



International Currency Markets

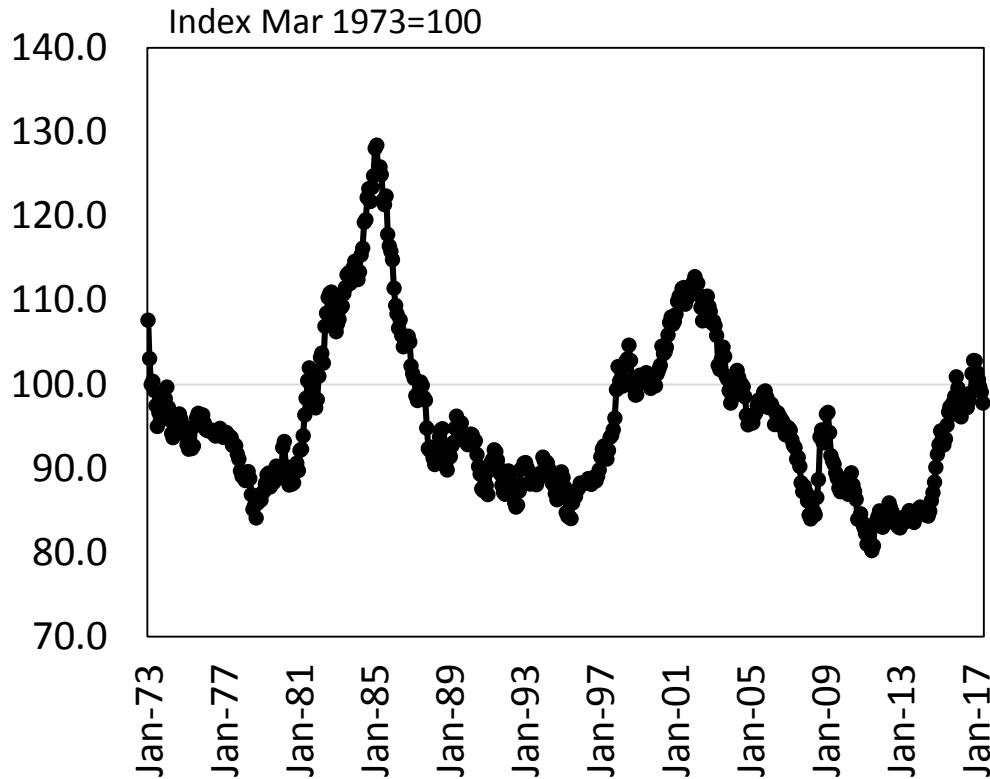
Jason Henderson

Director of Purdue Extension
Associate Dean College of Agriculture
www.extension.purdue.edu

July 2017

The U.S. Dollar Moves Due to ...

Real Trade Weighted U.S. Dollar Index:
Broad



Trade

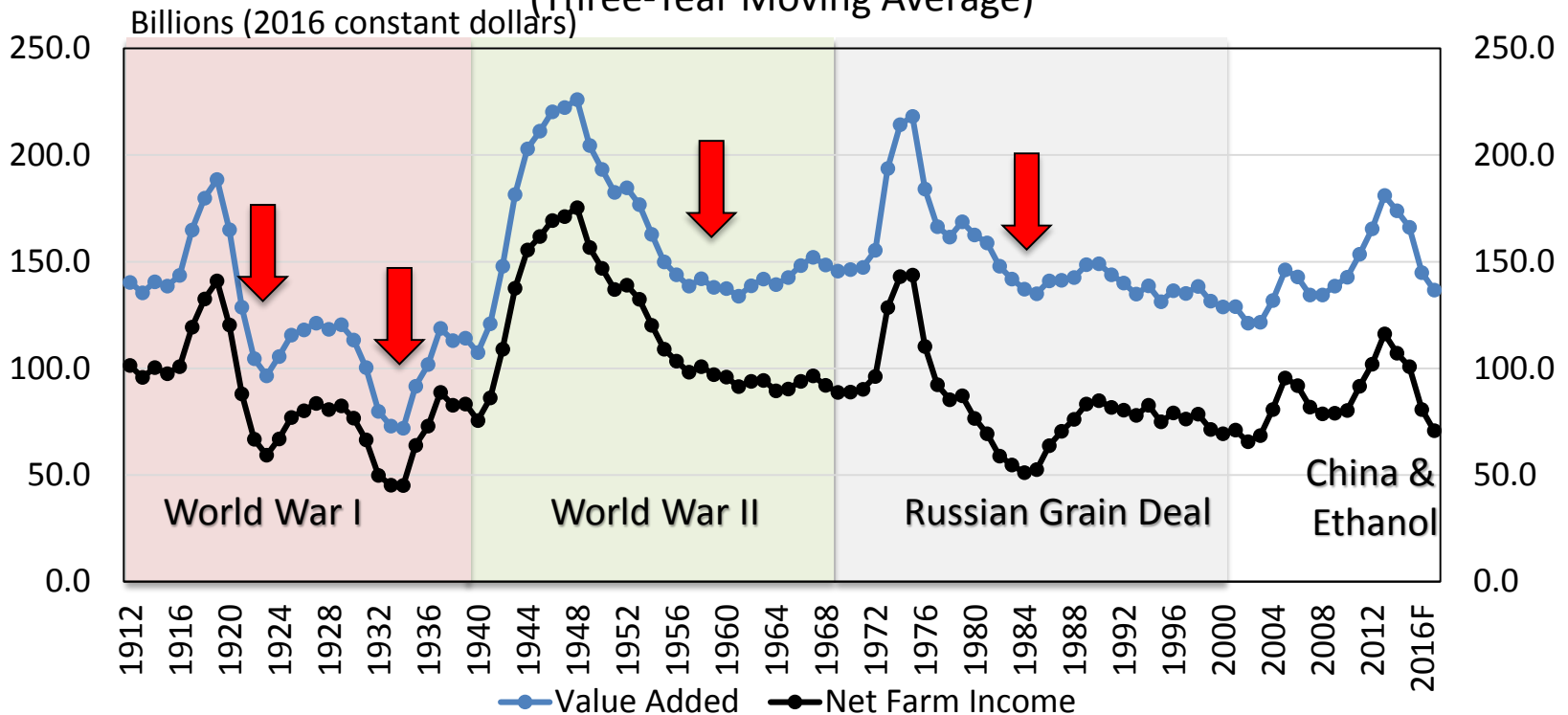
Financial Flows

Fear

Source: Board of Governors Federal Reserve System

International Trade is a Key Driver of Agricultural Cycles

U.S. Agriculture Value-Added and Net Farm Income
(Three-Year Moving Average)



Calculations based on USDA data deflated with Consumer Price Index

Global Trade and Policy Shapes Farm Incomes

1910s/1920s U.S. Foodstuff Exports

1910	\$ 9.5 billion
1920	\$24.3 billion
1936	\$ 3.5 billion

Note: Export value data presented in 2016 constant dollars
Source: Census Bureau, Historical Statistics of the United States

1940s/1950s U.S. Ag Exports

1940	\$ 8.9 billion
1947	\$ 42.4 billion
1953	\$ 25.5 billion

Note: Export value data presented in 2016 constant dollars
Source: USDA

1970s/1980s U.S. Ag Exports

1972	\$ 53.9 billion
1981	\$114.1 billion
1986	\$ 57.3 billion

Note: Export value data presented in 2016 constant dollars
Source: USDA

2000s/2010s U.S. Ag Exports

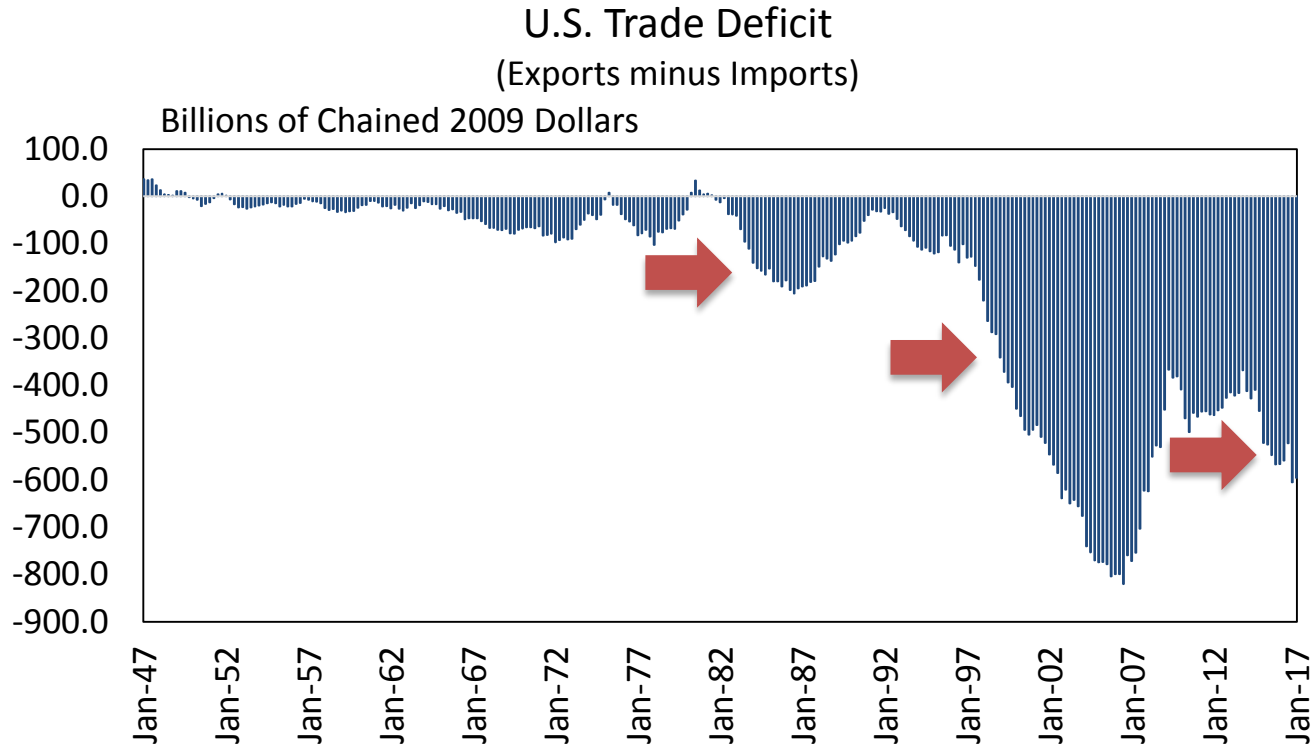
2005	\$ 77.5 billion
2014	\$151.8 billion
2016	\$133.7 billion

Note: Export value data presented in 2016 constant dollars
Source: USDA

Trade

U.S. Dollar Fundamentals: Trade

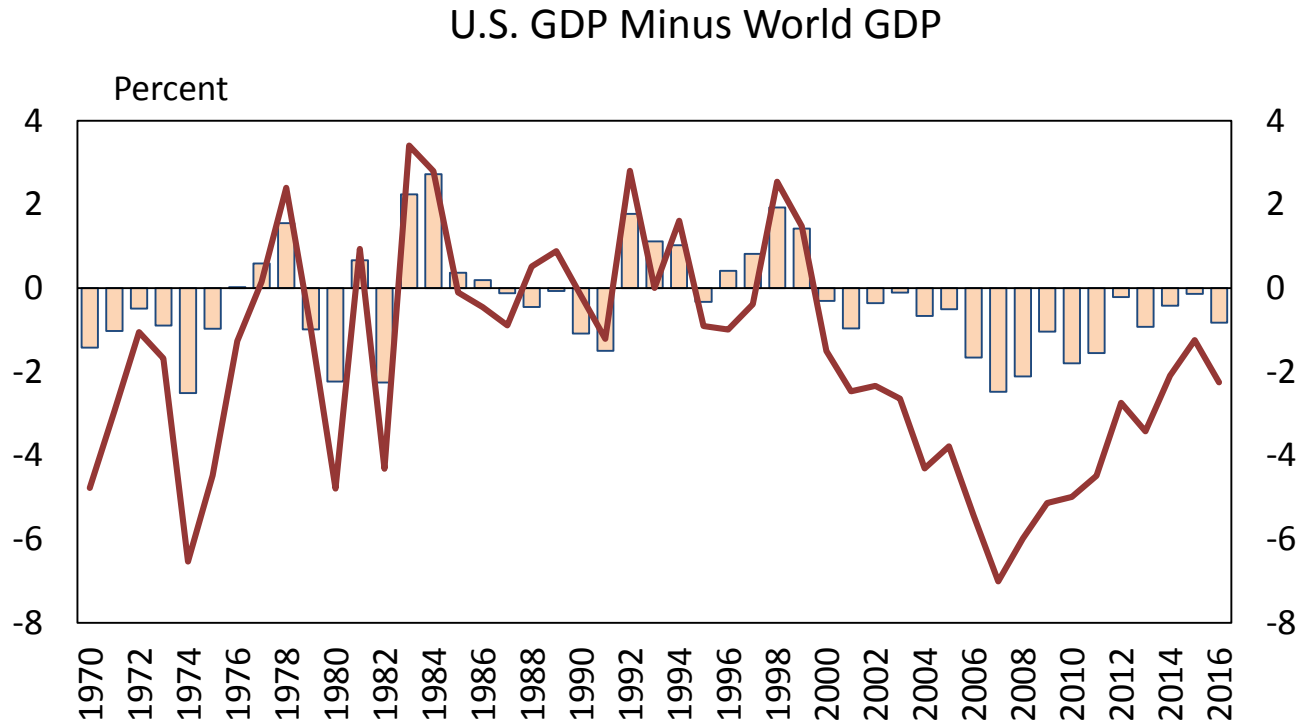
- Strong demand for goods and services supports a strong dollar



Source: U.S. Bureau of Economic Analysis

U.S. Dollar Fundamentals: Economic Growth

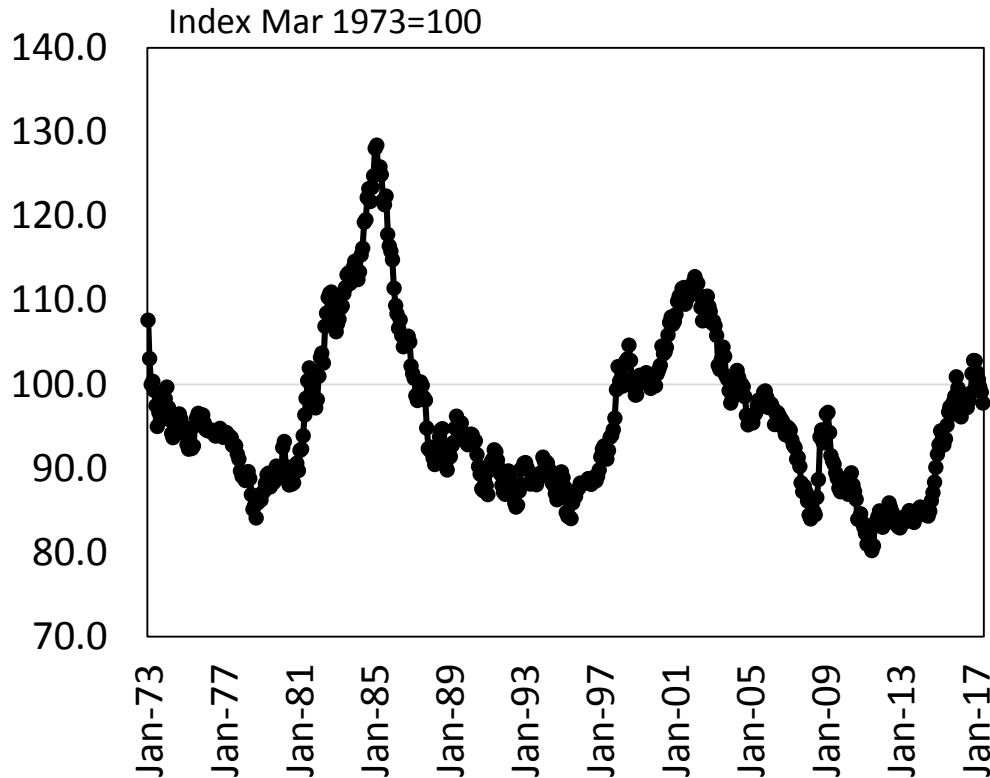
- Stronger U.S. economy supports a strong dollar



Source: World Bank

The U.S. Dollar Moves Due to ... Financial Flows

Real Trade Weighted U.S. Dollar Index:
Broad



1981 to 1985:
*High US Interest Rates
Stronger Economy*

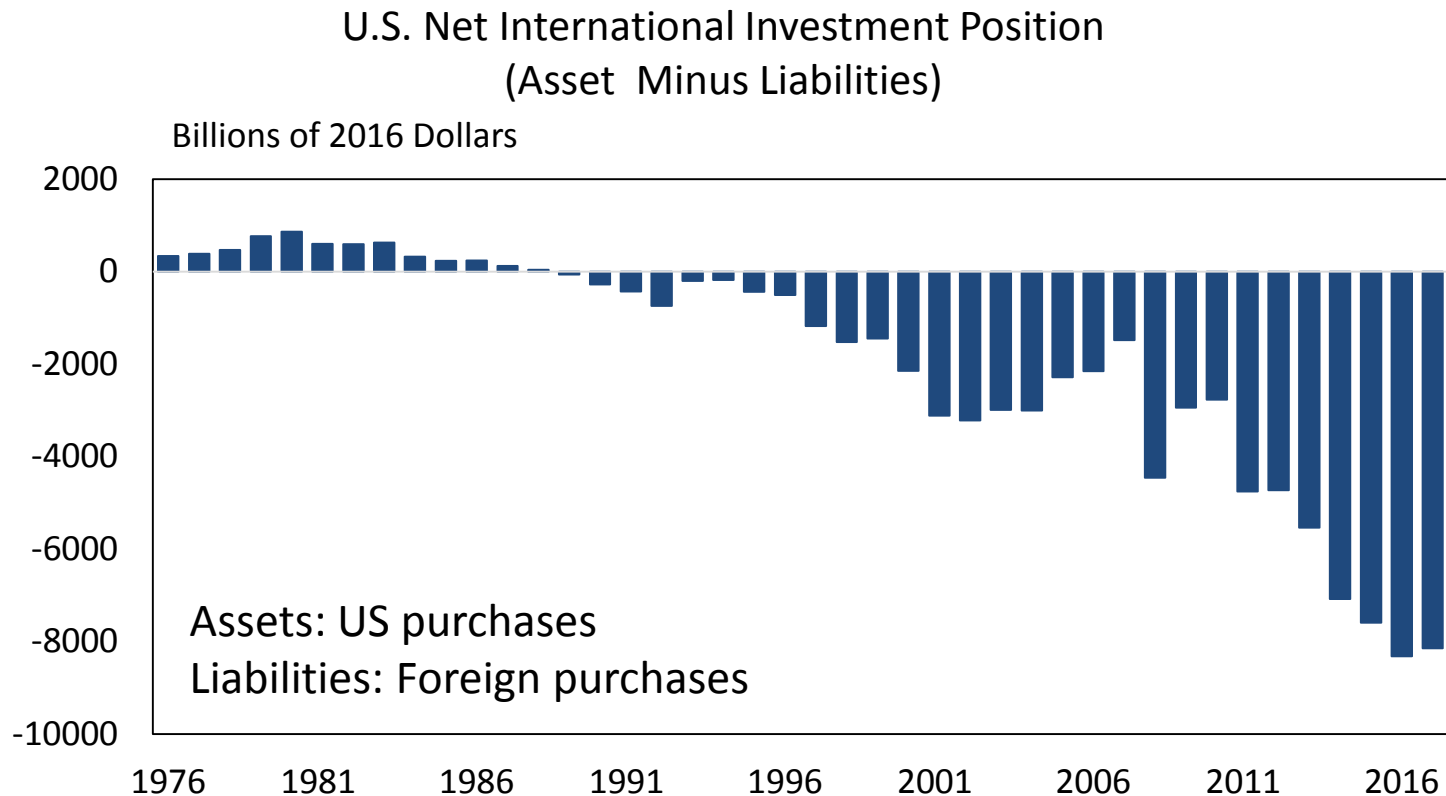
1997 to 2001:
*Asian Financial Crisis
Stronger Economy*

2015 to 2017:
*Higher Interest Rates
Stronger economy*

Source: Board of Governors Federal Reserve System

Financial Flows

Financial Flows are More Dominant than Ever



Source: U.S. Bureau of Economic Analysis

Financial Flows are More Dominant than Ever

Net Exports of Goods and Services
(Billions of dollars)

	1976-1980	1990-1994	2012-2016
Exports	315.3	730.8	2,072.4
Imports	(367.2)	(797.6)	(2,548.2)
Net Exports	(51.9)	(66.8)	(476.1)

Source: U.S. Bureau of Economic Analysis

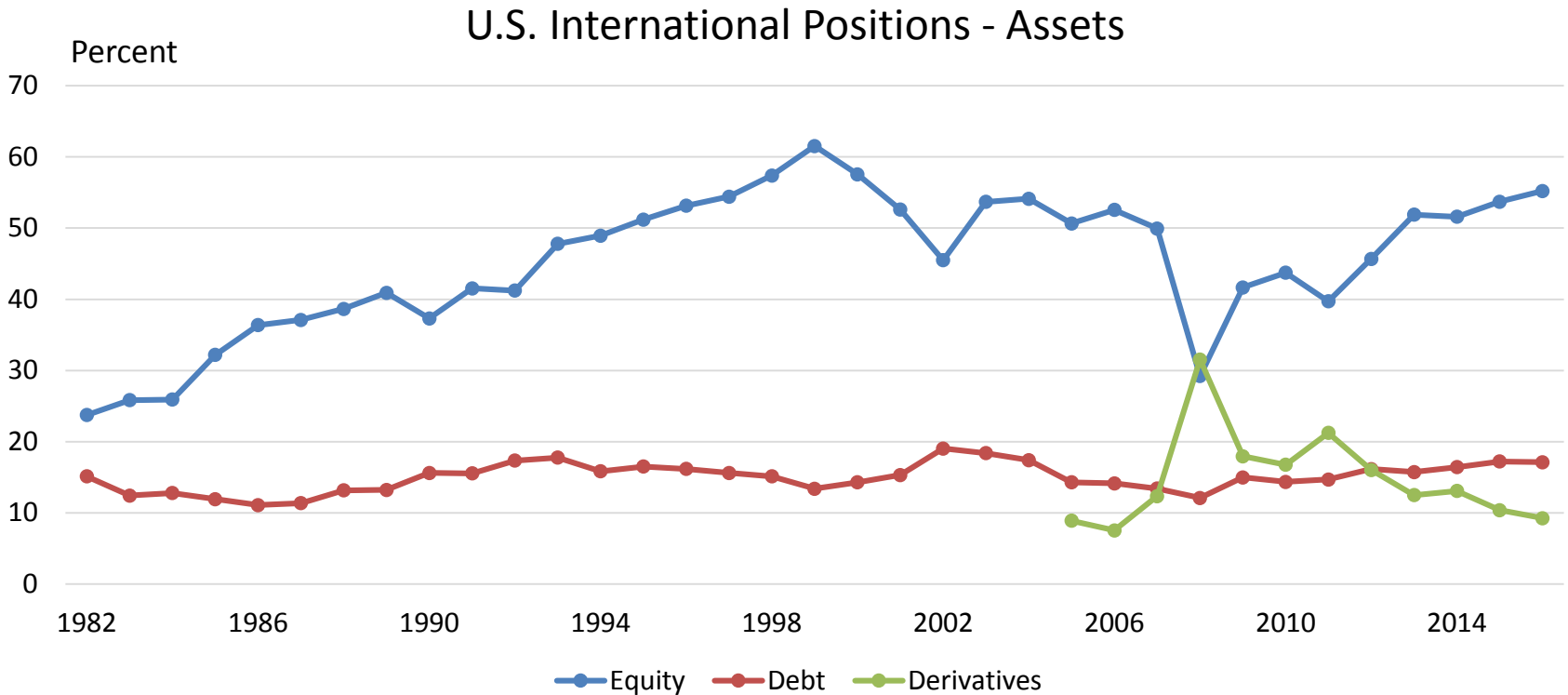
Net International Investment Position
(Billions of dollars)

	1976 - 1980	1990-1994	2012-2016
Assets	1,567	4,886	24,228
Liabilities	(1,227)	(5,250)	30,877
Net Position	340	(275)	(6,649)

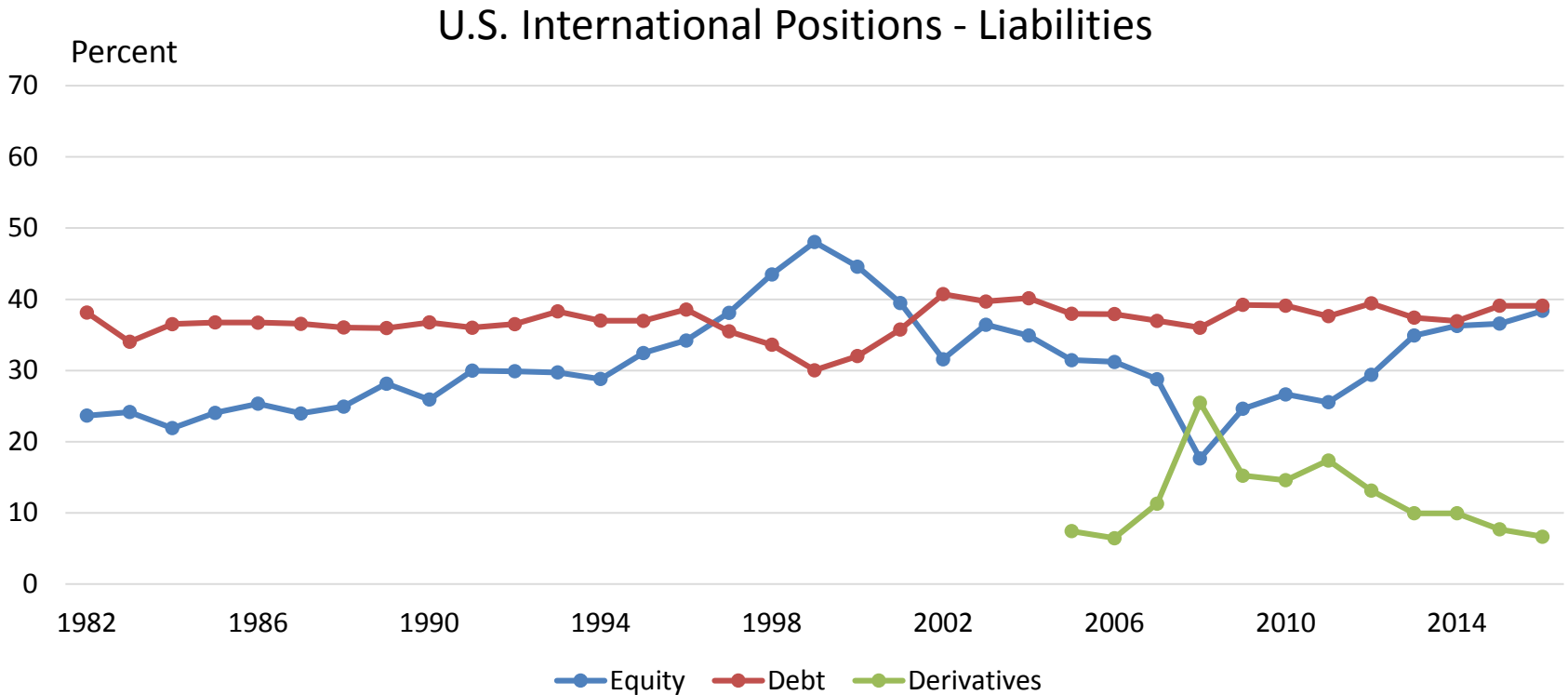
Source: U.S. Bureau of Economic Analysis

Financial Flow are 10 Fold Export Activity

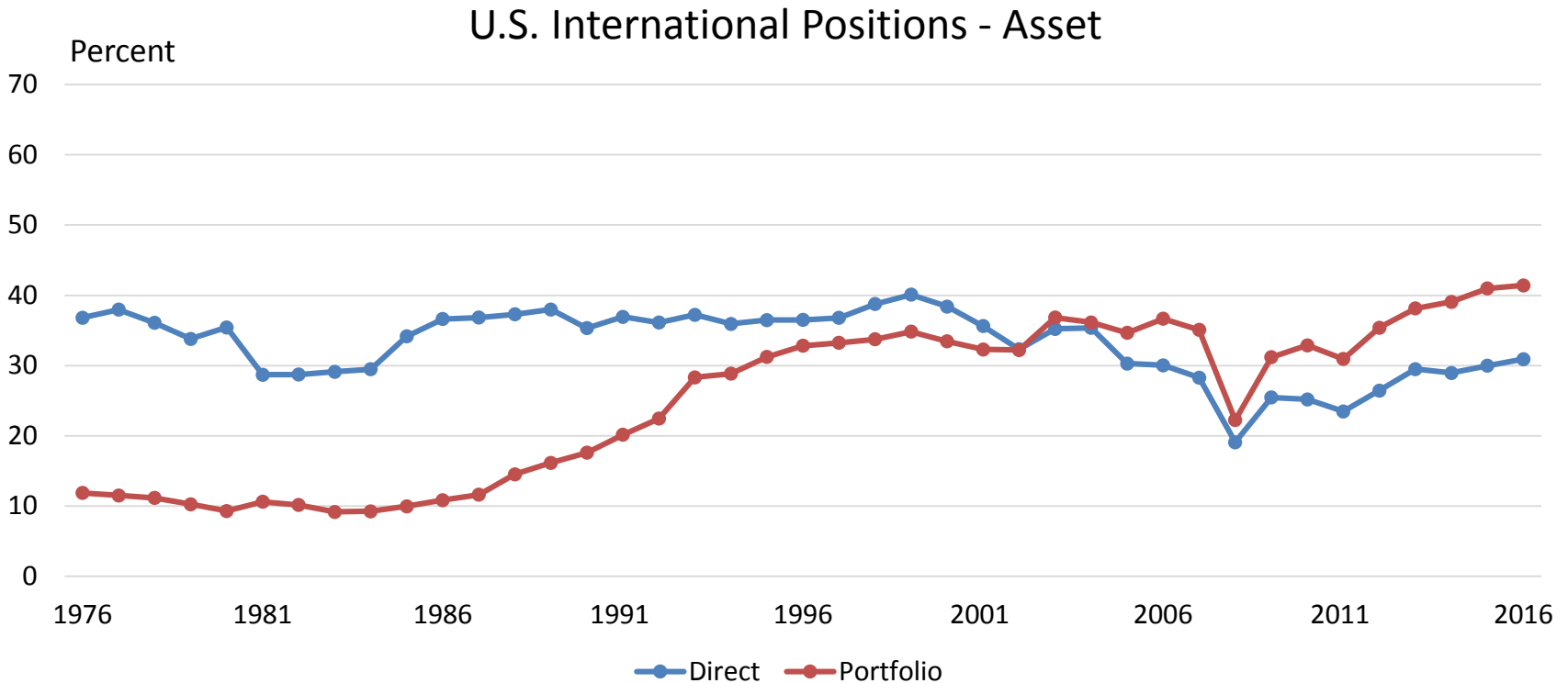
Financial Flows (Equity, Debt, & Derivatives) Shifted with Financial Conditions



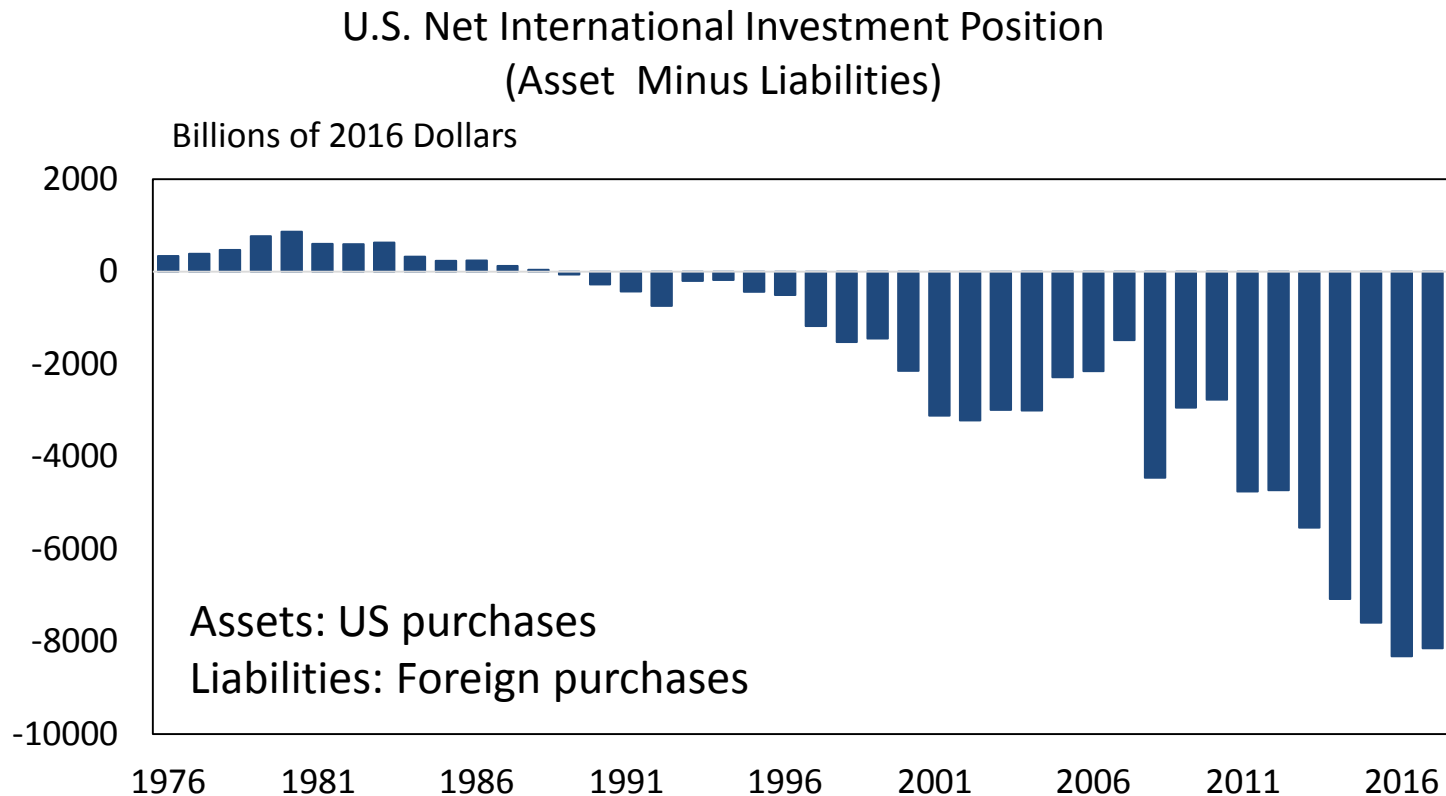
Financial Flows (Equity, Debt, & Derivatives) Shifted with Financial Conditions



Financial Flows (Equity, Debt, & Derivatives) Shifted with Financial Conditions



Is This Good for the U.S. Economy?

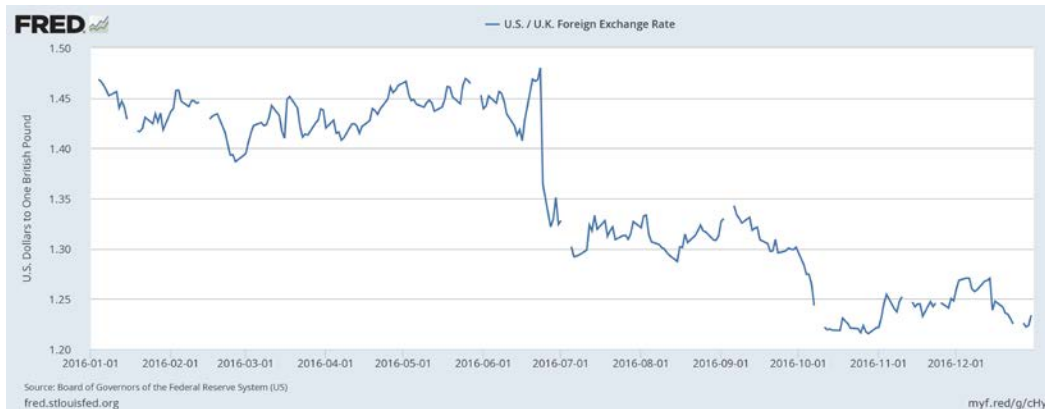


Source: U.S. Bureau of Economic Analysis

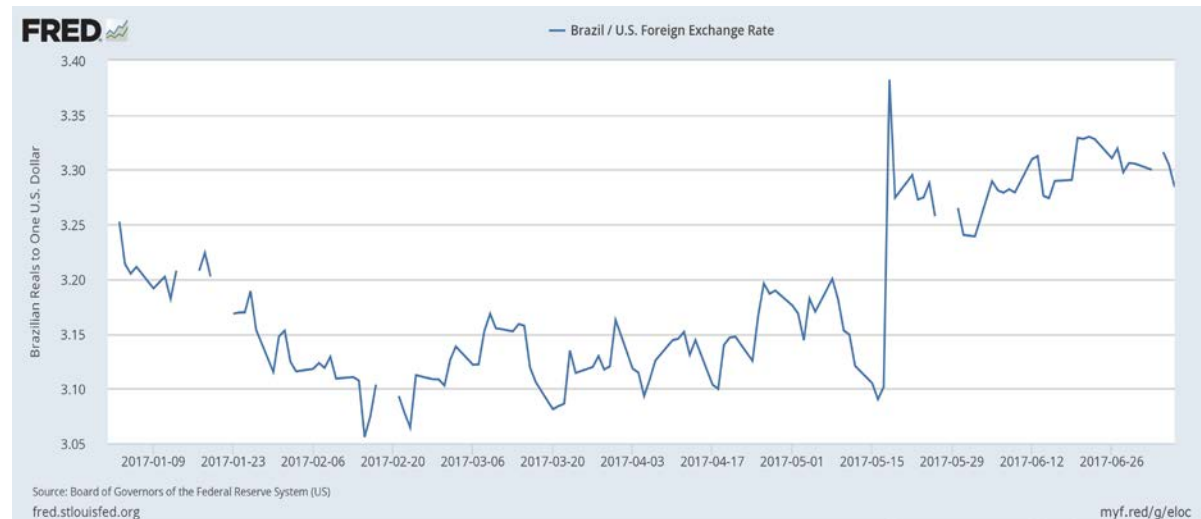
Fear and Uncertainty

Exchange Rates Move with Fear

Brexit: 2017

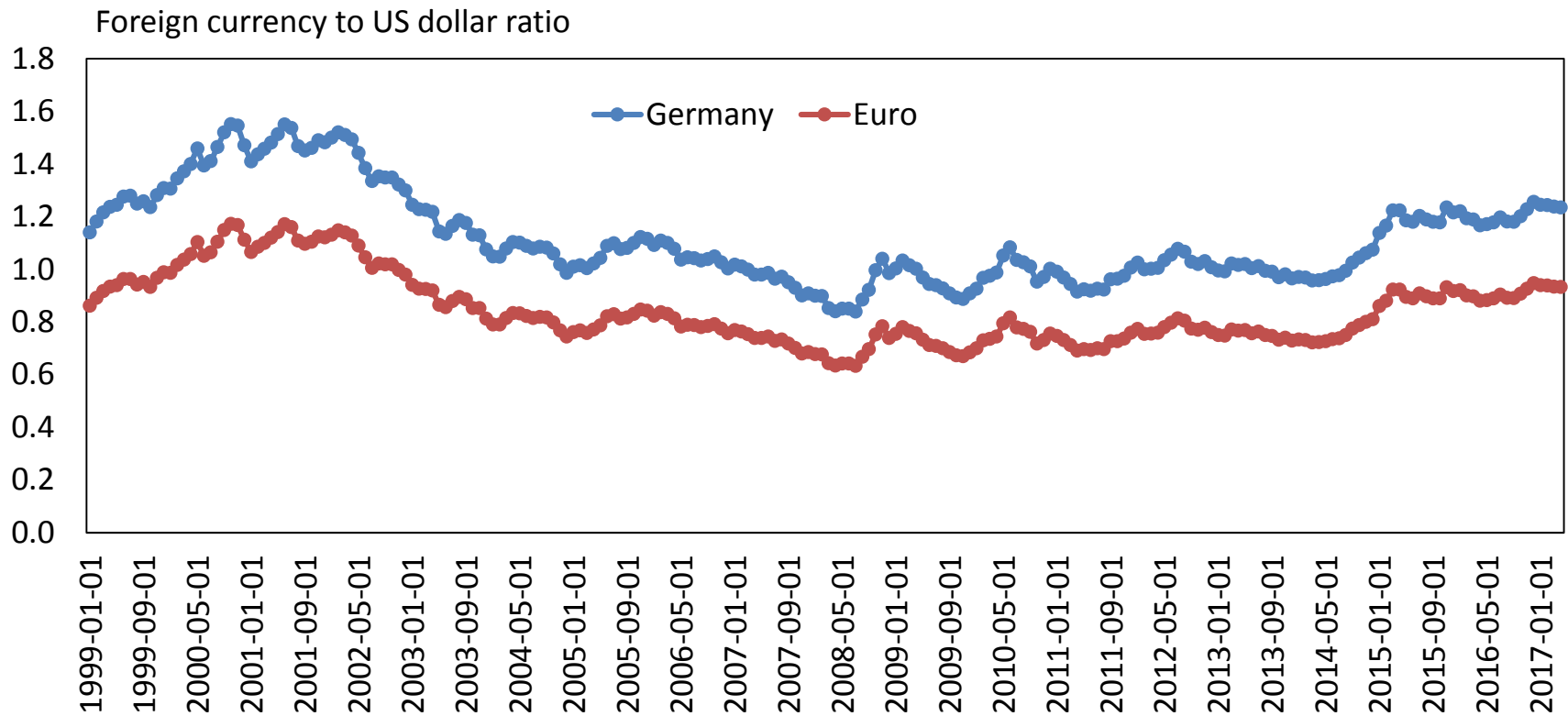


Brazil: 2017



The Euro and Germany

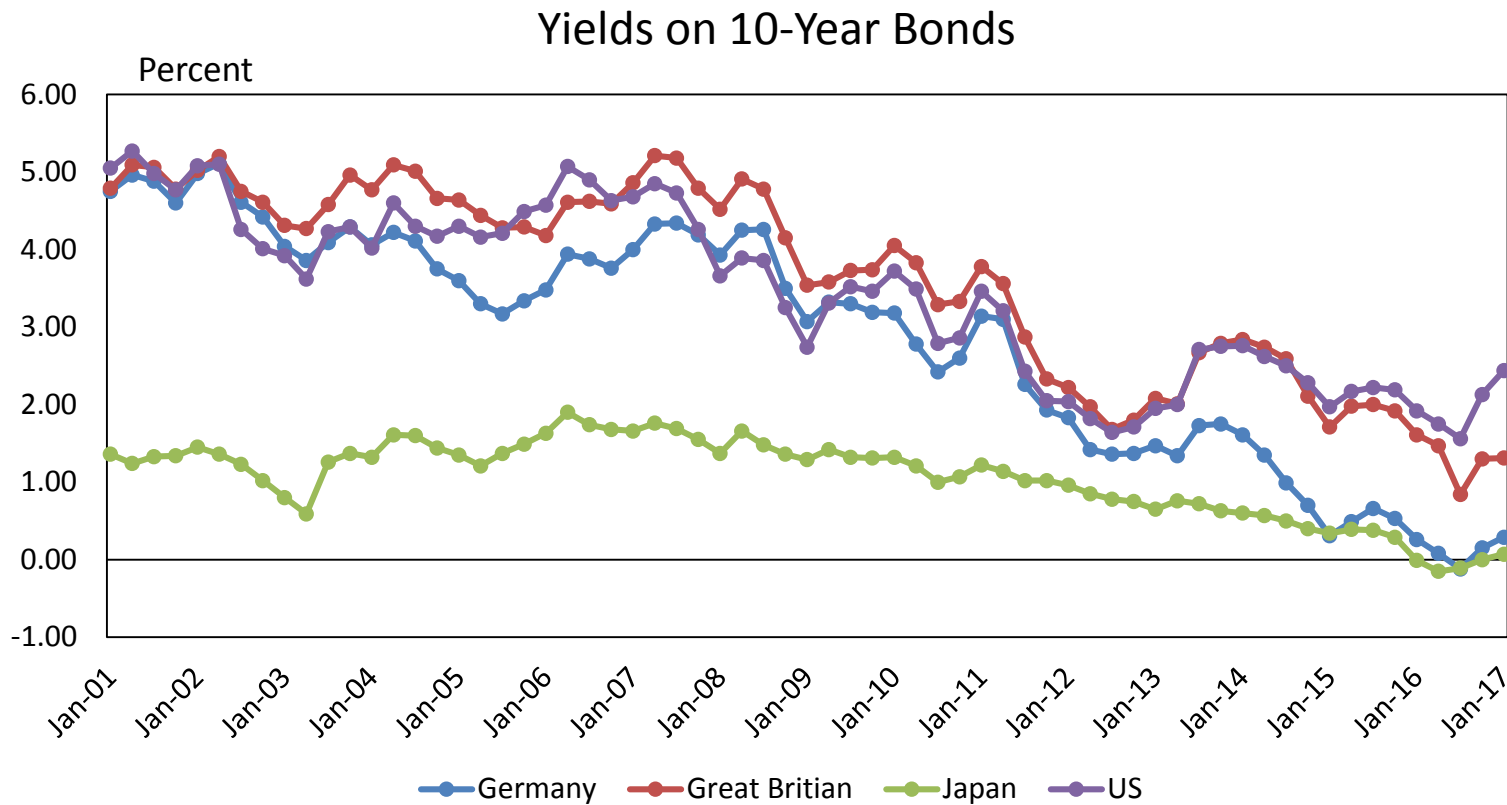
Euro and Germany Exchange Rate with US



Source: Board of Governors Federal Reserve System

Interest Rates and Exchange Rates

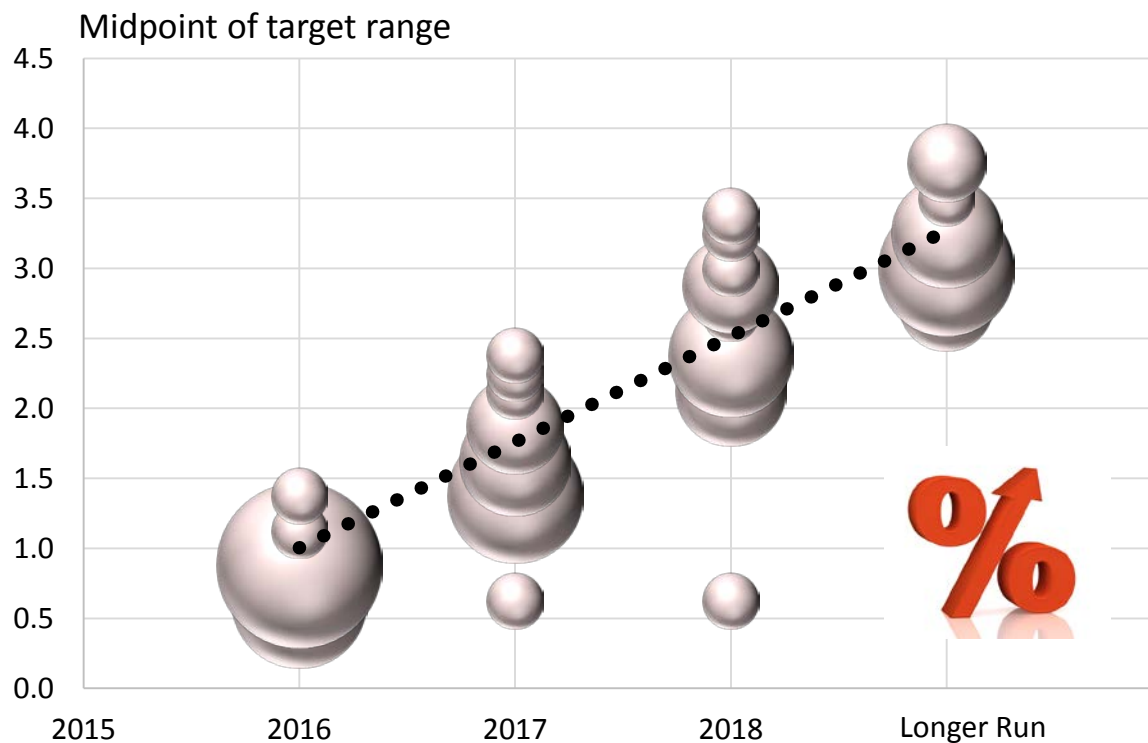
Interest Rate Movements Drive Financial Flows



Source: Board of Governors Federal Reserve System

How will the Fed Normalize Rates?

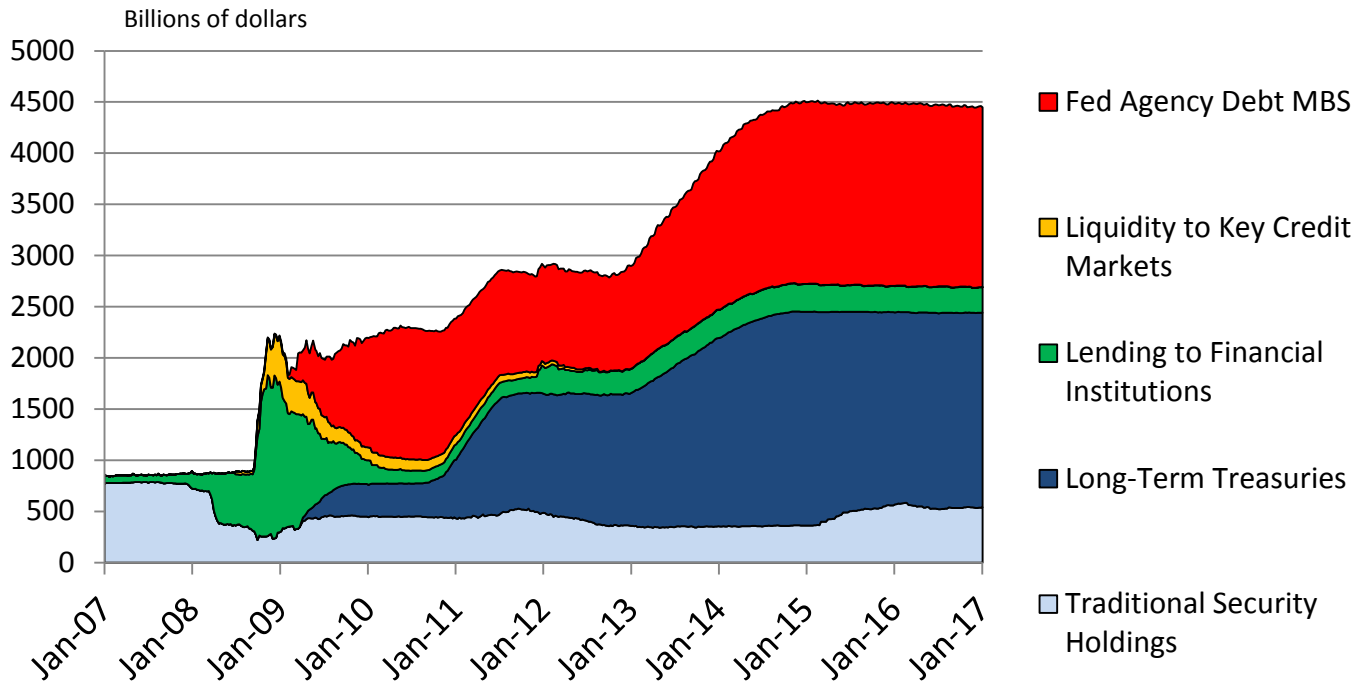
Fed Funds Rates



Source: Federal Reserve Board of Governors

The Next Step in Normalization: Shrinking the Balance Sheet

Federal Reserve Balance Sheet: Assets



Source: Federal Reserve Bank of Cleveland

What Drives Interest Rates Higher?



Too much money
chasing
too few goods

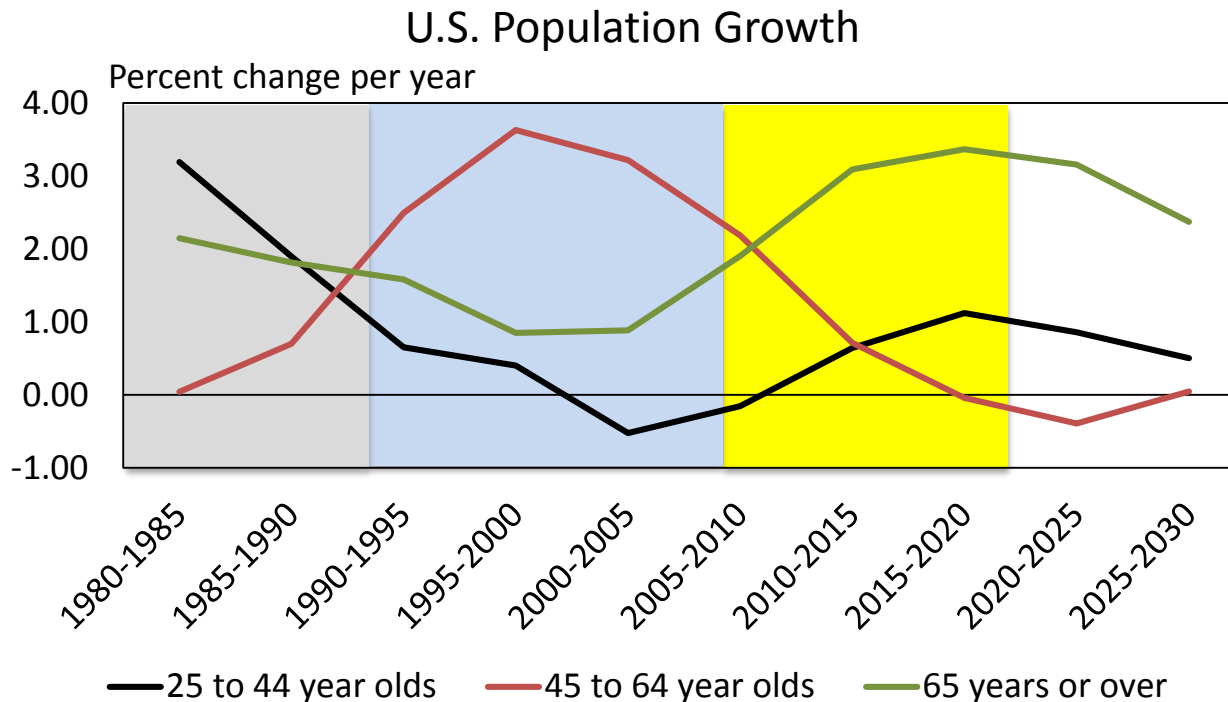
The U.S. is Expected to Lead the Rebound

Area	2016	2017	2018
World	3.1	3.4	3.6
Advanced	1.6	1.9	2.0
US	1.6	2.3	2.5
Euro Area	1.7	1.6	1.6
EMDE	4.1	4.5	4.8
China	6.7	6.5	6.0
India	6.6	7.2	7.7
Russia	-0.6	1.1	1.2
Latin America	-0.7	1.2	2.1

Source: International Monetary Fund, January 2017

Will Demographics be the Trigger?

- Millennial spending: Homes, cars, families ...
- Boomer spending: Retirement, health care ...



Calculations based on U.S. Census data

Slower Labor Force Growth is Expected to Trim Potential GDP

US Potential GDP
(Average Annual Growth)

	1950 - 1973	1974- 1981	1982- 1990	1991- 2001	2002- 2007	2008- 2014	2015- 2025
Potential GDP	4.0	3.3	3.2	3.2	2.8	1.4	1.8
Potential Labor Force	1.6	2.5	1.6	1.3	0.9	0.5	0.5
Potential Labor Force Productivity	2.4	0.8	1.6	1.9	1.9	0.9	1.3

Source: Congressional Budget Office

Lower Potential GDP Suggests Inflation Rises at Lower Growth Rates.

Policy Implications

Ag Export Destinations are Different than Manufactured Export Destinations

U.S. Ag Exports
(2012-2016)

Country	Share
(1) China	16.7%
(2) Canada	15.0%
(3) Mexico	13.1%
(4) Japan	8.7%
(5) Korea, South	4.3%

Source: USDA

U.S. Manufactured Exports
(2012-2016)

Country	Share
(1) Canada	19.3%
(2) Mexico	15.5%
(3) China	6.4%
(4) Japan	4.1%
(5) United Kingdom	3.4%

Source: International Trade Admin.

IN Manufactured Exports
(2012-2016)

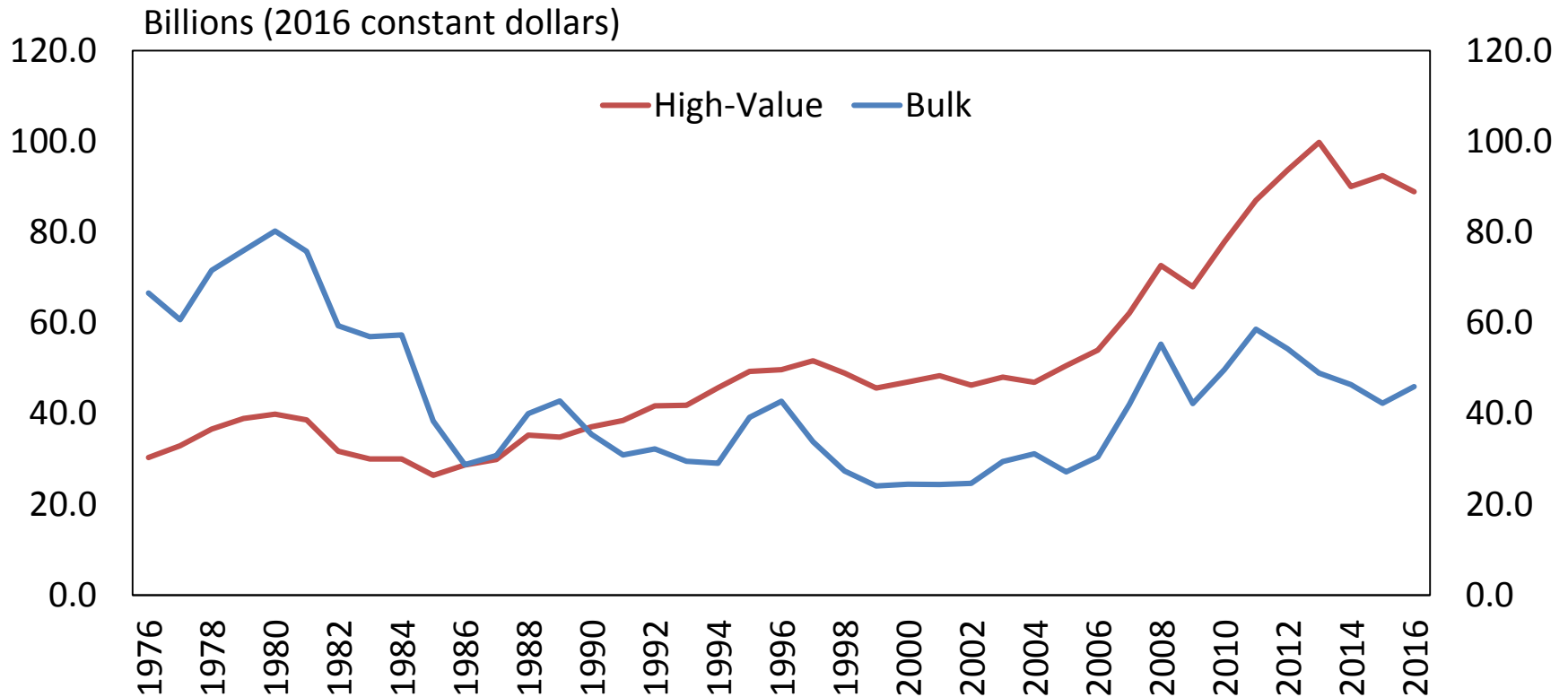
Country	Share
(1) Canada	33.7%
(2) Mexico	13.4%
(3) Germany	5.2%
(4) Japan	5.0%
(5) France	4.2%

Source: International Trade Admin.

Will Trade Policy Reflect Ag Interests?

Are Bulk or Consumer Exports the Future?

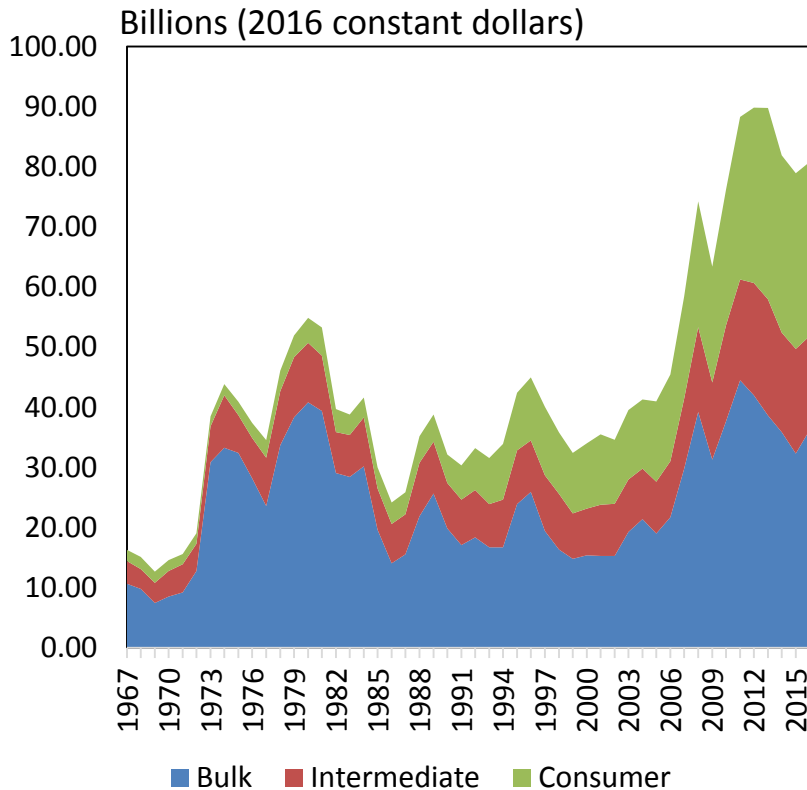
U.S. Agricultural Exports



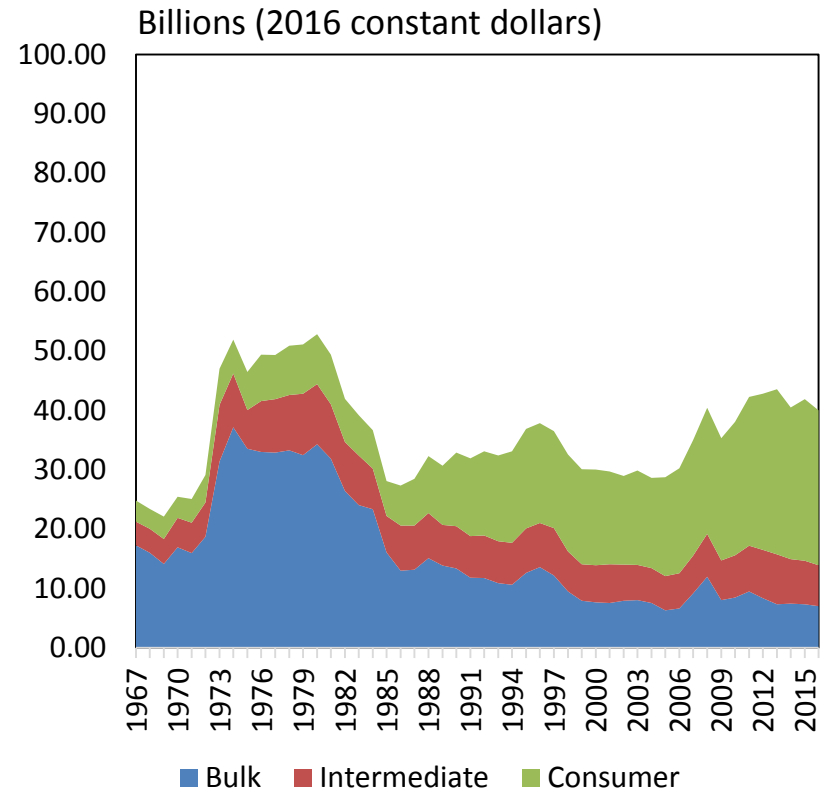
Calculations based on USDA data deflated with Consumer Price Index

Are Bulk or Consumer Exports the Future?

Exports to Developing Countries



Exports to Developed Countries



Calculations based on USDA data deflated with Consumer Price Index

Policy Implications for Agriculture: When Do Multinational Companies Buy US?

Strong Dollar



Weak Dollar



When is U.S. currency strong?

When do multinationals want to repatriate funds?

When will the Exchange Rate Environment Change?

- China: a Consumer or a Producer Driven Economy?

Consumers



Strong Currency

Producers



Weak Currency

- What about other developing nations?

Conclusions

- Currency markets and trade are important for ag
- Financial flows and fear/uncertainty are more important drivers of currency markets
- Strong economic growth, high returns, and stability drive a strong dollar.
- A strong dollar might be with us for some time.

