FEDERAL RESERVE BANK of NEW YORK

The Federal Reserve in the 21st Century

Global Perspectives on Monetary Policy

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The views expressed in this presentation are those of the presenter and not necessarily those of the Federal Reserve Bank of New York or the Federal Reserve System

Outline

- Monetary policy links between US and Rest of the World (ROW) in the context of global interdependence

- US monetary policy affects ROW developments
  - What are the effects of US monetary policy on foreign economic activity?
  - Do US monetary policy spillovers stabilize or destabilize the global economy?

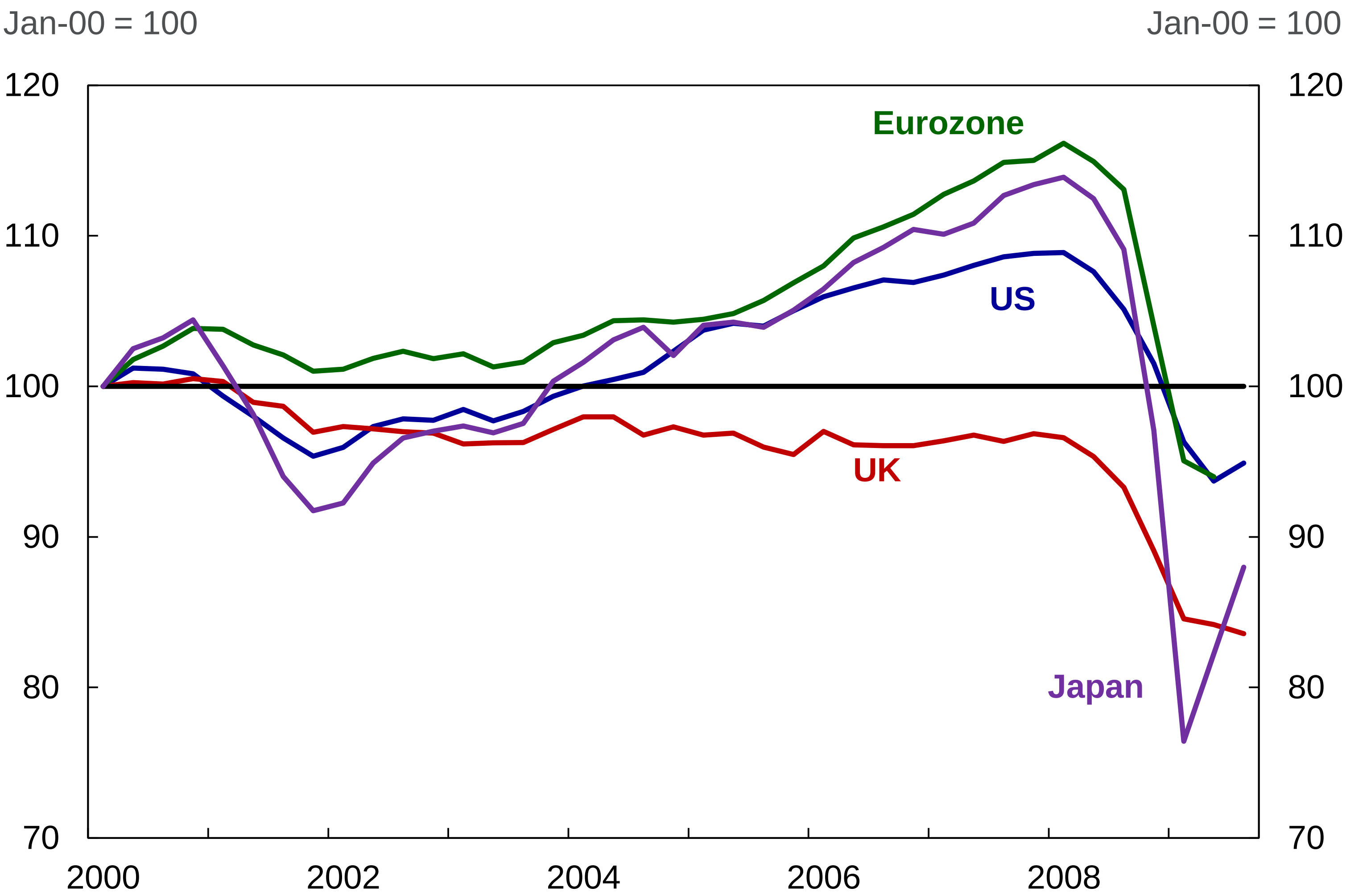
- (Briefly:) ROW affects US outlook
  - What are the implications for US monetary policy?

National economies are linked and interdependent

- Linkages between US and ROW via a range of channels including:
  - **Trade** in goods and services
  - **Capital flows** (sales and purchases of bonds, stocks, currencies, derivative instruments, foreign direct investment…)

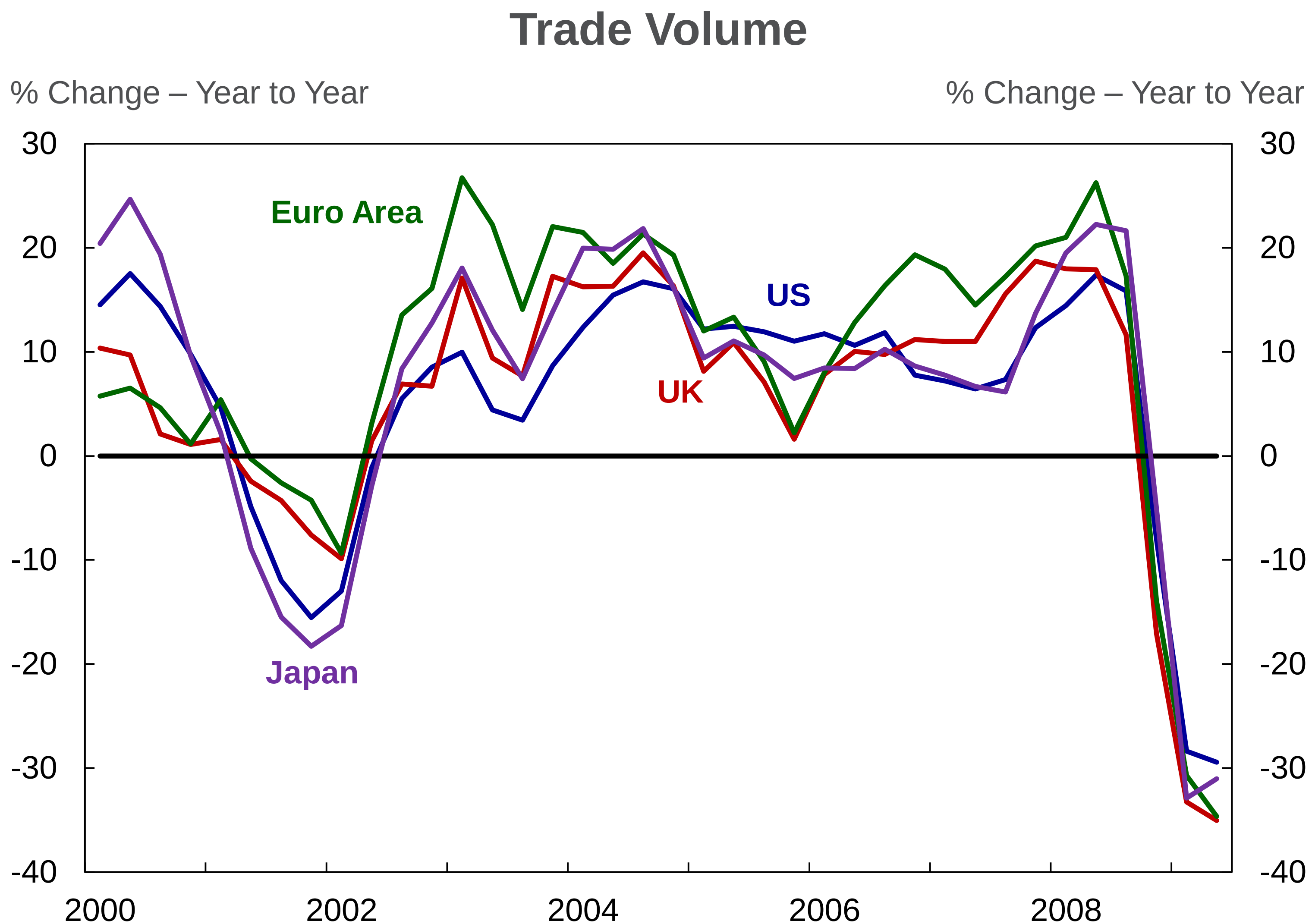
- Macroeconomic transmission:
  - demand/supply shocks in one country affect decisions by consumers/firms abroad
  - financial market spillovers: asset price fluctuations in one region affect cross-border valuations
    - more extreme: contagion effects of asset price declines in stressed situations
  - policy spillovers: domestic monetary (and fiscal) decisions affect foreign outcomes

Interdependence at work: The synchronized plunge in global industrial production in 2008…



Source: OECD

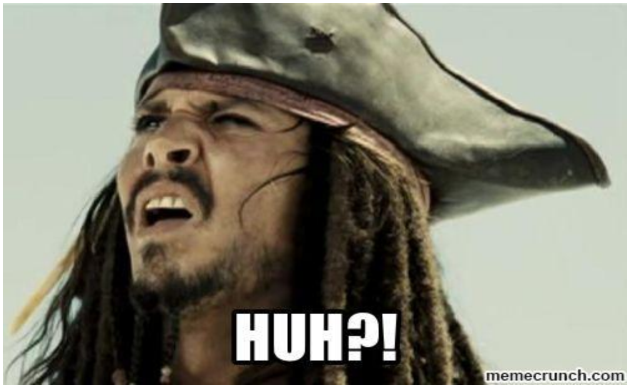
… and the collapse of international trade



Source: IMF Direction of Trade Statistics

The debate on monetary spillovers

- Starting in 2008 US engaged in large-scale monetary stimulus involving conventional and unconventional policy
  - Only recently (Dec. 2015) US began to raise policy rate as part of normalization of monetary stance
- Some were concerned that 2008-2015 US accommodative policy was hurting ROW
  - Quite confusingly, some are now concerned that move toward normalization is hurting ROW…
- What's going on?



A representative recent article (NYT March 16, 2017)

Key spillover channels from monetary policy: Part 1

Consider the effects of a US monetary expansion

- Exchange rates abroad appreciate (expenditure shifting):
  - Exports to US become more expensive
  - Imports from US become cheaper

  → Global demand reallocated toward US goods

Key spillover channels from monetary policy: Part 2

Consider the effects of a US monetary expansion

- Domestic demand increases (expenditure increasing):
  - US monetary policy raises nominal incomes and expenditures

  → Higher domestic demand for domestic goods **and** imports of foreign goods

Key spillover channels from monetary policy: Part 3

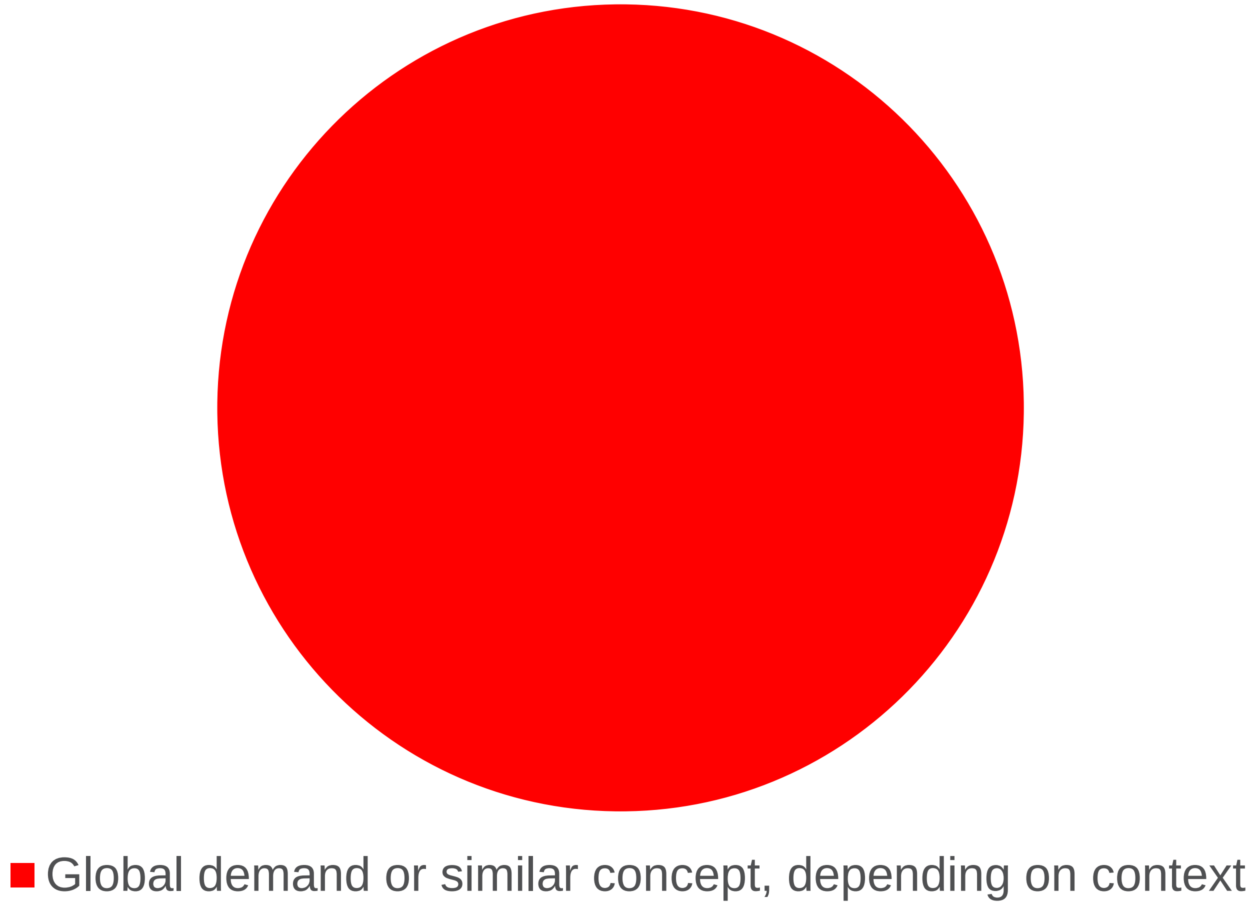
Consider the effects of a US monetary expansion

- Financial spillovers (likely expenditure increasing):
  - US stimulus lowers domestic longer-term yields
  - Capital flows out of the US into financially interconnected economies
  - What happens abroad?
    - Credit expands, lowering yields and borrowing costs and raising other asset prices such as equity
    - Foreign exchange rate appreciates, may improve corporate and financial balance sheets, but may reduce equity prices

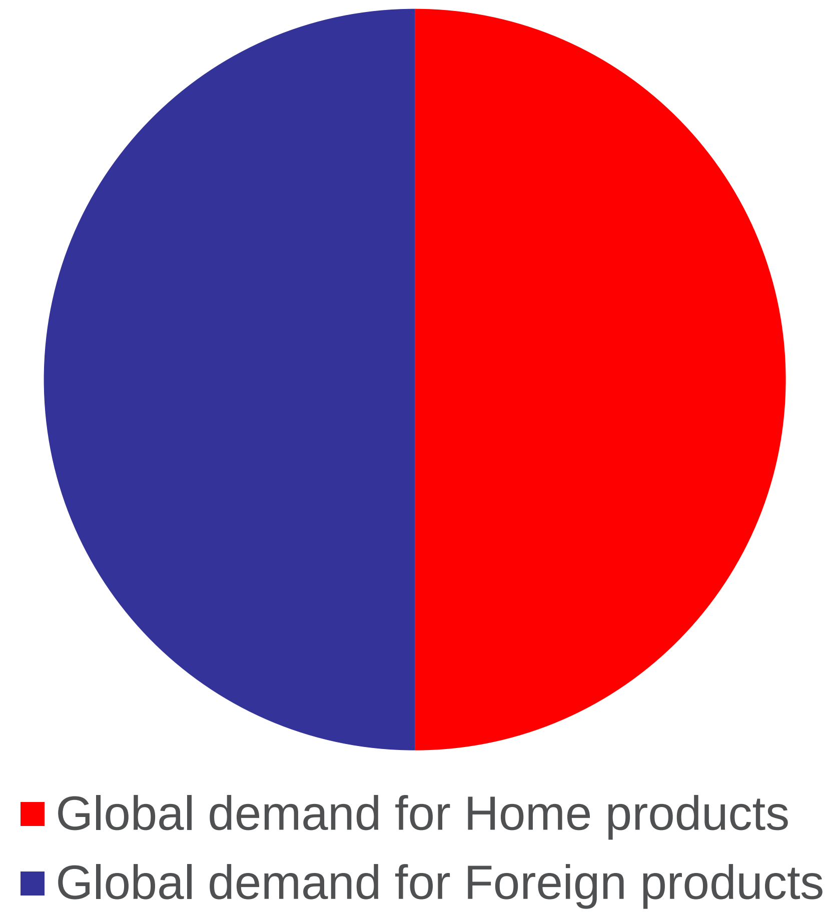
In case you need to explain monetary spillovers to a 2-yr old daughter…

… you may want to think of
global demand
as a pie

Something like this



And you can cut the pie into slices

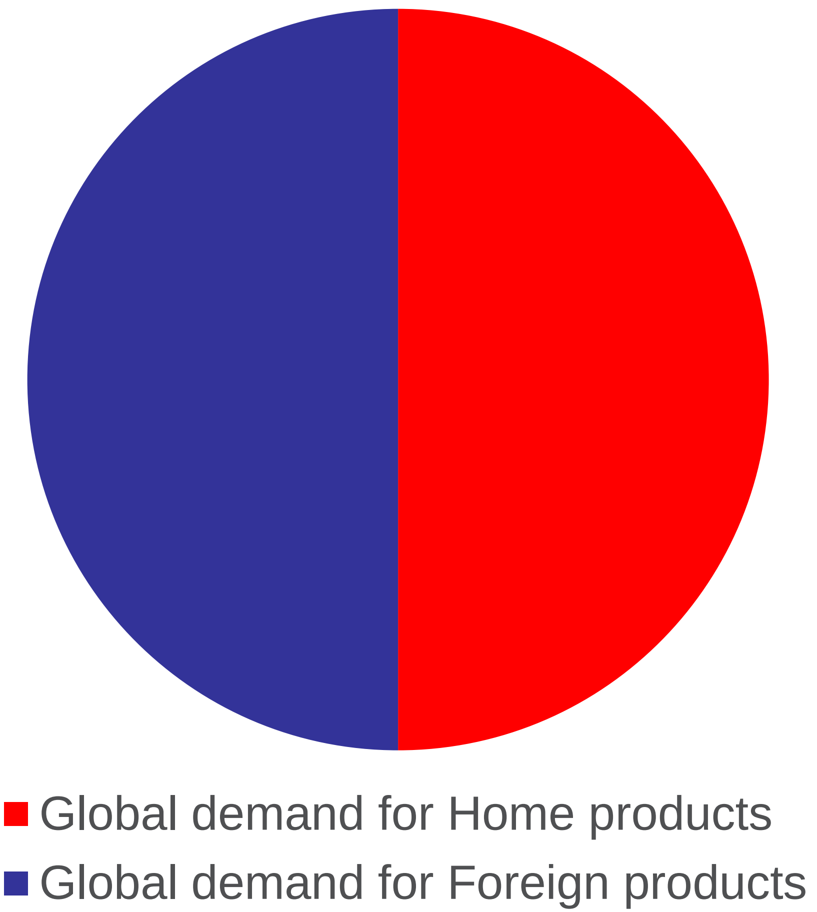


Now, stuff happening in one country…

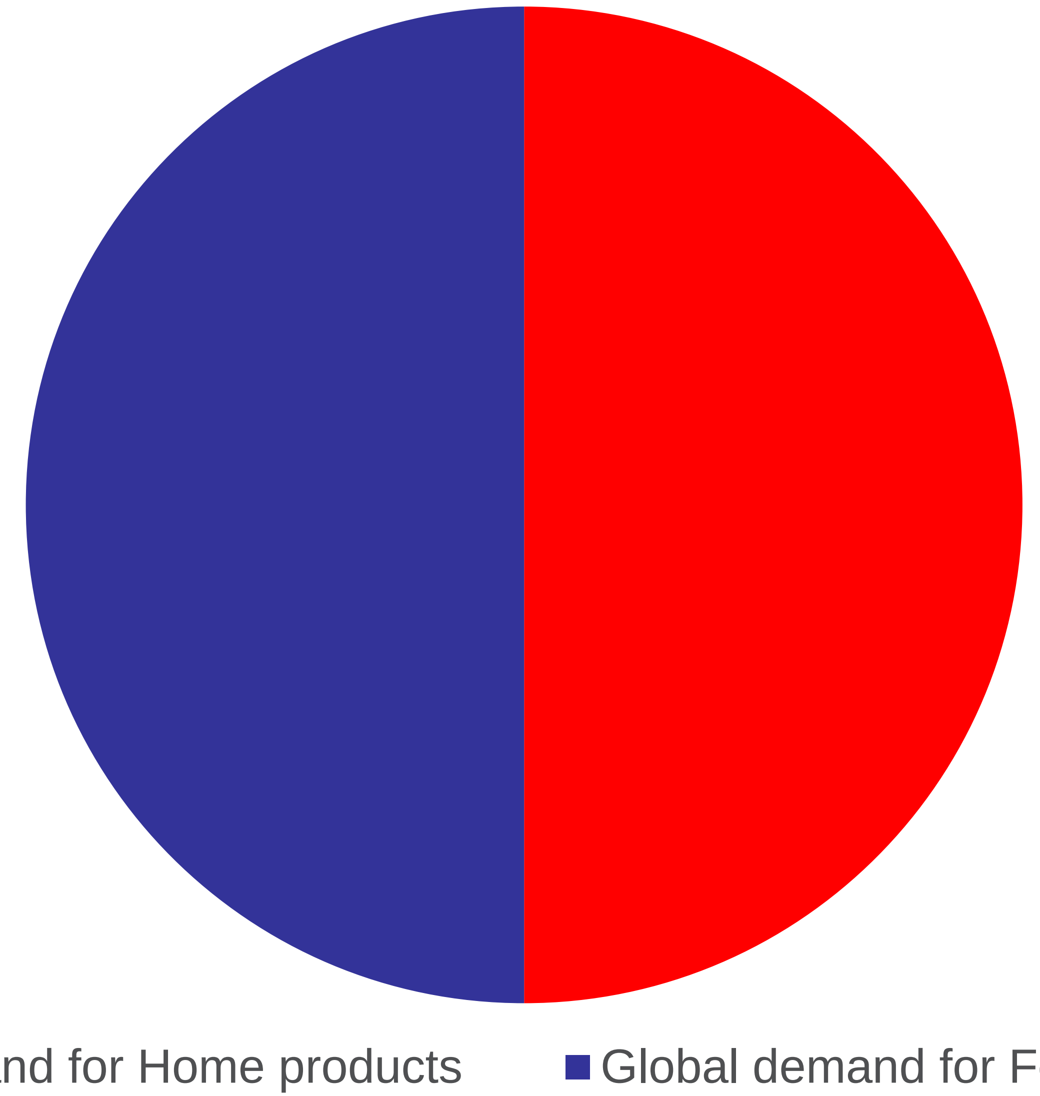
- …can affect the size of the whole pie (expenditure increasing/ income-absorption effects)

- …as well as the way the pie is split into slices (expenditure shifting effects)

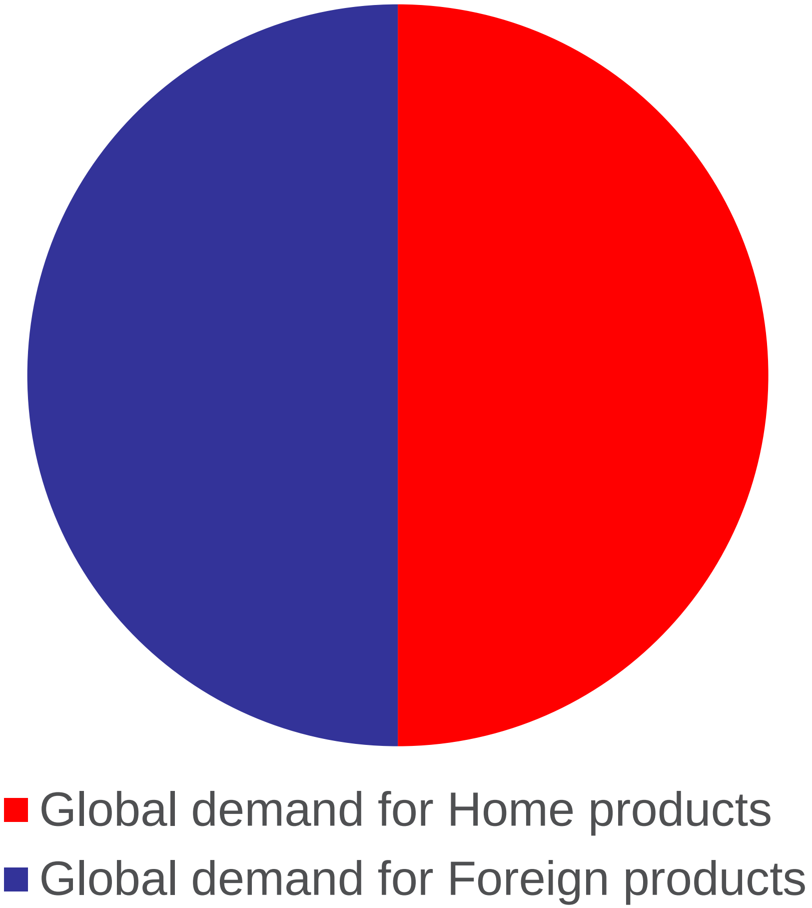
US (Home) monetary policy: start with pie and slices



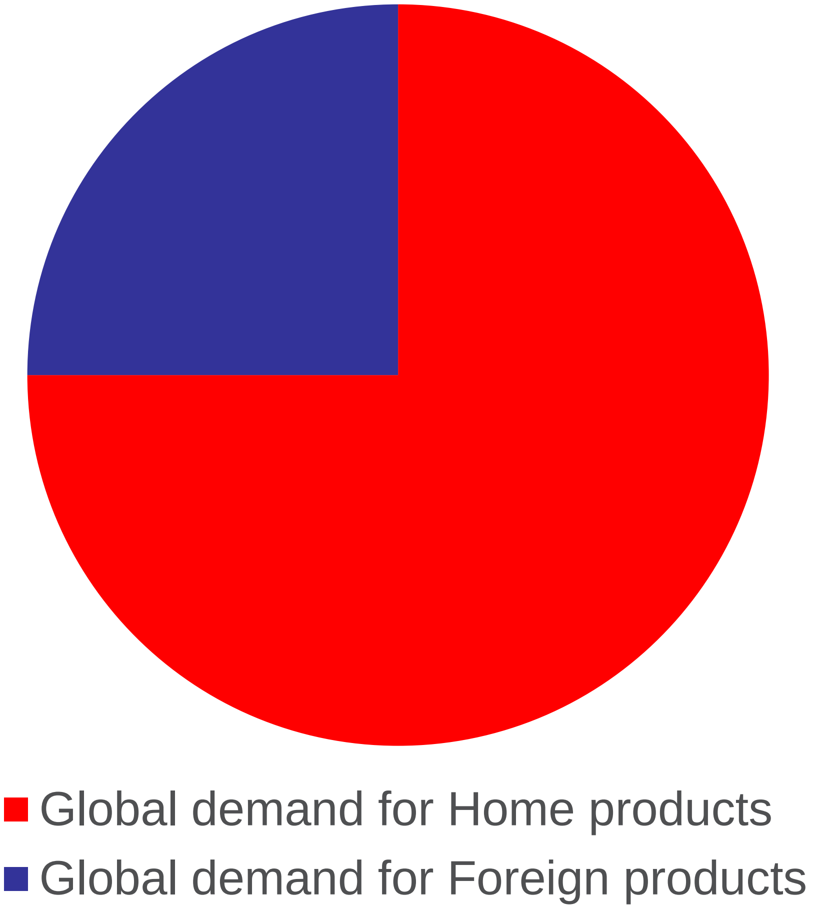
US monetary expansion has an expenditure increasing effect



Back to the initial pie



US monetary expansion has an expenditure shifting effect



Two effects: Spillovers of US monetary stimulus

- Rest of the world gets a smaller slice of a bigger pie

- If new slice **smaller** than initial slice: **negative spillovers** to ROW

- If new slice **bigger** than initial slice: **positive spillovers** to ROW

- Needless to say, sign of these effects flips in case of US monetary tightening

Back-of-the-envelope estimates of policy spillovers

- Assume monetary easing sufficient to lower 10-year US Treasury yields by 25 basis points
- Exchange rate channel
  - Lowers dollar about 1 percent
  - Boosts U.S. net exports by 0.15 percent of GDP
  - Lowers foreign GDP about 0.05 percent
- Domestic demand channel
  - Raises domestic demand by 0.5 percent
  - Raises U.S. imports by 0.15 percent of GDP
  - Raises foreign GDP about 0.05 percent
- Financial spillovers channel
  - Lowers foreign yields by 10 basis points
  - Raises foreign GDP about 0.25 percent

Positive or negative transmission?

- Exchange rate channel:
  - Lowers foreign GDP about 0.05 percent
- Domestic demand channel:
  - Raises foreign GDP about 0.05 percent
- Financial spillovers channel:
  - Raises foreign GDP about 0.25 percent

- First two channels offset each other, so financial spillovers dominate
- But overall effect not very large
  - see Ammer, Erceg, Kamin and De Pooter, "International Spillovers of Monetary Policy", http://www.federalreserve.gov/econresdata/notes/ifdp-notes/2016/international-spillovers-of-monetary-policy-20160208.html

Size and direction of monetary policy spillovers cannot be boiled down to a single coefficient

- Previous estimates suggest US monetary policy spillovers are positive but not very large
- Estimates are in line with a number of studies, but other studies have found negative spillovers
- In particular, the spillover effects
  - are likely to differ across recipient countries depending on various country-specific features
  - may vary through time
  - may differ depending on whether domestic monetary stimulus involves conventional or unconventional monetary policy

Ok, I get the slice stuff. Is that all?

- No. We need to move from positive (“what happens”) to normative (“what should happen”) considerations

- Foreign country cares about its slice being not too small (underemployment, low growth) but not too big either (overheating, inflation…).

- Let’s say there is a Goldilocks equilibrium slice…

Oh yes, when I am hungry I like a big slice, but not so much when I have indigestion

- Exactly

- The fact that monetary spillovers are likely positive does not say much about whether they stabilize or destabilize the global economy

- Depending on relative business-cycle positions, monetary policy spillovers may prove either stabilizing or destabilizing for the global economy depending on whether they push ROW closer or further away from equilibrium

Oh, this is fun. So, do I get my Goldilocks slice or what?

- Good question
- Maybe the ROW slice is too small and US monetary stimulus brings the ROW closer to equilibrium
- Maybe US monetary stimulus makes the foreign slice of the pie too big

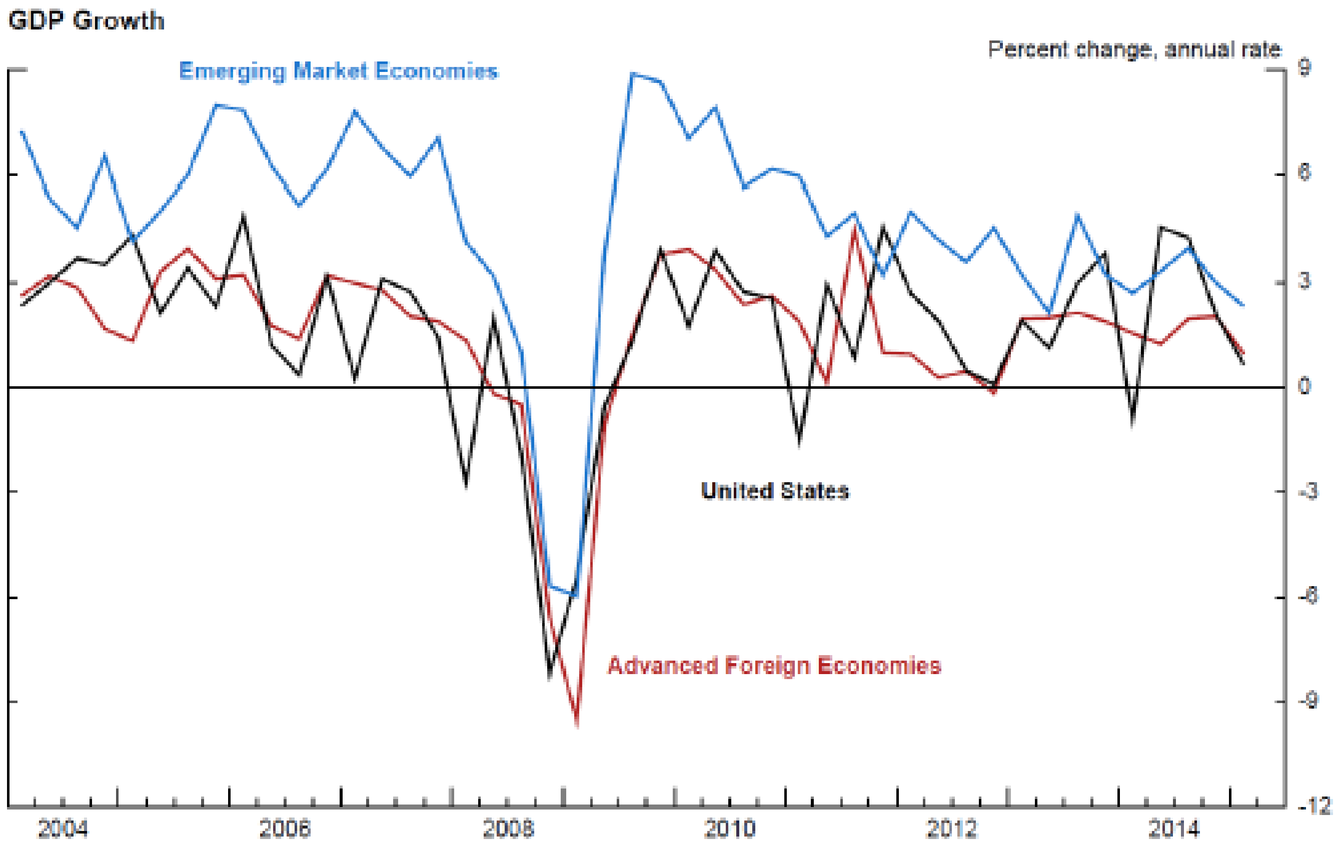
A scenario of monetary policy spillovers stabilizing the global economy

- Consider case where the US experiences a negative shock (such as a recession) while ROW is doing fine
  - If US monetary policy does not respond strongly to shock:
    - Contraction in US domestic demand lowers US imports, foreign GDP falls as well:
    - ROW is hit by US recession
  - If US monetary policy responds aggressively to shock
    - US GDP falls by less, US imports fall by less
    - Foreign GDP falls by less as well

In this case, Fed policy benefits world economy

- Here, spillovers from US monetary policy are stabilizing for global economy
- The same would hold true for a common shock that adversely affected many of the world's economies
  - In 2008 and 2009 the easing actions by Federal Reserve triggered beneficial spillovers that helped to stabilize the global economy
  - Positive spillovers were magnified by easing actions by other central banks

The Great Recession and world GDP growth



A scenario of monetary policy spillovers destabilizing the global economy

- When different economies are at different points in their business cycles, policy spillovers may not be stabilizing

- 2010 as a (possible) example
  - Weak recovery in US and other advanced economies
  - Solid rebound in Emerging Market Economies (EMEs)
  - EMEs may not have needed additional stimulus
  - US monetary stance eased in response to recession, possibly pushing foreign output and inflation further away from equilibrium

The verdict on monetary policy spillovers as an equilibrating mechanism

- As many times in economics, it’s a “on the one hand, on the other hand” story…

- Depending on the business-cycle positions, monetary policy spillovers may prove either stabilizing or destabilizing for the global economy

Hey, did you forget my Goldilocks slice?

- Well, maybe we should not overstate stabilizing/destabilizing role of spillovers
- Jury is still out on this, but let's just say that regardless of spillovers, autonomous policymakers can adjust policy to keep output and inflation near their targets
- Even if monetary policy spillovers push an economy away from equilibrium, independent monetary policy in a floating exchange rate regime can (help to) push the economy back toward equilibrium

To sum up: Three layers of spillover concepts

1. Transmission of policy shocks: estimates of net expenditure shifting and increasing effects

2. Welfare dimensions of spillovers: stabilizing/destabilizing effects depending on relative business cycle conditions

3. Endogenous policy response by ROW under floating rates: ROW not an innocent bystander, can react to spillovers and at least partly avoid importing inappropriate policy stance from abroad

Back to 2016-7: Normalization and policy divergence

- Concerns have been expressed about spillovers from current and future normalization of US monetary policy

- Considerations discussed before still apply:
  - Estimated effects of spillovers may not be particularly large
  - Normalization of US policy predicated on continued strength in US economy, which supports foreign activity
  - Foreign central banks concerned with tighter financial conditions can loosen their monetary stance
  - On the contrary, foreign policymakers concerned with a depreciating local currency can tighten their stance
    - … and happy birthday…

The other side of the coin: "Global developments" and US monetary policy

One year ago: the March 2016 FOMC statement:

FEDERAL RESERVE press release

Release Date: March 16, 2016

For release at 2:00 p.m. EDT

Information received since the Federal Open Market Committee met in January suggests that economic activity has been expanding at a moderate pace despite the global economic and financial developments of recent months. Household spending has been increasing at a moderate rate, and the housing sector has improved further; however, business fixed investment and net exports have been soft. A range of recent indicators, including strong job gains, points to additional strengthening of the labor market. Inflation picked up in recent months; however, it continued to run below the Committee's 2 percent longer-run objective, partly reflecting declines in energy prices and in prices of non-energy imports. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance, in recent months.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee currently expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace and labor market indicators will continue to strengthen. However, global economic and financial developments continue to pose risks. Inflation is expected to remain low in the near term, in part because of earlier declines in energy prices, but to rise to 2 percent over the medium term as the transitory effects of declines in energy and import prices dissipate and the labor market strengthens further. The Committee continues to monitor inflation developments closely.

Against this backdrop, the Committee decided to maintain the target range for the federal funds rate at 1/4 to 1/2 percent. The stance of monetary policy remains accommodative, thereby supporting

The ROW today (Q1 2017)

- Europe: GDP expanded 1.6% in Q4 2016, similar growth pace expected in 2017 supported by easy monetary policy, neutral fiscal policy, weak currency. Risks to outlook tilted to the downside reflecting political risk
- Japan: export-led growth trajectory but soft internal demand. Downside risks to inflation
- Canada: moderate consumption growth
- UK: uncertainties associated with Brexit
- China: moderate growth slowdown in 2017, official growth target lowered to 6.5% from 6.5-7% in 2016. Large net private outflows in Q4
- Mexico: deteriorating confidence in Q1 despite strong Q4 reading
- Brazil: central bank easing, higher commodity prices, lower inflation all support a return to positive growth

Global developments are less important today as ROW is doing better

Latest FOMC statement (March 2017):

Press Release

March 15, 2017

Federal Reserve issues FOMC statement

For release at 2:00 p.m. EDT

Share

Information received since the Federal Open Market Committee met in February indicates that the labor market has continued to strengthen and that economic activity has continued to expand at a moderate pace. Job gains remained solid and the unemployment rate was little changed in recent months. Household spending has continued to rise moderately while business fixed investment appears to have firmed somewhat. Inflation has increased in recent quarters, moving close to the Committee's 2 percent longer-run objective; excluding energy and food prices, inflation was little changed and continued to run somewhat below 2 percent. Market-based measures of inflation compensation remain low; survey-based measures of longer-term inflation expectations are little changed, on balance.

Consistent with its statutory mandate, the Committee seeks to foster maximum employment and price stability. The Committee expects that, with gradual adjustments in the stance of monetary policy, economic activity will expand at a moderate pace, labor market conditions will strengthen somewhat further, and inflation will stabilize around 2 percent over the medium term. Near-term risks to the economic outlook appear roughly balanced. The Committee continues to closely monitor inflation indicators and global economic and financial developments.