BANK FOR INTERNATIONAL SETTLEMENTS

A critical shortage of safe assets: a new Triffin dilemma?

Robert N McCauley*

Senior Adviser, Monetary and Economic Department, BIS

Presentation of work with Michael Bordo at the plenary panel on "International monetary reform",

83rd International Atlantic Economic Conference

Berlin, 24 March 2017

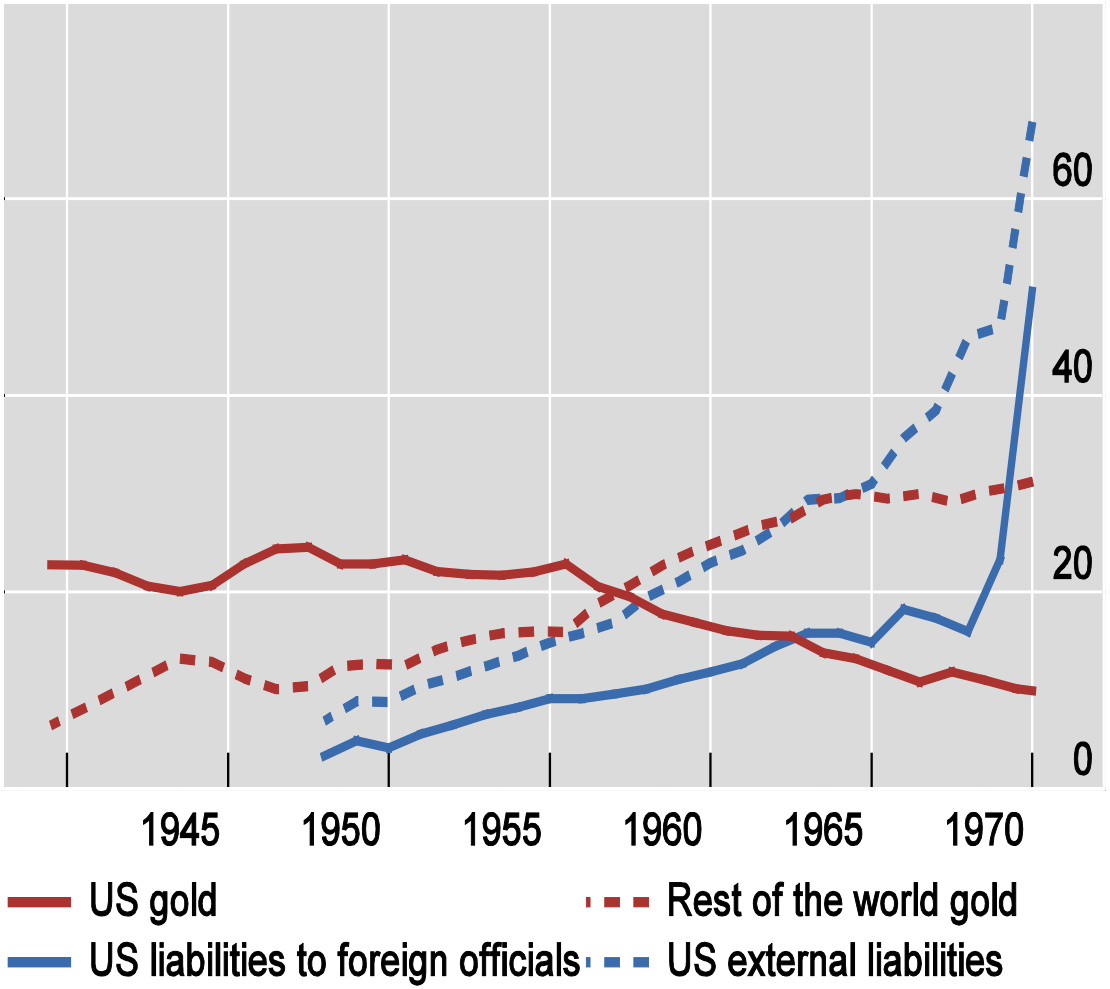
* Views expressed are those of the author and not necessarily the views of the BIS

Triffin dilemmas: original and new versions

- **1960s: Dollar and gold**: World growth without deflation requires rising US liabilities, but when these outgrow US gold, system breaks down.
- **1980s – now: US current account** deficits needed to provide dollar reserves, but eventually US net debt too big, $ collapses.
- **2000s: Safe asset shortage** as emerging markets need to accumulate reserves and hold US Treasuries:
  - If supply of US Treasuries through US fiscal deficits keeps up with demand, eventually US Treasury downgraded or default.
  - If supply does not keep up with demand, deflation and weak growth.

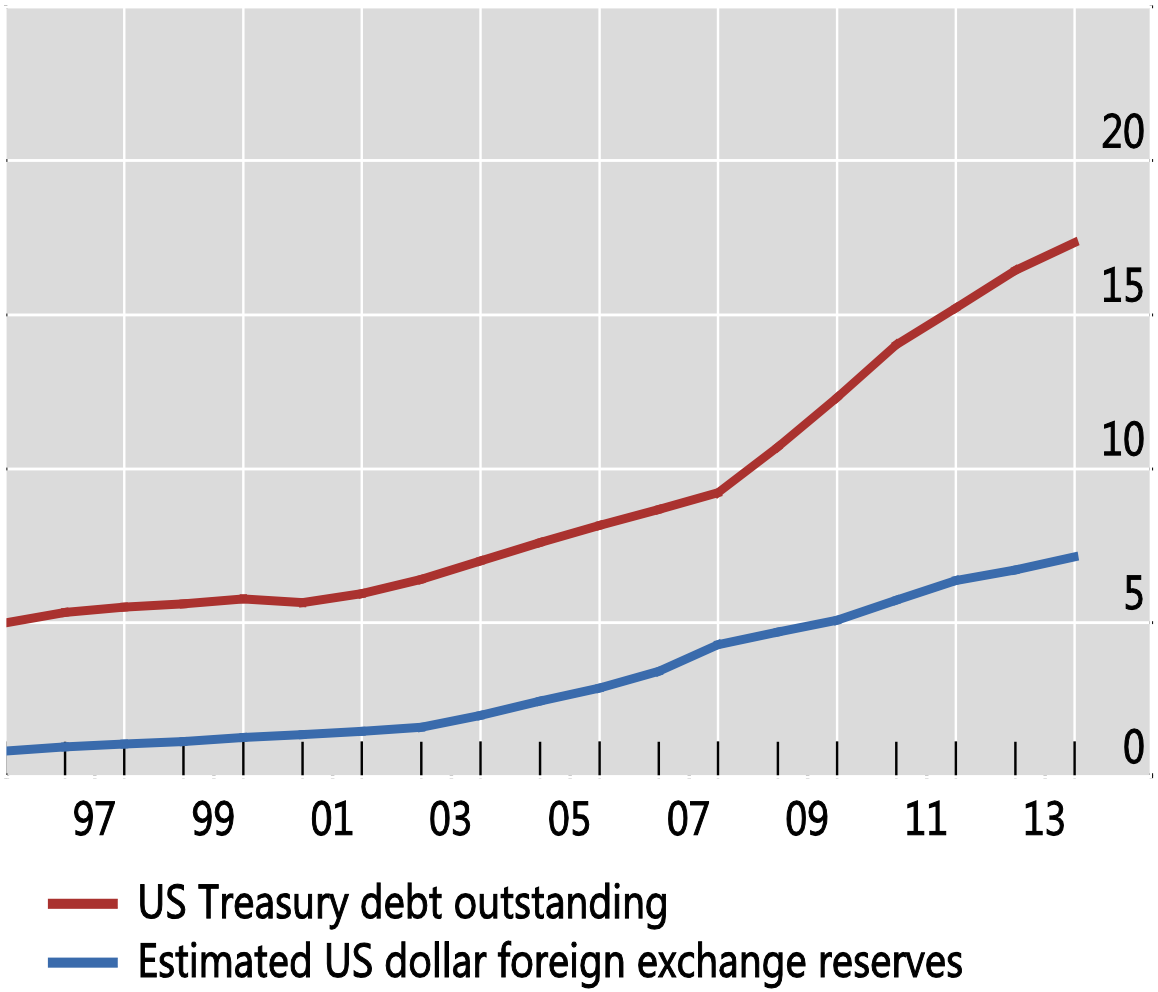
The original Triffin dilemma in one graph (Billions of US dollars)

- Implicitly gold price too low.
- So world depends on additions to dollar reserves to support global trade growth.
- But, without deflation, US liabilities to rest of world eventually exceed US gold…
- …leading to a run on the US gold stock and system collapse.



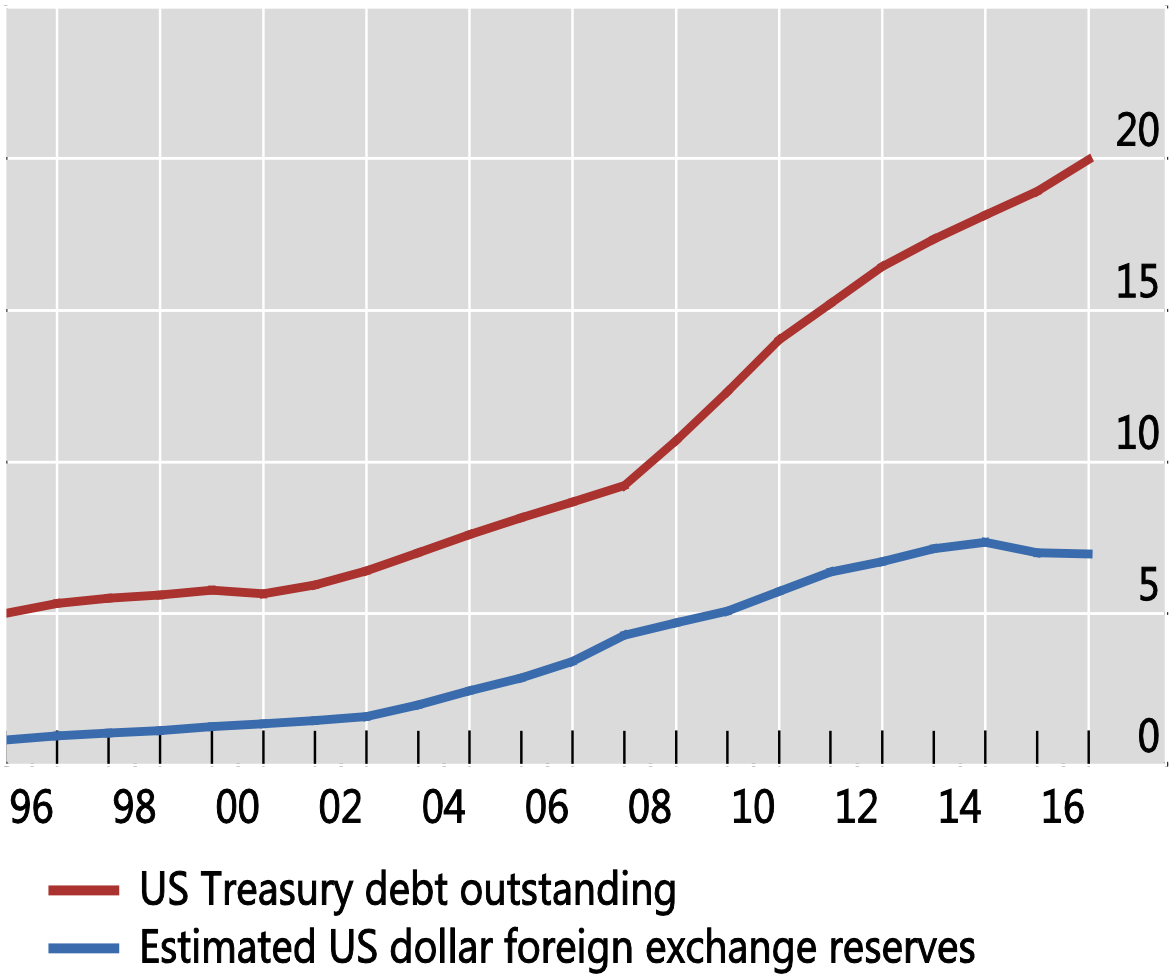
The safe assets shortage in one graph circa 2013 (Trillions of US dollars)

- US dollar reserves rise from <$2 trillion in 2000 to $7 trillion in 2013.
- US Treasury debt rises from $5 trillion in 2000 to $17 trillion in 2013: D/GDP up!
- If world and reserves grow at 6% and US and Treasury debt grow at 4%, then eventually a safe assets shortage.



The safe assets shortage in one graph circa 2016 (Trillions of US dollars)

- US dollar reserves fall as China, others shift to selling dollars to support domestic currency.
- Looking back, demand for safe assets or side-effect of currency management in weak dollar cycle 2002-12?

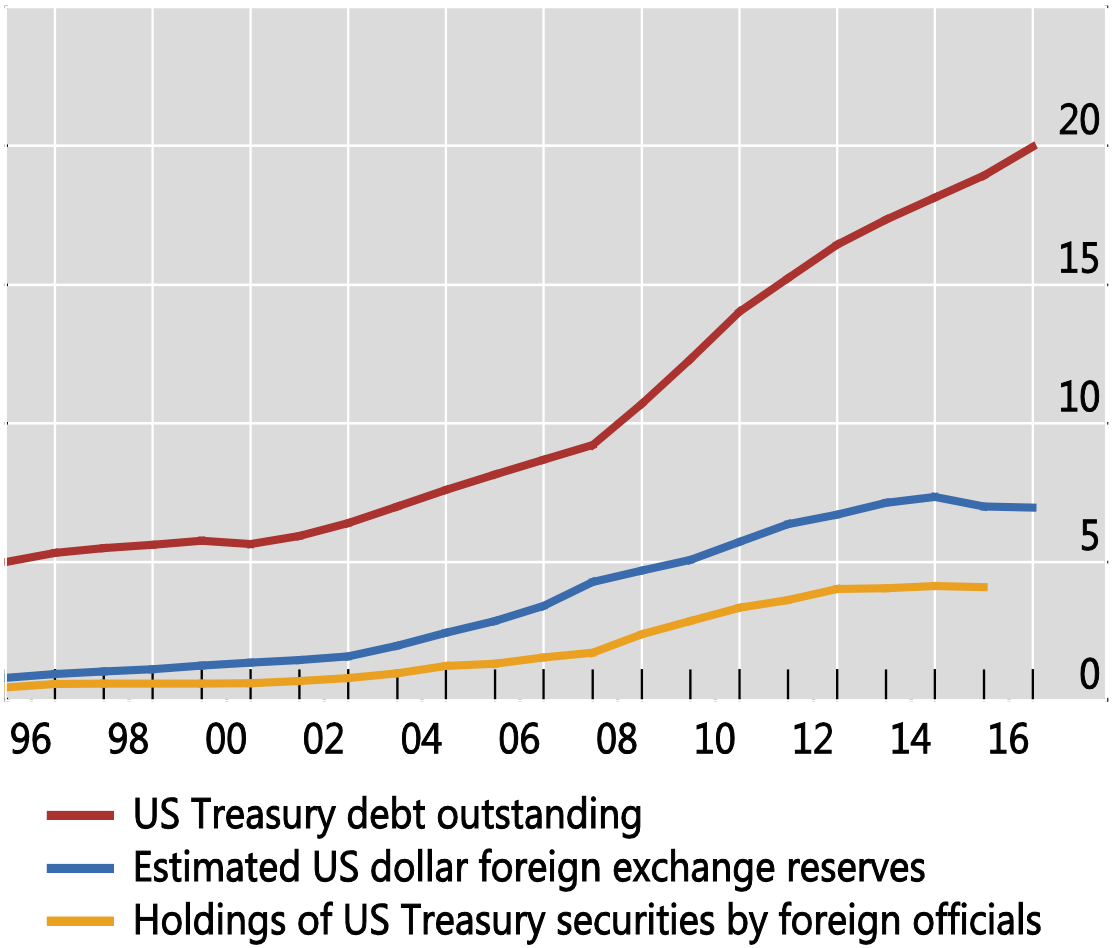


Supply story overlooked dollar assets w/o fiscal deficits

- Safe assets can be defined as what most central banks are willing to hold in their reserves.
- By this, US Treasury competes with (sovereign-supported) $ safe assets issuers:
  - US agencies both explicitly guaranteed (GNMA) & not—Fannie & Freddie.
  - Supranationals: World Bank, EBRD, EIB, ADB, etc.
  - Non-US agencies: KfW, CADES, export credit agencies, etc.
  - Bank deposits.
- As a result, a significant fraction of dollar reserves invested in competing dollar safe assets.

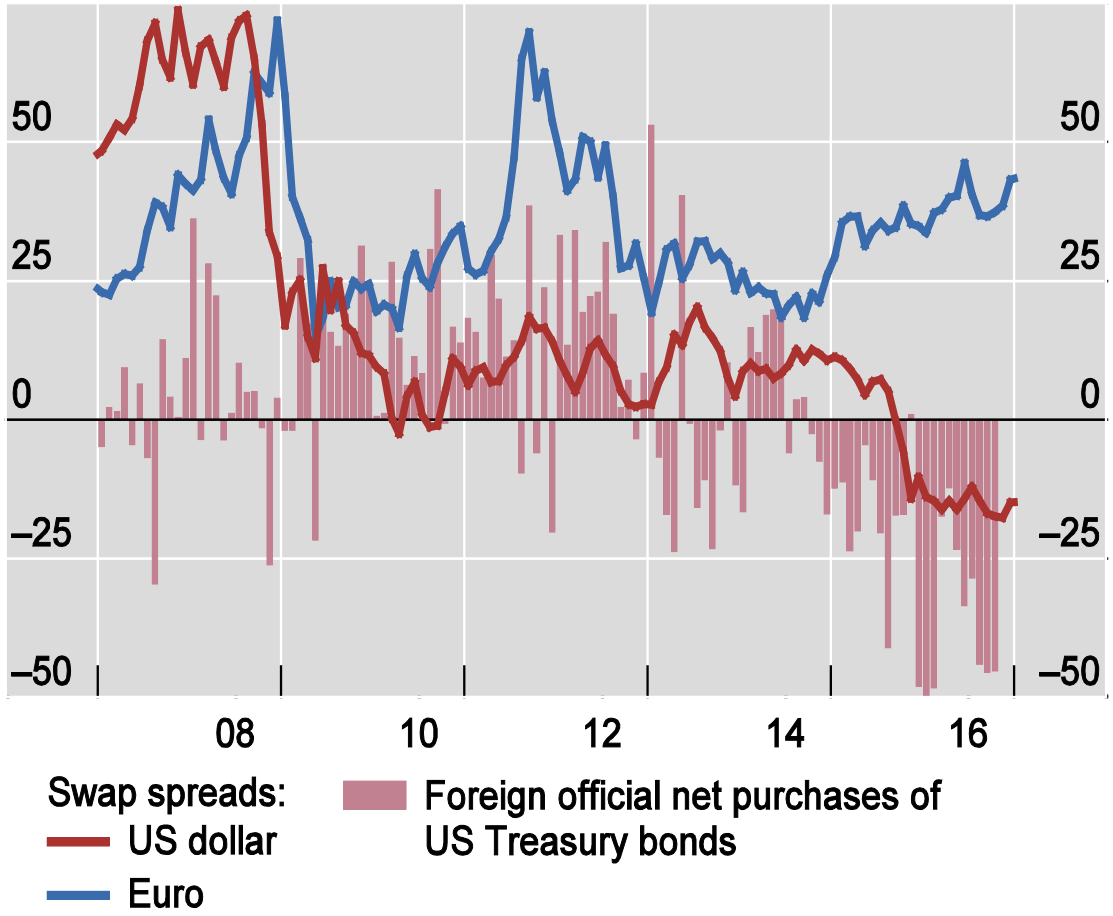
The safe assets diagram again: US Treasury competes (Trillions of US dollars)

- Rest of world's dollar foreign exchange reserves exceed official holdings of US Treasury securities by a wide margin.
- Gap shows the supply of dollar safe assets that **does not** require US fiscal deficits.



If there is a safe asset shortage, why do US Treasury 10-year bonds yield more than US dollar interest rate swaps (basis points and billions of US dollars)

- The safe assets shortage predicts that safe assets should yield less than risky assets.
- Yet we observe that the US Treasury bond yields more than the generic private rate in US dollar interest rate swaps.
- Anomaly associated with peak reserves.



Conclusions

- Triffin's apparent success in predicting the collapse of Bretton Woods attracts arguments about macro-financial quantities with unbalanced growth that may imply systemic instability.
- The idea that emerging market demand for safe assets will allow US Treasury profligacy or otherwise cause instability relies on
  - A stable, secular demand for foreign exchange reserves that is belied by "peak reserves" in 2014.
  - A narrow theory of the production of safe assets that ignores the extension of sovereign support to assets like mortgages, export credits, and development loans.