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Konstantin Egorov, NES
Dmitry Mukhin, University of Wisconsin-Madison
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The Dollar and the Global Monetary Cycle

The dominance of the dollar in international markets is at the heart of recent policy and academic debates at almost all conferences on international economics. Most recently, Bank of England Governor Mark Carney has suggested a new global electronic currency to reduce the dominance of the dollar (Carney 2019). What are the negative effects of the dollar's dominance, and how can countries protect against its influence? We answer this and other related questions in our recent paper (Egorov and Mukhin 2019), which we summarize in this policy brief.

Stable prices

What are the sources of the dollar's global powers? Ultimately, the dollar matters as long as it is used by private agents in their transactions. Recently, a lot of attention has been devoted to the role of the dollar in global financial markets, which gives rise to the so-called "global financial cycle" (Rey 2013). However, a growing literature (e.g., Gopinath et al. 2019) shows that the dollar also plays a central role in international goods markets with many exporters setting their prices in the U.S. currency. According to recent estimates, the share of goods with dollar prices is about 4-5 times larger than the share of the US in global trade (Gopinath 2016). That means many firms set prices in dollars even when they trade not with the US, but with other countries.

Even though this global invoicing role of the dollar may not seem important, many studies show that prices remain stable, or sticky, in the currency in which they are set. This means that in many countries, the prices of imported goods are almost fixed in dollars. Then movements in the dollar exchange rate immediately result in changes in the prices of these goods in the local currency. Of course, even dollar prices adjust occasionally, but recent empirical studies show that the dollar prices of imported goods remain pretty stable even two years after a change in the exchange rate (Gopinath et al. 2019).

Such stability of global prices in dollars has three important implications. First, the dollar exchange rate affects the volume of global trade. In any given country, appreciation of the dollar raises the local-currency prices of imported goods. Because of that, consumers switch from more expensive imported goods to cheaper domestic goods. The same happens in other countries, and thus all consumers buy fewer foreign goods, and the volume of global trade decreases.

Second, the dollar exchange rate affects world inflation and output. A rise in import prices after appreciation of the dollar increases inflation both directly and indirectly, through an increase in the costs to all domestic firms that use imported goods as inputs. The higher the costs, the more firms raise their prices, and the higher the inflation. Indeed, a recent empirical study shows that the dollar exchange rate is a good predictor of world inflation and the volume of global trade (Gopinath et al. 2019). Moreover, an increase in global inflation reduces consumers' real income, and this leads to lower aggregate demand and thus to a reduction in world output. Therefore, dollar appreciation could trigger a world recession.

Third, we show that all countries find it optimal to partially peg their exchange rates to the dollar. Since changes in the dollar exchange rate could negatively affect output and inflation, all countries try to protect themselves from these external shocks. If it is not possible for a government to convince its private agents to stop using the dollar in their transactions, then the government could reduce the changes in the dollar exchange rate by pegging its currency to the dollar. Of course, this policy cannot address all issues, but at least the prices of imported goods can become more stable in the local currency.

Rigged system

What does this global use of the dollar imply for the US? First of all, it enables the US's so-called "privileged insularity". Since the prices of both local and imported goods in the US are stable in dollars, changes in exchange rates do not lead to inflation or expenditure switching between home and foreign goods. This gives rise to a significant asymmetry across countries: the dollar exchange rate has a substantial effect on other countries, but all other exchange rates have only a negligible effect on the US.

We show that the asymmetry in countries' exposure to exchange rate shocks leads to an asymmetry in their monetary policy. All countries find themselves responding to US policy by partially pegging their exchange rates to the dollar. In contrast, due to its "privileged

insularity", the US can focus on its domestic targets, respond primarily to domestic shocks, and potentially achieve higher welfare than other countries, which are more exposed to foreign shocks.

So, when a local recession hits the US, the Fed stimulates the US economy regardless of the conditions of the world economy. Then all other countries stimulate their economies as well in order to keep their exchange rates more stable relative to the dollar. This creates what we call a "global monetary cycle", where the whole world becomes more synchronized even when there are no global shocks common to all countries. The more prominent the role of the dollar is in the international goods market, the stronger this "global monetary cycle". In fact, a recent empirical study confirms this prediction and shows that the higher the share of the dollar in the country's import basket is, the stronger its peg to the dollar, and the more nominal interest rates follow the US interest rates (Zhang 2018).

Leveling the playing field

What can other countries do to diminish negative consequences from the "global monetary cycle"? One possible way to discourage firms from using the dollar could be the creation or expansion of a monetary union such as the Euro area. The larger the Eurozone is, the more countries within this area use the euro and not the dollar to trade with each other. Moreover, the Eurozone's trading partners are more likely to use the currency of a larger monetary union (Mukhin 2018). If enough firms switch from the dollar to the euro, then we find that the Eurozone may gain the same advantage of "privileged insularity" as the US.

Another frequently mentioned policy to protect from the undesirable exchange rate effects is the use of capital controls, which are found to be effective in softening the "global financial cycle". For example, a tax on borrowing in foreign currency can reduce the size of the foreign-denominated debt, so that depreciation does not lead to an increase in the nominal debt burden and start a recession. However, we find that under the "global monetary cycle" these measures turn out to be much less effective. Basically, capital controls primarily affect decisions in financial markets. But it's the decisions of global exporters, that is decisions in international goods markets, that give rise to the "global monetary cycle". And the effect of capital controls on exporters is much more subtle if present at all.

Conclusion

To sum up, we argue that as long as many firms continue to set prices in dollars, it is optimal for central banks to smooth movements in exchange rates in order to diminish the effects of the dollar on their economies. This partial peg to the dollar leads to the "global monetary cycle". As a result, the US is free to implement a mostly independent monetary policy, while the rest of the world has to follow their lead.

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Konstantin Egorov

New Economic School (NES)
KEgorov@nes.ru
sites.google.com/site/kegorov7

Konstantin is an Assistant Professor of Economics at the New Economic School. He received his Ph.D. from Pennsylvania State University in 2018. His research interests are in the field of International Economics.

Dmitry Mukhin

University of Wisconsin-Madison
DMukhin@wisc.edu
sites.google.com/site/dmitry0mukhin

Dmitry is an Assistant Professor of Economics at the University of Wisconsin-Madison. With a Ph.D. from Princeton University, his research mainly studies Exchange Rates and the International Price System.

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