Two Views of the International Monetary System¹ Barry Eichengreen University of California, Berkeley May 2019

How has the international monetary system evolved over the last 75 years?² I will try to impose some structure on our discussion of this question by distinguishing two views. One, which I will call the "Harvard view," is that there is a striking degree of persistence in the structure of the system, which remains dollar based and U.S. led to a remarkable extent. Here I am referring to the analysis of Gita Gopinath (2015, 2017), supplemented by the work of Emmanuel Farhi, Matteo Maggiori and Jeremy Stein.³ The alternative, which I will call the "Berkeley view," is that the system is evolving away from the U.S. and the dollar, toward a multipolar world in which several consequential international and reserve currencies will coexist, other countries will no longer rely exclusively or even mainly on the United States for international liquidity, and governance will be a collective endeavor. Here I am referring to my own work but also that of my Berkeley colleagues Maurice Obstfeld and Pierre-Olivier Gourinchas.⁴

Truth be told, the distinction is not entirely clear cut. It can be argued that the two views shade into one another and that one view is more about the past while the other is more about the future. Nor are the two views rigidly and consistently associated with Harvard and Berkeley.⁵ Still, I will maintain this as a useful working distinction, or pretense, for purposes of this talk.

1. The Harvard View

The Harvard view is fundamentally empirical, although the regularities on which it focuses have stimulated some interesting theorizing. Its point of departure is the observation that some 60 per cent of identified global foreign exchange reserves take the form of dollars, that more than 60 per cent of the foreign currency liabilities and assets of banks are in dollars, and that the share of world trade invoiced in dollars far exceeds the share of the United States in global imports and exports.⁶

Gopinath (2015), Casas et al. (2016) and Box et al. (2017) document and draw out the implications of these observations. In particular, they provide evidence that the dollar exchange rate is more important than the effective exchange rate in price pass-through and trade elasticity regressions. They show in addition that U.S.-monetary-policy-induced dollar fluctuations are

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² This being the question posed by the organizers of this session.

³ See Farhi and Maggiori (2017, 2019), Gopinath and Stein (2018) and also Maggiori, Neiman and Schreger (2018). ⁴ The first full statement of my view is Eichengreen (2011). Much of the technical research was undertaken with collaborators; see Flandreau and Eichengreen (2009) and Eichengreen, Mehl and Chitu (2018). On the work of my Berkeley colleagues, see especially Obstfeld (2011), Gourinchas and Obstfeld (2012) and Gourinchas and Jeanne (2012).

⁵ Thus, one sees a member of the Harvard faculty collaborating with one of my Berkeley colleagues in Caballero, Farhi and Gourinchas (2015), and one of my Berkeley colleagues collaborating with Harvard's Gopinath in Casas, Diez, Gopinath and Gourinchas (2016). Life is messy.

⁶ Interesting, the ECB's data on global trade invoicing is not consistent with this premise; it estimates that the euro and the dollar are equally important as global invoicing currencies circa 2017 (ECB 2018). The difference may reflect the importance of intra-euro-area trade, which is euro denominated.

passed through into other countries' import prices, but not so (at least to the same extent) monetary-policy-induced fluctuations in other exchange rates, since import prices are sticky in dollars. They show that the strength of the dollar is a key predictor of global inflation, since changes in the dollar exchange rate are translated one-for-one into changes in the prices of imports in other countries). The dollar is, further, a key determinant of aggregate trade volumes for the world net of the United States, since it has a sharp impact in other countries on the relative price of traded and nontraded goods, and hence on mark-ups on tradables and the incentive to export.

These patterns have implications for economic adjustment and policy, as summarized in Gopinath (2017). Specifically, they point less strongly than other views to the advantages of exchange rate flexibility as an element of the international monetary system, since nominal exchange rate changes do not deliver changes in the relative prices of imports and exports, given that the prices of importables and exportables are sticky in dollar terms.

These authors then go on to develop theoretical frameworks designed to shed light on both the roots of this dollar dominance and its implications.⁷ Gopinath and Stein (2018) show that firms in emerging-market countries have an incentive to borrow in the dominant currency (the dollar) in order to hedge their overall economic risk, since export prices and financial obligations are then effectively denominated in the same currency.⁸ Why export prices are sticky in dollar terms is not accounted for in the model, however.

Similarly, a firm or household depending on goods imported from abroad will wish to hold a buffer stock of bank deposits in dollars, since imports are priced in dollars and dollar prices are sticky. Banks in emerging markets will then have an incentive to provide their customers with these dollar deposits. They can safely do so, however, only if they make dollar loans, including to local firms producing non-tradeable, local-currency-denominated goods. But such local firms will willingly incur dollar exposures only if dollar loans are cheap. Given these incentives, it follows that the expected return on dominant-currency safe assets will be lower than on safe assets denominated in other currencies. This is known as the "exorbitant privilege." In addition to providing an explanation for the U.S. government's relatively low funding costs, it helps to explain the persistence of deviations from uncovered interest parity (lower interest on dollars than can be justified by expectations of dollar appreciation) in the post-global-financial crisis period, when the demand for safe assets has been large.

Farhi and Maggiori (2017, 2019), in a related analysis, suggest that if merchandise transactions are priced and invoiced in dollars, then a given level of nominal dollar volatility will mean only a limited amount of real dollar volatility, which will increase the demand for dollar-denominated assets.⁹ The issuer will then enjoy a safety premium on the reserve assets (exorbitant privilege once more) but may also be prone to over-issuance if the safety premium is high, perhaps because the demand for safe assets in the rest of the world is growing rapidly relative to the economy and debt-servicing capacity of the issuer.

⁷ Much of this work descends in some sense from Krugman (1984), who modeled complementarities between an international currency's different functions and showed how those complementarities might give rise to persistence and even lock-in.

⁸ This will be the case insofar as export prices fluctuate with the dollar.

⁹ They also consider the case where a few reserve countries issue safe assets under conditions of Cournot competition.

Farhi and Maggiori (2019) use this model to show how an increase in invoicing in a different currency, say the renminbi, can induce a shift from dollar- to renminbi-denominated safe assets. In turn this can lead to a plunge in the price of and loss of confidence in the safety of dollar-denominated assets if nothing is done to reduce the stock.

Either way, the likely outcome is a shift from a dollar-dominated international monetary system, in which the bulk of trade invoicing and safe assets are denominated in that currency, to a renminbi-denominated system.

2. The Berkeley View

If the Harvard view is fundamentally empirical, then the Berkeley view is fundamentally historical. It regards the dominance of the dollar for much of the last 75 years as a historical anomaly that is unlikely to persist. Eichengreen and Flandreau (1996) argue that multipolar international monetary arrangements have been the rule, not the exception. This was true before the gold standard, when silver, gold and bimetallic blocs coexisted and interacted. It was true in the 19th century, when the British pound, the French franc and the German mark all accounted for significant fractions of global foreign exchange reserves (Lindert 1969). It was true in the interwar period, for much of which sterling and the dollar contributed equally to the stock of global liquidity and were equally important as invoicing and settlement currencies. Historical evidence is not consistent, in particular, with the maintained assumption of the Harvard view that traded goods prices are sticky in terms of a single global currency. Indeed, international currency status was shared even in the last 75 years, when the dollar rarely accounted for more than 70 per cent of global foreign exchange reserves, trade invoicing and payments through SWIFT, and over much of which it accounted for less.

To be clear, "multipolarity," in this context, does not mean that international currency status necessarily is or will be shared *equally* by different national units. It does however suggest that it will be shared *more* equally than is implied by the Harvard view.

Why might a unipolar system be unsustainable? One answer is that the country at its center may not wish to sustain it. To be sure, other countries have long complained that the United States benefits disproportionately from its "exorbitant privilege." The federal government is able to sell debt securities to foreign official investors at lower interest rates, and it enjoys an automatic insurance insofar as investors rush into those securities in turbulent times, strengthening the dollar and the U.S. balance of payments when this is needed most. But the current U.S. administration may be less conscious of these benefits than its predecessors.

Then there is the view that the dollar's exorbitant privilege confers more costs than benefits. C. Fred Bergsten has long argued the strength of the dollar, which is associated with the unit's reserve currency status, handicaps U.S. merchandise exporters.¹⁰ One can imagine this argument resonating with a U.S. administration that associates the manufacturing trade balance with the strength of the economy. In addition, there is the argument that reserve currency status exposes the issuer to liquidity-trap risk. By definition, yields go down globally in a global liquidity trap. But they go down most in the country that is issuer of the reserve asset, since investors are willing to pay a premium for its assets in troubled times. And the zero lower bound is not somewhere that a country, reserve-currency country or other, wishes to be.

¹⁰ See for example Bergsten (2001, 2009).

Alternatively, the reserve-currency country may wish to maintain its status but be unable to do so. Its capacity to issue safe assets that hold their value against alternative investments will be limited by the ability of its government to raise the revenues needed to service and amortize its debt in noninflationary fashion, as noted above. If other economies are growing faster than that of the reserve issuing country – if emerging markets are growing faster than the United States, as suggested by the logic of convergence – then the demand for reserves will outstrip the capacity of the country to provide them. The issuer may respond by increasing the supply of debt securities – by running chronic deficits, in other words – in which case confidence in the reserve currency will decline.¹¹ Or it can respond by attempting to balance its budget and external accounts, in which case the world may experience a global reserve and liquidity shortage. This, as Obstfeld (2011) puts it, is a 21st century version of the Triffin Dilemma.

Caballero, Farhi and Gourinchas show that a "more sinister" version of the Triffin dilemma also may arise if a single country, such as the United States, is the sole provider of safe assets. If the global economy grows more rapidly than the United States, so will the global demand for safe assets relative to the supply. This will push up the price of safe assets and depress their yield, increasing the likelihood of the issuer (and of the world economy) hitting the zero lower bound and succumbing to the problem of secular stagnation. In a stagnant world lodged at the zero-lower bound, previously safe assets may then come to be seen as unsafe, further aggravating the global safe-asset shortage and pushing their prices up and their yields down still even more (Gourinchas and Jeanne 2012).

The implication of this view is that extended periods at the zero lower bound, which are likely to be associated with the dominance of a single global currency, are not a sustainable equilibrium, so something has to give. For example, it is possible, in response to this safe asset shortage, for additional sources of safe assets to develop, and for other potential suppliers – reade "the euro area and China" – to take proactive steps to develop them. This is the multipolar-world scenario described above.

But, as Gourinchas and Jeanne emphasize, safety is in the eye of the beholder. For other governments to be recognized as safe asset providers, not only must they stand behind their obligations, but they must be recognized by investors as prepared to do so. They must be seen as prepared to do so by a substantial number of investors if their assets are to display the liquidity expected of a global safe asset.

Thus, whether the world succeeds in transitioning to a multipolar international monetary system where assets denominated in several currencies come to be recognized globally as safe and liquid will depend on how investors solve this coordination problem. As in any international monetary setting where there exists a coordination problem, there may be a role for an organization like the International Monetary Fund to provide a focal point for coordination by inter alia providing public information on the safety and liquidity of different currencies, and by encouraging orderly reserve diversification. It may similarly have a role in providing an external backstop for potential safe asset providers.¹²

Elaborating the idea of a coordination problem, Farhi and Maggiori (2017) warn that a system of multiple international and reserve currencies may be subject to runs as investors

¹¹ There is considerable overlap here with the Farhi and Maggiori analysis described above.

¹² See Farhi, Gourinchas and Rey (2011) for more on the last point.

"coordinate in and out of a given reserve currency." My own view is that the likelihood of this scenario depends on whether the governments of the competing reserve currencies follow stable or unstable policies.¹³ We have witnessed both cases in history: unstable policies leading to an unstable international system in the 1920s, and more stable policies leading to a more stable system before 1913.

For those who worry that we can no longer count on stable policies in the United States and that the main thing supporting the dollar's reserve and safe-asset status is an absence of alternatives, another response might be to supplement and ultimately replace the dollar with the SDR.¹⁴ But substituting new SDR allocations for Federal Reserve swap lines and making the IMF a quasi lender of last resort would require giving the Fund the ability to inject SDRs into the global system overnight. Moreover, the supplementation stage creates all the same dangers as a multi-currency system, insofar as reserve managers are then free to shift between dollars and SDRs. A substitution account, through which dollars held by central banks other than the Fed are retired, could speed the transition and eliminate this nascent source of instability.¹⁵ But we have been there before. Attempting to go down this road would confront formidable – dare one say insurmountable – political obstacles.¹⁶

3. Conclusion

Thus, the best hope in my view is a multipolar system backed by sound and stable policies on the part of the central banks and governments of the reserve-currency issuers. This is not a perfect world. But it is at least a feasible one.

¹³ "Likelihood" is not the same as "guarantee." But just as strong banks with a reputation for solvency are *less likely* to be subject to self-fulfilling runs than weak banks with dubious reputations, strong and stable policies can only help.

^{14} See the discussion in IMF (2018).

¹⁵ The idea of a substitution account was discussed following the breakdown of Bretton Woods and again in the wake of the Global Financial Crisis (Kenen 1981, 2010).

¹⁶ I discuss these obstacles in Eichengreen (2010).

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