



Counter-Hegemony to the Dollar: Reflections in Light of Francis' Papacy

Tatiana Vasconcelos Fleming Machado and
João Gabriel Danon Tavares

EasyChair preprints are intended for rapid
dissemination of research results and are
integrated with the rest of EasyChair.

August 15, 2023

Counter-hegemony to the dollar: reflections in light of Francis' papacy

Tatiana Fleming^{1[0000-0003-0861-806X]} and João Gabriel Tavares^{2[0000-0001-9470-0814]}

¹ Universidade Federal do Rio de Janeiro, Brazil

² Universidade do Estado do Rio de Janeiro, Brazil
lncs@springer.com

Abstract. The study analyzes the possibilities of weakening of the dollar's hegemony after the 2008 crisis and more specifically after the Covid-19 pandemic in 2023. The weakening of the dollar is due to several factors, such as peripheral and non-dollarized countries advancing towards the empowerment of their own economies. This action meets Pope Francis' call to "re-soul" the economy, that is, to give voice and empowerment to all countries excluded from currency hegemony. Therefore, the study analyzes the impact of monetary policy from an agent-based model (ABM) made by some non-dollarized countries in order to gain greater autonomy within our "Common House".

Keywords: Dollar Hegemony; Economy of Francesco; Agent-Based Model

1 Introduction

The dollar is losing its power as the world's strongest currency. The observed trends are in line with Pope Francis' call to rethink structures of capital domination and the "love of money" (FRANCIS, 2015). Money and currency remain the means of exchange in today's capitalist economy, whose knowledge undermines mass production (CASTELLS, 1997). Therefore, the present study proposes to analyze the monetary and trade policy strategy of non-dollarized countries in the face of this scenario of apparent weakening of the dollar hegemony.

The two policy pillars (monetary and international trade) studied are fundamental to the health and empowerment of economies, as they are able to stimulate investment and generate effective demand (KEYNES, 1936). There is a search for a new demand financing arrangement. By stimulating effective demand via monetary and regional trade policies of non-hegemonic countries, it is necessary to build a governance that makes the model viable. Therefore, it is essential to channel coordinated efforts towards climate and socio-environmental missions (GRAMKOW, 2019).

On the side of foreign trade policies, what is observed is the creation of regional currencies to facilitate transactions between peripheral countries and warm up such economies. An example of this is the proposal to create a single currency for South America, called Souther Common Market (GIAMBIAGI, 1998). On the monetary policy side, the study will simulate agent-based modeling (ABM) to

understand how the Central Bank of non-dollar issuing countries can strengthen their economies in the face of regional trade strategies with non-dollar currencies.

The call to "re-soul" the Economy by Pope Francis goes above all through the guarantee of economic justice and empowerment of all peripheral countries. In order to fulfill the mission of serving the Common Home, the economy must give voice to all countries. It is as the Pope says: "we must say no to an economy of exclusion and social inequality" (FRANCISCO, 2012). It is necessary to break with the domination and the imposition of an economic model that does not adapt to the different realities in the world.

Thus, the article is divided into four sections including this introduction. The second section consists of presenting current strategies that seek to break with the hegemony of the dollar. The third part develops an agent-based model (ABM) capable of attesting the relevance of monetary, trade and climate policies of peripheral countries coordinate among themselves. Finally, the conclusion of the article addresses suggestions and reflections on the phenomenon under study.

2 Dollar Hegemony

Ukraine's War showed Russia's resilience in the face of sanctions imposed on the country. This fact is not so strange, after all since the annexation of Crimea in 2014 the slavnic country is being submitted to them (EUROPEAN COUNCIL, 2023). This gave time for Russia to accumulate foreign exchange reserves and build pipelines, since only oil shipped to Europe is being subjected to sanctions (EC, 2023). In order to stop the aggressions, some countries have sanctioned part of the Russia banking system too.

In a dollarized world, the bulk of international trade is conducted in dollars, and, in smaller parts, in euros, pounds sterling and yens (BOZ et al, 2020). The use of the Chinese currency is still limited to Asia and China, despite the latter being the world's second largest economy on the planet (MARTINS, 2015; BOZ et al, 2020). BRICS and other groups, such as G-20, have been discussing the international financial and monetary system since the late 2000s (MARTINS, 2015).

The hegemony of the US dollar is the result of years of political-economic domination over the rest of the world. It brings several benefits to the country, such as the ability to indirectly control the exchange rate with other countries, the power of seigniorage and to manipulate the size of its foreign debt (BELLUZZO, 1995; MILAN, 2012; MARTINS, 2015). Thus, the desire of emerging countries to trade in their own currencies or in a single currency goes hand in hand with the desire for greater economic and political independence.

The dollar hegemony has been built at least since the finalization of the Bretton Woods Agreements, negotiated between 1942 and 1944, and of which only the proposals of the United States and England were effectively considered (BELLUZZO, 1995; BENAKOUCHE, 2009). During the negotiations, Keynes had suggested the creation of a central bank of central banks, which would be called Clearing Union, and responsible for issuing the Bancor, a universal currency, disconnected from any country (BELLUZZO, 1995). However, in practice, it was the ideas of Dexter White, the United States representative, which ended up prevailing, a process favored by the country's own power in the post-World War II context. Thus,

the monetary system created at Bretton Woods was less internationalist and more Americanist (BELLUZZO, 1995).

The end of the parity of the dollar-gold peg, announced by then-President Richard Nixon in 1971, and the resulting transformation of fixed exchange rates into flexible exchange rates in 1973 initiated the dollar-dollar standard (KRUGMAN, 2015). The definitive end of the monetary order established in New Hampshire in 1944 represented something that had existed at least a few years after its creation. According with Benakouche (2009), the other countries knew, at least since the 1950s, that there was no parity of the dollar against gold. Years before Charles de Gaulle declared that there was no parity between both currencies, in 1969, some European countries, such as Belgian, Netherlands and Germany had already reached an agreement with the United States confirming that they would not convert dollars into gold (BENAKOUCHE, 2009).

With the Strong Dollar Diplomacy of late 1979, when U.S. Federal Reserve raised dollar interest rates, some developing countries have entered one of the worst crisis in their history. Neoliberalism of the 1980s and 1990s was just another reflection of this hegemony: a moment when huge debts of developing countries were converted into the American rise at the end of the Cold War. Just a small change in the U.S. interest rates caused huge damage in the peripheral countries. This is just another example of the world's sensitivity to U.S. domestic decisions. It is not just a matter of being against the hegemony of the dollar, but of having an independent monetary and exchange rate policy. Rogoff (2001) and Sachs and Larrain (1999) defend the importance that the exchange rate, be it flexible or fixed, be linked to the country's economic characteristics. However, to make such decisions, the country must be able to have an independent monetary policy.

In this sense, the creation of regionally traded currencies can serve as tools to reduce the dependence of countries on the dollar. According to Sachs and Larrain (1999), such currencies have the capacity to reduce transaction costs and give countries more flexibility. Giambiagi (1998), by bringing up the idea of a single currency in Mercosur (Southern Common Market), understands that this possible currency is one more element confirming integration. In this way, the currency alone is not the solution if it is not accompanied by the advancement of the integration process (GIAMBIAGI, 1998). According with Rogoff (2001), the increase in European trade is not only due to the creation of the euro in 1999, but also to the development of many other areas of the European Union.

3 An analysis on monetary policy

The present section aims to analyse how a change in the conduct of monetary policy can impact on better economic performance in countries that are not dollar issuers. With the strengthening of regional transactions without the dollar, the monetary policies of peripheral countries have a great potential, if well managed, to contribute to the fight against poverty and structural inequalities in these countries. The reduction of inequalities between countries is in line with Pope Francis' dialogues. As Your Holiness says, a process of articulation at a global level must develop actions and mobilizations that face the problems caused by capitalism, such as the structural dependence of peripheral countries on central economies (FRANCIS, 2015).

In this way, peripheral countries' Central Banks are capable to stabilize the economy by reinforcing the trend of forming non-dollarized regional markets. An adjusted monetary policy is able to reduce the volatility of Gross Domestic Product (GDP) and to decrease the financial fragility of the economy. The relevance of a monetary policy adjusted to the counter-hegemony of the dollar in international trade is that it gives robustness to the domestic economy and creates effective demand (KEYNES, 1936). Therefore, it is analysed whether a subtle change in a specific economic policy is more or less effective in strengthening the economy of non-dollarized countries.

The monetary policy instrument at the center of the analysis is the interest rate and the adjustment scenario, which is based on Dosi et al (2015). One of the ways that Central Banks sets the nominal interest rate is given according to the Taylor Rule, and the institution also defines an interest rate corridor. In "The Financial Capital", Hilferding (1910) defines interest rate, superficially, as the relation between demand for money and money supply. Promptly, competition among money capital providers is assumed to bind all returns to the market floor, which is the interest rate for safe investments. The K+S (finance) model refines this analysis by adding the variations in risk among credit demanders. In peripheral countries the credit risk is very high, due to several factors such as low industrial productivity and high labor informality. Consequently, the role of credit for these economies is fundamentally for development (ALBUQUERQUE; SICSÚ, 2000).

It is important to distinguish financial capital from monetary capital demand. In our model, we consider credit as monetary capital that firms receive from commercial banks to innovate, create effective demand, improve quality jobs and, finally, develop the economy. If we were to consider the financial capital of money demand of firms, we would have to take into account that the joint stock company does not distribute all profit as dividends and this increases economic inequalities. Thereafter, the shareholder becomes the owner of a simple "surplus value security", which gives him access to the dominant rate of return on the securities market (LAZONICK; O'SULLIVAN, 2000).

A subtle change in the Taylor Rule is investigated and the impact of this change on stability between fiscal and monetary policy is analyzed in the K+S (finance) model. Therefore, the small modification of the Taylor Rule as a proxy for conventional monetary policy gives more analytical robustness to understand part of the K + S (finance) model. The proposal is to modify the Taylor Rule that is developed in Dosi et al (2015) to a three-mandate policy, whose Central Banks in non-dollarized countries take into account credit dynamics in addition to price and output stabilization.

The Baseline is the Taylor Rule with two terms, while the experiment setup consists of the Taylor curve in three terms. The Baseline of the Taylor Rule can be seen in Dosi et al (2015):

$$r_t = \gamma_\pi(\pi_t - \pi^T) + \gamma_U(U_t - U^T)$$

The objective of the Taylor Rule with 2 mandates (baseline) is to restore aggregate demand and combat unemployment. When we add one more mandate, automatic stabilisers show coping against business cycle fluctuations. Just like Dosi et

al (2015) say, a conservative Taylor Rule only makes matters worse, as the costs are not reduced by the benefits of a reduction in inflation.

Inflationary growth can be observed by analysing the difference between real GDP and nominal GDP. While the interest rate established by the Taylor Rule (baseline) has a tendency to grow, real GDP grows at a much slower rate and nominal GDP is leveraged by market prices.

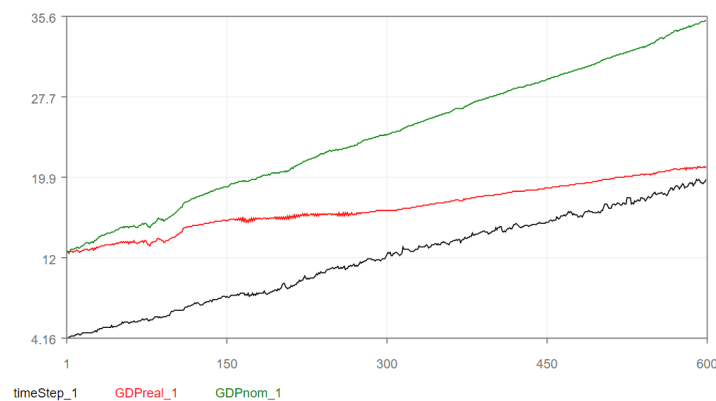


Fig. 1. Real GDP and Nominal GDP with the Taylor Rule Baseline

The difference between the interest rate paid on government bonds and the interest rate paid on debts with banks indicates the banks' main source of revenue: credit to firms with the collection of interest. Therefore, the risk of failure of commercial banks is linked to the payment of firms. In figure 2, it is clearly seen that in the baseline the Taylor Rule interest rate is below the companies' bad debts.

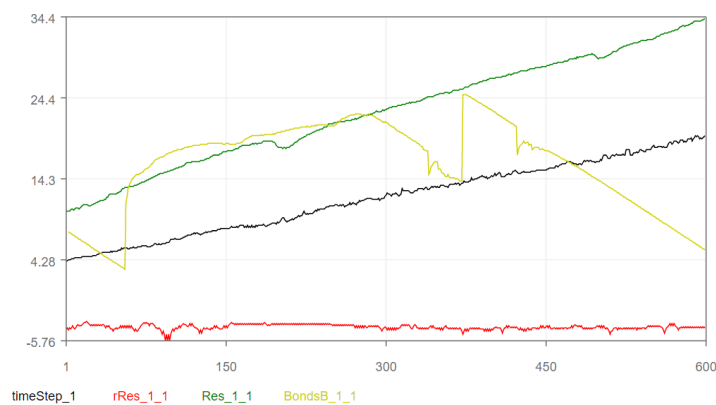


Fig. 2. Reserves required by the CB, Government Securities held by the financial sector, Interest Rate paid by the Central Bank with the Taylor Rule Baseline

We can observe two moments regarding the liquidity of commercial banks. The first is a greater demand for government bonds (BondsB_1_1), thus a reduction in liquidity or paper money held by the public. The second moment happens when the interest rate passes 450 on the x-scale, indicating that banks are seeking to increase liquidity to hedge against some future scenario. When we analyse the total reserves required by the Central Bank (Res_1_1) from the financial sector, we see that there is also a tendency to increase in order to maintain the Monetary Base at a desirable level and not to destabilise it.

When we analyse the two monetary policy instruments together in the graph above (interest rate and open market), we notice that the bond market has higher rates than the interest rate set by the Taylor Rule with 2 mandates. However, both follow the same growth trend. Supply and demand for government bonds adjust within a range of 100 to 300, then there is a reduction in demand for government bonds. There is only one peak by demand, which is covered by supply.

There are very few cases of requesting recovery from the financial sector. One of the justifications for this is the high spread of the banks, which, even with a softer monetary policy, still requires fiscal policies to combat the swelling of the financial sector. The government rate over income is higher than the interest rate in the Taylor Rule with 2 mandates (rRes_1_1). This shows the importance of having fiscal policies for the health of the economy.

A proposed analysis of the model is to add the relationship between corporate loans and GDP, as shown by the modified Taylor Rule of the model (DOSI; FAGIOLO; NAPOLETANO; ROVENTINI; TREIBICH, 2015) on three mandates below.

$$r_t = \gamma_\pi(\pi_t - \pi^T) + \gamma_U(U_t - U^T) + \gamma_C(CGR_t - CGR^*)$$

where $\gamma_\pi > 1$ and $\gamma_U \geq 1$. $CGR_t = \frac{\sum_k loan_{k,t}}{Y_t}$ is the total loan-GDP ratio and CGR^* is the long-run total loan-GDP ratio measured in the economy using the HP filter.

Clearly the 3-mandate Taylor Rule curve has made less oscillations than the 2-mandate Taylor Rule (baseline). This may be a first sign that the Central bank caring about the financial health of the economy both in public and private sector. Moreover, nominal GDP remained at the same level as the interest rate, corresponding to expectations of more gentle GDP cycles with respect to its trend.

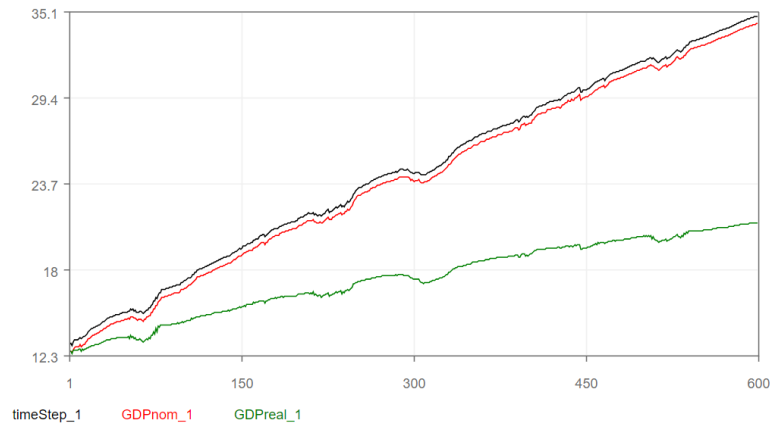


Fig. 3. Real GDP and Nominal GDP with the 3-Mandate Taylor Rule

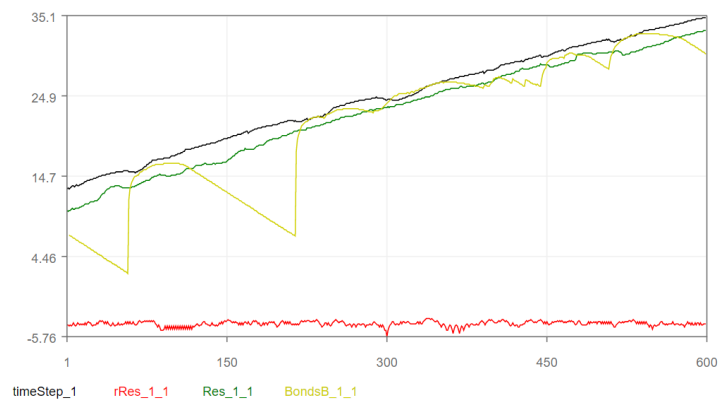


Fig. 4. Reserves required by the CB, Government Securities held by the financial sector, Interest Rate paid by the Central Bank with the 3-Mandate Taylor Rule

The Taylor Rule with 3 mandates had the expected behavior with regard to its increase and reduction of corporate profits, but with an environment where the Central Bank guarantees that the payment of debts is below the interest rate. Therefore, the Central Bank guarantees the financial health of the economy of both the public and private sectors.

So, the power of monetary policy for the health of the economy can be improved by changing the Taylor Rule. Other models and changes can also be tested, such as varying the sensitivity of the inflation, unemployment and loan parameters. This is just one way of showing that international trade strategies with currencies other than the dollar should be accompanied by strengthening monetary policies. Countries that seek to establish counter-hegemony to the dollar as one of the pillars of economic development must coordinate policies, focusing on and protecting their natural capital. According to McKibbin et al (2021), policies, monetary, climate, and fiscal must be articulated at the national and global levels to address the climate transition at the lowest economic cost. While rich countries tend to reduce the level of GDP in relation to climate shocks (MCKIBBIN; MORRIS; WILCOXEN; PATON, 2020), non-dollarized countries have a great opportunity to make a Big Push towards energy transition along with GDP uplift (GRAMKOW, 2019).

In this way, the Francesco Economy is an opportunity to raise our awareness to larger flights of peripheral countries and dare to point out paths via policy coordination. To debate transformative projects in the midst of the trends observed from deglobalization and counter-hegemony to the dollar is to give an indispensable place in the construction of new possible realities. It is the construction of an economy that makes life possible and that listens to all the voices historically excluded by the economic system that is in ruins.

4 Conclusion

The weakening of the dollar and the formation of regional trade in other currencies highlight the need to pay attention to the non-dollarized economies of the world. Pope Francis is the one who begins to pay attention to the peripheries and emphasizes that we need a new economy. Therefore, Pope Francis called on the global youth to "establish a pact to change the current economy and give a soul to the economy of tomorrow" (FRANCIS, 2015).

To give a voice to the peripheral economies of the world, several actions are needed and one of them is to strengthen the monetary policies of non-dollarized economies. Therefore, the study developed an agent-based model (ABM) to verify whether a subtle change in monetary policy formulation would strengthen non-dollarized countries in the face of the weakening dollar.

The Taylor Rule was used as a proxy for monetary policy because it shows the behaviour of the main monetary policy instrument (interest rate). The result of the model is a monetary policy with less oscillations to the crises and difficulties that peripheral countries may face.

The Central Bank of non-dollarized countries can strengthen their economies by inserting information about corporate loans in interest rate setting decisions. According to Keynes (1936), borrowing to foster entrepreneurial investment in the economy is the most important variable to achieve effective demand. So, the conclusion is that peripheral and non-dollarized economies can prosper not only by trading regionally, but by empowering their currencies via the 3-mandate Taylor Rule.

References

1. Albuquerque, E.; Sicsú, J.: Inovação institucional e estímulo ao investimento privado. São Paulo em Perspectiva 2, 108–114 (2000).
2. Belluzzo, L.G.: O declínio de Bretton Woods e a emergência dos mercados “globalizados”. Economia e sociedade, 11–20 (1995).
3. Benakouche, R.: Economia da Hegemonia do Dólar. Textos de Economia (TEC) 12(2), 80–97 (2009).
4. Boz, E.: Patterns in Currency Invoicing in Global Trade. ECB Working Paper Series. (2456), (2020).
5. Castells, M.: An introduction to the information age. City. 2(7), 6-16 (1997).
6. Dosi, G.; Fagiolo, G., Napoletano, M.; Roventini, A.; Treibich, T. : Fiscal and monetary policies in complex evolving economies. Journal of Economic Dynamics and Control. 52, 166-189 (2015).
7. EUROPEAN COUNCIL Homepage, <https://www.consilium.europa.eu/en/policies/sanctions/restrictive-measures-against-russia-over-ukraine/sanctions-against-russia-explained/> , last accessed 2023/06/10.
8. Francis, P.: Encyclical on climate change and inequality: On care for our common home. Melville House, New York (2015).
9. Francisco, P.: Evangelii Gaudium: a alegria do Evangelho. Canção Nova, São Paulo (2012).
10. Giambiagi, F.: Moeda única do Mercosul: notas para o debate. Revista Brasileira de Política Internacional. 41(1), 24-39, (1998).
11. Gramkow, C.: O Big Push Ambiental no Brasil: Investimentos coordenados para um estilo de desenvolvimento sustentável. Economic Commission for Latin America and the Caribbean - United Nations. (2019).
12. Hilferding, R.: Finance Capital: A study of the latest phase of capitalist development. Routledge, Abingdon (1910).
13. Keynes, J. M.: The General Theory of Employment, Interest and Money. Macmillan , London (1936).
14. Krugman, P.; Obstfeld, M.; Melitz, M.: Economia Internacional. Pearson Education do Brasil, São Paulo (2015).
15. Lazonick, W.; O’Sullivan, M.: Maximizing shareholder value: a new ideology for corporate governance. Economy and society. 29(1), 13-35, (2000).
16. Martins, A.: A Hegemonia do Dólar no Sistema Monetário e os Desafios do Renminbi em se tornar uma moeda internacional. Revista de Iniciação Científica em Relações Internacionais. 2(4), 1-32, (2015).
17. McKibbin, W. J.; Morris, A. C.; Wilcoxon, P. J.; Paton, A. J.: Climate change and monetary policy: issues for policy design and modelling. Oxford Review of Economic Policy, 36(3), 579-603, (2021).
18. Milan, M.: A Crise Financeira e a Hegemonia do Dólar. Austral. Revista Brasileira de Estratégia e Relações Internacionais. 1(1), 133-147, (2012).
19. Rogoff, K.: Why Not a Global Currency? American Economic Review. 91(2), 243-247, (2001).
20. Sachs, J.; Larrain, F.: Why Dollarization is More Straitjacket Than Salvation. Foreign Policy. (116), 80-92, (1999).