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14. ABSTRACT

In the coming decades, the largest threat to American military readiness and the national security of the United States is the slow global transition away from the dollar to a new global currency standard. This paper assumes the transition from the dollar will begin soon and could be complete in the next three to four decades. There are a few identifiable alternatives with the potential to replace the dollar as the global standard in the coming decades: a different single currency (yuan or euro); a mix of currencies rebalancing the dollar (dollar, euro, yen, and yuan mix); and a digital currency operating independently of central banks (cryptocurrencies). The transition to one of these alternatives will coincide with declining American economic power caused by a decrease in discretionary spending capacity and an increase in foreign-exchange transaction costs.

Mirroring the petrodollar model with a new high-demand commodity or creating an American-backed cryptocurrency are two ways to prolong the dominance of the dollar, but the bipartisan political support for either remains uncertain. The impact of the global currency transition on American national security will severely shape America's global role for the duration of the twenty-first century.

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The Global Transition Away from the Dollar and the American Military Implications

Garrett Boody Denniston

Introduction

In the coming decades, the largest long-term threat to American military readiness and the national security of the United States is the slow global transition away from the dollar to a new global currency standard. First, this is not a question of if, but when. The historical context of international currency trends points toward slow, but constant transitions and evolutions. This paper assumes the transition from the dollar will begin soon and could be complete in the next three to four decades. Second, there are a few identifiable alternatives with the potential to replace the dollar as the global standard in the coming decades: a different single currency (yuan or euro); a mix of currencies rebalancing the dollar (dollar, euro, yen, and yuan mix); and a digital currency operating independently of central banks (cryptocurrencies). Finally, the transition to one of these alternatives will coincide with declining American economic power caused by a decrease in discretionary spending capacity and an increase in foreign-exchange transaction costs. These two factors will cause a national security crisis as American military readiness declines and the American military alliance network shrinks. Mirroring the petrodollar model by pairing the dollar with a new high-demand commodity or creating an American-backed cryptocurrency are two ways to prolong the dominance of the dollar, but the bipartisan political support for either remains uncertain. The impact of the global currency transition on American national security will severely shape America's global role for the duration of the twenty-first century.

Historical Background

Three individual currencies dominated the last few centuries, coinciding with the birth of global commerce—the Dutch guilder, the British pound sterling, and the American dollar. The Dutch guilder was the first true global currency and emerged as such in the 18^{th} century. The guilder dominated the global market and was spread by trade through the highly successful Dutch East India Company. Between the 1760s and the 1840s, the world transitioned from the Dutch guilder to Great Britain's pound sterling primarily due to the Industrial Revolution and the associated strength of the Royal Navy. The pound sterling maintained its global dominance until the end of the World War II. In 1944, the Bretton Woods Agreement established the gold-backed American dollar as the foundational currency for global commerce, thus transitioning the world from the pound-sterling. On August 15, 1971 the United States unilaterally decoupled the dollar from the gold price and established the dollar's position as the global currency, but in a fiat status. The dollar's new fiat status allowed it to proliferate much further as a global currency reserve than the Bretton Woods system had previously allowed it to do. The final stage in the evolution of the dollar to present day status was the creation of the petrodollar. In the 1970s, the United States government worked out an agreement with the Organization of the Petroleum Exporting Countries to price oil in dollars in exchange for military security. The petrodollar effectively tied the dollar to the world's primary energy source and has helped sustain the American dollar as the primary global currency and reserve ever since.

Alternatives to the Dollar

There are three main options for the global economy as the world transitions away from the dollar as the primary international currency: (1) a single currency replaces the dollar; (2) multiple currencies rebalance the dollar; (3) a new form of currency, such as cryptocurrency, replaces the dollar.

The first option is a single, sovereign-backed currency replacing the dollar as the primary global reserve currency. As of October 2017, the International Monetary Fund (IMF) included five currencies in the Special Drawing Right (SDR) basket with "the respective weights of the U.S. dollar, euro, Chinese renminbi [yuan], Japanese yen, and British pound sterling are 41.73 percent, 30.93 percent, 10.92 percent, 8.33 percent, and 8.09 percent."[1] Despite their global reserve status, none of these other four currencies are currently in a position to replace the dollar. Neither the Japanese nor the British economies have the economic base or growth potential to propel either currency to replace the dollar. The euro and the yuan have the economic backing and future growth trajectory to be considered viable single currency alternatives to the dollar, but it is unclear if either entity has the political will for the economic move. Despite concerns, there still is plenty of economic incentive for a country/union seeking to push its currency to replace the dollar. In 2008, it was estimated that the global foreign exchange trading expense is $400 billion annually.[2] Additionally, it is estimated the American economy saves $100 billion by avoiding those transaction costs. Even in large economies such as the European Union (EU) or China, saving $100 billion a year would generate a substantial economic boost. However, the costs associated with maintaining an international currency might not be worth the benefits. For example, as the world transitioned from the pound to the dollar after World War II, "many British ministers and officials recognized that the burdens of sterling's role in terms of cost of borrowing and confidence in the exchange rate outweighed the benefits of issuing an international currency."[3] A certain amount of autonomy regarding economic policy is lost when a country maintains the world's primary reserve currency. The EU and China do not want those economic restrictions and would prefer to remove the foreign exchange trading expenses without

[1] "Special Drawing Right (SDR)," IMF, October 13, 2017.
http://www.imf.org/en/About/Factsheets/Sheets/2016/08/01/14/51/Special-Drawing-Right-SDR
[2] Anil Kamath, "A global currency?" *Gulf Daily News*, November 2, 2008
[3] Catherine Schenk, "The Retirement of Sterling as a Reserve Currency after 1945: Lessons for the US Dollar?" Canadian Network for Economic History Conference, October 2009.

incurring the associated burdens. Instead, the EU and China could reduce transaction costs and avoid internal policy restrictions by propelling the international system toward a more balanced multiple-currency reserve system.

The second option to replace the dollar would be a more balanced multiple-currency reserve system. There is no historical precedent for this option as one currency has dominated the financial markets for hundreds of years. However, it is logical that the global economic markets would mirror the global political trends as the balance of power shifts from an American hegemony to one of regionally dominant powers. A multiple-currency system would align with this geopolitical shift. Global transaction costs would most certainly decrease as foreign exchange trading would only be required for inter-regional transactions. Additionally, regions would negotiate bilateral agreements to lower or eliminate currency transaction costs to focus on shrinking the $400 billion lost to those transactions. Although slightly decentralized, the multiple-currency system would still rely on the fundamental pieces of the international economy as laid out in the post-World War II economic system. This option seems to be the most viable based on other international trends: regional hegemony, push to trade oil in currencies other than the dollar, and reluctance to replace the dollar with a single currency.

The final option to replace the dollar would be a non-sovereign backed digital currency or cryptocurrency. Cryptocurrency is a logical evolution in the historical trend of fiat currency. The transition from commodity-backed currencies to confidence-backed currencies opened the door to blockchain technology and the confidence it provides. Blockchain technology, as the key innovation behind cryptocurrencies, is quickly catching on as a viable and secure means of enabling trust between consumers and producers. Prior to global implementation, however, cryptocurrencies would need to overcome three major obstacles: storage security, lack of military backing, and central banks' protectionism policies. First, although the technology behind cryptocurrency appears to be highly secure, owners' digital storage options remain vulnerable to theft. For example, in January 2018, Japan's largest digital currency exchange announced that hackers had stolen $660 million.[4] The digital core of the currency itself has proven highly resilient to hacking, but transactions between exchanges and accounts have proven much more vulnerable to theft. Secondly, a non-sovereign based version of currency would lack a national military to provide physical security for it. Historically, large national militaries have coexisted with and supported global currencies. A shift to non-sovereign currency would need to overcome this obstacle or account for the rise of a private security forces to fill this void. Finally, a non-sovereign international cryptocurrency would need to overcome the legislative and policy attacks from sovereign central banks. National banks have an interest in preventing the proliferation of cryptocurrencies and some nations, such as China and South Korea, have either already implemented legislation or are drawing up bills to ban cryptocurrency trading.[5] Nations and the currencies they produce have a lot to lose if the world shifts to independent cryptocurrencies. The recent protectionism trend demonstrated by central banks is just the beginning and a battle cryptocurrencies will need to win in order to remain a viable option to the current monetary system.

The three options listed above represent the primary options for replacement of the dollar as the global currency based on current and historical trends. Other options surely exist, but these three stood out as the most worthy of exploration due to viability. Although none of the options

[4] "Coincheck hacked in 'world's biggest cryptocurrency theft.'" *ABC News*, Jan 28, 2018. http://www.abc.net.au/news/2018-01-28/coincheck-worlds-biggest-cryptocurrency-hack/9368056
[5] Martin Arnold and Chloe Cornish, "Bitcoin dives as regulators call for cryptos to be reined in," *Financial Times*. Feb 9, 2018.

seem perfectly feasible today, historical analysis shows that something will replace the dollar eventually. The question is not if, but when and what replaces the dollar. Whichever option prevails, the global economy would benefit most by modeling the slow transition from the dominance of the pound sterling to the dollar. The transition from the pound to the dollar was smooth and had relatively minimal impacts on the global economic, diplomatic or military alliance systems. Black swans and other significant global events are sure to be the catalysts facilitating the transition, but the international system will benefit from a slow transition over the course of decades instead of a rapid one. Additionally, the transition away from the dollar will coincide with decreased American discretionary spending power and will have dramatic impacts on both American military readiness and the post-World War II alliance network supported by that readiness.

Currency and Budget impacts on American Military Readiness and its Alliance Network

The rapid increase in mandatory spending coinciding with the transition away from the dollar will have a profound impact on the American military's readiness and its alliance network. Over the next few decades mandatory spending requirements are projected to dramatically increase. In 2017, mandatory spending--Social Security, Medicaid, Medicare, and debt interest payments--accounted for 70% of the $4.1 trillion American budget. A study at George Mason University estimated that mandatory spending will account for 82% of the projected $12.3 trillion budget in 2040, a growth of 17%.[6] Coinciding with this steep decrease in available discretionary spending will be increased foreign exchange transactional costs due to the loss of the dollar's primacy. In 2017 dollars, the United States is estimated to save about $100 billion

[6] Veronique de Rugy and Jason Fichtner, "Growth in Entitlements Means Less Money to Budget," Jan 14, 2013, https://www.mercatus.org/publication/growth-entitlements-means-less-money-budget.

per year by avoiding these transactional costs. For example, if the United States was forced to pay those transaction costs, roughly 8% of the 2017 $1,244 billion discretionary spending would be lost. Increased transaction costs for the American economy in the future will force sequestration-type funding decreases for the military. The shrinking discretionary budget combined with the rising transaction costs will create a military readiness crisis. The significant difference between the 10% sequestration decrease in the early 2010s and the future decrease is that the American government will not be able to easily increase debt to offset the loss in defense spending. The American government will not be able to print its way out of the economic crisis because the dollar will have lost its global reserve status. The enduring impacts on military readiness from sequestration were astronomical and will be the same in the future. In June 2017, Secretary of Defense Jim Mattis testified to the Senate Armed Services Committee that, “it will take years of stable and higher budgets for DoD to dig out of the readiness hole” created by the sequestration spending cuts.[7] As recently as April 2018, experts were suggesting a correlation between a rash of Department of Defense aviation mishaps and the sequestration cuts from 2013. Unfortunately, the future decline in discretionary spending will not allow for the same type of stable and increased budgets called for my Secretary Mattis. The decreased military spending capacity over the next few decades will not only impact the United States military’s readiness, but its military alliance network as well.

The decline of America’s economic power and military readiness will exacerbate the decline of America’s diplomatic power causing America’s alliance network to shrink. Barry Eichengreen, and economics professor at the University of California, Berkeley, argued that, “Being in a military alliance with a reserve-currency-issuing country boosts the share of the

[7] Jim Garamone, “Mattis Says DoD Needs Years to Correct Effects of Sequestration,” DoD News, June 13, 2017.

partner's foreign-exchange reserves held in that currency by roughly 30 percentage points. The evidence thus suggests that the share of reserves held in dollars would fall appreciable in the absence of this effect."[8] The diplomatic strength of America is tied to its military and economic strength. The moment the United States is no longer the pre-eminent economic and military power in the world, countries will begin to diversify their reserve currencies and will look for military security guarantees elsewhere. For example, South Korea and Japan are both believed to hold 80% of their international reserves in dollars, but as American power declines, it is logical that both countries would diversify their portfolios.[9] South Korea and Japan rebalancing their reserves would have "negative implications on both the dollar's exchange rate and US borrowing costs."[10] As countries rebalance their foreign-exchange reserves the decline of the dollar as the global currency will quicken. Decreased demand and increased global supply of the dollar will result in the greenback having less buying power. The downward spiral of economic, diplomatic and military power will force American policy makers to adjust to a new level of global influence and power in the twenty-first century. This policy adjustment will not be comfortable or easy for Americans especially as it implies the rise of another powerful global player.

Options to Prolong the Dominance of the Dollar

The decline of the global position of the dollar is inevitable, but there are a few ways to slow that transition. The best, but highly partisan, options for delaying the transition away from the dollar include: reducing mandatory spending requirements, reducing military overseas contingency operations, and increased domestic investment in infrastructure modernization.

[8] Eshe Nelson, "The decline of US diplomacy could threaten the dollar's global-reserve status," Oct 13, 2017.
[9] Ibid.
[10] Ibid.

Although these options are the best available for solving the problem, none of them are feasible based on the current political climate in the United States. However, there are two other options that might prove more cost-effective, more realistic, and less politically divisive: tie the dollar to a new global commodity and consider the creation of a United States-backed cryptocurrency.

As the world moves beyond oil dependency in the coming decades, the United States needs to tie its alliances and security guarantees to the new high-demand global commodity. America's newly found oil independence corresponds with OPEC's shrinking global influence, and both trends point toward the end of the petrodollar. However, the death of the petrodollar should not be the death of the highly functional model it has created. The United States needs to begin maneuvering and investing to ensure it can leverage its current military might into future economic and security relationships. No other country can match the diplomatic power a security guarantee from the United States brings to the negotiating table. While its power remains unmatched, the United States needs to take advantage of the opportunity to shape the future economic world it wants to exist in. The next high-demand commodity has yet to be fully identified by the global markets, but it could end of being any of the following: water, hydrocarbons, rare earth metals, etc. Whatever the next high-demand commodity ends up being, the United States needs to be the entry-level supporter and enforcer. If the United States wants to successfully evolve the petrodollar model to a new commodity, it must begin the slow process immediately.

Another option the United States should pursue to prolong the dominance of the dollar is a government-backed American cryptocurrency. As discussed, no other single currency is postured to replace the dollar. A sovereign-backed cryptocurrency positions America to seize the initiative prior to the world devolving into regional spheres of influence dominated by regional currencies. Additionally, a sovereign-backed cryptocurrency allows the United States to overcome two of the three largest obstacles currently preventing the global proliferation of cryptocurrency: lack of military backing and central banks' protectionism policies. An American cryptocurrency would be backed by the United States military, just like the traditional dollar. Additionally, the American central bank system would instantly become the largest and most powerful player in the global cryptocurrency market. The only remaining hurdle for the United States to focus on would be solving the storage security issue. The government could easily overcome this problem through direct investment and a partnership with the private sector. Historically, the United States has leveraged the power of American private industry to overcome obstacles and dominate global markets. This partnership model would not be new, but would need to be carefully managed based on the high stakes associated with the transition of the dollar from a hard currency to a digital currency. The risk would be high, but the upside potential would be ever greater. As the first and most powerful country to adopt a sovereign-backed cryptocurrency, the United States would position itself to shape the international banking standards on cryptocurrencies ensuring itself long-term benefits. The economic rewards for this type of control of the international banking standards could offset the rising mandatory spending increases, and balance the future national security concerns caused by the loss of the hard dollar's global status.

Conclusion

The largest national security threat facing the United States in the coming decades is the global transition away from the dollar as the primary global currency standard. The historical precedence over the last few centuries dictates this economic transition is inevitable. There is no clear successor on the horizon in the twenty-first century the way the dollar was the clear successor to the pound in the twentieth century. The three leading options are a single currency, multiple currencies, or a digital currency. Each option comes with advantages, disadvantages, and hurdles that must be overcome prior to replacing the dollar. The transition away from the dollar will coincide with a decrease in American discretionary spending, the decline of American military readiness and its global diplomatic influence. Additionally, shrinking military, economic and diplomatic power will reshape American's global role in the twenty-first century. The dominance of the dollar could be extended for a period by mirroring the petrodollar model and by creating an American-backed cryptocurrency, but it is unclear if there is bipartisan political support to make this happen. Overall, the transition away from the dollar will force a large adjustment on the part of American policy makers as the role of the United States in the future will be much different than it was in the twentieth century.