deplorable submission to the power and interests of the United States". Padoan (1986) states that the benefits of the country's position were evident in a number of ways, including "the position of 'international banker', which allowed enormous room for the growth of American banks" (Belluzzo, 2016, p. 14).

It is argued that the privileged role achieved by the United States began in the aftermath of the Second World War, with the establishment of the Bretton Woods system. What is commonly referred to as the Bretton Woods "Agreements"[9] was actually a clash, where the American team led by Harry Dexter White pushed for a financial architecture that would benefit the United States, when creating a "durable post-war global peace, one that would allow governments more power over markets" (Steil, 2013, p.1).

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9 Formally known as the United Nations Monetary and Financial Conference.

Keynes' - who led the British team - idea of an international financial system was that it should be built upon an international reserve currency, to be regulated by the International Clearing Union, an institution to be set up alongside the establishment of the international reserve currency, aiming to regulate currency exchange (a role to be taken by the IMF eventually). The unit of account to denominate trade would be called "Bancor" and it would have a fixed exchange rate with national currencies. On the other hand, Harry D. White envisioned an International Stabilization Fund, which would stabilize exchange rates by persuading countries to peg their currencies to the US dollar, while at the same time pegging the value of the dollar to a fixed price of gold (Steil, 2013).

> White's role as the chief architect of Bretton Woods, where he outmaneuvered his far more brilliant but willfully ingenuous British counterpart, marks him as an unrelenting nationalist, seeking to extract every advantage out of the tectonic shift in American and British geopolitical circumstances put in motion by the Second World War (Steil, 2013, p.5)

The American team was dealing with internal conflicts over which approach to adopt and put forth and although the White plan was prevalent in the documents, there were bankers opposed to the idea of creating an International Monetary Fund, i.e. John Williams, who advocated the creation of the Williams plan, also known as the Key Currency Proposal. The Key Currency Proposal advocated that the United States helped recover the British economy through a loan, which would make the British allies in the construction of a more international and aggressive capitalism. In this regard, Block (1989, pp.87-88) states:

> The core of this plan was a huge US loan to Britain to support the international role of the pound. Boosted by the loan, Britain would implement multilateral trade policies, re-establish London as an international capital market, and cooperate with the United States in the joint administration of the international monetary order [...] In essence, Williams' Plan was an exhortation to re-establish the gold standard. It reflected the interests of US international bankers who opposed the IMF proposal, not because it was ineffective, but because they feared it would be too effective.

It is clear that the British team did not stand a chance against the American team when deciding how to structure the new international monetary-financial system. It was an imposition, rather than an agreement between the two countries, given the geostrategy of the United States. Ultimately, a currency exchange rate system was established where each country fixed the value of its currency to the US dollar, which was in turn convertible to gold at a rate of $35 per ounce, establishing a global monetary structure with internationally agreed rules. Two international institutions were then created alongside the Bretton Woods system: the IMF (International Monetary Fund) and the World Bank (WB), which were responsible for supporting the monetary model that was emerging.

> The U.S. dollar's status as the leading international currency has been an enduring feature of the post-1945 world order. The greenback has provided the monetary foundation for the international economy and its worldwide role has both reflected and reinforced America's global preeminence (Helleiner; Kirshner, 2011, p.1)

> The important fact is that the Bretton Woods institutions have helped spread the use of the US dollar globally and have become one of its pillars because, since their origins, they have operated in dollars and have been the main alternatives for countries to circumvent, via the Fund, any problems of external strangulation, as well as to access, via the IBRD and the World Bank, the international reference currency funding needed for long-term financing (Metri, 2023, p.430).

After 1945, the architects of the Bretton Woods system (Harry D. White and Henry Morgenthau - secretary of the US Treasury -) had lost ground on Truman's administration and the president implemented the Key Currency Proposal. This means that commitments made during the establishment of the BW system were "practically archived" (Metri, 2023, p.269) so long as the Key Currency Proposal lasted (1945-1947). The Marshall Plan can be seen as a rescue of Bretton Woods, which was reaffirmed after the Truman Doctrine abandoned the key currency proposal. Between 1945 and 1947, the key currency plan prevailed, but with the outbreak of the Cold War, it was abandoned, and Bretton Woods was re-established, alongside the implementation of the Marshall Plan. The Marshall Plan was designed to rebuild Europe after the Second World War: "while the U.S. plan would be open to the Soviet Union and its satellites in Eastern Europe, it emphasized the free market economy as the best path to economic reconstruction—and the best defense against communism in Western Europe" (United States). According to Metri (2023, p.269): "The Marshall Plan and the rescue of the Bretton Woods proposals shaped the core of US economic initiatives. As we have seen, both had a major geopolitical objective. They were expressions of the submission of the economic order to geopolitics".

In the 1960s, there was an accumulation of US dollars outside of the United States, generating the "dollar glut". The stability of the Bretton Woods system relied on the US government's capacity to exchange dollars for gold at a rate of $35 per ounce. This commitment became increasingly difficult to uphold as the post-war dollar shortage transitioned into a surplus, commonly referred to as the dollar glut. The Bretton Woods system and its financial order collapsed in the 1970s, when US President Richard Nixon (1969-1974) unilaterally suspended the convertibility of the dollar into gold, marking the end of the gold standard and the beginning of a floating exchange rate system. In this regard, said Nixon when addressing the nation in 1971 (UNITED STATES, 1971).

> We must protect the position of the American dollar as a pillar of monetary stability around the world [...] The strength of a nation's currency is based on the strength of that nation's economy - and the American economy is by far the strongest in the world.

In the years following the end of the convertibility system, there were large fluctuations in exchange rates, followed by wide instability in interest rates. According to Belluzzo (2016, p.16) "exchange rate fluctuations, supposedly intended to correct balance of payments imbalances [...] were destabilizing". Nonetheless, at the end of the 1970s, the United States suddenly raised interest rates in a bid to preserve the dollar's reserve currency role. The collapse of the system led to the expansion of the country's economic power based on the dollar, as the United States began to significantly increase its public debt in order to obtain short-term loans - which in 1985 amounted to 1 trillion 600 billion dollars - corresponding to 80% of the circulation of the international currency.

Between 1989 and 1991, the Cold War came to an end, with the fall of the Berlin Wall and the disintegration of the Soviet Union representing the so-called "undisputed" victory of the United States in the geopolitical and ideological dispute of the Cold War. As Metri (2023, p.345) puts it, 1991 played a cardinal role in the "correlation of forces of the central core of the great powers", as well as in the formation of the contemporary international monetary-financial system. According to the author: "it must be said that it was only after 1991 that the United States effectively achieved its global pre-eminence or, in other words [...] consolidated its hegemony over the international system". This is precisely because until 1991, given the Soviet bloc, "a large part of the world's population was outside the radius of action, the capacity for strategic initiative or the exercise of some kind of US hegemony." (Metri, 2023, p.345).

In this context, alongside the reconfiguration of political and military forces, the international monetary-financial system underwent profound transformation. From 1945 to 1971, capitalism operated under the US dollar within a regulated liberal international order. Between 1971 and 1991, it shifted to a deregulated liberal international order, still centered on the US dollar. After 1991, a deregulated neoliberal global order was established, again under the US dollar's dominance. In this environment, the productive reconfiguration of capitalism and financial globalization took hold.

Throughout this process, capital accumulation is no longer based on material expansion ("where a growing mass of capital is turned over to trade and production") but on financial expansion ("where a growing mass of capital is turned over to its monetary form and towards loans and speculation") (Arrighi, 1997, p. 355) and where capital, instead of its classic wealth accumulation formula: money generating merchandise generating expanded money (D-M-D'), has become Monetary capital - money generating expanded money (D-D'). In her renowned paper from 1997, Tavares already highlights the new dimension of American hegemony by understanding the process of the monetary dollar becoming a financial dollar.

> The explosive increase in international financial flows is no longer proportional to the needs of the world economy, so that the relationship between the increase in these flows and the financing of foreign trade and productive investments becomes indirect, to say the least [...] The volume of US international transactions with financial securities, which in 1980 represented 9.3% of US GDP, became equivalent to 109.4% of its GDP in 1992 (Tavares; Melin, 1997, p.8)

As early as 1988, the developed capitalist countries became fully deregulated, a process that had already been made possible by the end of dollar-gold convertibility with the Nixon shock and the transformations in information technology. In this context, the process of securitizing financial assets deepened and expanded, given the systemic risks of this amount of speculative financial capital. It is precisely at this point that the role of the US currency as the international economy's singular financial benchmark is greatly expanded (Tavares; Melin, 1997).

> Thus, since 1992, with exchange rate and financial deregulation reaching three continents, financial capital has been flying to all ports in a casino game in which winners and losers have only contributed to strengthening the dollar's financial position. It's important to note that in this huge casino, individual players - companies and banks - can break each other, but they can't break the bank (Tavares; Melin, 1997, p.11).

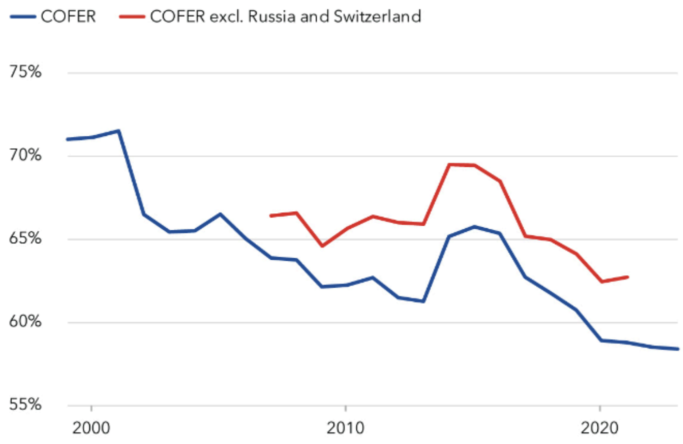
According to Tavares (1997), in globalized markets, the denomination of transactions fulfills three functions: providing liquidity in any market; security in risky transactions; and a unit of account for virtual financial wealth. It is important to note that the American currency, in this scenario, does not fulfill the classic function of a store of value. The value of the dollar is set by the US interest rate, which becomes the basic reference for the international monetary-financial system, since they manage to keep their own public debt[10] as a security for the entire system. This use of the US interest rate as a reference means that securitization operations are carried out in dollars, generating arbitrage gains.

[10] "Operations with US public debt securities rose from an annual average of US$13.8 billion in 1980 to US$119.6 billion in 1993" (Tavares; Melin, 1997, pp.13).

> By defending the dollar's position as the international currency of reference, pushing the world to operate on its basis [...] the United States has managed to turn its public debt securities into the main instrument, both of the monetary authorities for the autonomous insertion of their national economies, and of the large economic groups, for managing the risks deriving from the marked instability of a deregulated system. In this way, they created a demand for their public debt without any apparent limit, which allowed this financial asset to develop high liquidity, a wide range of maturities, a sophisticated market infrastructure and, in effect, minimal credit risk (Metri, 2023, p.366)

The commercial transactions of large companies and world pricing are denominated in US dollars, meaning that the classic role of value (dollar-gold, for example) does not apply, since the role that the US currency plays is that of the "most important" financial currency in a "deregulated system where there are no fixed exchange parities" (Tavares; Melin, 1997, p.13). In this context, all the major central banks have to coordinate their exchange rates with the dollar, and they do so under the direction of the Federal Reserve Bank. This coordination is criticized by several academics who see it as a "dictatorship of financial capital". The FED, in this arrangement, is the primary provider of liquidity. As exemplified by Chart 1, the international demand for US dollars, through the accumulation of reserves by non-US dollar issuing countries (to ensure supply of imports, manage their exchange rates, repay debts etc.) are the main tool by which the United States' increases its deficit capacity. Chart 2, from the New York Federal Reserve Board, illustrates the foreign holdings of US Treasuries by major investing countries as well as the type of securities held. According to the US Treasury, in 2018, 32% of all securities held by foreigners were public debt bonds (FED, 2019).

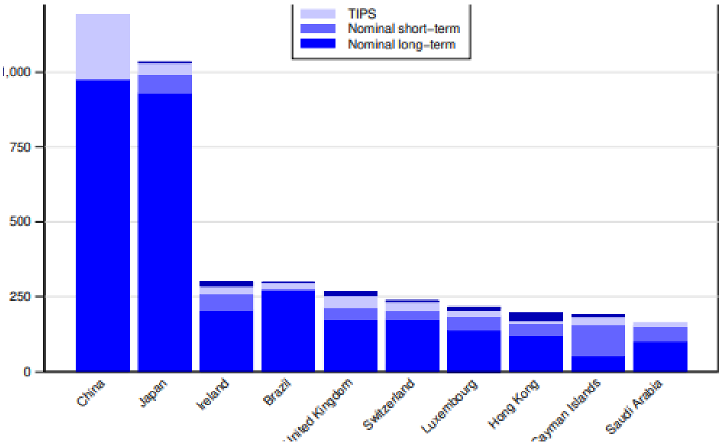
Chart 1. Percentage of global FX reserves held in US dollars



Source: IMF COFER, Bank of Russia and Swiss National Bank, 2024.

Chart 2: Foreign holdings of US Treasuries

by major investing country, as of June 29, 2018



Source: Department of the Treasury, New York FED, 2019.

US Treasury bonds are quasi-currencies, a kind of anchor for the international financial system, because, in the post-Cold War system, US treasuries provide the reference interest rates for the formation of the other fixed-income securities on the market. They are therefore a safe tool for long-term investments, with little credit risk, as Metri (2023, p. 367) puts it: "They have become important hedging vehicles for positions in other securities, as they have made it possible to manage risks arising from changes in interest rates." Regarding this, Tavares states:

> A very important aspect is that this [a massive transfer of income and capital from the rest of the world to the US] makes it possible to close the structural financial deficit of the public sector. Everything happens as if every time the Fed throws public debt securities on the market, it is sure that the securities will be placed in all the banking structures and with all the rentiers, from developed countries or not. (Tavares, 1984, p.41).

Once the US dollar became globalized, imposing monetary violence on developing countries, through various mechanisms, especially under the umbrella of the Washington Consensus (Williamson, 1991), became the norm, such as taking out loans - external debt - in US dollars (with a flexible exchange rate) through institutions such as the IMF and the World Bank. Because countries are placed within this hierarchy, and they do not issue dollars, they need to accumulate reserves in US dollars to deal with economic shocks, repayment of debts, management of import payments, and stabilize their currency values. That is to say that not only does the United States not suffer from a Balance of Payment restriction[11], but that it

[11] For more details on the balance of payments constraint as an explanation for differences in international growth rates, see A. P. Thirlwall (2019)

imposes a foreign restriction on all countries - they do not issue US dollars but need to obtain it to operate within this international monetary hierarchy.

> The IMF's pretensions of becoming an effectively global multilateral agency, to serve as an arbiter and fiscal agent for the rich countries, show no signs of coming to fruition. Its technocracy is likely to remain the policeman of poor and indebted countries, with no convertible currency on the international market (Tavares; Melin, 1997, p. 18)

The very need to manage the risks of a deregulated system arises from the establishment of the deregulated system itself, as laid down by the United States at the end of the Cold War. As precisely described by Metri (2023, p.348), the Cold War, unlike any other war, did not end with a peace conference, but it was characterized by the presence of one key winner who did not have to negotiate with other countries by “accommodating the differences and antagonisms that are natural to relations between the major powers”. The reshaping of the order took place via the announcement of the US National Security Strategy in 1991, promulgated by the White House at the end of the Gulf War and even before the collapse of the Soviet bloc. This document showed that the promotion of a global liberal economic order, based on open markets, was vital to the defense of US' strategic interests.

> We continue to pursue a strategy that expands and strengthens market economies around the world. This will require international efforts to open markets and expand trade; to strengthen cooperation among major industrial countries and with international financial institutions.
>
> [...]
>
> (We seek to): ensure access to foreign markets, energy, mineral resources, the oceans and space; promote an open and expanding international economic system, based on market principles, with minimal distortions to trade and investment, stable currencies, and broadly respected rules for managing and resolving economic disputes. (NSS, 1991, pp.3;19)

In short, the dollar was established as the international currency of reference in 1945, with the Bretton Woods “agreements”, through a strategy based on a liberal order centered on the American currency, without, however, promoting deregulation or having a global reach. The United States effectively framed the First World countries (partners and competitors) in the 1980s, in the period of the "restoration of American hegemony[12]", but it was only in the post-1991 period, with the National Security Strategy proposing to redesign the international order, that a deregulated global liberal order was established - still, of course, anchored in the dollar as the currency of reference.

[12] For more on the recovery of American hegemony, see Tavares (1985).

2.2 The SWIFT system

The SWIFT (The Society for Worldwide Interbank Financial Telecommunication) is a cooperative established in 1973 in Belgium, owned by banks. The SWIFT provides a messaging network through which international payments are initiated. The system is not a clearing/settlement institution, rather, it is a data/message carrier that transports messages between two different financial institutions, which means it does not store financial information.

> [The] object of the company is for the collective benefits of the members of the company and their affiliates and branches, the study, creation, utilization and operation of the means necessary for the telecommunication, transmission, and routing of international private proprietary financial messages between the members of the company (SWIFT, 1972).
>
> [...] SWIFT is only a messaging service. It does not provide bank accounts or hold funds for banks in any capacity. The banks actually transfer the funds through a different entity. In order to send money across borders,
>
> individuals usually need to use a trusted network of banks, which settle transactions through a series of mutually held accounts. (Lipsky;Kumar, 2023).

According to Scott and Zachariadis (2012), “One of the most important challenges facing financial institutions in the design of a common messaging system capable of increasing volumes of international payments was the reduction of their operational risk (e.g. the reduction of error rates, increase of security, and greater reliability).” In an international economy that is increasingly connected in terms of its financial markets - but also in terms of foreign trade - the development of a cross-border transaction system was a profound step forward. To give a brief historical context, if a transnational transaction were to be made via Telex, for example, it would require more than 10 Telex messages, a costly, time-consuming and human-capital intensive process

In this sense, since the 1960s, there had already been discussions about the difficulties of the Telex system and, above all, there was a sense of the need to create a common standard for cross-border transaction messages: "However, it was evident that such an initiative could only be feasible if there was close cooperation among the banking community (U.S. Congress, 1984 apud Scott and Zachariadis, 2012, p.5). In the early 1970s, 68 banks in 11 countries in Western Europe and North America were already interested in sponsoring the creation of the SWIFT system. To this end, feasibility studies were conducted by Great Britain and the United States to evaluate the creation of a "private international communications network" (Scott and Zachariadis, 2012, p.5).

Great Britain was responsible for the technical and financial evaluation, while the United States was in charge of the organizational and legal aspects. International working groups were also set up to analyze message standards and formats, as well as their security aspects. SWIFT was then founded in 1973 as a non-profit cooperative organization with headquarters in Brussels, a permanent staff and 239 banks from 15 different countries as members. It is worth mentioning that the network went into operation at the end of 1974, after the equipment was installed by a US company

> What is remarkable about the early history of SWIFT is that a "society" founded by a relatively small number of banks to reduce errors and increase efficiency in inter-bank payments, evolved into a broader industry co-operative and became an unexpected network phenomenon. The notion of a network effect was not part of the consciousness of those involved in the original SWIFT project during the 1970s. Their focus was solely on creating an entity, a closed society, to bind members together in an organizational form that would enforce standards designed to create efficiencies on transactions between the member banks (Scott and Zachariadis, 2012, p.5).

> Banks need a uniform and standard way to communicate with each other about transactions, and SWIFT is the answer. Every member gets a unique code—with details about country, location, and even bank branch. When a bank wants to transfer money to another bank, it simply enters the code through the SWIFT network, tells the other bank the amount, and then the actual money changes hands.

In sum, SWIFT allows a payer to transfer money to an account located in a bank in another country; it enables the unique identification of a financial institution. To do this, it assigns a unique code to each institution. The structure of a SWIFT code is composed of a Bank Identifier Code (BIC), which identifies each bank, normally made up of four letters; a Country Code with two letters; a Location Code with another two letters and a Branch Code with three letters. A SWIFT code would look like this: ABCD-XY-MN-123.

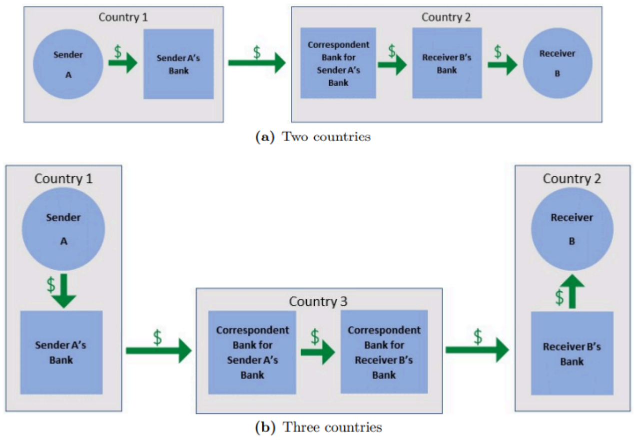
> [...] SWIFT is only a messaging service. It does not provide bank accounts or hold funds for banks in any capacity. The banks actually transfer the funds through a different entity. In order to send money across borders, individuals usually need to use a trusted network of banks, which settle transactions through a series of mutually held accounts. (Lipsky;Kumar, 2023).

There are two scenarios in which SWIFT works: 1) Two banks that have a commercial account with each other and 2) Banks that interact but do not have a commercial account with each other.

> If both the sending and receiving banks have a relationship with each other, the money will transfer immediately upon receipt of the SWIFT communication by the receiving bank. However, both banks will charge some kind of processing fee. Additionally, the receiving bank may also charge a foreign exchange fee.If the two banks do not have a direct commercial relationship with each other, SWIFT will still facilitate the transfer, but it will have to go through an intermediary bank (also known as a correspondent bank). In that case, the sending bank will debit the sender's bank account and send the money to an intermediary bank that has a direct

commercial relationship with the receiving bank (Birken; Foreman, 2021).

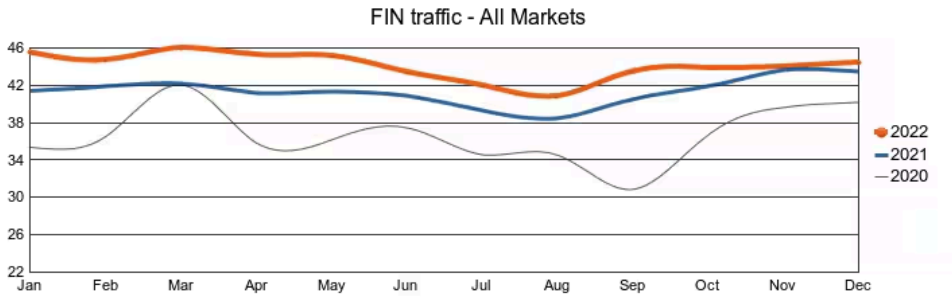
Figure 1. SWIFT for cross-border payments



Source: NY FED, 2023.

Currently, the SWIFT is made up of 11,696 banks and sends more than 44 million FIN messages - a type of financial message from one institution to another - as shown by Chart 4. In November 2021, SWIFT recorded 50.3 million FIN messages. The SWIFT doesn't actually transfer any funds, it just creates a standardized message to send payment orders. Nonetheless, it is viewed as the most reliable way for banks to communicate and exchange financial data. It is paramount for the current functioning of foreign trade, international fund transfers and so on. It is widely accepted, accessible, secure and efficient.

Chart 3. FIN Traffic



Source: SWIFT

The SWIFT charges a fee for each message sent, which will vary depending on the type of message and the amount of messages sent.There are three types of fees for SWIFT transfers. 1) OUR: Issuer pays all fees, even those of the payee's bank, as well as fees from any other bank or institution that may be involved in the transaction; 2) BEN: The fees are all paid by the recipient and 3) SHA: The total amount is shared equally between both parties. The fees charged from other banks/institutions involved are called correspondent fees and will be charged when, just like exemplified above, the banks/institutions have a relationship with each other, but don't share commercial accounts. The correspondent fees will vary from 13 to 50 USD.

SWIFT has a specific governance structure given the nature of the system. Ownership lies with the member banks, and the capital structure combines equity and loans. Each new member received shares according to its traffic volume. Countries new to the system received only one share until the transition to operational status. In addition to representing ownership status, the shares were also an obligation to provide loans to the institution, with a pre-established amount and an interest rate set by the Board of Directors. These shares and loans covered operating costs during the system's development process. The Board of Directors controls the institution. The Board of Directors currently has a broad governance structure, to which it delegates functions such as Chief Executive Officer (CEO), Chief-Financial-Officer (CFO) and others who form an Executive Board. (SWIFT, 1972).

From the outset, the institution's membership has been dominated by European banks, “ [...] despite the international nature of the markets for which they were competing there were inevitable geo-politics."(Scott and Zachariadis, 2012, p.10). There was also concern about the competitive advantages of the United States due to the large U.S. TNBs. At present, The SWIFT is overseen by the central banks of the G-10: Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland, the United Kingdom and the United States.

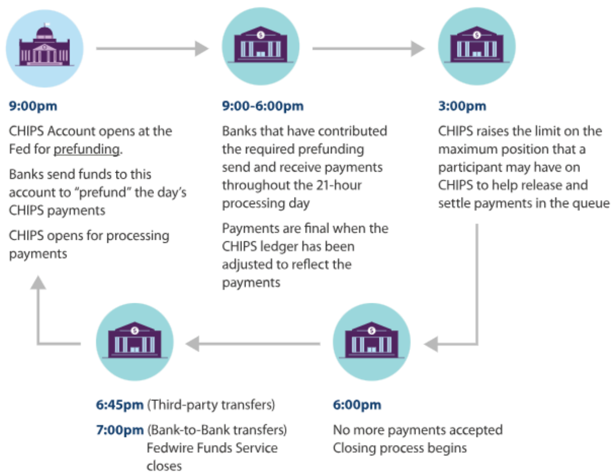
2.3 The Clearing House Interbank Payments System (CHIPS)

It was also in the 1970s that the Clearing House Interbank Payments System, also known as CHIPS, was founded. In addition to being a tool for clearing transactions (unlike SWIFT, which only standardizes and sends financial messages), CHIPS is a global system denominated exclusively in US dollars. In other words, CHIPS not only sends encrypted data, but moves financial funds, and it does so only in US currency (the SWIFT, on the other hand, operates with many other currencies). It is the largest private transaction clearing system in the world.

CHIPS was created by the New York Clearing House Association (NYCHA), (a banking association and a payment company) currently owned by 41 financial institutions. CHIPS is the private counterpart of Fedwire, the public service operated by the FED, which is a real-time gross settlement system for domestic USD payments. The CHIPS, however, is used for international USD-denominated transactions.

> Along with its public sector counterpart, Fedwire, CHIPS forms the primary network for transferring and settling payments in US dollars. According to The Clearing House, CHIPS settles around $1.8T daily in domestic and international payments. CHIPS allows transactions to be netted, so it doesn't process every transaction instantly in real-time. For payments that are not time-sensitive, CHIPS is a less expensive option to Fedwire, which is a real-time gross settlement system. (Modern Treasury).

Figure 2. How CHIPS works



Source: The Clearing House

Given the involvement of several banks, transactions carried out via SWIFT take longer to settle. In the case of CHIPS, on the other hand, settlement takes place in real time, and the financial funds are available as soon as the transaction is completed. According to the Clearing House, CHIPS clears and settles "$1.8 trillion in domestic and international payments per day." Nonetheless, CHIPS' costs are lower than SWIFT's because they adopt a fixed fee per transaction, where in the case of SWIFT, it will vary given the amount of messages sent and the amount of institutions involved. If the amount is significantly high, for example in the case of larger banks and financial institutions, CHIPS will be more cost-effective.

> CHIPS, "is a "netting engine" that settles payments between banks over the course of the trading day, netting offsetting payments against one another when possible. CHIPS uses a pre funded model in which banks use Fedwire (the Federal Reserve's real-time gross settlement system) to send balances from their account at the Fed to CHIPS's account at the Fed. The latter serves as backing for CHIPS's book-entry system, over which direct participants settle payments. When CHIPS closes at the end of its trading day, the outstanding balances of participants are paid out with an actual transfer of funds over Fedwire [...] Payments settled through CHIPS are denominated in dollars." (Eichengreen, 2022).

SWIFT and CHIPS have different but often complementary functionalities. While SWIFT only sends coded financial messages, CHIPS acts as a clearing house for transactions. While SWIFT integrates more than 10,000 banks around the world, CHIPS integrates 41. While SWIFT works with a wide range of currencies, CHIPS only works with dollar-denominated transactions. In this sense, CHIPS has a more specific functionality, which is cheaper and more effective settlement and clearing in dollars, while SWIFT integrates the whole international monetary-financial system. They can be complementary to the extent that, for example, a bank in England needs to transfer money to an American bank. The English bank can use the SWIFT system to initiate the transaction, sending a secure message to the American bank. The American bank, being a member of CHIPS, processes the payment through CHIPS, immediately settling the transaction and receiving its funds.

According to the Clearing House, among the 41 member institutions, are: Banco do Brasil S/A (Brazil), Bank of America N/A, Bank of China, Barclays Bank PLC (England), Citibank N/A, China Merchants Bank, Commerzbank AG (Germany), Deutsche Bank AG (Germany), HSBC Bank USA, Industrial and Commercial Bank of China, JPMorgan Chase Bank, N.A, Wells Fargo Bank, San Francisco and more.

2.4 The Bush Doctrine: Weaponizing SWIFT

In 2000, George W. Bush, eldest son of former US president George H.W. Bush (1981-1989) and then Republican governor for the state of Texas, ran in the 54th presidential election of the United States of America against the Democrat and vice-president of then president Bill Clinton (1993-2001), Al Gore. Bush's election campaign was centered on foreign policy guidelines (especially what would later become the National Security Doctrine) and built the narrative of the so-called Global War on Terror (GWT). This narrative, centered on the ideals of individual freedom and liberal democracy, makes it possible to position the United States in a path towards a return to conservatism, or neoconservatism. These politicians will come to be called neoconservatives.

This is important because, although the scope of this work does not cover the specifics of the campaign that elected Bush, the narrative established by the campaign (and rekindled in the hearts of the country's Republicans) was a basis for not only guaranteeing the election of the president, but also for securing positions in the White House that would support the state policies to be pursued. In this sense, Bush's neoconservative project and that of the Republican Party itself had a clear bias for expanding American hegemony through the use of the dollar as a geopolitical weapon, by framing the economies of countries seen as national enemies. It is in this scenario that the imposition of financial sanctions was made possible, extirpating from the international financial and banking system those countries that were perceived as a threat to “national security”. This institutional justification, as we shall see, sets a precedent for the kind of policies that the United States still imposes on countries with which it has geopolitical conflicts, as in the case of Russia.

> The election and designation of an enemy of this nature - ubiquitous and universal - means accepting that the US will declare war at any moment, defining who and where the enemy is, in a war that will have no end and will be ever more extensive, a permanent and "infinitely elastic" war (Fiori, 2007 apud Do Nascimento, 2024, p.10)

Once elected, George W. Bush inaugurated the so-called Bush Doctrine, an institutional mechanism organized to meet national security objectives. According to Nascimento, the use of the dollar plays a secondary role in the literature on the Bush Doctrine, which usually focuses on the military apparatus. The Doctrine, however - justified by the Global War on Terror - will institutionalize the coercive power of the dollar as we know it today, in a much broader, deeper and violent way than that of when the United States experienced "only" an exorbitant privilege with regard to the balance of payments and the denomination of assets, loans and transactions in dollars.

A few days after the terrorist attack on the United States in 2001, Bush announced in the House of Representatives the creation of the Office of Homeland Security and the declaration in the name of the Global War on Terror.

> Our war on terror begins with al Qaeda, but it does not end there. It will not end until every terrorist group of global reach has been found, stopped and defeated. [...] Americans are asking: How will we fight and win this war? We will direct every resource at our command -- every means of **diplomacy**, every tool of **intelligence**, every instrument of law enforcement, every **financial influence**, and **every necessary weapon of war** -- to the disruption and to the defeat of the **global** terror network.[13]

As highlighted in bold above, the fight against terrorism needed to be conducted on a global scale, using any and all tools of diplomacy, security, financial influence and weapons of war. Our focus in this section is precisely the "financial influence" sphere as well as the "every necessary weapon of war" aspect. We don't intend to break down all the measures through which the United States was able to expand its imperial project, but it is worth looking at some of the measures and tools in the field of financing or financial influence that the country - and international agents - adopted under the Bush Doctrine. One of these tools was the adoption (by the United Nations Security Council) of Resolution 1373, in which the Council indicated measures to be taken to curb the financing of international terrorism.

> Acting under Chapter VII of the Charter of the United Nations[14]

[13] President George W. Bush Address to a Joint Session of Congress and the American People, 20 of September of 2001.

[14] United Nations Security Council, Resolution 1373 (2001) Adopted by the Security Council at its 4385th meeting, on 28 September 2001.

1. Decides that all States shall:

(c) Freeze without delay funds and other financial assets or economic resources of persons who commit, or attempt to commit, terrorist acts or participate in or facilitate the commission of terrorist acts; of entities owned or controlled directly or indirectly by such persons; and of persons and entities acting on behalf of, or at the direction of such persons and entities, including funds derived or generated from property owned or controlled directly or indirectly by such persons and associated persons and entities;

(d) Prohibit their nationals or any persons and entities within their territories from making any funds, financial assets or economic resources or financial or other related services available, directly or indirectly, for the benefit of persons who commit or attempt to commit or facilitate or participate in the commission of terrorist acts, of entities owned or controlled, directly or indirectly, by such persons and of persons and entities acting on behalf of or at the direction of such persons

It's worth mentioning that before the 9/11 attacks, public approval of Bush's presidency was around 50%, a figure that rose to 80% after the terrorist attack and the measures taken in relation to it, demonstrating the popular appeal of adopting the GWT, as patriotic sentiment swept the nation. This patriotic sentiment, as well as being an obvious direct result of the attack itself, also included biased media coverage on the subject of terrorism. According to Nascimento, 2024, p.43 "The fear that was installed in citizens after the attacks were quickly absorbed and reproduced by the American media". In 2002, in another speech, this time at the West Point Military Academy, Bush used a direct attack on countries that "support[ed] terrorism", while calling for support from what he called "civilized countries".

According to Jervis (2005), the Bush Doctrine encompasses four different spheres, as follows: (i) a strong belief in the importance of the state's national regime in determining its foreign policy; (ii) the perception that there are major threats that can only be defeated by new and vigorous policies - namely preventive wars; (iii) a willingness to act unilaterally when necessary and; (iv) a prevailing sense that peace and stability require the United States[15] to exercise its primacy in world politics. The dichotomy of the "civilized countries" of the free world vs. those that "support" and "finance" terrorism, namely the rogue states in the American view, is the ultimate demonstration of the neoconservative narrative; a narrative that was encapsulated before Bush's election and during his term in office, and has since been used to justify American imperial advance through, yes, the military-industrial complex, but perhaps above all, from an economic point of view, through monetary violence.

This narrative - institutionalized through the Bush Doctrine (hereafter, BD) - positions the United States, after suffering a terrorist attack, in the position of leader of the free world in the fight against terrorism, being able to use any weapons at its disposal to contain not only violence and the threat of violence, but, as justified in the BD, the remotest possibility of the threat of violence. In many cases, as in the Second Iraq War - not supported by the UN Security Council - by fabricating a possible threat. This can be verified by the various mechanisms prescribed in the National Security Strategy (hereafter, NSS), such as involvement in preventive action or war, in which “force may be used even without evidence of an imminent attack to ensure that a serious threat to the United States does not “gather” or grow over time.” (O'Hanlon, Rice e Steinberg 2002, p.1).

In this context, the mechanisms created by the Doctrine extend to the monetary

[15] Echoing the theory of hegemonic stability, as proposed by IR theorists such as Keohane, Kindleberger, Gilpin and S. Krasner.

system, through the dollar, which, in itself, was already in a stronger position due to the globalization of the financial markets, given the widespread use of the dollar as a more liquid and secure asset. In this regard, Nascimento (2024, p. 49) writes: "The preventive nature of the Doctrine and the weight associated with the financing of terrorism paved the way for the formulation of programs designed to track the financial flows of organizations and individuals linked, or potentially linked, to terrorism."

This formulation occurred specifically through the Terrorist Finance Tracking Program (TFTP), led by the US Treasury to identify, track and pursue terrorists. Despite its initially secret nature, the TFTP became public a posteriori through the American media. Of course, this type of initiative required citizen data, both from the US itself and from the rest of the world, in order to identify and track, given the global nature of the GWT. This global access to financial data would require the cooperation of none other than SWIFT.

> As part of its vital national security mission, the Treasury issues subpoenas to the Society for Worldwide Interbank Financial Telecommunication (SWIFT) — a Belgium-based company with U.S. offices that operates a worldwide messaging system used to transmit financial transaction information — seeking information on suspected international terrorists or their networks. Under the terms of the subpoena, the U.S. government may only review information as part of its efforts to prevent, detect, investigate, and prosecute terrorism (US Treasury)

It is clear that, without the exorbitant privilege of the US dollar, it would have been impossible to frame the SWIFT system in revealing data of American citizens and other nationals in the search not for "dirty money" being used to finance terrorist activities, as is assumed by the public and justified by the US government, but so that, through absolutely arbitrary framings, money coming from countries considered enemies - within the broad definition established -, would not be used at all, enabling geopolitically favorable results for the United States.

> The US Secretary of the Treasury can consider any financial institution, American or not, a threat, if this action is motivated by the repression of money laundering and terrorist financing, without having the burden of providing evidence. As a result, the Americans are very well equipped to quickly interrupt any economic agent's access to their financial market and, consequently, to the international market (Torres, 2022, p.10)

Finally, all these tools combined set the precedent for the imposition of a powerful geopolitical weapon in recent times: financial sanctions. We'll cover them briefly in the next and final subsection of this chapter.

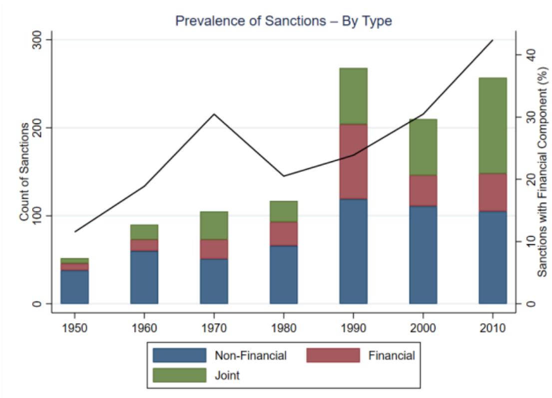
2.5 The dollar-bomb? The imposition of Financial Sanctions

As previously outlined, the scope of the US dollar's power is not limited to the United States' debt capacity, or its ability to maintain a current account deficit for more than 40 years, or even the denomination of geopolitically relevant assets - such as oil - in its currency. There is a dimension through which the United States is able to effectively shut down the economic and financial communication of other countries and strangle their economies. This mechanism is called financial sanction.

Sanctions, when referring to trade, have been used since before Christ, through the banishment of merchants from certain cities, strangling the economy that had been sanctioned, through the imposed scarcity of certain goods. The League of Nations, for example, promoted mechanisms for imposing sanctions from country to country, in an attempt to make a certain country adopt a certain foreign policy behavior. During the First World War, US President Woodrow Wilson also promoted the use of sanctions as an alternative to the common mechanisms of war. According to Cipriani (et al., 2023, p.3): “When sanctions involve traded goods, it is relatively easy to understand how they function. Either certain goods are permitted to cross a national border, or they are not.”

In a world of globalized markets, however, trade sanctions are not enough to cover the complexity of a country's economic and financial relations with the rest of the world. In this context, we are talking about the imposition of financial sanctions, which “involve flows of funds, which occur through networks of banks and financial institutions.” (Cipriani, et al., 2023, p.3). Notwithstanding, “financial sanctions typically restrict the ability of sanctioned entities, countries, businesses, or even individuals to purchase or sell some financial assets” (Cipriani, et al., 2023, p.3). Sanctions can also be combined, meaning that a country can suffer from both economic and financial sanctions.

Figure 3. Prevalence of Sanctions - By Type



Source: The New York FED

Financial sanctions have also been used for decades, and are known to have catastrophic effects on the target economy, especially with regard to the well-being of the country's civil population. Kofi Annan, former Secretary General to the United Nations, in a report to the United Nations in 1997, stated:

> As we have seen most recently in the report on the Angola sanctions regime, the proliferation of actors on the international scene has rendered traditional regimes incomplete and vulnerable to new threats. In the case of Iraq, a sanctions regime which enjoyed considerable success in its disarmament mission has also been accused of worsening a humanitarian crisis as its unintended consequence. And in the case of the Bosnian war, we witnessed an arms embargo which was seen by many States as favouring the aggressor and effectively denying a Member State its Charter right to self-defence.

The Secretary, however, defended the prerogative of sanctions, calling for their "smart" or "targeted" use to curb the "unintended" consequences of the sanctions. According to The New York FED, (2023, p.1):

> Counts of sanctions have increased over time, from 52 sanctions episodes in the 1950s to 257 in the 2010s. [...] The proportion of sanctions episodes with both a financial and a real economy component increased from 12% in the 1950s to 42% in the 2010s; in contrast, exclusively economic sanctions decreased from 73% of the total in the 1950s to 41% in the 2010s. Exclusively financial sanctions were most prevalent in the 1980s and 1990s, reaching 32% of the total in the 1990s. Most sanctions are imposed by North American and European countries targeting Asian and African countries.

In this context, this section aims to address what Torres (2022) calls the "dollar bomb". The dollar bomb refers to the imposition, through the mechanisms of the US Treasury Department, where the United States unilaterally manages to guarantee "[...] the financial blockade - and consequently the commercial blockade - of the target country" (Torres, 2022, p.5). To this end, Treasury Department officials use data from the American monetary and financial system "and the penalties provided for in financial regulations in force around the world to conscript the institutions operating in this sector" (Torres, 2022, p.5). We should recall at this point the importance of the Bush Doctrine, the TFTP, and the American subpoena of the SWIFT system to obtain data on American citizens and the rest of the world, without which such a mechanism for imposing the dollar bomb would be virtually impossible.

Torres (2022) argues that the dollar bomb, unlike the nuclear bomb and other military and direct warfare apparatuses, cannot be replicated by any other country, even by a great power, insofar as it is only feasible to the extent that it features the US dollar and its total assimilation into the international monetary-financial system: "This is a unique institutional differential that has been built up by the United States over the last hundred years and which is not present in any other currency that enjoys international circulation" (Torres, 2022, p.6)

The US currency is the unit of account for the payment obligations of the rest of the world. There's no need to go into the specifics, as this effort has already been carried out in the first part of the chapter, but it's worth remembering the central argument that all countries suffer an external restriction because they have payment obligations in US dollars, without issuing that currency, and in order to meet those obligations, they need to keep a sufficient amount of US dollars in their cash flow. The American financial system and the American currency therefore "determine global regulation" (Torres, 2022), from where it stems its unique ability to impose the 'dollar bomb". Notwithstanding, with the unilateral dismantling of the Bretton Woods system by the United States and the end of dollar-gold convertibility, the fully fiduciary nature of the US dollar combined with the financial globalization that followed in the 1970s and deepened in the 1990s, led to the centrality of this currency in cross-border transactions, (Torres, 2022).

As pointed out in section 2.3, the Bush Doctrine deepened existing mechanisms (and created new ones) for monitoring financial flows and assets in US dollars, mainly through the legal framework made possible by the post-9/11 scenario. Before the terrorist attacks, SWIFT feared that its neutrality would be compromised if it gave in to American requests for unrestricted access to its systems. In the wake of the Global War on Terror, this deadlock was resolved through the FED's subpoena to SWIFT to obtain the access.

> Today, we have launched a strike on the financial foundation of the global terror network [….]. We will starve the terrorists of funding (…). We are putting banks and financial institutions around the world on notice – we will work with their governments, ask them to freeze or block terrorists' ability to access funds in foreign accounts [...]. If you do business with terrorists, if you support or sponsor them, you will not do business with the United States of America. […] We have established a foreign terrorist asset tracking center at the Department of the Treasury to identify and investigate the financial infrastructure of the international terrorist networks[16].

The pretext of tracking and suppressing financial activity related to terrorism enabled the United States to, again, possess the legal framework and political rationale to impose the same tools against States viewed as enemies. In this context, the dollar bomb became the primary weapon of the United States against the so-called rogue states, for example in the case of North Korea in 2005 and Iran between 2006 and 2015 and then in 2018. In the case of Iran, for instance:

[16] President George W. Bush Address to a Joint Session of Congress and the American People, 20 of September of 2001.

> [...] As Iranian accounts in foreign banks were closed, local banks, one after the other, were disconnected from the international system. As a result, the country's foreign operations were increasingly concentrated in Iran's central bank, which also carries out commercial operations. In the end, the Iranian monetary authority came to operate as a "financial vehicle of last resort" between the country's banking system and the rest of the world. In January 2012, Iran's central bank was finally blocked, greatly accelerating the country's economic crisis (Torres, 2024, p.12).

Focusing on the subject of sanctions to the more immediate topic of this research, we will briefly tackle the sanctions imposed on Russia in 2022 and the role of SWIFT. This is important because, as will be discussed in detail later, the institutionalization and weaponization of the SWIFT through the US currency is a cornerstone of the dollar's position as a global currency, as proposed in the hypothesis of this paper. Nonetheless, it is within this framework that the Sino-Russian initiatives to bypass the US dollar, which include China's Cross-Border Interbank Payment System (CIPS) and Russia's System for Transfer of Financial Messages (SPFS), take place.

According to the NY Fed (2023, p.23) "International sanctions involving SWIFT prevent sanctioned entities from accessing the SWIFT network". In theory, being a cooperative, SWIFT is supposed to protect the interests of all its members, and it is not the system itself that imposes sanctions. However, it must act in accordance with the law of Belgium and the European Union, to which it is subject. The sanctions are imposed, as we have seen, by SWIFT member countries, not by the cooperative. However, as has also been explained, countries like the United States have a coercive power, based on their international currency, which coerces systems like SWIFT to shut down members of the system in order to impose sanctions. In this context:

> In February 2022, following Russia's invasion of other areas of Ukraine, Canada, the European Union, Japan, the United Kingdom, and the United States agreed to remove some Russian (and Belarusian) banks from SWIFT, and the European Union accordingly issued EU Council Regulations 2022/345 and 398. SWIFT complied with the new EU regulation and, on March 12, 2022, it disconnected seven Russian and three Belarusian banks and their subsidiaries from its network. Three more Russian banks, one more Belarusian bank, and their subsidiaries were disconnected in June 2022 (Cipriani, et al., 2023, p.27).

Not only that, but the Russian central bank was sanctioned and "about $300 billion of the total $640 billion, the most liquid portion of the country's international reserves, was frozen" (Torres, 2022, p.14). These reserves included treasury securities and bank deposits (Eichengreen, 2022). The Russian currency began to depreciate sharply (50% in a 10-day period) and Moscow was forced to tighten capital controls and raise interest rates. The measures implemented by Russia, however, were ultimately successful in reversing the situation.

> In the fifteen months since Russia's full-scale invasion of Ukraine, the Society for Worldwide Interbank Financial Telecommunication (SWIFT) has gone from a Belgian cooperative assisting banks in messaging each other to a centerpiece of the West's economic arsenal [...] But here's the rub—SWIFT is only a messaging service. It does not provide bank accounts or hold funds for banks in any capacity. The banks actually transfer the funds through a different entity. In order to send money across borders, individuals usually need to use a trusted network of banks, which settle transactions through a series of mutually held accounts [...] That's why 'banning' a bank from SWIFT does not mean that the institution cannot get money from other banks. It just makes it more complicated and costly to do so (Lipsky;Kumar, 2023).

As pointed out by Eichengreen (2022, p.2), "SWIFT is also a vehicle through which the U.S government can monitor third party compliance with sanctions" and the "U.S government could also make SWIFT's compliance with its sanctions a condition for its continued dealings with U.S banks or even sanction SWIFT directly", as was threatened by the US congress in 2012, in case the organization did not remove Iranian financial institutions from its platform. In February 2023, Europe implemented a ban on the import of refined oil from Russia; nonetheless, "[...] the EU allows its shippers, insurers and banks to continue facilitating Russian exports to other countries so long as the oil is sold below a price set by the G7" (The Economist, 2024, n/p).

As of 2024, the European Council adopted a "comprehensive fourteenth package of sanctions [...] on an additional 69 individuals and 47 entities" in Russia.The US Departments of Treasury and Commerce also issued new sanctions as well as export controls, prohibiting software activities and services, secondary sanctions[17] and added approximately 300 special designated nationals (SDN) companies and agents (Council of the EU, 2024; US TREASURY, 2024). Among those,

> Five Russian financial institutions, i.e., the Moscow Exchange ("MOEX"), the National Clearing Center ("NCC"), the Non-Bank Credit Institution JSC National Settlement Depository ("NSD"), the Gas Industry Insurance Company Sogaz ("Sogaz"), and the JSC Russian National Reinsurance Company ("RNRC"); More than 90 parties across Russia, Belarus, the British Virgin Islands, Bulgaria, Kazakhstan, the Kyrgyz Republic, the PRC, Serbia, South Africa, Türkiye, and the United Arab Emirates for sanctions evasion attempts; More than 100 entities supporting Russia's domestic war economy; and Various entities involved in certain liquefied natural gas projects (Lis et al., 2024, n/p)

Notwithstanding, in May of 2024, the EU council under Sweden's presidency decided to use Russia's frozen assets in the EU to support Ukraine, both in the military and in the economic sphere (SWEDEN, 2024).These sanctions, however, do not seem to have had a major impact on the Russian economy, given that it is projected to grow faster than all

[17] "[...] Sanctions on foreign financial institutions determined to have "conducted or facilitated any significant transaction or transactions, or provided any service, involving Russia's military-industrial base, including the sale, supply, or transfer, directly or indirectly, to the Russian Federation" (UNITED STATES, 2024).

advanced economies in 2024 (IMF, 2024). According to the International Monetary Fund, "Oil exports have "held steady" and government spending has "remained high" contributing to growth [...] Despite many gloomy predictions, the world avoided a recession, [and] the banking system proved largely resilient" (BBC, 2024, n/p).

As discussed in detail by Torres (2022), there are several specificities in the Russian case and why the sanctions did not achieve the results expected by the United States and the European Union. Among those, the accommodation of the Russian ruble, exports and cross-border transactions through the Chinese Yuan, given that banks in Russia invested in phone lines to send payment instructions in RMB to Chinese banks (Qinqin Jia;Cheng, 2022 apud Eichengreen, 2022, p.2). Alternatives such as this one are more costly, slower and deemed less secure.

The scope of this paper focuses on the mechanism for imposing monetary violence (exemplified here by SWIFT) and its possible counterpart (CIPS). In this sense, we don't intend to dwell on the specifics of the Russian case, but rather to point out that, as a result of this imposed mechanism, countries like China and Russia have begun to invest more heavily in tools to bypass the US dollar. This will be addressed further in the next chapter.

Chapter 3: Sino-Russian bypass? Analyzing CIPS and SPFS feasibility

We consider that the USD performs the roles of an international currency at the market level[18] but its exorbitant privilege resides on the arbitrage capabilities of geopolitical instruments centered on monetary power, through institutions such as the SWIFT system. In the wake of discussions on monetary power and financial sanctions, lies the emergence of financial instruments, through institutions that can arbitrate cross-border transactions without the use of the US dollar. From our point of view, these initiatives are not intended towards dismantling the current monetary hierarchy, but rather, towards 1) a decrease in dollar dependency, strengthening national autonomy and reducing financial costs in times of peace and 2) avoiding the strangulation of their economies in face of possible financial sanctions in times of war. In other words, they're intended to bypass the U.S dollar.

China and Russia are the countries further ahead in developing alternative systems to clear and settle transactions transnationally. In this sense, this chapter will discuss the

[18] The market variables are the prerequisites for international usage (convertibility, liquidity and trust) to be used in foreign trade, cross-border transactions and global payments.

feasibility of China's transaction clearing and settlement system (CIPS) as well as Russia's System for Transfer of Financial Messages in bypassing the US dollar. An important concept with regard to the role of systems such as CIPS is that of institutional bypass. The idea of bypass comes from a practice in the medical field where, given a blocked artery in the human body, a "surgical bypass" is created. This concept has been used primarily in the field of law, but has been gaining relevance in debates on International Relations and International Political Economy, especially in the work of Prado and Hofman (2017) and Coelho (2023), who used the concept of International Institutional Bypass within discussions on the reforms of the international financial system, focusing on Renminbi offshore centers (OFC).[19]

An international institutional bypass is the development of an institution equivalent to another existing institution, which operates in parallel with the first one, deemed to be dysfunctional. According to Prado and Hofman (2017, p.231): "Just like surgeons grafting new pathways around blocked arteries in coronary bypasses, global governors are increasingly responding to clogged international institutions by creating new ones, rather than reforming existing structures." In this sense, bypass does not change the nature of the institutions or the system, but it does overcome resistance to the reforms demanded by countries that see similar institutions as dysfunctional and unrepresentative. There are six characteristics to an institutional bypass (Coelho, 2023):

(i) the new institution maintains the pre-existing institution (dominant institution) in the same location or jurisdiction;

(ii) an institutional alternative is established (an optional alternative path), providing users (investors and market agents) with financial services and products that do not depend - at least in their entirety - on the dominant institution;

(iii) the new institution has at least one distinctive feature in relation to the dominant one, in order to overcome a dysfunction or limitation detected in the latter;

(iv) the new institution produces effects in the same international regime or domestic legal order in which the dominant institution operates;

(v) the newly created institution must be compatible with the legal requirements of

[19] "Financial transactions with Chinese currency beyond the political borders of China or the Chinese mainland (mainland China or onshore)" (Coelho, 2023, p. 55).

either the international or domestic legal order in which it operates; and

(vi) the new institution, resulting from the institutional by-pass, requires a structural governance of the dominant institution.

As Coelho (2023, p.144) puts it: 'a new institution is set up, and the by-pass process takes place without disturbing the operations of the pre-existing institution. If the dominant institution is suppressed and the new one persists, this no longer characterizes a by-pass." The institutions created to serve as bypass tools should then preserve at least one of the original functions of the existing institutions, while also introducing a new and innovative feature and/or service, in China and Russia's cases (through CIPS and SPFS), that means enabling the clearing and settlement of transactions, as opposed to only the messaging system that is the SWIFT. These are features that are either more expensive or absent[20] in the dominant institution. The new mechanisms (CIPS and SPFS), then have the potential to complement the existing one.

The following sections deal with the operationality of the systems being developed by both countries, with data from the Central Bank of China (PBoC) and the Bank of Russia, as well as an analysis of the common approaches of Economics and Political Science in relation to their development, offering an alternative insight from the Political Economy of International Currencies and the concept Institutional Bypass. At the end of this section, a framework will be drafted to understand whether the Sino-Russian mechanisms fit the definition of institutional bypass.

3.1 The CIPS - Chinese transaction clearing and settlement system

In 2015, the People's Bank of China (PBOC)[21] launched the Cross-border Interbank Financial System (CIPS), in order to safely and conveniently send and receive payments between domestic and foreign accounts. CIPS is an independent real-time settlement mechanism, overseen by the PBOC. CIPS members can participate directly or indirectly. A direct participant has to 1) be incorporated in China (to be overseen by the PBOC) and 2) comply with Chinese capital controls. These capital controls mean there may be a need for pre-approval from the PBOC for payment transfers, which slows the process (Eichengreen, 2022). A direct participant maintains an account with the CIPS system and is able to message

20

21 Chinese Central Bank.

another direct participant either through the CIPS structure itself or through the SWIFT, while an indirect participant must use SWIFT. There are currently 141 direct participants of the CIPS, those being, in general, branches of Chinese banks in other countries. CIPS does not reveal the identity of the indirect participants, but it claims to have 1,304 of those.

> To accommodate the evolving cross-border RMB business, meet global need for RMB asset allocation and better serve the global use of RMB, against the backdrop of the financial opening-up of China [...] With the goal of "wherever there is RMB, there is CIPS service", the Company is committed to becoming even more market-oriented, professional and international and providing diversified services and products to meet the needs of different institutions at different levels (CIPS, 2024).

According to CIPS, the program specializes in settling transactions denominated in RMB, and is an essential infrastructure for the development and improvement of the Chinese financial market, as well as the opening up of the financial sector itself. Nevertheless, the system bolsters the real sector of the Chinese economy, with regard to the Belt and Road Initiative and the global use of the RMB. Table 1 showcases a timeline of CIPS, from its creation to where it currently stands.

Table 3. CIPS Phase 1 Timeline

PHASE	YEAR	NUMBER OF PARTICIPANTS	LEVEL OF GLOBAL REACH
PHASE 1 - CONSTRUCTION	2012	-	-
OPERATION	2015	19 Direct Participants 176 Indirect Participants	50 countries; All 6 continents
OPERATION	2019	33 Direct Participants 903 Indirect Participants	94 countries

Source: The Author, with data from CIPS, 2024.

CIPS is divided into phases, and between 2017 and 2018, it had put in place the DVP settlement[22] and supported Northbound Trading of Bond Connect, reducing settlement risks and improving efficiency of cross-border bond transactions. According to CIPS (2024),

[22] In delivery versus payment a "message sent by securities deliverer will also initiate a debit against the funds account of the receiver" (BIS, 1992, p. 79).

“Through these Direct and Indirect Participants, the network of CIPS has reached 3000+ banking institutions over 167 countries and regions.” Nonetheless, the system is capable of "Uniform standard straight-through processing" based on ISO20022[23]; it “adopts international information security mechanisms and reliable communication technology”, through “multi-access, intelligent routing, persistent message, and smart monitor functions; it supports “multiple connection methods including leased line and VPN” as well as API Interface and GUI user terminal. CIPS Phase 2 has new features in comparison with Phase one, as follows:

1. More settlement modes. The Deferred Net Settlement (DNS) mechanism has been introduced on the basis of the Real-Time Gross Settlement (RTGS) to offer a liquidity-saving hybrid settlement mechanism.

2. Supporting financial market transactions. To meet needs for diverse financial transactions, CIPS supports settlement and clearing for RMB remittance, Delivery versus Payment (DvP), Payment versus Payment (PvP), Central Counterparties (CCP), and other RMB cross-border transactions.

3. Extended service hours. The operation time of CIPS has been extended from 5×12 hours to 5×24 hours + 4 hours, covering almost all financial markets in every time zone. Considering overseas participants and their local customer’s use of RMB, CIPS (phase 2) supports intra-day RMB settlements.

4. More types of Direct Participants. FMIs as Direct Participants are introduced. CIPS is ready to have more overseas Direct Participants.

5. Improved message design. CIPS enriches message types, enlarges message scalability and optimizes message field definition, which facilitates compliance management of participants and regulators.

6. CIPS backup system. The capacity of real-time data transmission from main system to backup system improves business sustainability of CIPS.

In practical terms, what China has built with CIPS is a messaging and transaction clearing system, unlike SWIFT, which is only a messaging system. The central feature of CIPS is the possibility of transferring large amounts of money between international banks

[23] “ISO 20022 is a multi part International Standard prepared by ISO Technical Committee TC68 Financial Services. It describes a common platform for the development of messages” (ISO 20022).

without using SWIFT or CHIPS, ensuring not only the effectiveness of doing the whole process within only one convenient mechanism, but doing so at a lower cost[24]. According to Chaoyang Zhang, 2016 (General Manager of the first overseas bank to join CIPS as a direct participant): “Opening an account in CIPS is somewhat equivalent to opening an account in China’s central bank. This can effectively mitigate counterparty and clearing risks and is significant to ensure the stable operation of cross-border payments.”

Authors that analyze currency internationalization through market variables will argue that there a few problems with turning the RMB into an international currency, the bigger ones being 1) the acceptance of banks and institutions of using such systems, given that the creation of a transnational payment system doesn’t guarantee its use by the counterparts; 2) the convertibility, which is directly related to problem 1, considering the recipient must be confident that the currency will maintain its value and that such currency will be easily used abroad (Eichengreen, 2022).

This type of analysis assumes that countries need to be "convinced" to use non-Western mechanisms - such as CIPS - rather than the SWIFT. We argue that countries do not need to be convinced, for a few reasons; one of them is that CIPS was already put in place to serve the interests of countries looking for alternatives to western-led mechanisms. This means that the CIPS, and consequently, RMB internationalization, is not looking to “reach an audience”, it already has its audience, which is why it was created in the first place. Countries that were previously sanctioned by the United States and the European Union had previously noticed they could not rely on U.S dollar-based systems to carry out their foreign trade, maintain foreign exchange reserves and identify/reach financial counterparts.

The development of a transnational payments infrastructure has been a global trend for developing economies, for a variety of reasons, from the geopolitical influence brought about by control of a global payments system, to the flows of financial income and finally the bypass of the current financial system which has been weaponized by the great powers.. China and Russia started setting up their payment systems in very close proximity: CIPS and SPFS. As we can observe, the number of CIPS members has more than doubled since 2018, even though it has fewer members than SWIFT. Of course, it's worth pointing out that CIPS only deals with transactions denominated in RMB, just as its counterpart, the US

[24] According to Lipsky and Kumar (2023, n.p), nearly 23 trillion dollars were transferred between businesses worldwide in 2020, which cost more than 120 billion dollars to process: “That’s like paying a tax the size of Morocco’s entire gross domestic product. Plus, these payments often take days to settle. It’s a lot of money for slow service, and that cost gets passed on to consumers.”

dollar-denominated system, CHIPS.

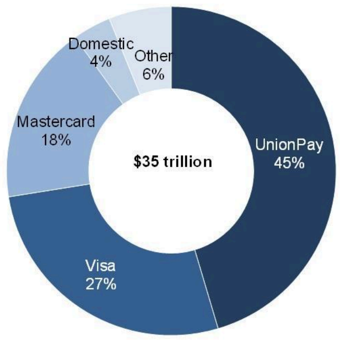
> The fact that CIPS has also adopted the ISO 2022 international payments messaging standard is now facilitating the widening of the cross-border connectivity of CIPS [...] All the speakers in a session on CIPS at Sibos in Geneva on 26 September 2016 agreed that the use of global messaging standards by the new infrastructure is increasing RMB transaction volumes and accelerating the evolution of the RMB into a major global currency (SWIFT, 2016, n/p).

It is worth noting that CIPS still depends on SWIFT for most of its interbank messages, “[...] for translating messages between China and its business partners, with around 80 percent of CIPS payments estimated to use SWIFT messaging systems” (Mooradian, 2024, n/p). In March 2016, CIPS and SWIFT signed a memorandum of understanding (MoU) in Beijing to foster collaboration between the two institutions and to integrate CIPS to the “global banking community”, through the “adoption of recognised processes and protocols” (SWIFT, 2016).

Beyond CIPS, Chinese providers are now leading when it comes to retail payment through digital wallets and currencies. Currently, less than 5% of the total currency in circulation in China is paper money (Xinhua, 2022). In 2016, 80% of financial transactions were electronic (China, 2021). The Chinese system, which has come to be known as the "cashless society", is based on digital wallets and QR codes, via the big tech firms. The Chinese currency, the so-called Renminbi, has the yuan as its unit of account (CNY). The term Renminbi (RMB) means "people's currency" in Mandarin: 人民币 . Both terms - yuan and Renminbi - are used interchangeably, which means that 5 RMB is the same as 5¥. This is the official currency issued, either in paper money (banknotes) or used in digital transactions. The e-Renminbi, on the other hand, is what we call a "digital currency electronic payment", i.e. a digital currency issued by the People's Bank of China (PBOC) to serve as a means of payment.

Take for instance giants UnionPay, AliPay and Wechat. Unionpay is a Chinese state-owned financial services corporation, operated under endorsement of the People’s Bank of China. UnionPay International (UPI) as a subsidiary of China UnionPay “focused on the growth and support of UnionPay's global business”. According to Unionpay, more than 2600 institutions worldwide are linked to the system, ensuring card acceptance in more than 180 countries and issuance in more than 80 countries and regions. “UnionPay International provides high quality, cost effective and secure cross-border payment services to the world's largest cardholder base”. According to China Media Group, in 2022, UnionPay outperformed Visa in global debit card transactions, and within the Asia-pacific area, one out of four new bank cards issued is UnionPay (Xinhua, 2022). Nonetheless, UnionPay debit cards have held the largest market share for the tenth year in a row, its credit cards came in second, followed by Visa credit cards and Mastercard credit cards, as illustrated by Figure 5. The 45% market share is mainly led by Chinese domestic spending (Van Dyke, 2017; Rolfe, 2020).

Figure 4. Share of Purchase Volume Worldwide by Card Scheme, 2019



Source: RBR, 2019.

There are two other possible approaches when it comes to analyzing the geopolitical framework around CIPS. The first one is that CIPS is part and parcel of China's broader strategy of international economic/financial opening up. The second one refers to CIPS being the financial wing of the Belt and Road Initiative (BRI). Let us dive deeper into these two means. According to Yu Xiaojiao Lei (2011, n/p), the "Going Out Policy", or international business strategy, would drive Chinese participation "in international competition and cooperation through foreign direct investment, foreign engineering contracting, foreign labor cooperation and other forms, and realizing the strategy of building a modern powerful country with sustainable economic development."

It must be emphasized that such "open-door policy" has always been controlled, in the sense that China developed an autonomous approach to foreign direct investment, capital inflows and outflows and by no means liberalized their economy as a path to economic development, as it is heavily conveyed on mainstream economic analysis. Foreign direct investment in China was always highly conditioned to the development and strategic planning guidelines of the Chinese state, through policies such as: "mandatory local partnerships (through the formation of a joint venture with a Chinese state-owned company); technology transfer agreements; local content rules; geographical definition of the location of factories, quotas for exports and job creation (Nogueira, 2020, p.10). Through this process, it was able to promote autonomous growth, thereby avoiding the common fate of developing countries of becoming enclave economies.

In a historical overview, back in the 1950s China established an organization within its Ministry of Commerce to promote industry and trade, the China Council for the Promotion of International Trade (CCPIT), which remained inefficient until the reform and opening up process fostered by Deng Xiaoping. After that, "China's trade engagement with the outside world widened its scope of duties from nation-wide to international trade promotion, and information and education of Chinese businesses to legal services, patenting, trademark, e-commerce guidance and handling international trade disputes" (Yelery, 2014, p.1). The role of CCPIT was then enhanced following China's membership in the World Trade Organization (WTO), and in March, 2000, during the Third Session of the Ninth National People's Congress, leader Jiang Zemin officially announced the 走出去战略 (Go out policy or Going Global Strategy) as a national policy.

> Jiang emphasized the importance of and need for pioneering international markets, promoting diversification of trade and developing an outward economy (*waixiangxing jingji*) as well as enhancing the experiences of Chinese firms by absorbing advanced technology [...] The ultimate aim was to make Chinese firms competitive in global markets [...] (Yukyung, 2018, p.343).

In sum, Going Global was designed as a strategic concept by Deng Xiaoping and then made a national strategy at the end of the 2000s by Jiang Zeming. One important aspect is that this national strategy did not only stem from China's impressive economic growth but also to protect the country against risks such as the 1997 Asian financial crisis. According to the Chinese government, these are some results of the Go out policy throughout the years:

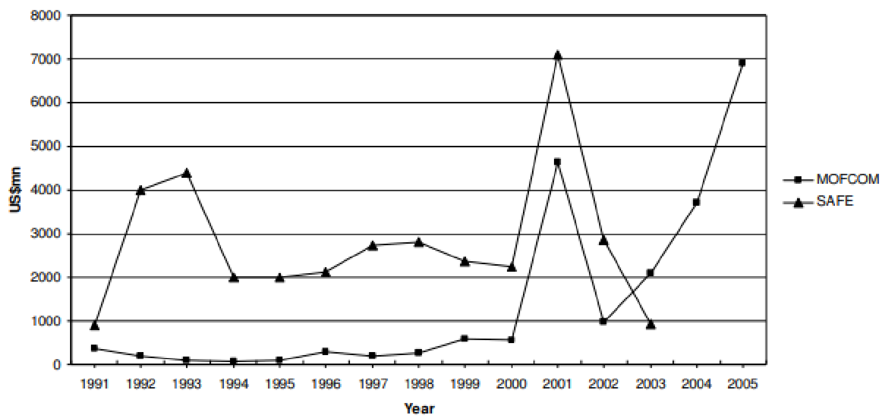
1) In 2010, domestic Chinese investors made direct investments in 3,125 overseas enterprises in 129 countries and regions; 2) By the end of 2010, China's cumulative non-financial outward direct investment reached US$258.8 billion; 3) China's foreign economic cooperation business is distributed in nearly 200 countries and regions, and most of its foreign direct investment, foreign contracting projects, and foreign labor cooperation are concentrated in Asia; 3) Overseas processing trade investment accounts for nearly half of China's total overseas investment, mainly concentrated in light industry, machinery, building materials, electronics, textiles and clothing and other industries; 4) China's outward direct investment has expanded from initial monetary investment and physical investment to cross-border mergers and acquisitions, and more and more companies have begun to invest overseas through equity investment and equity swaps. Chinese companies are also

increasingly acquiring sales networks, licenses, technology patents, and establishing R&D centers and industrial parks overseas (Yu Xiaojiao Lei, 2011, n/p).

> This tremendous increase in China's ODI since the early 2000s suggests not only its deep integration into the global economy with its WTO membership, but also its rising demand for overseas direct investment to expand markets in order to address overproduction as well as make use of local resources [...] China supported its state firms with investment capitals for overseas infrastructure building, but such investment projects were largely bilaterally arranged (Yukyung, 2018, p.343).

In the 1990s, the country received more than 7% of the world's total FDI inflow (UNCTAD, 2006 apud Buckley et al., 2008). However, as Chart 5 demonstrates, there has been substantial growth in Chinese outward direct investment (ODI), since 2002, that is, after decades of receiving FDI, China became a major FDI supplier. The process of Chinese development for outward direct investment (ODI) policy can be divided into five stages, as follows: 1. Cautious internationalization (1979-1985); 2. Government encouragement (1986-1991); 3.Expansion and regulation (1992-1998); 4.The 'go global' policy period (1999-2001) and, 5.Post WTO period (from 2001 onwards) (Buckley et al., 2008, p.40). For our analysis, stage 5 matters the most, since it was precisely during this period that, through the 11th Five-Year Plan, China reinforced the importance of 走出去战略 (zou chu qu), the "Go out Policy". Nonetheless, Chinese capital has turned mainly to developing countries, such as those in Africa, the Middle East, Latin America and those in its strategic surroundings, the countries of Central Asia.

Chart 4. China's Approved Outward FDI Flows (current prices), 1991-2005 (US$mn)



Source: Buckley et al., 2008.

Two important players stand out in this framework: the *Asian Infrastructure Investment Bank (AIIB)* and the *Belt and Road Initiative (BRI)*. The Belt and Road Initiative

(BRI) is the new version of the Silk Road, a trade network that began in central Asia, passed through the territories of India and Pakistan and reached Europe, used during the Han Dynasty (206 BCE-220 CE). At the time, linkages within Asia and from Asia with other countries were extremely well-established, since “Central Asia was the epicenter of one of the first waves of globalization, connecting eastern and western markets” (McBride et al., 2024, N.p). Trade was then hindered by the Crusades and other historical events, marking the beginning of a “bottleneck in Asia connectivity” (Xi, 2013), nowadays, for instance, trade within Asian countries makes up a minor percentage of cross-border commerce. The BRI therefore

> [...] consists of a Silk Road Economic Belt, which is a transcontinental corridor connecting China with Southeast Asia, South Asia, Central Asia, Russia, and Europe by land, and a 21st-century Maritime Silk Road, a sea route linking China's coastal regions with Southeast and South Asia, the South Pacific, the Middle East, Eastern Africa, and extending to Europe (Belt and Road, 2023, N.p)

Previously called “One Belt, One Road” (OBOR), the infrastructure project was announced by Xi Jinping in 2013 during visits to Kazakhstan and Indonesia. In 2015, it was advertised that a Digital Silk Road would also be part of the initiative. Literature often focuses on these goals of the BRI: trade improvement within the region, export markets boost and Chinese overcapacity drainage. Yes, China is indeed promoting economic links and market integration within Asia, but trade is one part of the story. Infrastructure building within BRI countries - 147 so far - as well as financial integration play a pivotal role. According to Liu et al., (2020, N/p): “The Belt and Road Initiative (BRI) is clearly aimed at international development, and designed to jointly build a regional economic cooperation framework that is open, inclusive and balanced. Financial integration is the cornerstone of the BRI”.

Many BRI members are developing countries that lack profoundly needed FDI to fund infrastructure, and do not have mature financial markets. The Belt and Road Initiative has been providing - through national development financial institutions (such as the China Development Bank and Export-Import Bank of China (Chexim) - massive lending and attracting private investment to these projects:

> Due to their large reserve assets, CDB and Chexim have become major lenders for infrastructure projects in countries along the Belt and Road. By the end of June 2017, CDB had given loans totaling 170 billion USD to countries along the Belt and Road, of which 12.6 billion was given in 2015, and 14.9 billion in 2016, to support the implementation of major infrastructure projects in target countries (Liu et al., 2020, p.8).

Alongside BRI, China has led the creation of the Asian Infrastructure Investment Bank (AIIB) and the Silk Road Fund. AIIB is a multilateral development bank and an international financial institution, designed more specifically to lend money for infrastructure projects, especially within the Asia-Pacific region. It is currently the world's second largest multilateral development organization and it was launched by a Chinese initiative. The bank currently has 109 member states and China holds 27% of the voting shares. Some of the most important member states are India, Brazil, France, Germany, South Korea, Russia, Saudi Arabia, South Africa, Vietnam and the United Kingdom. In other words, AIIB promotes Asian integration through trade, investment and finance under Chinese leadership (Yukyung, 2018).

The emergence of AIIB stems from the shortcomings of other multilateral development institutions and banks - such as the World Bank and the Asian Development Bank - to deal with Asia's population and economic growth, as well as its integration into the rest of the global economy. By leading AIIB, China demonstrates the need for infrastructure building as well as its commitment to a leadership role within the international financial architecture.

> To address Asian infrastructure investment, the WB (World Bank) and ADB (Asian Development Bank) provided $15 billion and $13 billion annually (Kawai, 2015). But according to the ADB Institute report in September 2010, Asia needs to finance $776 billion in infrastructure in the period 2010-2020 to meet the increasing needs of various sectors including transport, water, energy and sanitation (Tien et al., 2019, p.62).

Given this context, geopolitical analysis usually focuses on issues such as: the use of AIIB by China as a means to widen the scope of its geopolitical influence within the Asia-pacific region and within other developing countries; the possibility of AIIB to serve as a tool for China to set the agenda for the reform of global governance and if the institution can or cannot challenge the legitimacy of existing other multilateral banks. Some studies will also point out that AIIB is China’s new version of “going out policy”, by “[...] the pursuit of secure resources and markets for export, as well as attempts to nurture Chinese firms in overseas competition” (Yukyung, 2018, p.369).

> [...] China recently has strengthened its global economic governance by implementing a series of high-level institutions which are widely regarded as a clear statement of intent from Beijing. They want to challenge America's position as the only superpower (Jeremy, 2015) and shape the rules of investment and business in Asia (Tien et al., 2019, p.62).

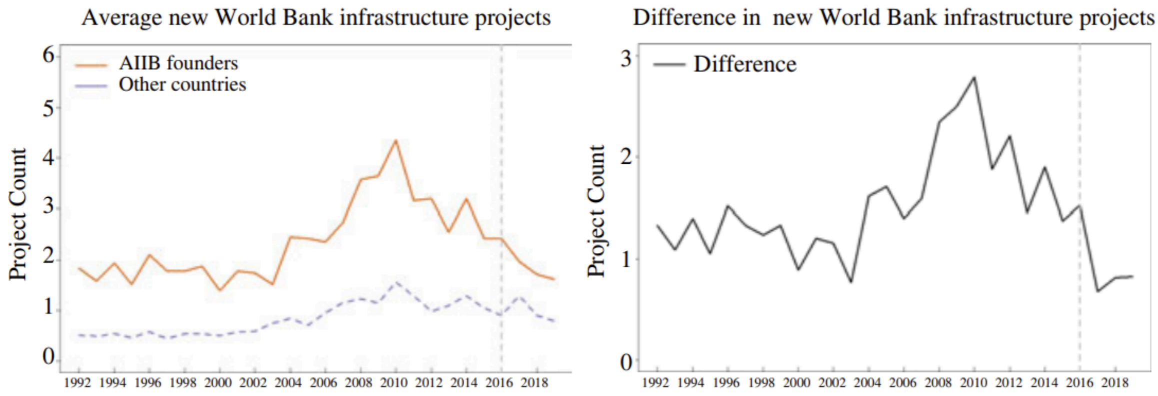
Two approaches deal with China's impacts on global governance/international financial architecture. The first one is the contentious approach, which views power as being relative in nature. From this perspective, AIIB will eventually challenge the existing order by promoting alternatives to developing countries. In this context, the rise of alternative mechanisms and institutions to those led by Washington - whose economic policy and financial aid have subjected poor and emerging countries to severe constraints and unmanageable conditions - would inevitably lead to a hegemonic transition. In other words, given that the hegemon does not accept a peer, the rise of one country necessarily means the downfall of another. "In the long-term, the development of infrastructure in Asia would contribute to promoting trade integration of the region with China, while weakening its dependence on trade with the US" (Yukyung, 2018, p.369).

> By representing the interests of developing countries that have been often dismissed in the World Bank or the ADB, China-led AIIB may accelerate a decline in the status of the US in Asia and beyond, leading to a substantial change in the post-World War II architecture of global economic governance (Yukyung, 2018, p.369).

The second approach is the functional perspective which takes into account that the infrastructure in Asia would promote opportunities for a number of countries, even developed Western ones. This hypothesis is illustrated by Chinese stakeholding in a number of existing financial institutions, which scholars address as making it infeasible for China to challenge them. Rather, AIIB would "run in parallel with incumbent banks" (Yukyung, 2018, p.370). This is the approach of Yukyung (2018), who believes Chinese leadership will extend the system, not replace it, in three ways: by changing the focus from bilateral cooperation to multilateral partnerships, from corporate-centered to industry-centered and from primacy for state firms to partnership with private capitals.

It seems that both approaches fall short in the sense that they ignore the political economy of international currencies, either in the context of systemic transformation, because they recognize the movements of change but are trapped in a unipolar vision of the International System, or in the context of coexistence, because they accept the multilateralism that seems evident but are incapable of recognizing a challenge to American hegemony. Some analysts, however, are already recognizing such manifestations. A study conducted by scholars from Princeton University and Fudan University in Shanghai provided systematic evidence of such transformations. As shown by figure 5, The left panel of Figure 1 shows the annual number of infrastructure projects approved by the World Bank for the founding countries of the AIIB and other developing countries. After 2016, there is a drop for AIIB founders. The founders participate in more projects, but this difference decreases by more than 50% after 2016, from 1.52 in 2016 to 0.68 in 2017.

Figure 5. World Bank infrastructure projects for AIIB founders versus other countries



Source: Jing et al., 2023, p.225

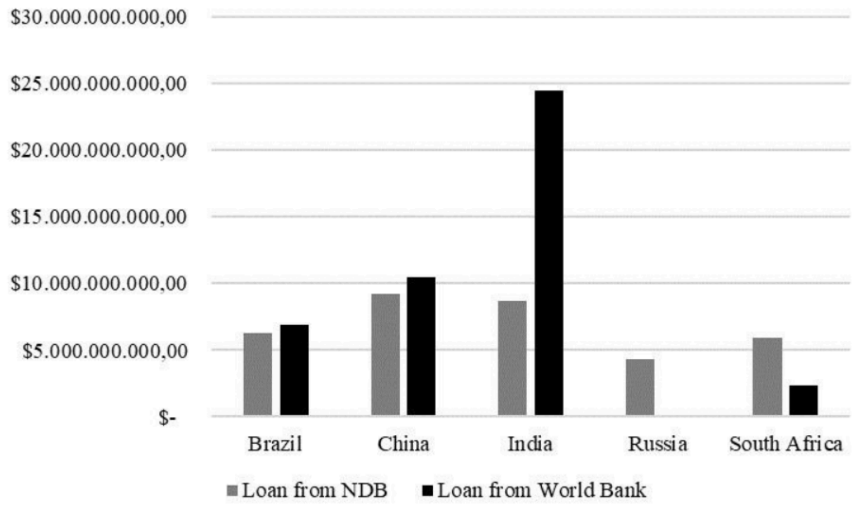
> [...] China's AIIB could unsettle the political influence the United States has enjoyed over developing countries through its leadership of the World Bank. An important set of countries may be parting ways with the World Bank and looking to a Chinese institution for leadership in the world of development (Jing et al., 2023, p.217).

It is surprising, compared to previous studies, that the World Bank is losing ground to AIIB. This represents, however, that there is a challenge to the dominance of the United States - within the framework of global governance - represented also by the prominence of the country, its currency and its economic policy, by multilateral development banks. This challenge demonstrates China's broader strategy of transforming the international system towards a more multilateral agenda that responds to domestic and regional issues without the limitations[25] of US-led banks.

Figure 6 shows the amount of loans coming from the New Development Bank (NDB) and the World Bank (WB) to BRICS countries. In cases such as Brazil, China and especially India, the World Bank still appears as a major lender. South Africa and Russia, for example, paint a different picture, where NDB figures as a major lender. However, 60% of the NDB loans are still carried out in US dollars, with the Renminbi figuring as the second most nominated currency, at around 23% (Braga, 2022; Voigtel, 2024).

[25] "Long term financial flows to emerging and developing countries have been partly limited by high risk perception and the resulting high cost of borrowing [...] An average country in sub-Saharan Africa, for instance, pays 300 basis points more than an average emerging market country in the bond market" (Gurara et al., 2020, p.1).

Figure 6. Loan comparison from NDB and WB to BRICS



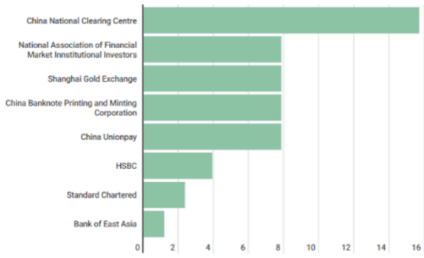
Source: Voigtel, 2024.

Nonetheless, China launched a development and investment fund in 2014 - Silk Road Fund (SRF) - especially to fund BRI projects by "financing economic and trade cooperation and multilateral action. It participates in projects for infrastructure, production capacity cooperation, and resource development [...] and uses medium- and long-term equity investment to enhance credit." (Liu et al., 2020, p.8). The initial capital of SRF was that of 40 billion US dollars. In 2023, president Xi Jinping announced an additional 80 billion Renminbi to the fund; "After the injection, the capital size of the Silk Road Fund will be 40 billion USD plus 180 billion RMB. The capital injection is an action that demonstrates China's determination to support the high-quality development of BRI through practical cooperation." (Belt and Road Portal, 2023, N.p).

Chart 5 below demonstrates the shareholders of the Chinese CIPS, mostly Chinese institutions, and Chart 6, about the identified holdings of Chinese RMB reserves, depicts that Russia has nearly a third of all RMB reserves. More importantly, the number of CIPS participants from the Belt and Road Initiative have been increasing. "By the end of 2019, 1017 banking institutions from 59 BRI countries and regions (including mainland China, Hong Kong SAR, Macao SAR and Taiwan) ran their business via CIPS." (CIPS, 2024). This is important because it showcases the intentions or at least the outcomes of China's development of alternative financial systems: it appears to be used the most within the Asia-Pacific region. In other words, the emergence of a financial transnational system based on the Renminbi, part and parcel of the internationalization of the Chinese currency, gains momentum with its non-western counterparts.

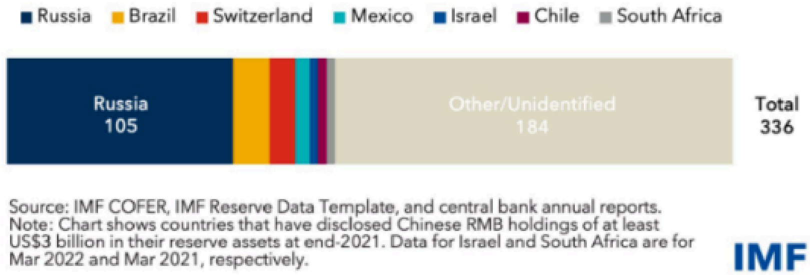
> China has made bilateral currency swap arrangements with more than 20 B&R countries and Renminbi clearing arrangements with 7 B&R countries, and signed cooperation agreements with the financial supervision authorities of 35 B&R countries. The Cross-Border Interbank Payment System (CIPS) now covers some 40 countries and regions involved in the Belt and Road Initiative (BRI, 2019, n.p).

Chart 5. CIPS Shareholding



Source: SWIFT, 2022.

Chart 6. Country holdings of Chinese RMB, billions of U.S dollars, end of 2021



Source: IMF

In conclusion, the Cross-border Interbank Financial System (CIPS) plays a pivotal role in China's strategy to internationalize the RMB and reduce reliance on Western financial mechanisms such as SWIFT. By providing a real-time settlement system, CIPS facilitates seamless cross-border transactions denominated in RMB, enhancing China's financial infrastructure and supporting its broader economic initiatives like the Belt and Road Initiative (BRI). Despite challenges such as acceptance by international institutions and concerns over currency convertibility, CIPS's growth in direct and indirect participants indicates a significant move towards a more integrated global financial presence for China.

Moreover, CIPS's development is closely tied to China's broader "Go Out Policy," which aims to strengthen its global economic ties and reduce the geopolitical risks associated with Western-dominated financial systems. Initiatives like the Asian Infrastructure Investment Bank (AIIB) and the BRI are integral to this strategy. The CIPS, by providing the necessary financial support for large-scale projects, fosters economic integration, and promotes the use of RMB in international transactions. The BRI further extends China's influence by creating new trade routes and economic corridors, thereby increasing the demand for RMB-denominated transactions. Together, these initiatives not only support China's economic goals but also position it as a key driver of global economic integration, particularly among developing countries seeking alternatives to traditional Western financial frameworks.

3.2 The SPFS - Russia's System for Transfer of Financial Messages

Since 1990, it is recognized that economic sanctions are mostly ineffective[26]. In regard to financial sanctions, the impact can be mitigated through "economy vaccination", by insulating the economy through "remedy securement" or by gaining/creating easy access to alternatives (Pacholczak, 2024). Within this framework, just as China launched an alternative mechanism to SWIFT for cross-border payments, so did Russia in 2014 as a reaction to Western sanctions. Through its Central Bank, the country developed The System for Transfer of Financial Messages (SPFS). According to the Bank of Russia, SPFS is a "safe and reliable channel for exchanging electronic financial messages".

The system has been in place since 2014, but it has only become international in 2019, when Eurasian's Economic Union bank[27] adopted it to transfer its financial information. Nonetheless, Iran was integrated into SPFS (Reuters, 2023) and Russia is pushing for its expansion within BRICS countries. The service has more than 550 Russian and foreign users from 20 countries. SPFS allows for sending and monitoring financial messages in SWIFT formats, sending messages in the client's proprietary formats, managing the client's list of counterparties and the types of financial messages to be received as well as sending ISO 20022 financial messages and it operates 24 hours a day, 7 days a week, 365 days a year (Bank of Russia, 2024).

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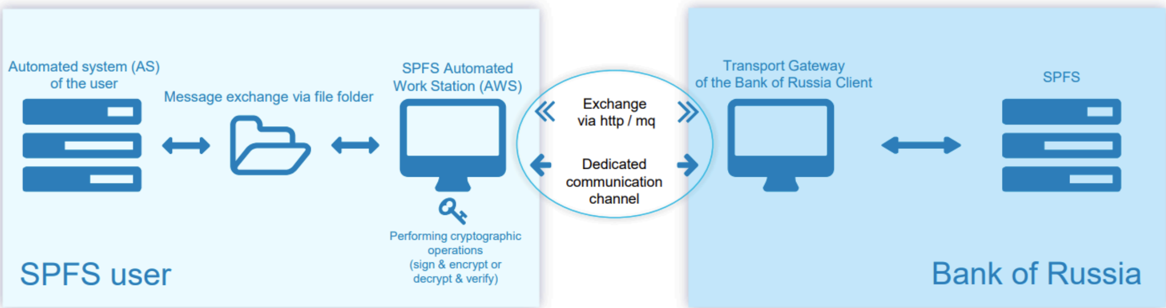
[26] G.C. Hufbauer et al., Economic Sanctions Reconsidered: Supplemental case histories, Washington 2007.
[27] "The Eurasian Economic Union is an international organization for regional economic integration. It has international legal personality. The Member-States of the Eurasian Economic Union are the Republic of Armenia, the Republic of Belarus, the Republic of Kazakhstan, the Kyrgyz Republic and the Russian Federation" (EAEU).

There are a couple of ways in which a foreign institution can integrate and use SPFS: Direct participants interact with the Bank of Russia without intermediaries and pay a fixed fee of RUB 0.8-1.0 (less than 0.02 USD) per message. To integrate with SPFS directly, a legal entity must send an application to the Bank of Russia. Another way is to use a service bureau, which exchanges financial messages on behalf of its clients, who would then have no need to connect to SPFS directly. Some of the advantages of using a service bureau are: 1) it integrates the foreign institution with the infrastructure of the Bank of Russia "cost-free"; 2) a foreign institution will make use of existing interfaces and communication channels; 3) a foreign institution will have access to all SPFS clients and services (Bank of Russia, 2024).

The expansion of SPFS' scope has become pivotal for Russia's survival after the sanctions that continue to be imposed since 2022 after the beginning of its invasion of Ukraine. A prime example of this is that in April of 2024, Russia's central bank director, Elvira Nabiullina, almost all domestic financial operations were now conducted using SPFS (Tass, 2024). "More than 98% of (financial) messages inside the country go through the SPFS now, with over 160 non-residents from 20 countries having joined the system" Nabiullina said addressing the State Duma[28]. According to Tass, a Russian news agency, "The Financial Messaging System of the Bank of Russia has become the main channel for the exchange of financial information in carrying out payments on corresponding accounts inside Russia." Nonetheless, in accordance with a decision from the Bank of Russia, all banks in Russia, since the end of 2023, must use SPFS within the country to hedge risk on financial messages exchange. The requirement, however "does not apply to cross-border transfers" (Vedomosti, 2024).

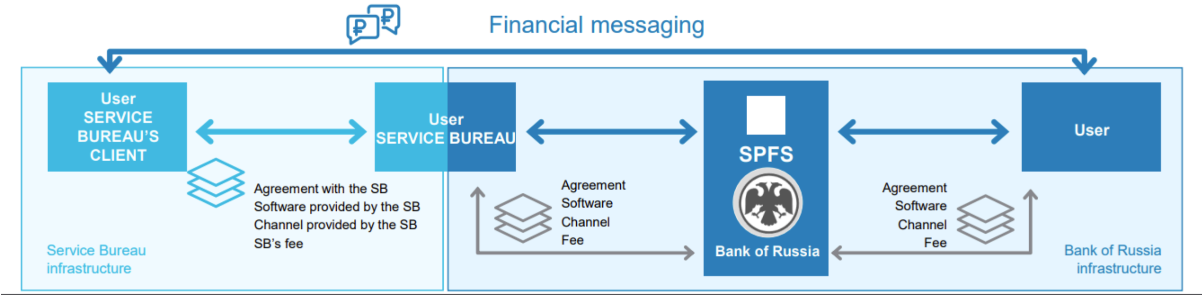
Figure 7. Sending and receiving messages via direct connection to SPFS



Source: Bank of Russia, 2024.

[28] Russia's lower house of the parliament.

Figure 8. SPFS Financial Messaging through service bureaus



Source: Bank of Russia, 2024.

The SPFS is still largely domestic, but while the Chinese CIPS still depends to a large extent on SWIFT, the SPFS might be seen as doing a total bypass process. In other words, the Russian system is more domestic but more autonomous, and the Chinese system is more international but more dependent. According to scholars, “The real threat SPFS poses is the conversation China and Russia have about connecting SPFS with CIPS to work around the SWIFT ban by trading exclusively in yuan to expand its capabilities.” (Mooradian, 2024, n/p).

It is worth highlighting the creation, by the Central Bank of Russia, or Mir (in Russian, Мир), a payment system for debit and credit cards and electronic funds transfers. Mir was adopted in 2017, developed by a Belgian company and is currently operated by the Russian National Card Payment System (NSPK). NSPK is a clearing house for card transactions in Russia and the operator for the Mir system, as well as the Faster Payment System (SBP) and it is owned by Russia’s Central Bank (Bank of Russia). According to the Bank of Russia (2024, n.p), “NSPK also processes domestic payments made in Russia with cards of international payment systems [...] they account for 56.0% of all domestic card transactions in Russia and 55.0% of debit and credit card issuance.”

Mir was developed to serve as an alternative to Western payment card corporations such as Visa and Mastercard in the wake of sanctions against Moscow in 2014. According to the Bank of Russia (2024, n.p), the percentage of cashless payments in total retail sales in 2023 was 83.4%; more than 287.3 million Mir cards issued by the end of 2023 and “As of 1 June 2024, there were 220 banks using SBP. The system had processed over 15.8 billion transactions worth 71.2 trillion rubles.”

The Faster Payment Systems (SBP) is a system which enables individual interbank transactions via cell phone. Transfer fees are "either zero or low"; "users can receive payments from organizations" as well as paying for purchases using QR codes. More than 200 Russian banks are connected to the service (Bank of Russia, 2024). The Faster Payments system was developed by Russia's central bank alongside the National Payment Card System (NSPK). The Bank of Russia is the operator and settlement center and the NSPK acts as the clearing house. As part of the sanctions imposed as a result of the war in Ukraine, in February 2024, the US Treasury included the NSPK on the list of sanctioned institutions. These sanctions, however, have no impact within Russia.

These initiatives are part of the Bank of Russia's National Payment System Development Strategy (2021-2023), to develop a "stable and open national payment infrastructure that is widely accessible and features in demand innovative services" by "ensuring payment independence and the development of the Russian payment market."

> [...] The Bank of Russia Payment System has been transferred to an up-to-date centralised platform and now ensures continuous interbank settlements within a single extended regulation [...] all domestic operations against bank cards of international payment systems were transferred to continuous round-the-clock processing in the Russian Federation. The dynamic development of the Russian payment market has allowed Russia to become a global leader in terms of growth rates of cashless payments, and placed it among the top five countries in terms of the number of such payments in 2018 and afterwards (Bank of Russia, 2021, p.2).

Another key development is the digital ruble, issued by the Bank of Russia, i.e a central bank digital currency (CBDC), which, along with its other traditional roles, "[...] will allow households and businesses to have access to their electronic wallets through any financial institution where they are serviced. Additionally, a digital ruble will provide for transactions without access to the Internet (in the offline mode)." This is important because digital innovations are at the core of transforming the international-monetary financial system. According to the IMF, CBDCs "could affect both the cross-border payment infrastructure and currency configuration" (IMF, 2020).

Given that international payments are handled through financial intermediaries like the SWIFT, it is systems like the SPFS that have stabilized the Russian financial system and given the country sufficient scope to circumvent the financial sanctions imposed by the United States, Canada and the European Union. These systems, tools and alternatives have been in development since the first wave of sanctions against the Eurasian country in 2014, as a result of the annexation of Crimea. Mir itself was put forth because Visa and Mastercard stopped operating in the country, and 90% of the cards used by the Russian population were issued by these corporations.

In the same timeframe, the EU called for the Russian economy to be disconnected from SWIFT, which catalyzed the development of the Russian National Card Payment System (NSPK). The existence of a national payment system and a very own card system make it impossible for Russia to be disconnected from the international financial-monetary system, as they promote independent banking services. In this sense, citizens continue to live normally, making their payments and transactions without any issues. In terms of cross-border transactions, the SPFS can handle the loss or disconnection from SWIFT. Consequently, the geopolitical threats posed by sanctions have not succeeded against Russia. Notwithstanding, despite being at war, Russia's real GDP is growing faster than that of advanced economies like Germany.

In the first quarter of 2020, the dollar's share of trade between Russia and China amounted to just 46% of all settlements, compared to 90% in 2015. In addition, Russia has been channeling gas production not purchased by Europe to partner countries, where payments are made through the SPFS. Furthermore, In 2021, Russian Finance Minister, Anton Siluanov, announced at the St. Petersburg International Economic Forum that Moscow was cutting the US dollar from the National Wealth Fund (CNBC, 2021).

Table 4: World Economic Outlook Growth Projections

(Real GDP, annual percent change)	2023	2024	2025
World Output	3.2	3.2	3.2
Advanced Economies	1.6	1.7	1.8
United States	2.5	2.7	1.9
Euro Area	0.4	0.8	1.5
Germany	-0.3	0.2	1.3
France	0.9	0.7	1.4
Italy	0.9	0.7	0.7
Spain	2.5	1.9	2.1
Japan	1.9	0.9	1.0
United Kingdom	0.1	0.5	1.5
Canada	1.1	1.2	2.3
Other Advanced Economies	1.8	2.0	2.4
Emerging Market and Developing Economies	4.3	4.2	4.2
Emerging and Developing Asia	5.6	5.2	4.9
China	5.2	4.6	4.1
India	7.8	6.8	6.5
Emerging and Developing Europe	3.2	3.1	2.8
Russia	3.6	3.2	1.8

Source: The IMF, 2024

The development of a digital domestic payment infrastructure as well as the cross-border system were, as previously mentioned, the backbone of why Russia is not only surviving sanctions - sanctions that to countries in the past were quite devastating -, but also doing much better than some developed economies. An article in The Economist (2024) stated that: "Being cut off from parts of the global payments system in 2022 will have inconvenienced many of Russia's corporate treasurers, and certainly has made cross-border transactions much harder. But it did not strike a fatal blow".

The table below is a tentative way to assess the institutional bypass being carried out, according to the characteristics of institutional bypass, as illustrated in the beginning of the chapter.

Table 5. Institutional Bypass?

Country	**Maintenance of the dominant institution**	**Establishment of an alternative system**	**Creation of a different service within the new institution**	**Dependence on the dominant institution**	**Domestic Usage**	**International Usage**
China	Yes - SWIFT operates normally	Yes - creation of the CIPS	Yes - it offers clearing and settlement, not only financial messaging exchange.	High	Low	Medium (mainly regional)
Russia	Yes - SWIFT operates normally	Yes - creation of the SPFS	Yes - Although it is only a messaging system, it is the only mechanism being used in Russia after the financial sanctions	Low	High	Low (mainly regional)

			imposed.			

Source: The Author, 2024.

Final Remarks

In recent years, the topic of monetary hierarchy has become mainstream. The concrete initiatives undertaken by developing countries and members of the BRICS, such as China and Russia, are on the frontier of creating alternative mechanisms to systems based on the US dollar, namely the Cross-border Interbank Payment System (CIPS) and the System for Transfer of Financial Messages (SPFS). However, there is an important distinction between these initiatives and the process of de-dollarization. De-dollarization would be the means by which the US dollar would cease to be the key currency in the international monetary-financial system, including mechanisms that, even if not denominated in dollars, necessarily fall under the aegis of American power, such as the SWIFT system.

This thesis is driven by an existing gap in the discussion of currency internationalization, which is the result of analysts' assumption that money is a product of the market or of institutions, neglecting aspects of power. And in doing so, they understand that the internationalization of a currency is 1) dependent on its effectiveness in market terms, 2) its international acceptance in institutional terms and 3) that internationalization, in this regard, guarantees the economic power enjoyed by the United States. By analyzing internationalization in such a fashion, they assume that the initiatives being implemented are sufficient to dismantle a status built on other foundations. The premise of this thesis is that the main component in the construction of a monetary hierarchy is necessarily power, and only power can be the main component, given that the construction of a hierarchy, by principle, involves imposition and violence. In this sense, we have established that there is a fundamental difference between an international currency and a global currency.

The United States has been building a process of establishing and reaffirming its hegemony through the US dollar, from 1945 to 1971, from 1971 to 1991 and from 1991 to the present day, as thoroughly described in this thesis. The American currency is unique because even when it doesn't obey market rules, it remains the most liquid and secure asset. And it does so because throughout the process of establishing its monetary hegemony, the United States has imposed a global economic order. This is radically different from what has been undertaken by the Global South, be it Russia, China, Brazil or the bloc itself. From our point of view, these initiatives are not intended towards dismantling the current monetary hierarchy, but rather, towards 1) a decrease in dollar dependency, strengthening national autonomy and reducing financial costs in times of peace and 2) avoiding the strangulation of their economies in face of possible financial sanctions in times of war. In other words, they're intended to bypass the U.S dollar.

We have seen that both China and Russia have been creating, testing and implementing alternative financial mechanisms, like the CIPS and the SPFS. They are not being developed as an end in themselves, but rather as part of a bigger strategy of currency internationalization and a strategy of self-determination, especially in the historical and contemporary contexts we have been witnessing. However, neither China nor Russia are directly confronting the dominance of the US dollar as a global currency. Because a global currency is that 1) a unit of account that denotes the prices of geopolitically relevant assets, such as oil, 2) a store of value that makes up the majority of the reserves of non-issuing countries, and 3) is the unit of account behind an imposed economic order, the internationalization of the RMB, as is, and the autonomy of Russia's economy and finance cannot supplant the current international monetary-financial hierarchy. That is not to say that both processes do not impact such hierarchy. By creating alternatives to other developing countries and to themselves and their survival without the need of US-led mechanisms, China and Russia are effectively circumventing the current international monetary-financial hierarchy.

It is within this scope that the research question guiding this thesis was posed: What are the impacts of the Chinese Cross-Border Interbank Payment System (CIPS) and the Russian System for Transfer of Financial Messages (SPFS) to the current structure of the monetary-financial hierarchy? The objective of this work was then to assess if the Chinese CIPS and the Russian SPFS systems work as bypass tools, showcasing that currency internationalization (CI) can be successful in circumventing the current order without actually dismantling it. The hypothesis of this work is that the internationalization of the RMB does not in itself put pressure on the international monetary hierarchy. However, accompanied by other initiatives, such as the creation of financial messaging systems, both in the Chinese and Russian cases, creates alternative channels to those based on the US dollar. To this end, this work was organized into 3 chapters.

Chapter 1 critiques both orthodox and heterodox perspectives on international monetary hierarchy. The chapter argues that a global currency emerges through mechanisms of power in the global monetary hierarchy. Currencies can take on international roles, but they cannot become global currencies solely through market or institutional processes. To better examine this, section 1.1, on Knapp's Chartal Theory explains that mainstream economic theory views money as a commodity used to facilitate barter. This mainstream view is questioned by the Chartalist theory, which asserts that money is created by the state through the power of imposing unavoidable tax liabilities. Money's value comes from the trust in the issuing state, rather than its material (such as gold or silver). The chapter links this national theory of money to international contexts, suggesting that money reflects state power, whether at the national or international level.

Section 1.2 establishes an international political economy approach to Currency internationalization (CI). CI refers to the process by which a national currency is used across borders, such as the US dollar being employed to settle international transactions. This concept can be understood through two primary approaches: a functional approach, which focuses on how the currency is used economically, and a factor-based approach, which examines the political economy surrounding its use. Both approaches highlight the significance of a currency's role beyond its home country.

One of the main arguments in favor of CI is the substantial benefits it provides to the issuing country. These benefits include reduced transaction costs, the ability to collect seigniorage (profits made from issuing currency), enhanced macroeconomic flexibility, increased political influence, and an improved international reputation. The functional approach, as outlined by economists like Cohen, classifies CI according to the currency's private and public functions. For instance, an international currency serves as a medium of exchange, a unit of account, and a store of value in both trade and financial markets.

The gains from CI are notable. Reduced transaction costs benefit the financial sector, and macroeconomic flexibility is achieved by allowing countries to finance external deficits in their own currency. This autonomy extends to greater influence over international monetary systems, enabling the issuing country to exercise political leverage over others. The reputational benefits of having an internationally recognized currency also enhance the issuer's standing in global monetary systems.

The geopolitical perspective on CI contrasts with market-based approaches. Geopolitical scholars often predict the eventual decline of the US dollar's dominance, given the rise of economic rivals such as China. Market-based scholars, however, focus on the comparative strengths of currencies like the US dollar, highlighting its liquidity, convertibility, and trustworthiness in global markets. Despite the challenges posed by emerging currencies like the Chinese Renminbi (RMB), the text argues that the US dollar remains firmly entrenched in its role as the world's dominant currency, largely due to its unique position in both political and economic spheres.

In contrast, the institutional or instrumental view treats the US dollar's global role as a matter of logical choice by other countries, who adopt it for convenience and stability, rather than because of direct political imposition. This approach shifts focus from the behavior of the US as the issuer to the policy decisions of those countries that rely on the dollar. Ultimately, the section suggests that the US dollar holds not only the status of an international currency but also that of a global currency. It fulfills essential economic functions, such as serving as the unit of account in global trade, while also creating a monetary-financial hierarchy that is deeply embedded in the international system. Although other currencies, like the RMB, may continue to internationalize, they do not currently possess the political and economic influence required to challenge the US dollar's dominant position in the global economy.

Chapter 2 explores the evolution of the world economy from the gold standard to the dominance of the U.S. dollar as the leading international currency. It begins by explaining how, prior to World War I, countries operated under the gold standard, which maintained fixed exchange rates backed by gold. However, World War I introduced monetary protectionism and competitive devaluation. The chapter then details the rise of U.S. financial influence, beginning with the Great Depression, which led debtor nations to halt payments to the U.S. due to a shortage of dollars. To solve this, Franklin D. Roosevelt facilitated dollar availability to repay debts, creating the Export-Import Bank in 1934 to promote U.S. exports. The chapter tracks the rapid growth of U.S. lending and the eventual establishment of the International Monetary Fund (IMF) in 1945, which solidified U.S. control over the global monetary system through the dollar-gold standard. Despite John Maynard Keynes' vision for a more internationalist financial system with the Bancor as a global reserve currency, the U.S. plan led by Harry Dexter White prevailed, securing the dollar's dominance.

The Bretton Woods system established a dollar-based international monetary order, but by the 1960s, a dollar glut strained the system. This led to President Nixon's 1971 suspension of dollar-gold convertibility, transitioning to a floating exchange rate system and marking the end of Bretton Woods. The subsequent decades saw increased deregulation and financial globalization, with the U.S. dollar solidifying its role as the central currency in a liberal international financial system. The chapter concludes with the U.S. leveraging its economic position to influence global markets, especially following the Cold War, using its public debt and financial systems to reinforce its hegemony over the international monetary order.

Section 2.2 discusses the establishment and evolution of SWIFT (Society for Worldwide Interbank Financial Telecommunication), a cooperative founded in 1973 by banks to streamline and secure international payments. SWIFT operates by transferring messages between banks, not funds. For banks with a direct relationship, transactions are processed immediately. For those without direct relationships, intermediary banks assist with the transfer. Fees are charged for each message, varying by transaction type, with several fee-sharing options available. Section 2.3 discusses the Clearing House Interbank Payments System (CHIPS), founded in the 1970s by the New York Clearing House Association (NYCHA). CHIPS differs from SWIFT as it not only sends encrypted financial messages but also clears and settles international transactions in US dollars. It is the largest private USD clearing system globally, while SWIFT operates in multiple currencies but only transmits messages. CHIPS, used primarily for international USD transactions, complements Fedwire, the Federal Reserve's real-time settlement system for domestic payments. While SWIFT connects over 10,000 banks worldwide and handles multi-currency transactions, CHIPS serves 41 institutions and focuses solely on USD transactions. Both systems can work together, as SWIFT can initiate an international payment, and CHIPS can clear and settle the transaction in US dollars, as illustrated by cross-border transactions between banks in different countries.

Section 2.4 outlines the impact of George W. Bush's presidency and the Bush Doctrine on U.S. foreign policy, particularly in response to terrorism and financial influence. Bush's 2000 election campaign focused on conservative ideals and the Global War on Terror (GWT), which emphasized American hegemony and liberal democracy. This ideology became central to U.S. actions following the 9/11 attacks, positioning the country as a global leader in combating terrorism, often unilaterally. The Bush Doctrine, introduced post-9/11, institutionalized preventive wars and expanded the use of the U.S. dollar as a geopolitical weapon. A key part of the Doctrine was the imposition of financial sanctions and tools like the Terrorist Finance Tracking Program (TFTP) and UN Resolution 1373, which targeted the financial assets of individuals and entities involved in terrorism.

The use of financial influence became an integral aspect of the GWT, enabling the U.S. to freeze assets globally, restrict financial flows, and leverage international systems like SWIFT for tracking purposes, weaponizing said system. This financial strategy reinforced U.S. power, allowing arbitrary sanctions on countries deemed a threat to "national security" and laying the groundwork for the economic sanctions that would follow in later geopolitical conflicts, such as with Russia. The Doctrine emphasized not just military action but also the coercive use of the U.S. dollar to achieve geopolitical goals. Section 2.5 discusses the economic and geopolitical power of the U.S. dollar, particularly its use in financial sanctions. The U.S. can leverage its currency to effectively cut off countries from the global economy, using financial sanctions to restrict access to funds and assets. This practice has been employed against countries like Iran and Russia, where U.S.-led sanctions, often facilitated through networks like SWIFT, have had significant economic impacts. The text also examines the evolution of sanctions from trade-based to financial mechanisms and the rise of countermeasures by countries like Russia and China, which have developed alternatives such as CIPS to bypass U.S. dominance. The "dollar bomb" concept highlights the unique position of the U.S. dollar as a global reserve currency and its role in enforcing these sanctions. The U.S. has enhanced its ability to monitor and restrict financial activities through legal frameworks, especially following the events of 9/11.

Chapter 3 examines the concept of "institutional bypass". This concept is gaining importance in International Relations and International Political Economy, highlighted by scholars like Prado, Hofman, and Coelho. An "international institutional bypass" creates an alternative to a dominant institution without replacing it, allowing reform-resistant countries to bypass flawed systems. For example, BRICS nations have called for reforms in the International Monetary Fund (IMF) and the World Bank, which the U.S. opposes to preserve its monetary privileges.

China's Cross-border Interbank Financial System (CIPS) exemplifies this bypass approach, aiming to reduce reliance on the U.S. dollar and SWIFT. Launched in 2015, CIPS enables cross-border transactions denominated in the Chinese Renminbi (RMB), advancing China's economic and geopolitical goals. However, CIPS still relies on SWIFT for most interbank messages. China's Belt and Road Initiative (BRI), the Asian Infrastructure Investment Bank (AIIB), and the Silk Road Fund are part of its broader strategy to challenge Western financial dominance, facilitate economic integration, and promote the RMB internationally. Since 1990, economic sanctions have largely been seen as ineffective, and countries like Russia and China have developed strategies to mitigate their impact. Section 3.2 talks about how Russia, in response to Western sanctions, launched its own financial messaging system, SPFS, in 2014 as an alternative to SWIFT. SPFS became international in 2019, with integration into countries like Iran and expansion to BRICS members. SPFS operates similarly to SWIFT but is more autonomous and primarily domestic. Over 98% of Russia's financial transactions now go through SPFS. The Faster Payments System (SBP), enabling quick interbank transfers, is another initiative boosting Russia's payment infrastructure.

These developments, including the introduction of the digital ruble, have allowed Russia to maintain economic stability and even growth despite sanctions imposed due to its annexation of Crimea and the ongoing war in Ukraine. The Russian financial system's independence from Western mechanisms, along with partnerships with China and other nations, has diminished reliance on the U.S. dollar in international trade. This infrastructure has enabled Russia to weather economic sanctions more effectively than anticipated, outperforming some advanced economies like Germany.

In sum, with regard to possible future scenarios, caution is called for. The object of this research is a moving target, which means that its results are not yet clear, and may not be for a couple of years. The international context is not so simple either: major geopolitical conflicts such as the one in the South China Sea, more urgent ones such as the war in Ukraine and the genocide of the Palestinian people, led by Israel with broad ideological, military and financial support from the United States and the European Union. There's also a fierce and polarized presidential election in the US right on the corner, with the risk of their liberal democracy being undermined, and not only that, but the slowdown in the Chinese economy, revealed in the latest International Monetary Fund report, although with the specific characteristics of a country that, contrary to the global capitalist trend of 2% to 4% growth per year, was growing at an average of 8.83% per year.

Taking into account the novelty of the subject, this line of research would benefit from a potential continuity in the future. This work has taken into account the historical formation of the contemporary international monetary hierarchy, as well as the very objects of the formation of a hierarchy per se, addressing the process of currency internationalization through a specific case study of the Chinese and Russian transaction clearing systems. However, it would be useful to take an in-depth look at the specific initiatives of the multilateral banks mentioned in this thesis, such as the New Development Bank, the Asian

Infrastructure Bank and, above all, the Belt and Road Initiative. If we understand the creation and dissemination of the CIPS, for example, as part of a broader strategy to develop China's autonomous capacities, which involve, but do not have the internationalization of its currency as an axis, we need to look more closely at the role of these banks and initiatives. At the same time, if we agree that the SPFS has a less diffuse and more autonomous role, more research should be carried out on the impacts of this system on the Russian economy.

Finally, we will continue to monitor the Sino-Russian financial initiatives. For now, they represent a challenge to the current international monetary hierarchy, albeit without putting enough pressure on the hierarchy to dismantle it.

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