U.S. Current Account Sustainability Revisited

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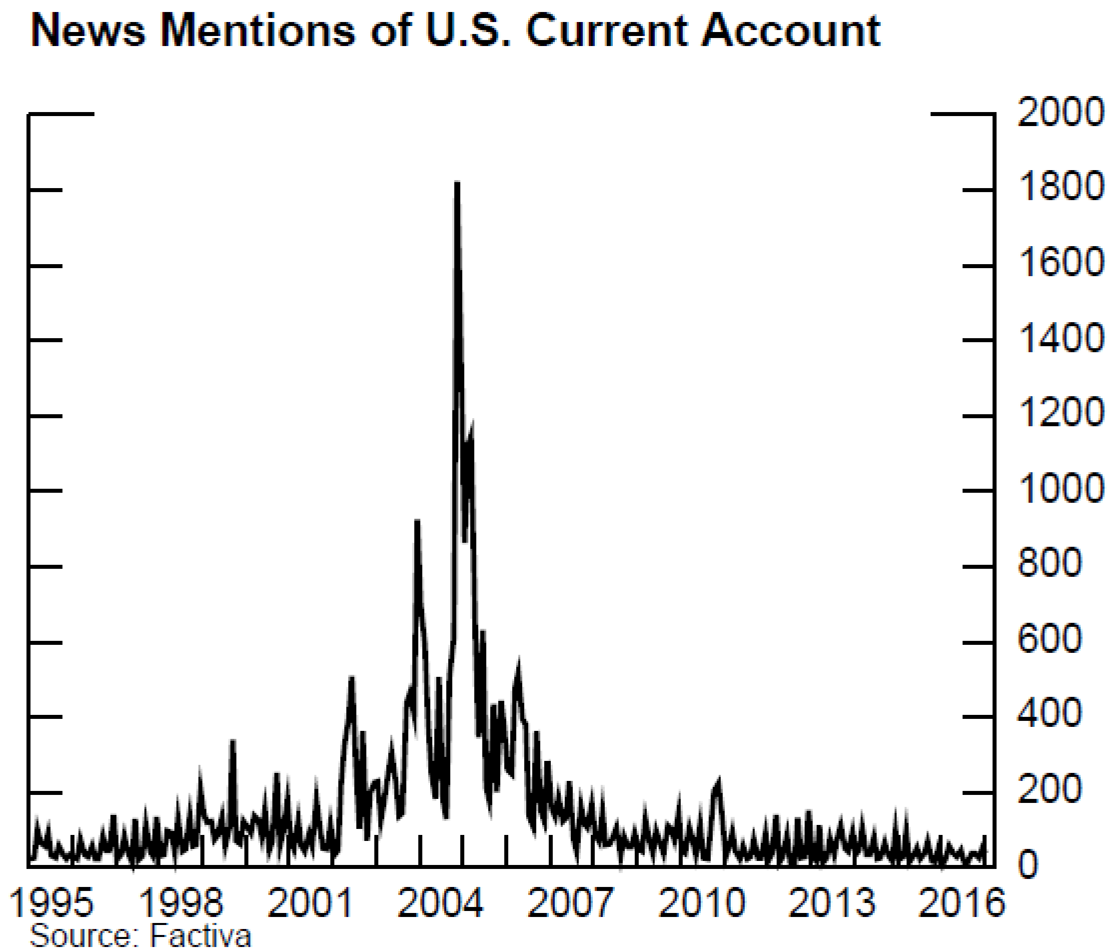
*The views expressed in this presentation are my own and my coauthors' and should not be interpreted as reflecting the views of the Board of Governors of the Federal Reserve System or any other person associated with the Federal Reserve System.

ROADMAP

- Concerns about U.S. external sustainability
- Our metric for sustainability of U.S. CA
- Developments in the U.S. external sector
- Simulations to assess sustainability
- Challenges in our approach
- Conclusions

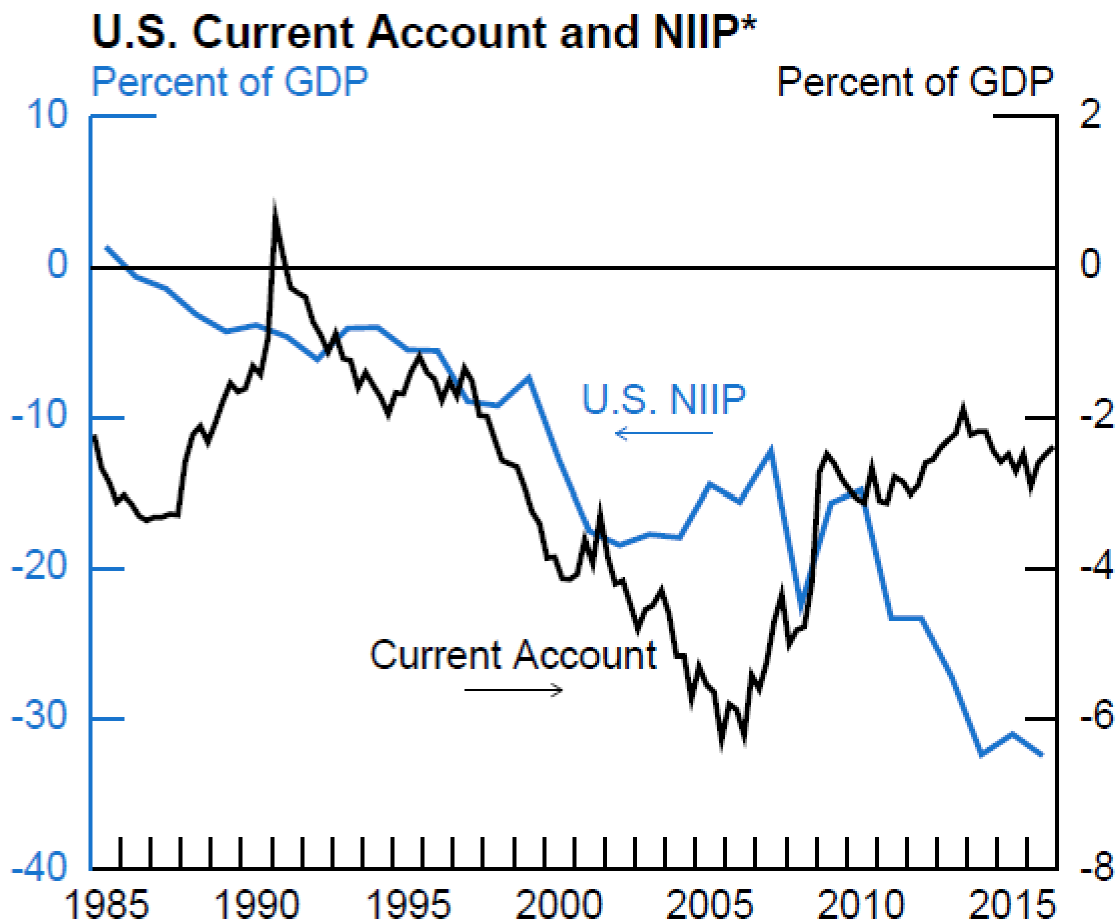
CONCERNS ABOUT SUSTAINABILITY

Concerns about the U.S. CA have waned since the pre-GFC period.



CONCERNS ABOUT SUSTAINABILITY

Yet U.S. CA deficit is still notable and net international investment position (NIIP) as a share of GDP has become more negative.



* NIIP = Net International Investment Position. DI at current cost.
Source: BEA

METRIC TO ASSESS SUSTAINABILITY

Stability of NIIP/GDP (Necessary condition)

- Otherwise debt service consumes entire GDP eventually
- Stable NIIP/GDP constrains CA/GDP: Implies NIIP must grow at growth rate of nominal GDP = *g*

$$CA_t = NIIP_t - NIIP_{t-1} = gNIIP_{t-1}$$

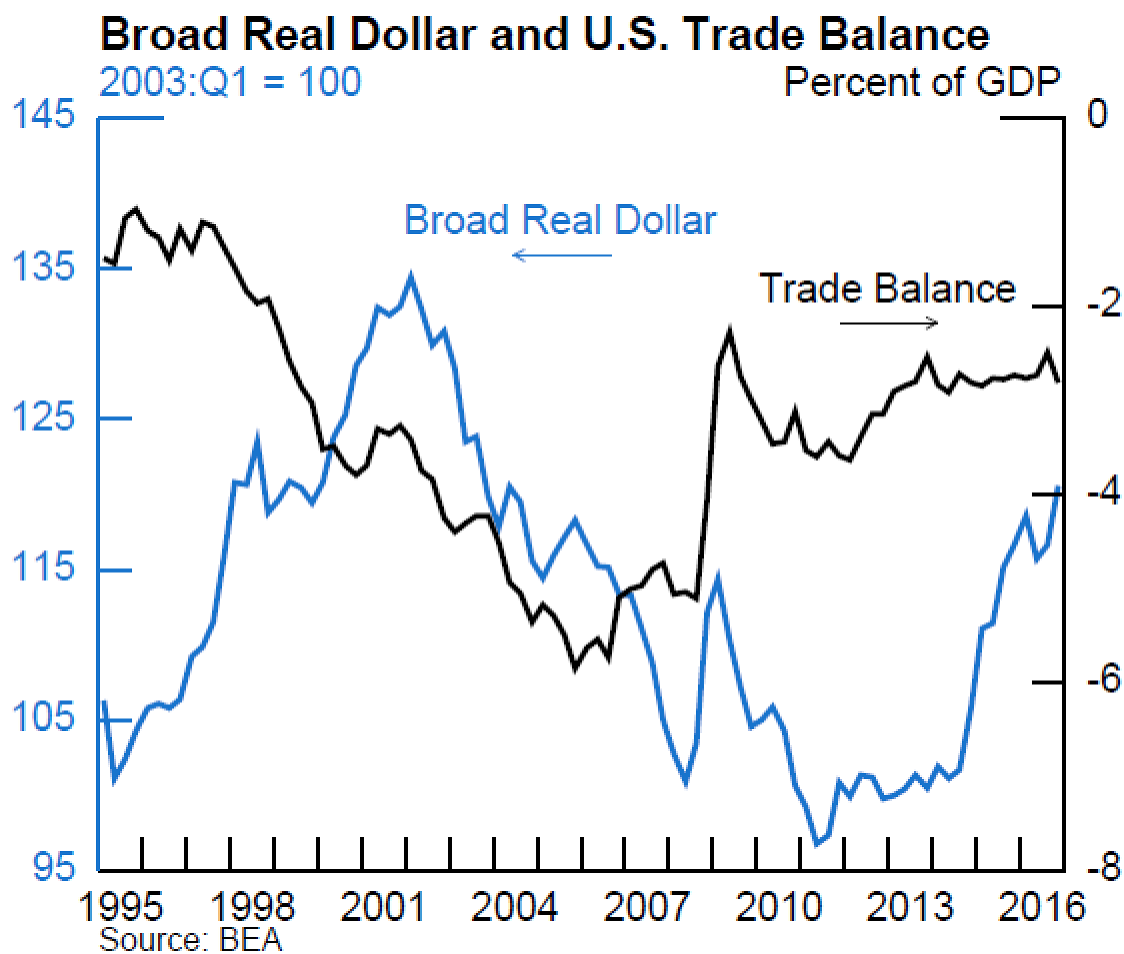
$$\frac{CA_t}{Y_t} = g \times \frac{NIIP_t}{Y_t} \times \frac{NIIP_{t-1}}{NIIP_t}$$

$$\frac{CA/Y}{NIIP/Y} = \frac{g}{1+g} \approx g$$

- Not a sufficient condition (can still ask if this constant value of NIIP/GDP can be maintained)
- Necessary condition clearly not satisfied, yet concerns about U.S. CA not in the forefront
  - (CA/GDP)/(NIIP/GDP) = -.024/-.32 = .074 > U.S. potential nominal GDP growth

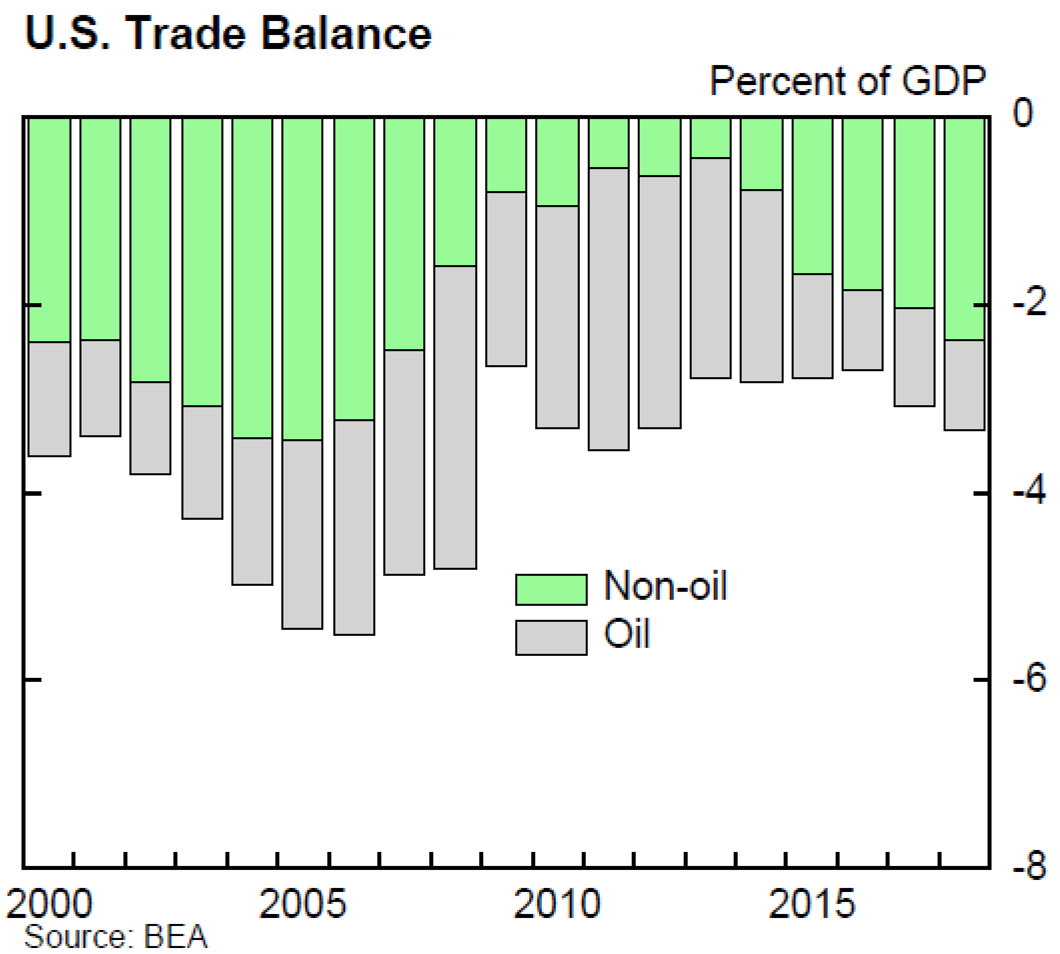
U.S. EXTERNAL SECTOR DEVELOPMENTS

CA deficit notable but has not moved as much as might be expected given dollar appreciation.



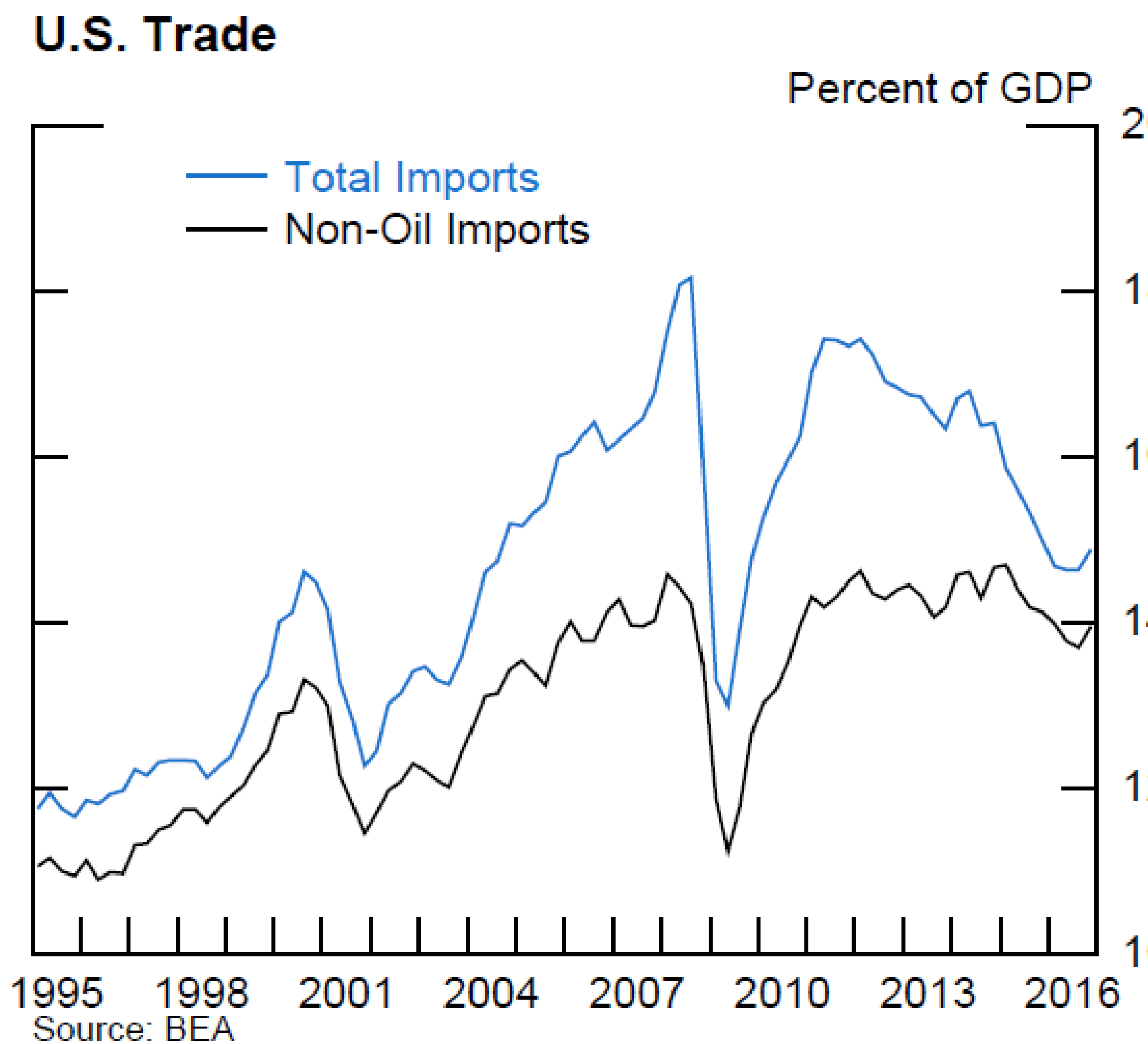
U.S. EXTERNAL SECTOR DEVELOPMENTS

U.S. CA deficit not moved as dollar might imply partly due to decrease in U.S. oil imports as U.S. oil production ramped up…



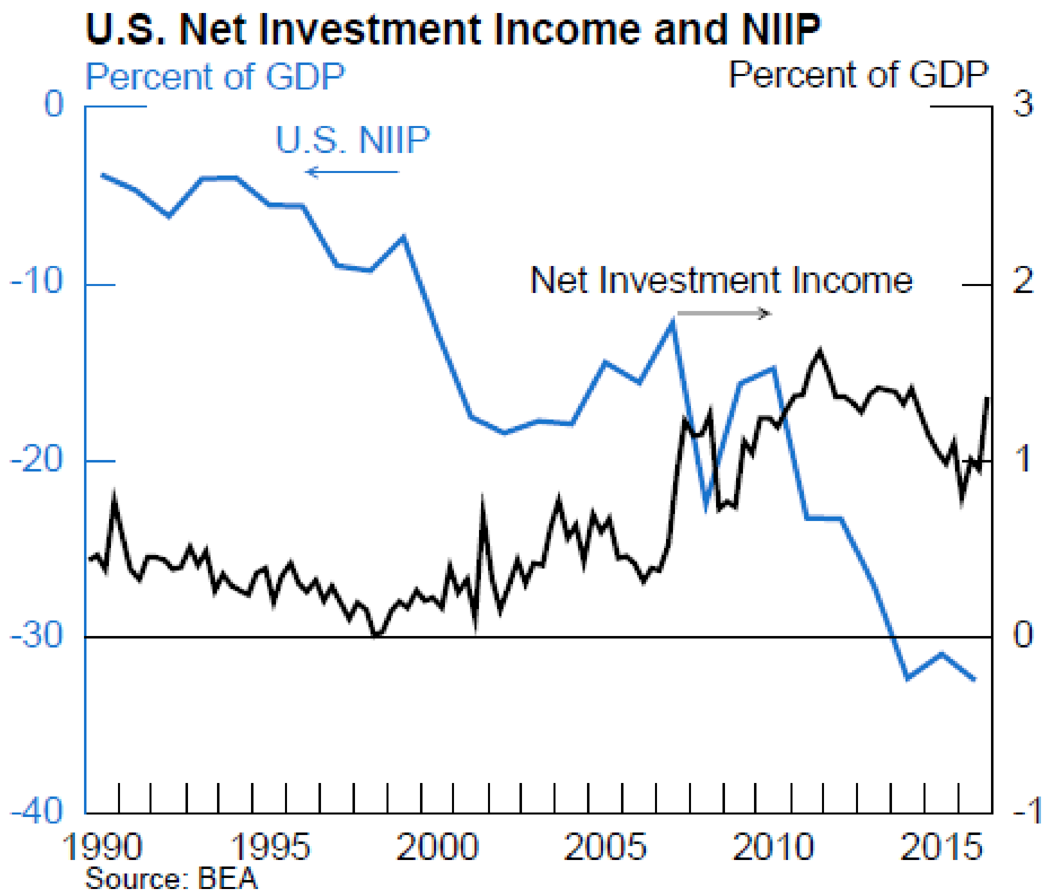
U.S. EXTERNAL SECTOR DEVELOPMENTS

…And partly due to cyclical weakness of U.S. imports.



U.S. EXTERNAL SECTOR DEVELOPMENTS

Another reason for less concern: U.S. continues to earn positive net investment income (NII) despite increasingly negative NIIP.



U.S. EXTERNAL SECTOR DEVELOPMENTS

Why is NII positive and has grown? Net income on DI more than offsets net payments on portfolio liabilities.

- Stock of DI abroad is larger than FDI in U.S. and earns more
- U.S. has larger portfolio liabilities than portfolio assets
- Most liabilities fixed-income instruments whereas claims tilted more toward equity
  - So, with "low-for-long" interest rates and safe haven flows, U.S. net portfolio payments since 2008 have actually decreased, even as the portfolio position has become more negative

SIMULATIONS: MODEL

Where is the U.S. CA and NIIP headed? Use FRB staff's partial equilibrium U.S. International Transactions (USIT) model:

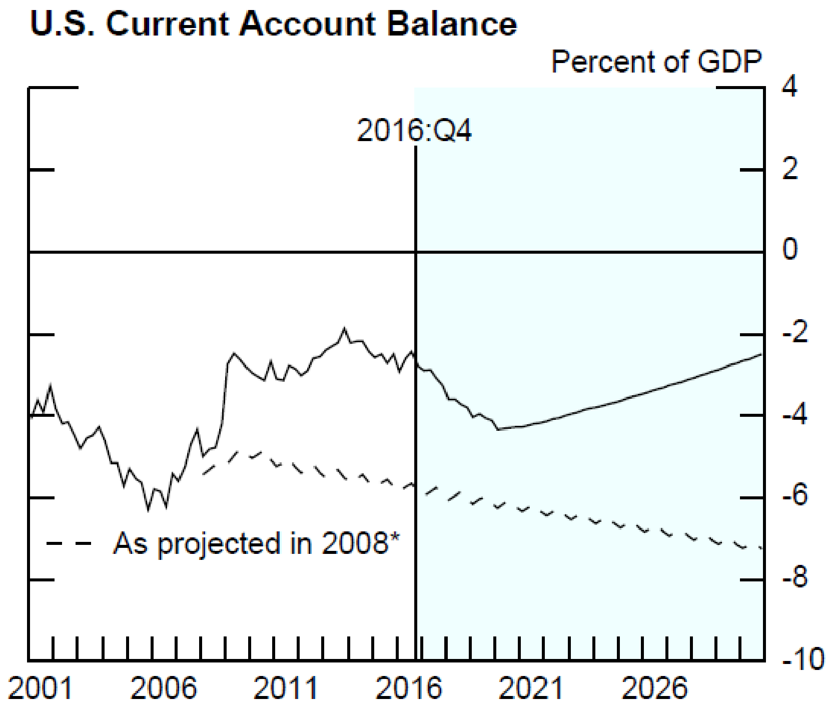
- Several hundred equations, including identities and several estimated behavioral equations.
- Uses exogenous projections for central determinants of U.S. external accounts: U.S. and foreign real GDP growth, U.S. and foreign inflation rates, U.S interest rates, oil prices, and the foreign exchange value of the dollar.
- From these inputs, project U.S. external balances/positions in 4 categories:
  - TRADE FLOWS:
    - f(relative prices, foreign GDP, U.S. GDP).
  - NON-TRADE COMPONENTS OF CA (esp. investment income):
    - f (income rates of return on different categories of external claims and liabilities).
  - FINANCING FLOWS:
    - CA pins down aggregate net financing flows but have to be allocated between direct investment and portfolio flows.
    - Have to decide what combination of gross flows to use to get the appropriate net flows.
  - INVESTMENT POSITIONS COMPRISING NIIP:
    - For each category of investment, the position = previous year's position + financial flows in that period + valuation changes.

SIMULATIONS: ASSUMPTIONS

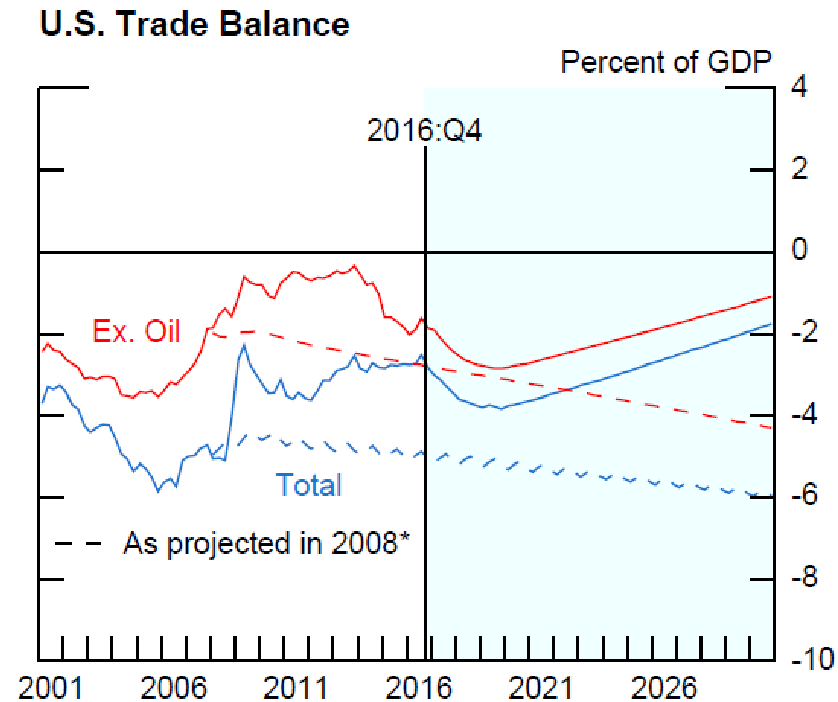
- U.S. and Foreign GDP Growth:
  - WEO forecasts up to 2021 and then flat lined.
  - Except China—downward trend of past 10 years continued…
  - …and Venezuela—still in recession in 2021 according to WEO, so we return growth to past 10 yrs. average.
- U.S. and Foreign Inflation:
  - WEO forecasts up to 2021, then flat lined.
- U.S. short-term (3 month) and long-term (10 yr.) interest rates:
  - Blue Chip forecasts.
- Exchange value of the Dollar:
  - Flat line, but also consider some appreciation/depreciation alternatives (1 percent per year).

SIMULATIONS: RESULTS

U.S. CA and trade deficits widen again in the near term, but then begin to narrow around 2020.



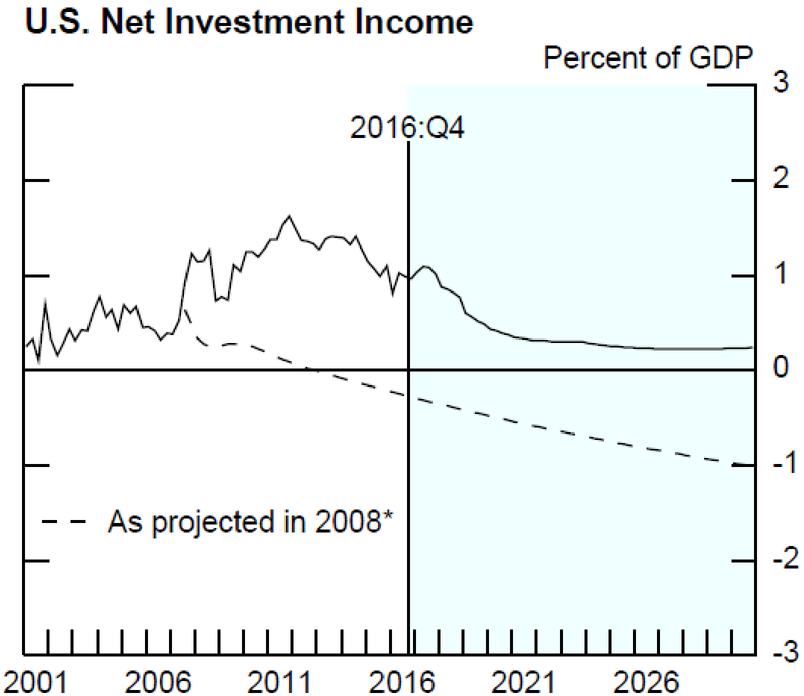
* See Bertaut, Kamin, Thomas (2008)



* See Bertaut, Kamin, Thomas (2008)

SIMULATIONS: RESULTS

U.S. NII declines in the near term as interest rates rise, but then gradually flattens out; U.S. NIIP continues to become more negative beyond 2020 but stabilizes by about 2030.



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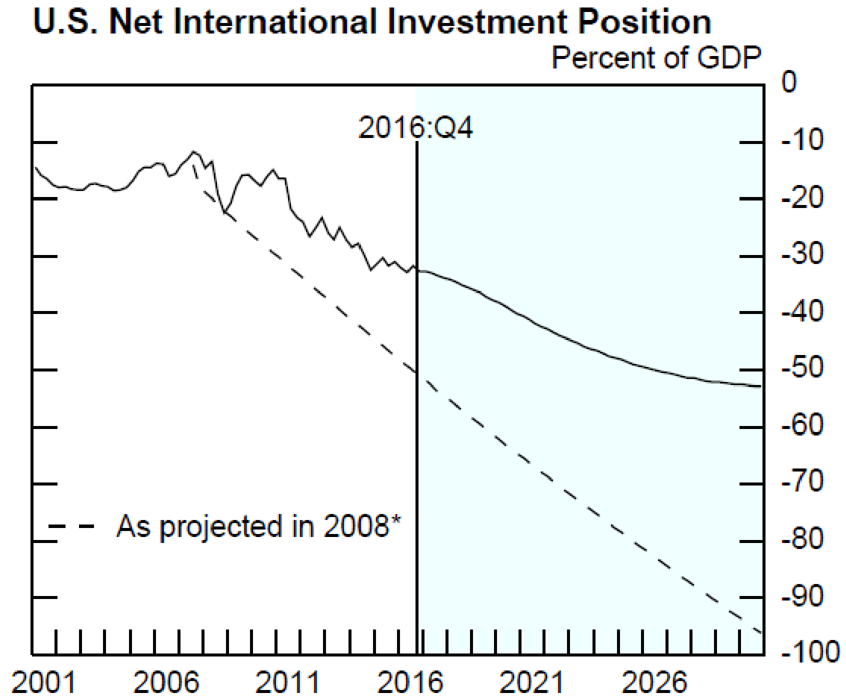

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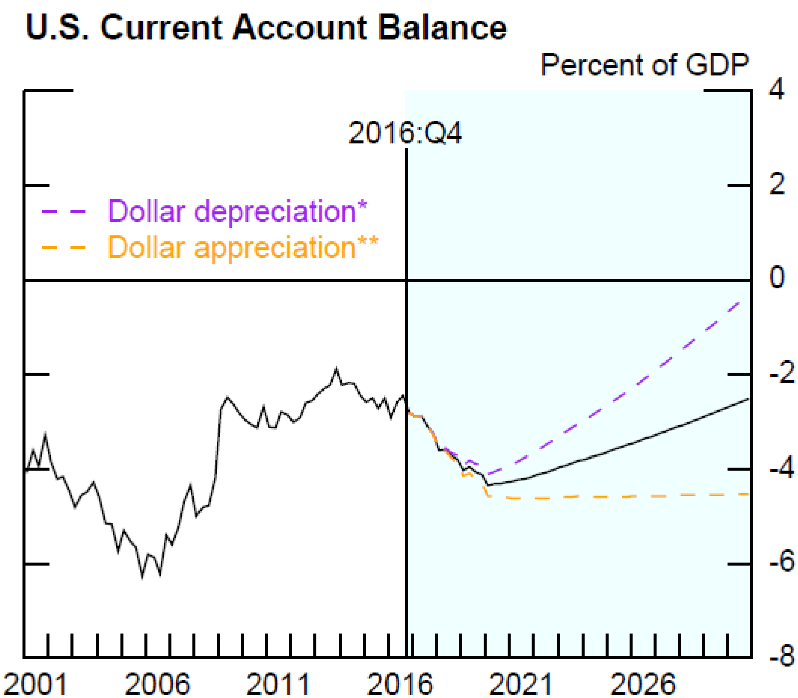
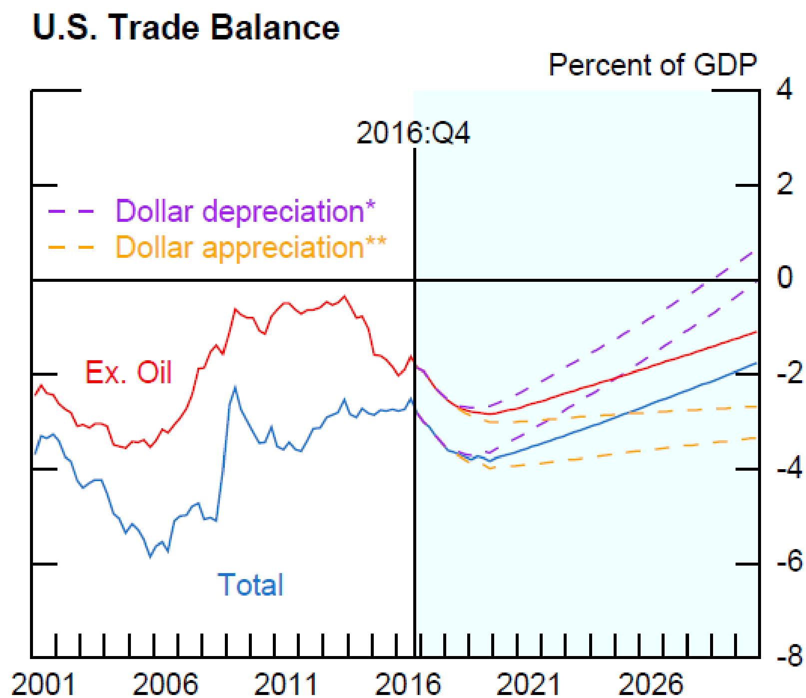
SIMULATIONS: RESULTS

Dollar assumptions matter: If dollar continued to appreciate for a long time, CA deficit would not narrow by 2030; if instead it depreciated CA and trade deficits would narrow faster.



* Dollar depreciation = 1 percent depreciation per year
** Dollar appreciation = 1 percent appreciation per year



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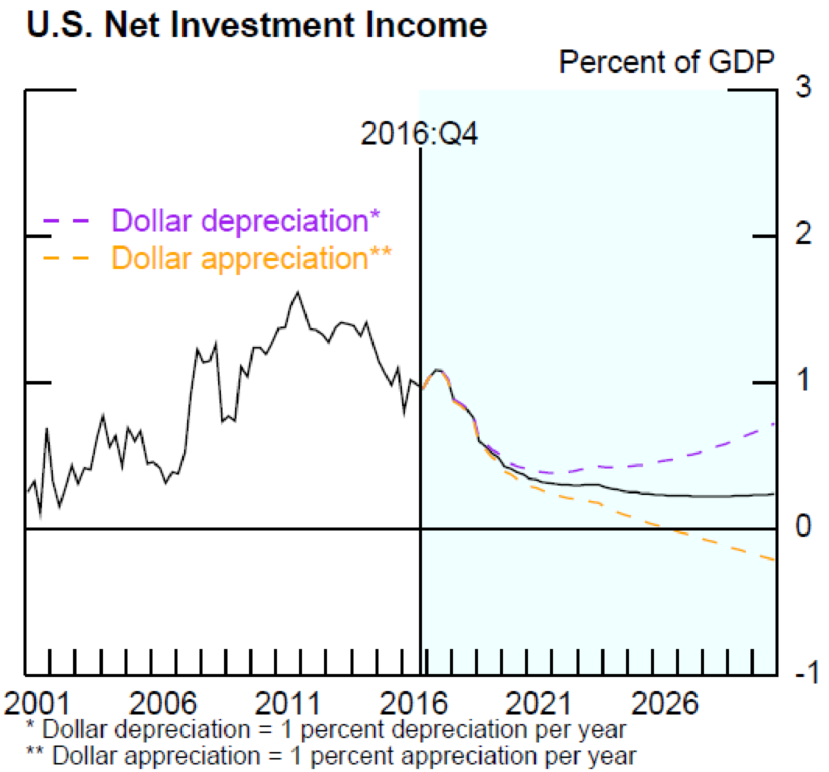
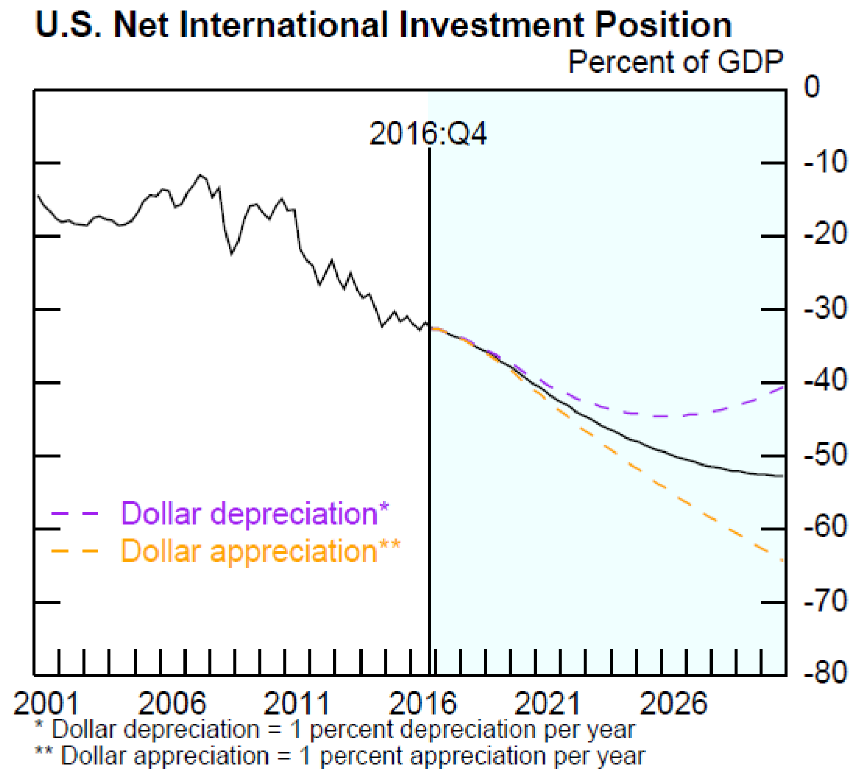
SIMULATIONS: RESULTS

Similarly, if dollar keeps appreciating, U.S. NII continues to fall and NIIP continues to deteriorate; with dollar depreciation, NII starts to rise around 2020, and NIIP stabilizes around that time and improves subsequently.





CHALLENGES

Focused on necessary condition, but is NIIP of negative 50-60% of GDP sustainable? Key is willingness of foreigners to acquire more U.S. assets to finance such an NIIP.

- How willing they will be depends in part on evolution of market capitalization.
  - Foreign holdings of U.S. assets more than tripled between 2003 and 2016…
  - …but resulted in a relatively muted increase in the share of U.S. market cap held by foreigners.
- U.S. assets are still only a small fraction—less than 15%—of the aggregate foreign portfolio.
  - Our simulations suggest even with increased holdings implied by our NIIP projections, U.S. assets would still be less than 20% of the foreign portfolio.
- U.S. dollar is special as the major reserve currency.

CHALLENGES

Partial equilibrium approach, of course, has its shortcomings.

- For example, dollar path is exogenous.
  - Is ROW path of CAs consistent with the U.S. CA path implied by the dollar assumptions?
  - If instability of NIIP/GDP, dollar would be one of the adjustment factors.
- There are tradeoffs as you go to a more general equilibrium approach.
  - Lot of detail in the partial equilibrium model that allows us to look at composition of assets and liabilities.
  - Partial equilibrium, at a minimum, helps us understand and quantify transmission mechanisms from which better judgments can be made.

CONCLUSIONS

- Currently necessary condition for U.S. external sustainability not satisfied.
- But simulations suggest that, under baseline assumptions, U.S. NIIP/GDP eventually stops becoming more negative without bound. (Suggests sustainability.)
- The situation is much less worrisome than it was projected to be just before the global financial crisis.
- Still, key is whether foreign investors would become saturated with U.S. assets well before we reach stability of NIIP/GDP.
  - U.S. dollar's special role as reserve currency helps.
- Assumptions matter:
  - Deviation from some of the baseline assumptions leads to faster improvement of NIIP position.
  - Deviation from some other assumptions would imply that adjustments would be necessary to get back on sustainable path.