

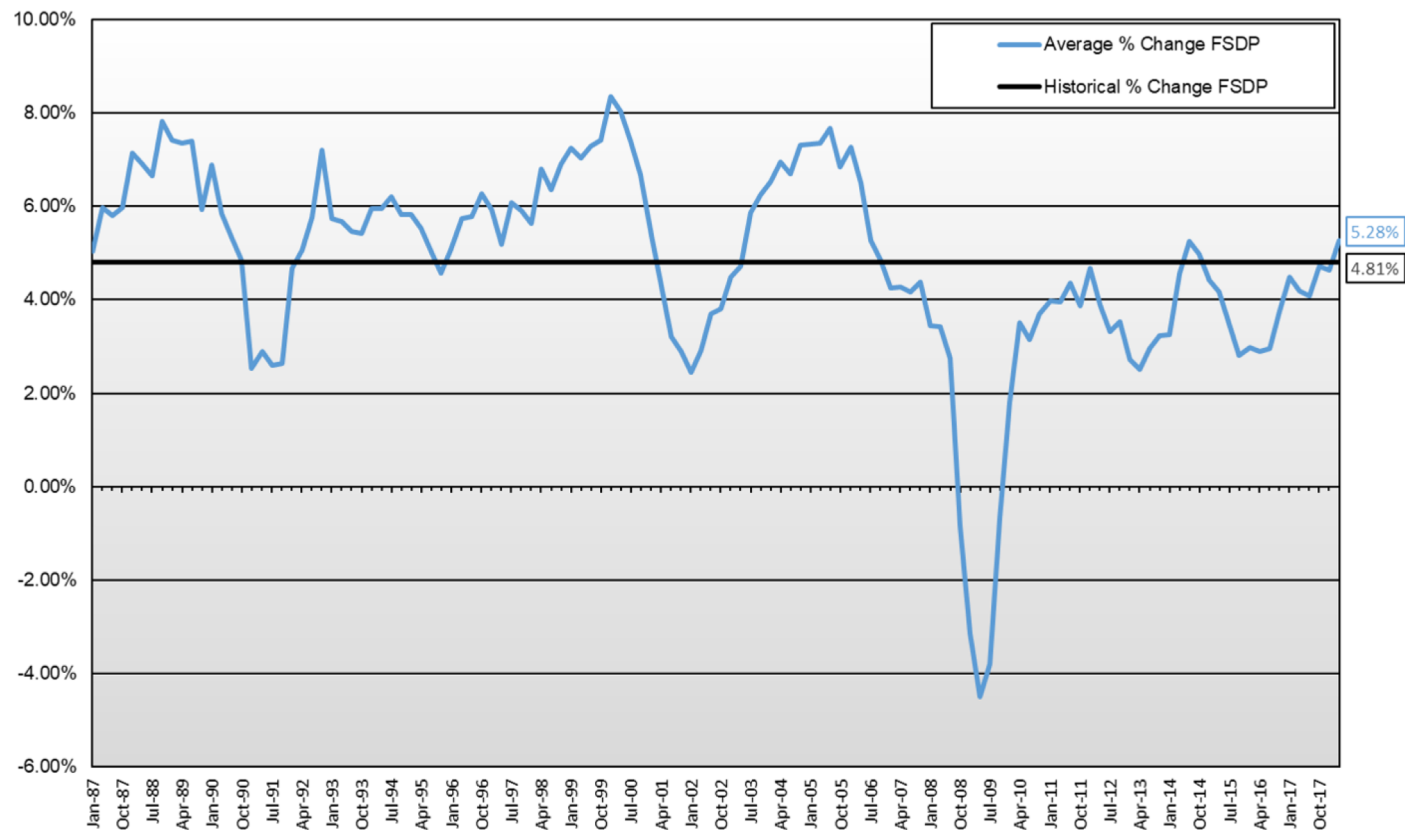
The Steve H. Hanke Lecture on Money, Banking, and Markets

Accompanying Figures and Charts

by Prof. Dr. Drs. h.c. Steve H. Hanke,
Professor of Applied Economics at The Johns Hopkins University
and the *Gottfried von Haberler Professor* at the European Center of Austrian Economics Foundation

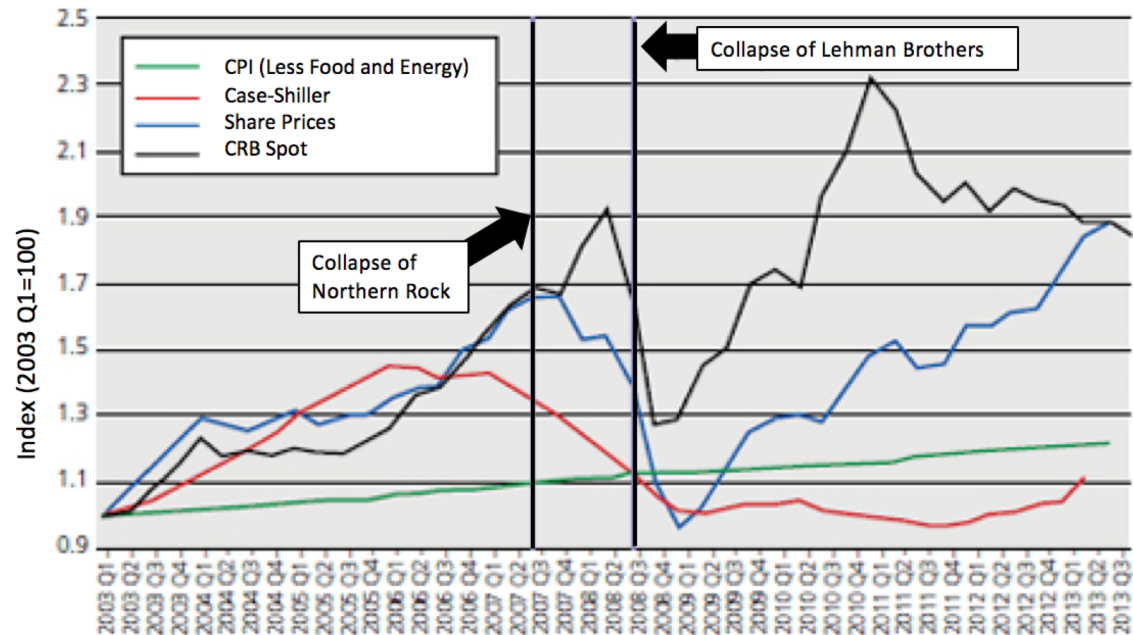
Email: Hanke@jhu.edu | Office: (410) 516-7183 | Twitter: [@Steve_Hanke](https://twitter.com/Steve_Hanke)

Change in Final Sales to Domestic Purchasers - US



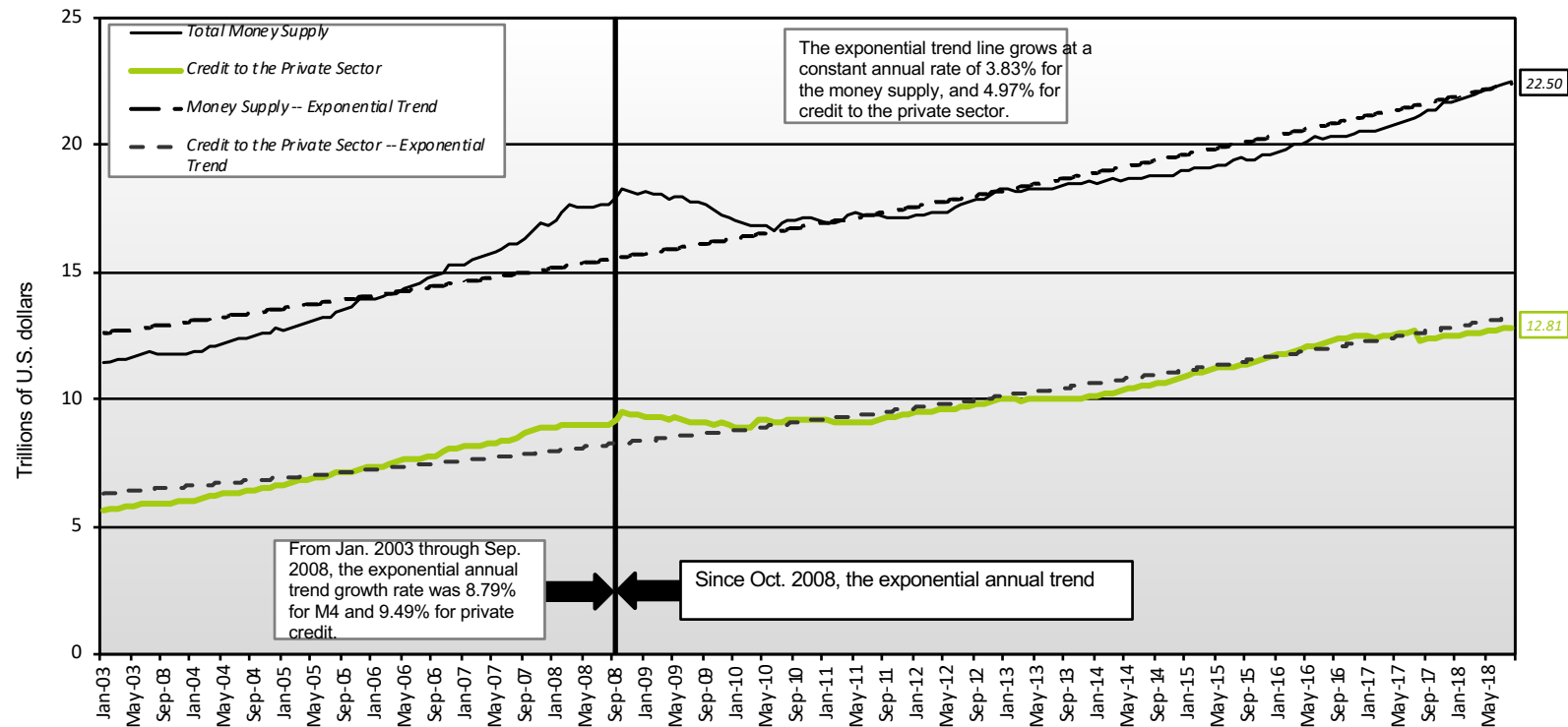
Source: FRED Economic Data - GDP/GNP, Imports, Exports data. Calculations by Prof. Steve Hanke, The Johns Hopkins University
 FSDP is calculated through the following formula: $FSDP = GDP + Imports - Exports - \Delta Inventories$.

Relative Prices



Sources: International Monetary Fund, International Financial Statistics; Bureau of Economic Analysis, U.S. Department of Commerce; Standard and Poor's; Bloomberg and calculations by Professor Steve. H. Hanke, The Johns Hopkins University
 Last Data entry: 2013 Q2 Case-Shiller, 2013 Q3 CPI Less Food and Energy, 2013 Q3 Share Prices, 2013 Q4 CRB Spot.

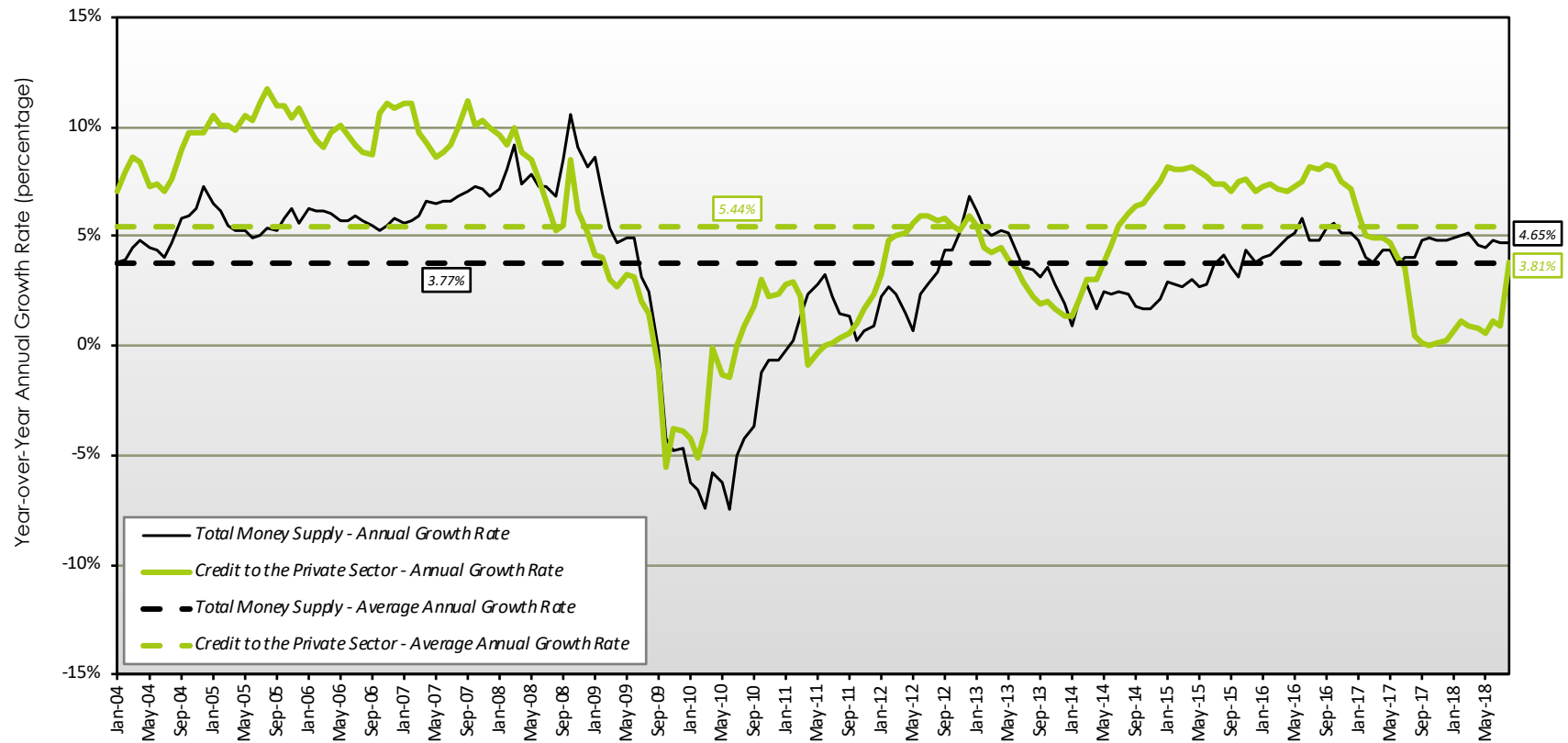
United States Money Supply (M4) & Private Credit



Sources: Center for Financial Stability, Federal Reserve Economic Data and calculations by Prof. Steve H. Hanke, The Johns Hopkins University.

Note: The trend line for the money supply and private credit are calculated over the period from Jan-03 through Aug-18. The trend line used is an exponential trend line -- an exponential trend line has a constant growth rate over time in percentage terms in contrast to a linear trend line, which has constant incremental change over time in nominal terms. For example, this exponential trend line for private credit grows at 4.88% per year but a linear trend line would grow by 0.04 trillion U.S. dollars per year.

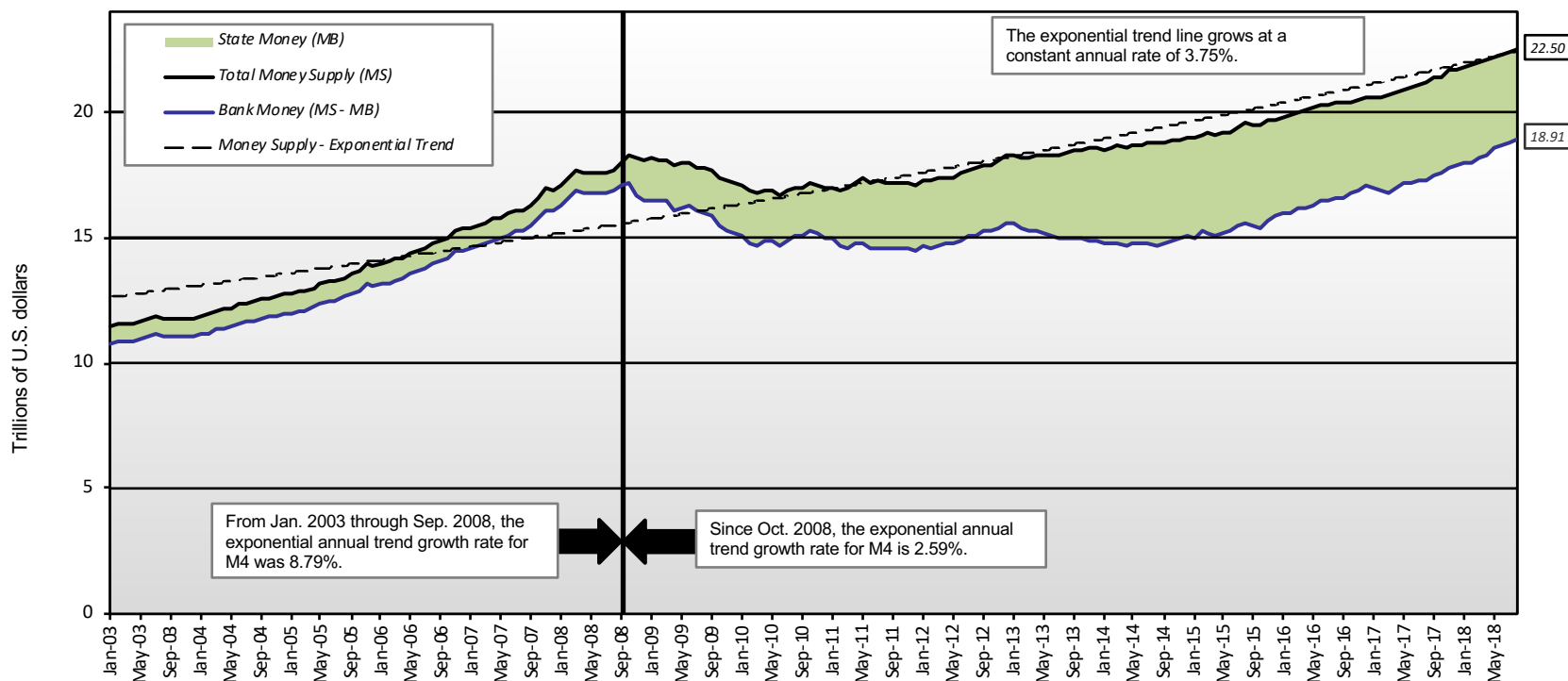
United States Money Supply (M4) & Private Credit



Sources: Center for Financial Stability, Federal Reserve Economic Data and calculations by Prof. Steve H. Hanke, The Johns Hopkins University.

Note: The averages for the money supply and private credit are calculated over the period from Jan-04 through Aug-18.

United States Money Supply (M4)



Sources: Center for Financial Stability, Federal Reserve Economic Data and calculations by Prof. Steve H. Hanke, The Johns Hopkins University.

Note: The trend line for the money supply is calculated over the period from Jan-03 through Aug-18. The trend line used is an exponential trend line -- an exponential trend line has a constant growth rate over time in percentage terms in contrast to a linear trend line, which has constant incremental change over time in nominal terms. For example, this exponential trend line grows at 3.75% per year but a linear trend line would grow by 0.60 trillion U.S. dollars per year.

The Crisis of 2008, A Supply-Side Dashboard

	Euro/USD (\$ per €)	USD/Euro (€ per \$)	Price of Gold (\$/oz)	Price of Oil (\$/bbl)	CPI Year/Year (%)
Jul-08	1.5758	0.6346	\$925.40	\$133.37	5.6%
Nov-08	1.2744	0.7847	\$723.85	\$57.31	1.1%
% Change	-19.13%	+23.66%	-21.78%	-57.03%	
Change in % Points					-4.5%pts
	Sharp Euro Depreciation	Sharp USD Appreciation	Sharp Price Decline	Sharp Price Decline	Sharp CPI Decline

Sources: U.S. Bureau of Labor Statistics, Federal Reserve (FRED), and Bloomberg.

Prepared by Prof. Steve H. Hanke, The Johns Hopkins University.

Natural Corporate Advocates for Stability

Foreign Exchange Exposure and Treatment: 100 Largest U.S. Companies

Group	1	2	3
Company Notes Exposure to Foreign Exchange Risk	Yes	Yes	Yes
Company Hedges Foreign Exchange Risk	Yes	No	Yes
Company Quantifies Foreign Exchange Losses	Yes	Yes	No
Total Number of Companies	77	3	20

Sources: Company Annual Reports (2016)

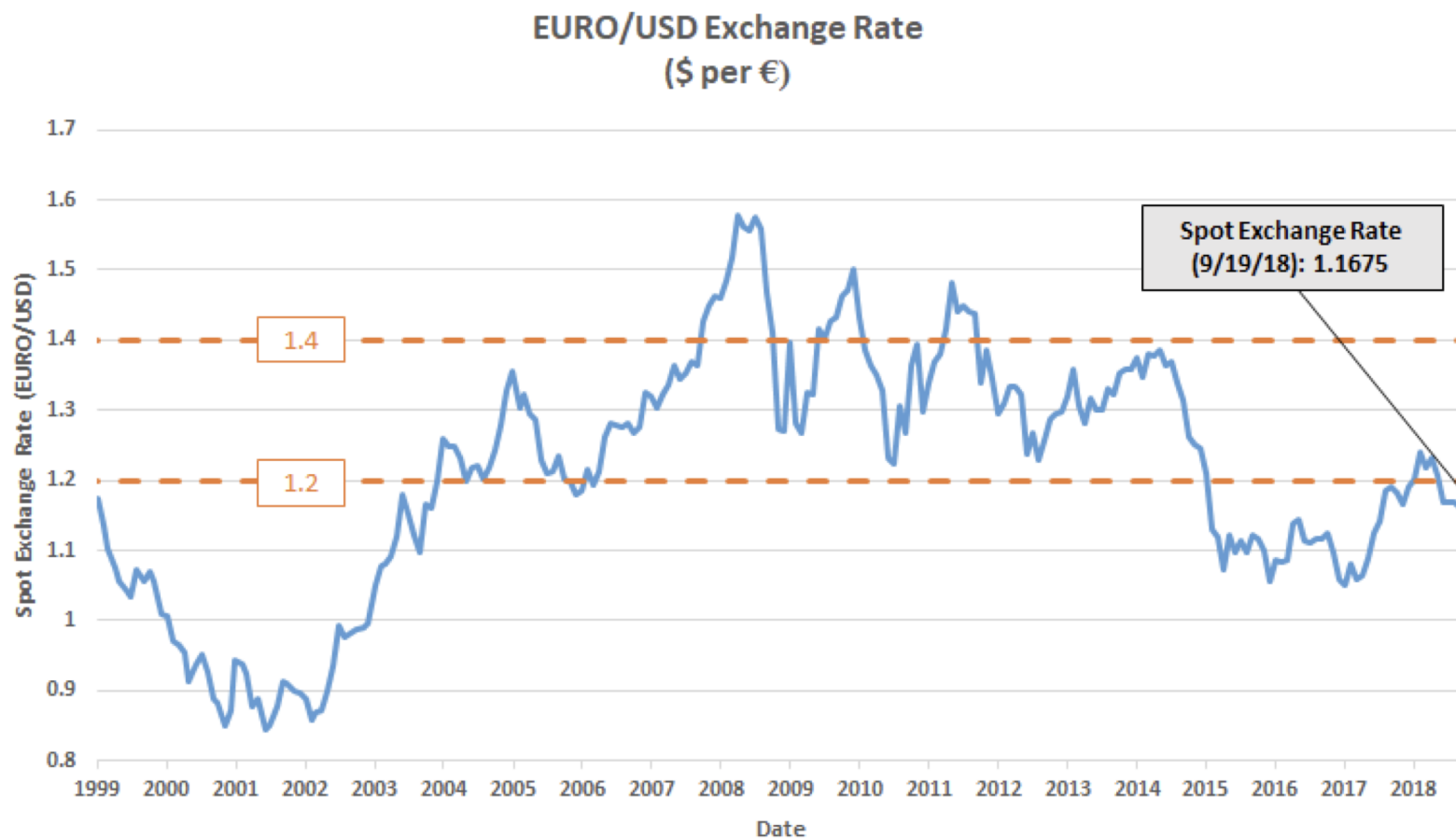
Prepared by Prof. Steve H. Hanke, The Johns Hopkins University

Notes:

Group 1: Companies that noted exposure to foreign exchange risk, hedged foreign exchange risk, and quantified foreign exchange losses.

Group 2: Companies that noted exposure to foreign exchange risk and quantified foreign exchange losses, but did not hedge foreign exchange risk.

Group 3: Companies that noted exposure to foreign exchange risk and hedged foreign exchange risk, but did not quantify foreign exchange losses.



Source: Bloomberg

Prepared by Professor Steve H. Hanke, The Johns Hopkins University