



The End of Globalization?

What to Expect Going Forward

How to Invest in a New Era

OCTOBER 11, 2018

Martin C. Schulz

Managing Director, International Equity

For institutional investors only, as defined by Rule 2210. Do not give, show, or quote to any other person. Not to be used with retail investors.



fa-mag.com

Agenda

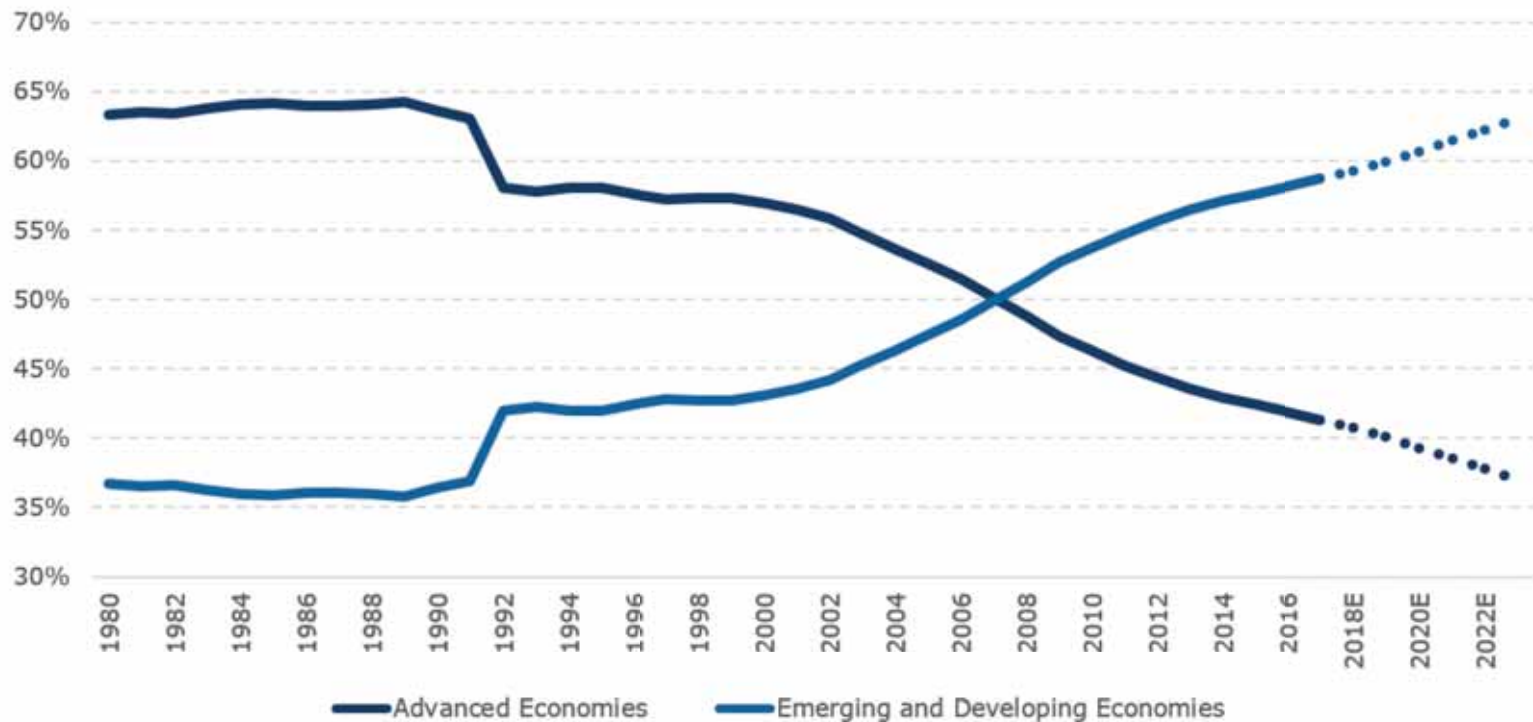
Introduction	3
Demographic Trends	5
Globalization	12
Trade	16
Technology	22
What Globalization/Trade/Technology Have Meant to The World	25
The Global Financial Crisis 10 Years On	27
Populism, Protectionism, and The Rise of Political Risk	33
Current Economic Backdrop	39
Investment Implications	49

Introduction

- The intersection of globalization, demographics, and technology
- Nearing the end of the post-WWII and Cold War globalization era
- Entering a more antagonistic phase of globalization
- The end of quantitative easing
- Last innings of the post Global Financial Crisis (GFC) investment cycle
- The new environment will bring new challenges and new opportunities

A New Era

Global Share of GDP Based on Purchasing Power Parity
Annual Historical and Projected (1980 – 2023E)



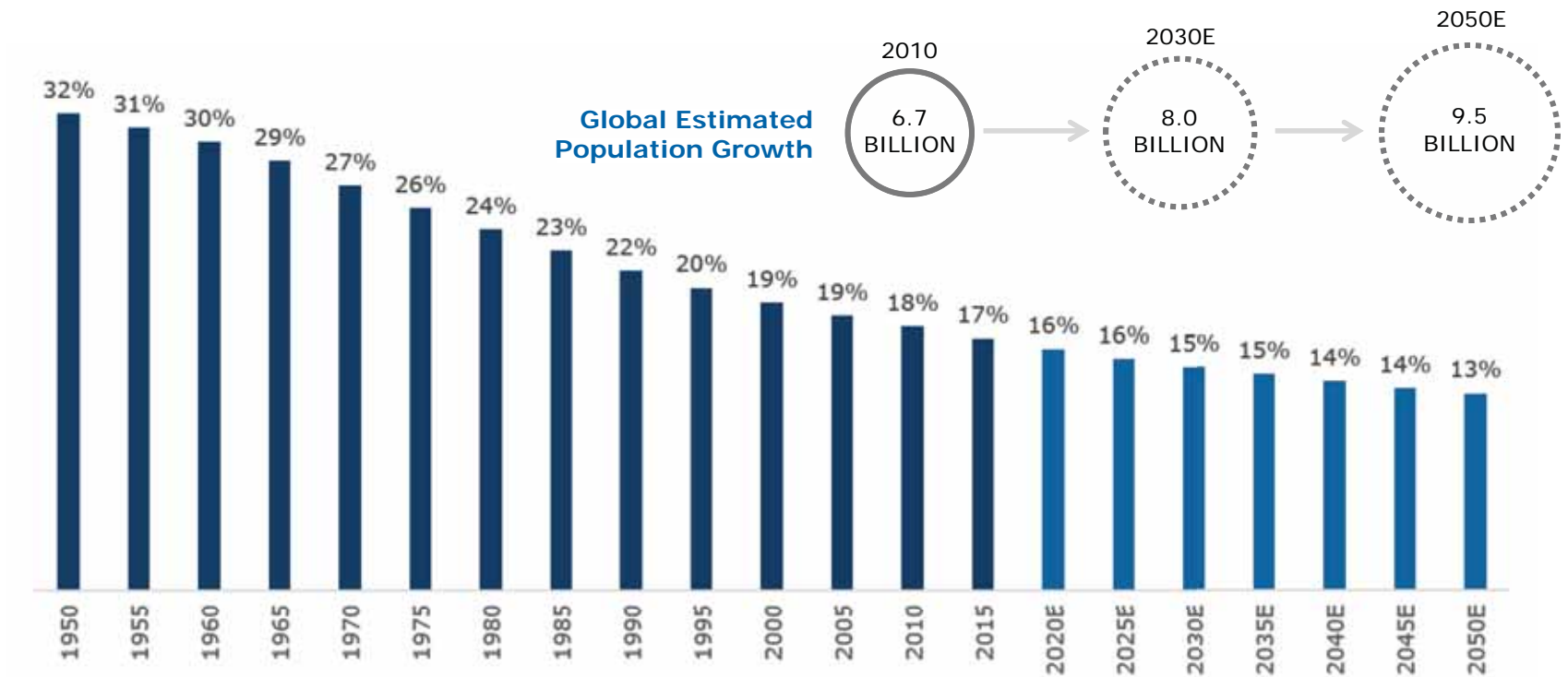
Source: International Monetary Fund

Demographic Trends

- Exploding global population growth
- Transformational shift: Growth of emerging markets/decline of developed market populations
- Dependency ratios: Graying developed markets and young emerging markets
- Generational differences: savings rates and indebtedness
- Super cycles: Urbanization, commodities, and migration

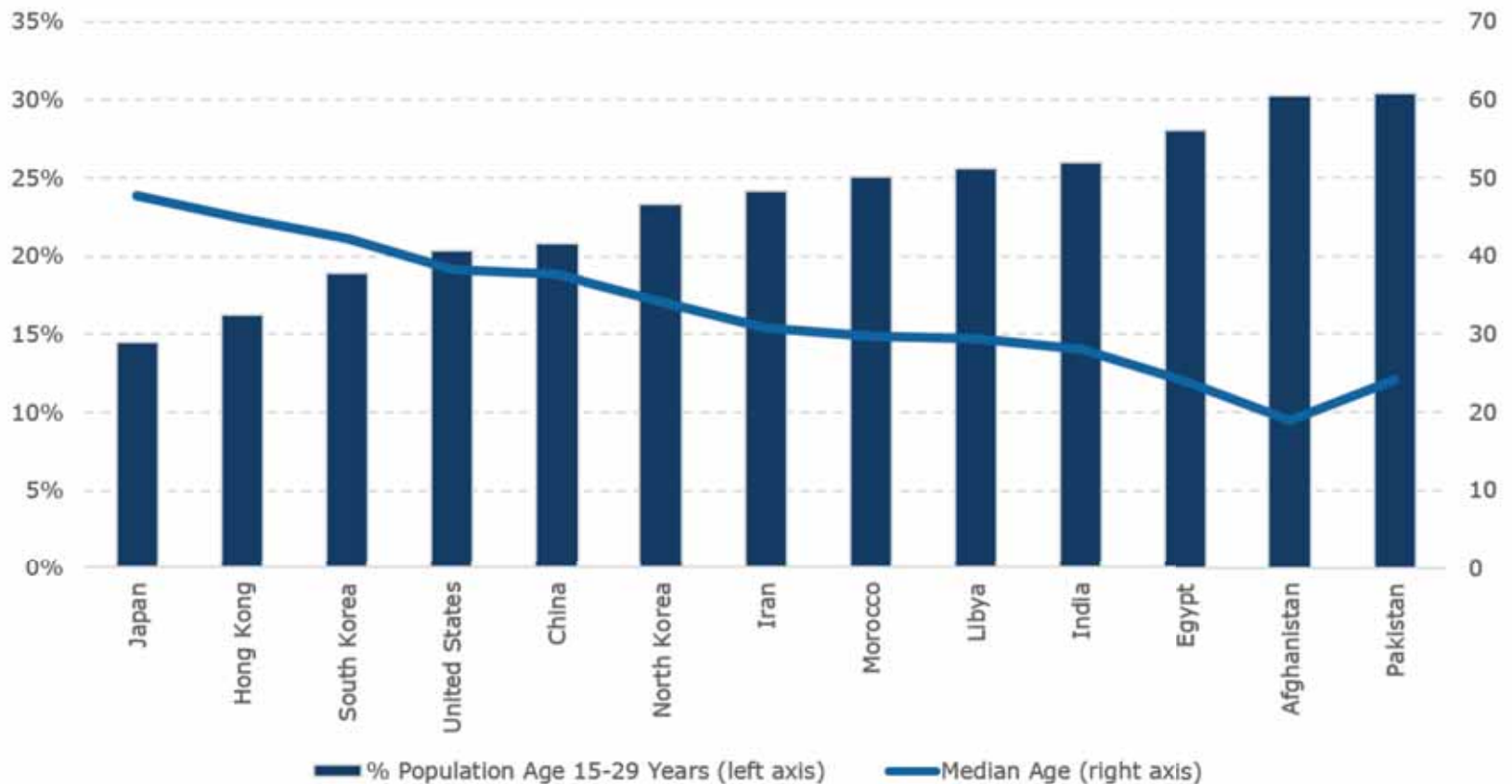
The World is Growing - and Changing

Developed World Population as a % of Total
Historical and Projected (1950 – 2050E)



Graying of the Developed World and an Emerging Market Youth Bulge

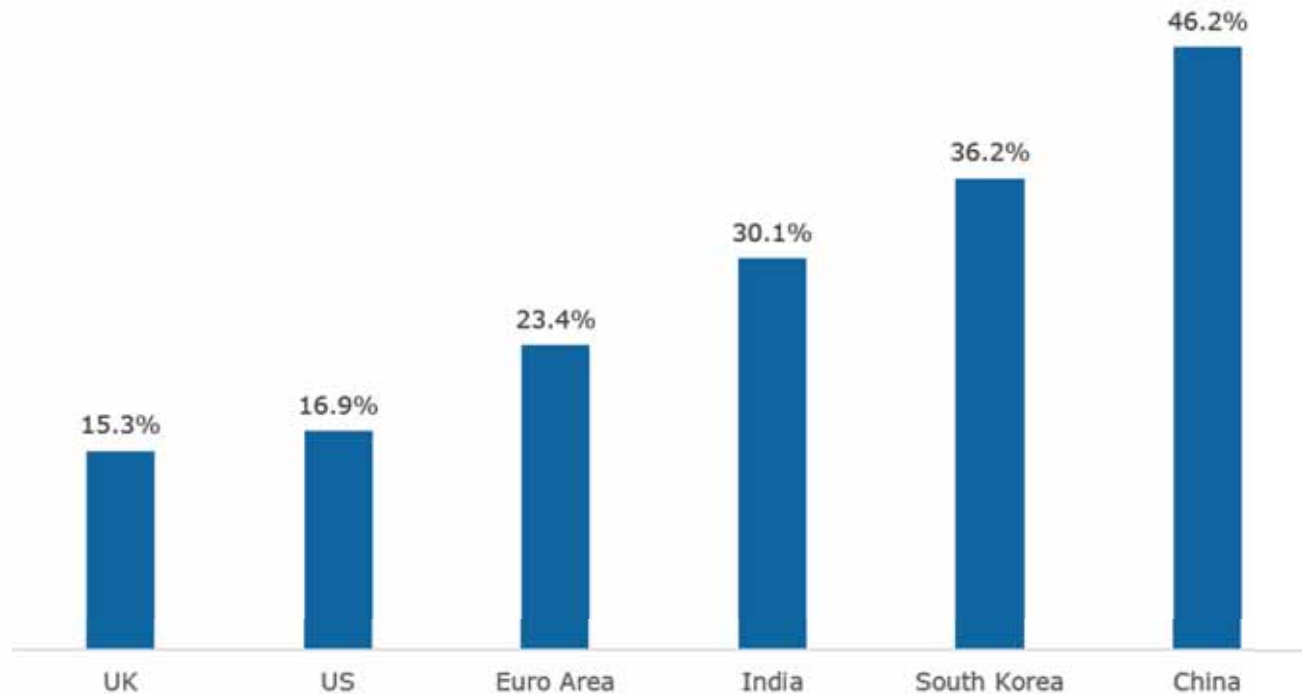
Young Adult Population (% Total) vs. Median Age



Source: International Data Base, US Census. 2018 population projections based on the 2014 National Projections

Imbalances...Household Savings Rates

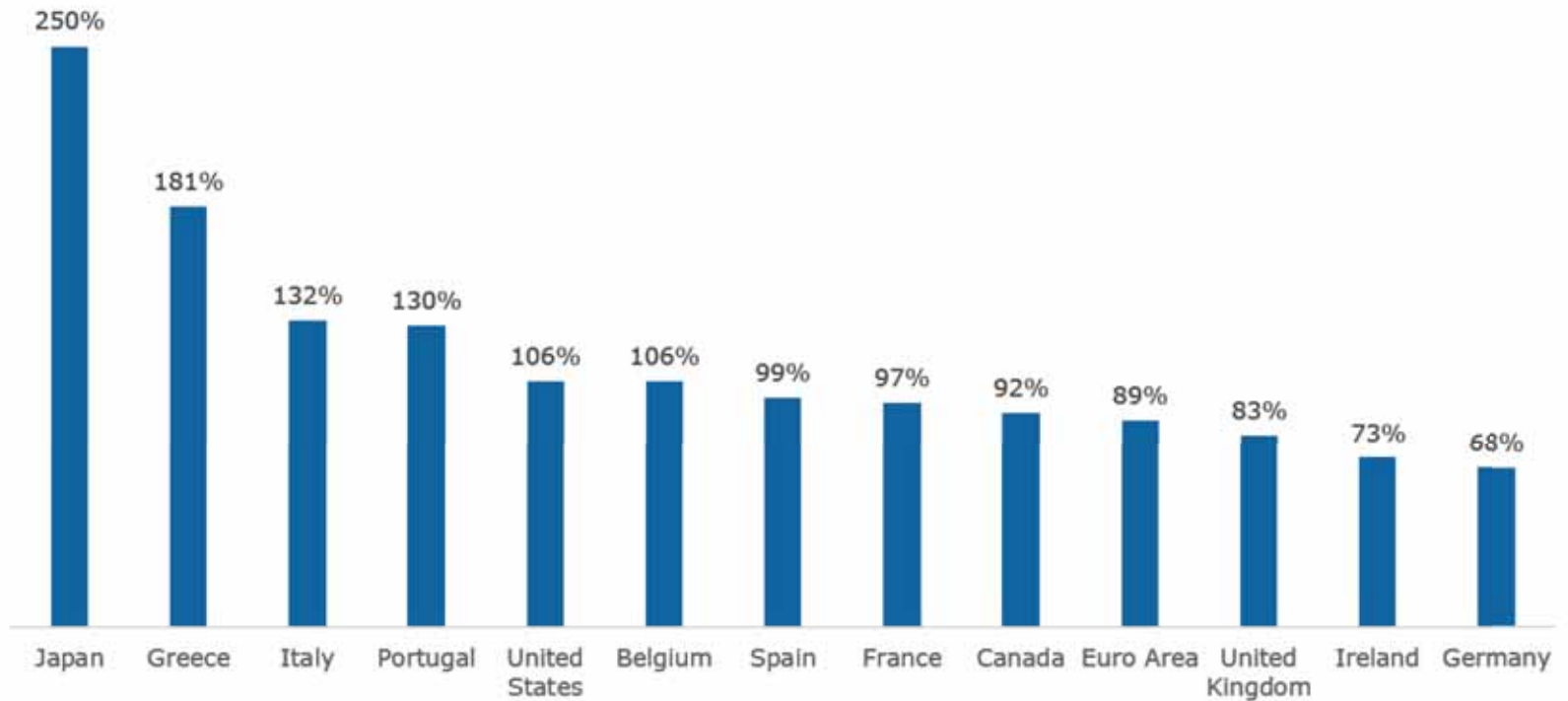
Gross Domestic Savings (% of GDP, 2016)



Source: World Bank national accounts data, and OECD National Accounts data files

Imbalances...Government Debt of Developed Economies

Government Debt (% of GDP, 2017)



Source: National Accounts Sources-Ministry of Finance Japan, National Statistical Service of Greece, National Institute of Statistics (Italy), Banco De Portugal, US Bureau of Public Debt, Eurostat, Bank of Spain, INSEE France, Department of Finance Canada, Office For Budget Responsibility UK, Central Statistics Office Ireland

Exports Outpace in the Emerging Markets

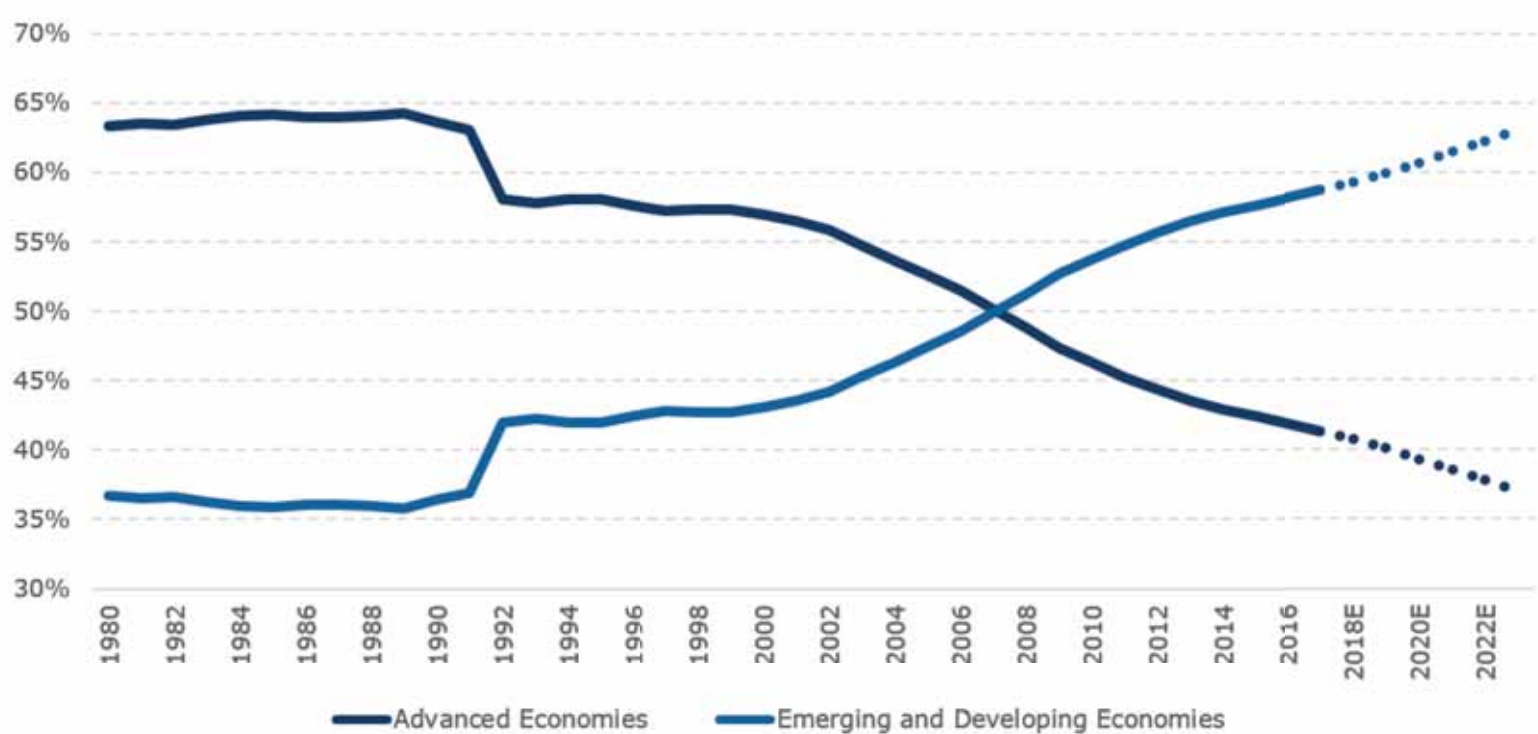
Developed Economies vs. Emerging Economies—Export Index
Monthly, Indexed to January 2010 (1/2010 – 6/2018)



Source: CPB Netherlands Bureau for Economic Policy Analysis

Changing of the Guard

Global Share of GDP Based on Purchasing Power Parity
Annual Historical and Projected (1980 – 2023E)



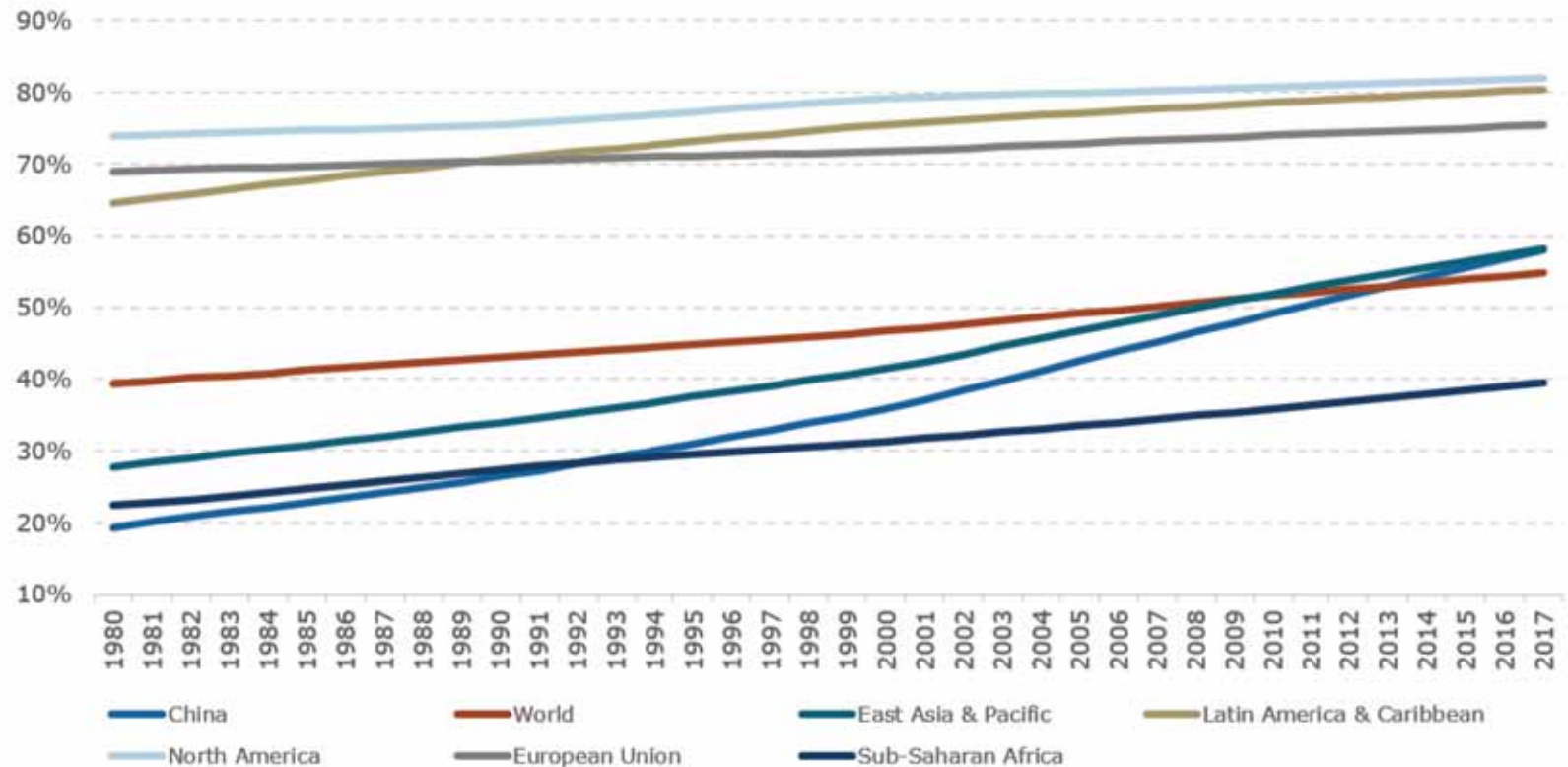
Source: International Monetary Fund

Globalization

- Movement of goods and services (trade)
- Deployment of capital (investment)
- Movement of people (migration)
- Dissemination of knowledge (technology)
- Creating both winners and losers

A Rapidly Urbanizing World

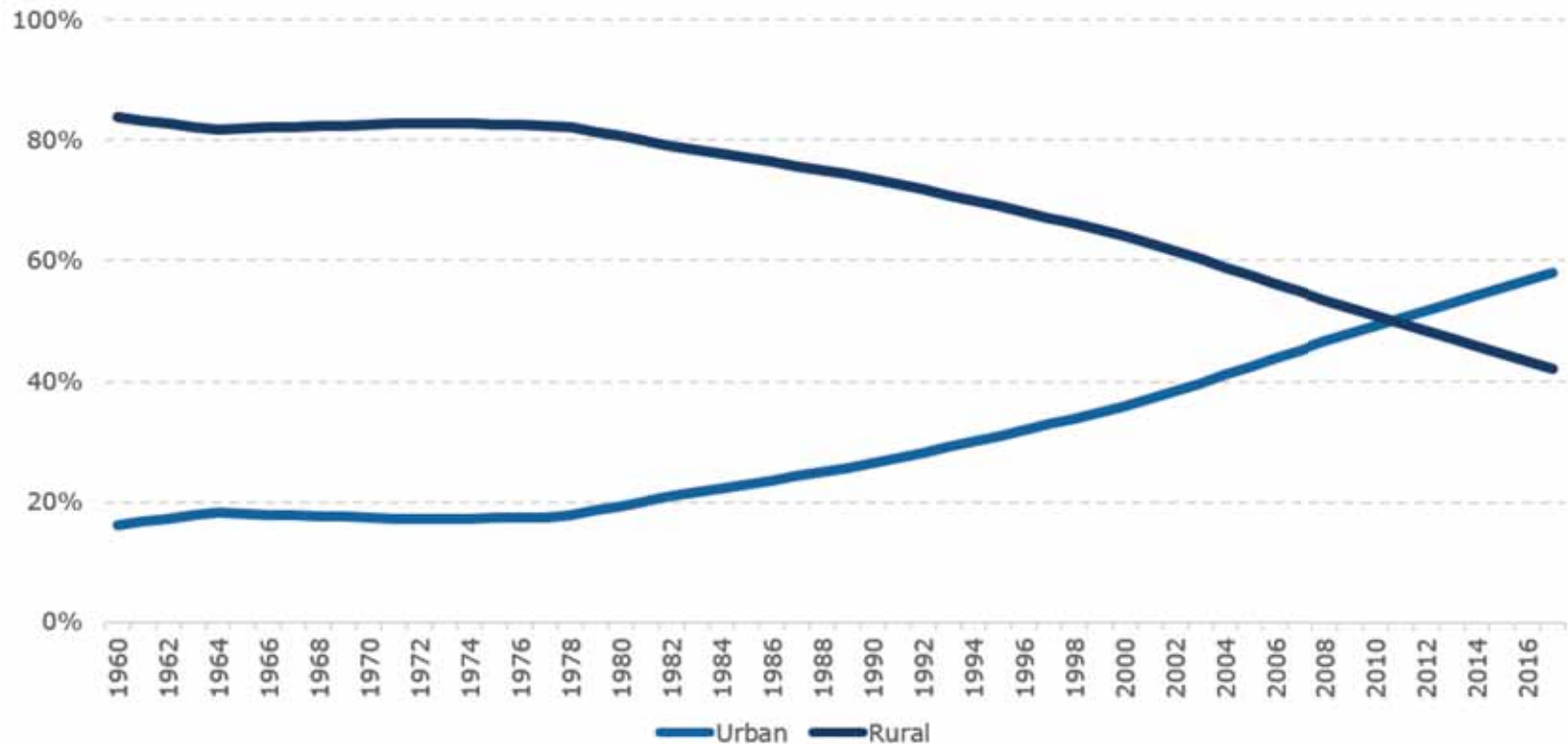
World Urbanization Rates (1980 – 2017)



Source: The World Bank

Megatrends and Super Cycles: China's Urbanization Rate

China's Urban vs. Rural Populations, % of Total
(1960 – 2017)



Source: The World Bank

Back to the Future: China's Return to the World Stage

China's Share of Global GDP

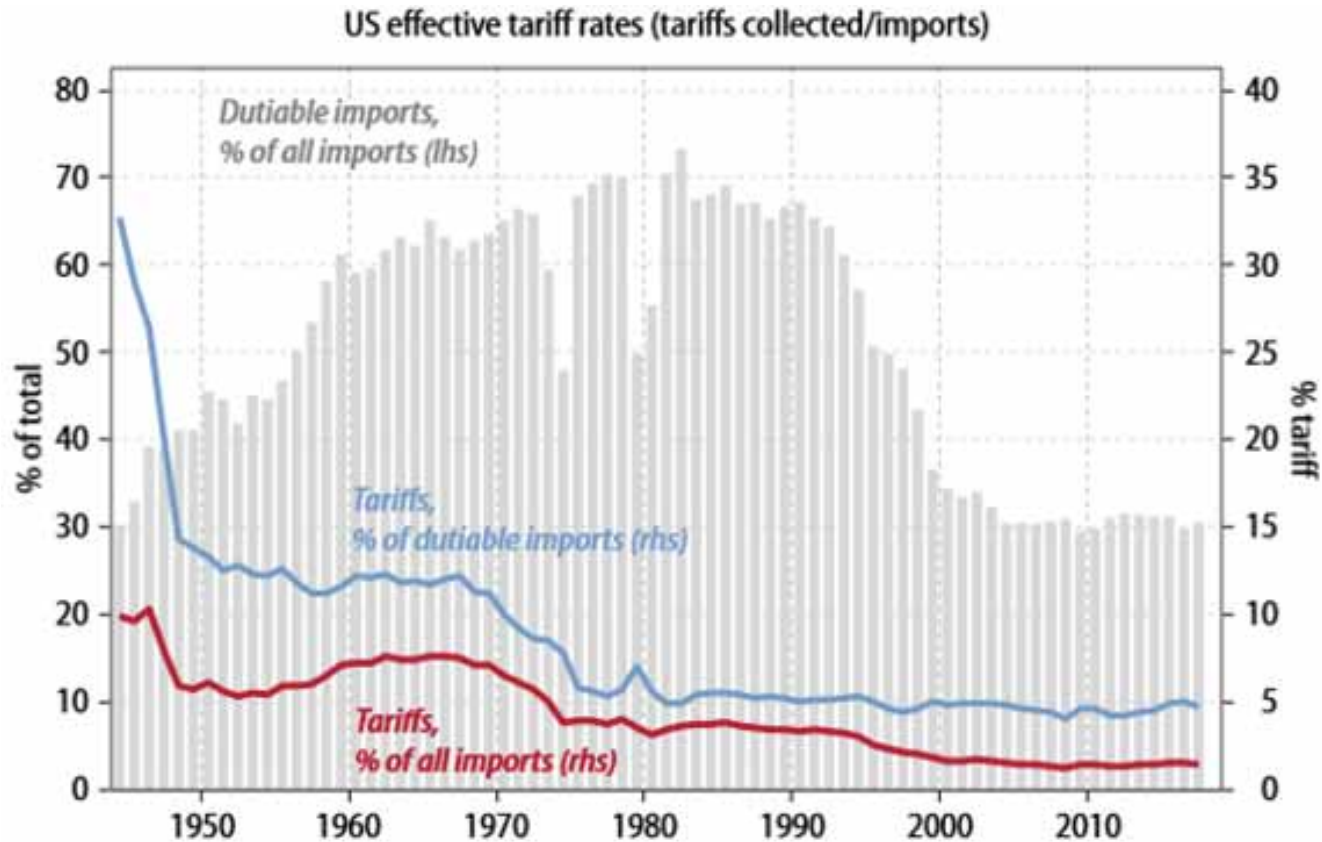
Year	%
1000	26.2
1500	22.7
1600	25.0
1700	29.2
1820	22.3
1870	32.9
1913	17.2
1950	8.9
1973	4.5
1998	11.5
2017	18.3

Source: U.S. Treasury, International Monetary Fund

Trade

- Theory
- Short history
- The post WWII era: Bretton Woods
- GATT and the World Trade Organization (WTO)
- Explosion in global trade
- Emergence of China (joining WTO in 2002)
- U.S./China co-dependency
- Current account deficits

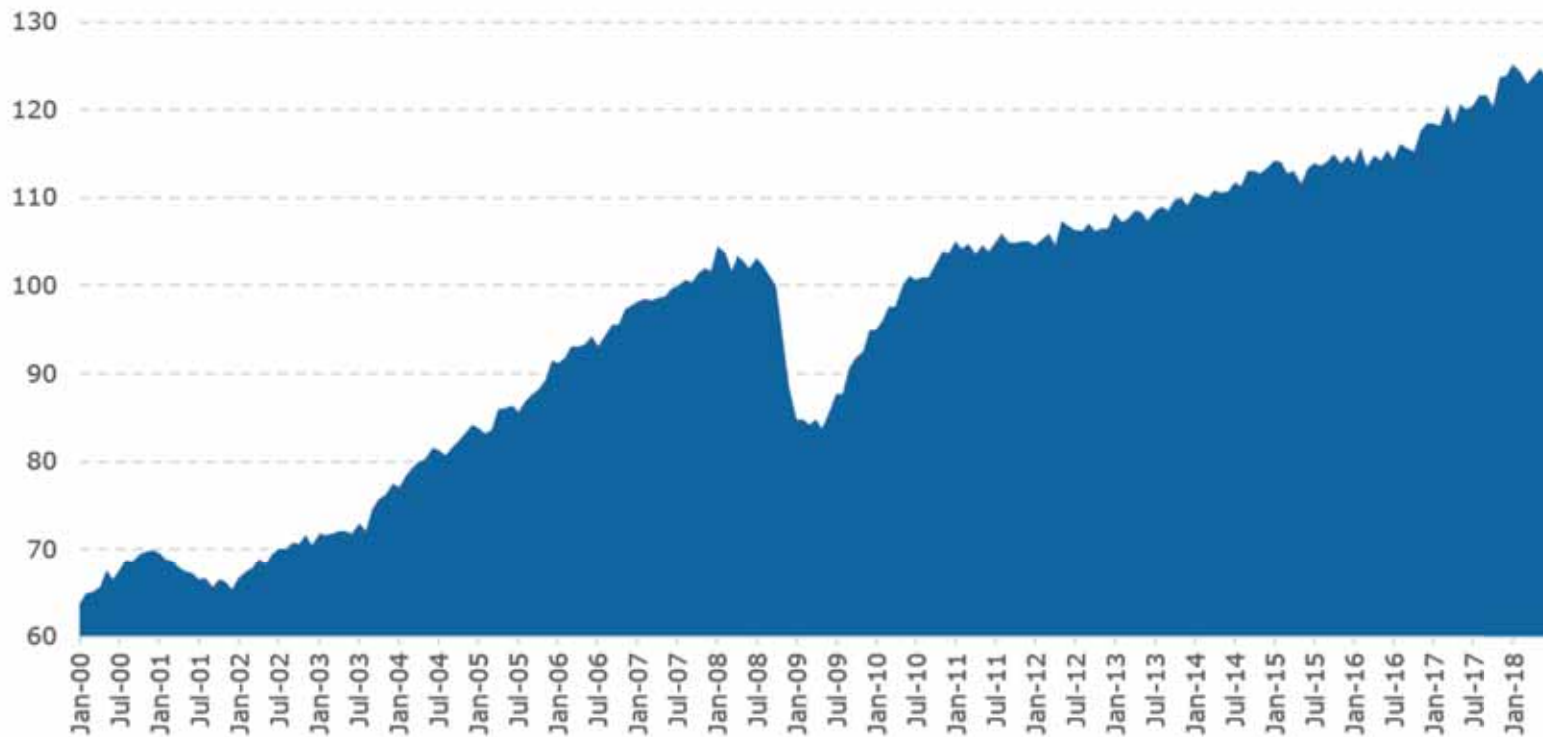
Trade Barriers Fell Steadily Since WWII



Source: USITC, Gavekal Data/Macrobond.

Global Trade Keeps Expanding, But...

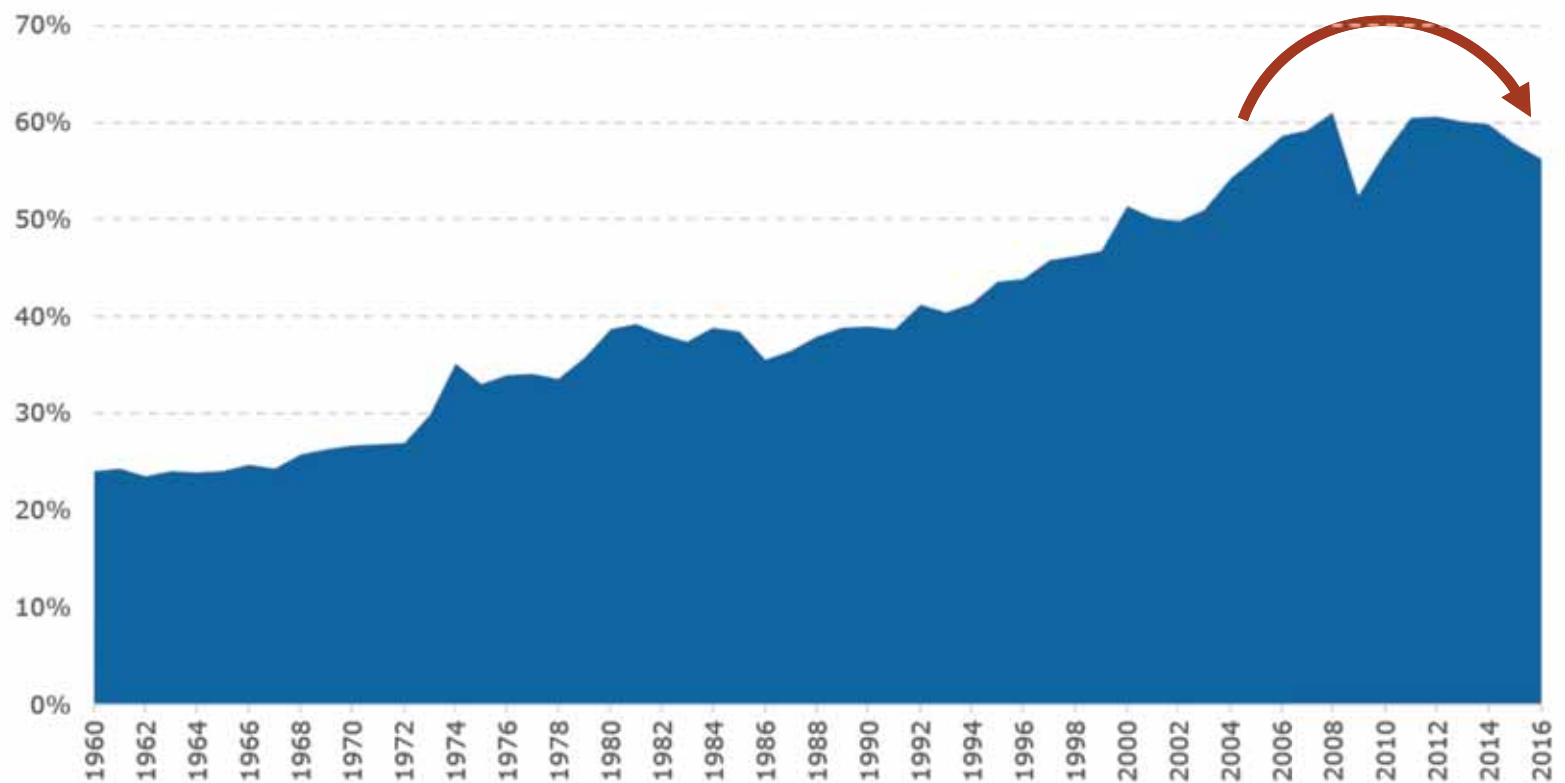
CPB World Trade Monitor: Merchandise Volumes Index
(1/2000 – 6/2018, 2010 Base Year)



Source: CPB Netherlands Bureau for Economic Policy Analysis

...Is Global Trade Peaking?

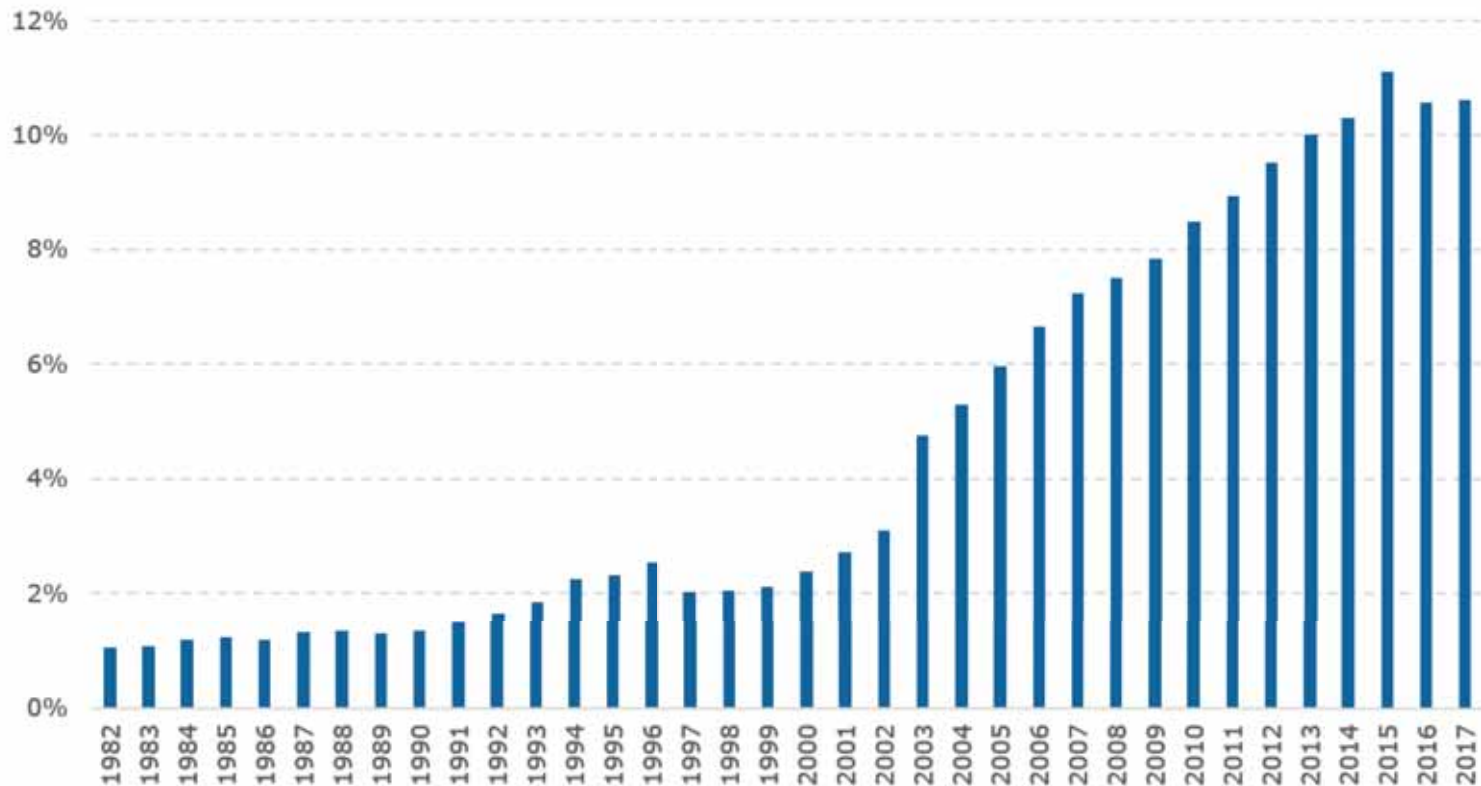
Trade, % of GDP (1960 – 2016)



Source: The World Bank

China's Rise

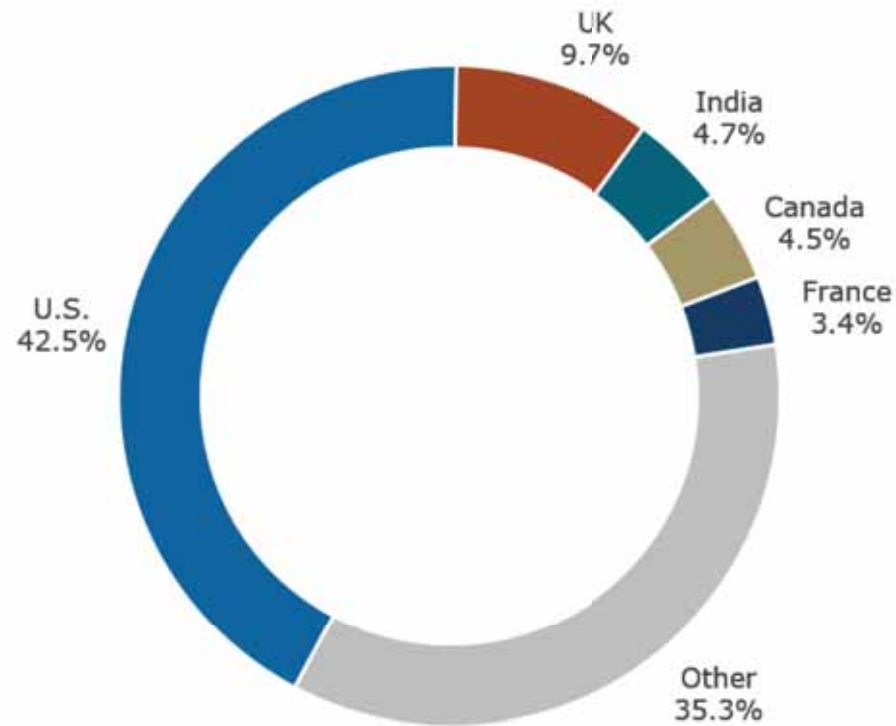
China Exports, % of World Total (1982 – 2017)



Source: The World Bank

Imbalances...in Trade

Share of Global Current Account Deficit (2017)



Source: International Monetary Fund World Economic Outlook Database

Technology

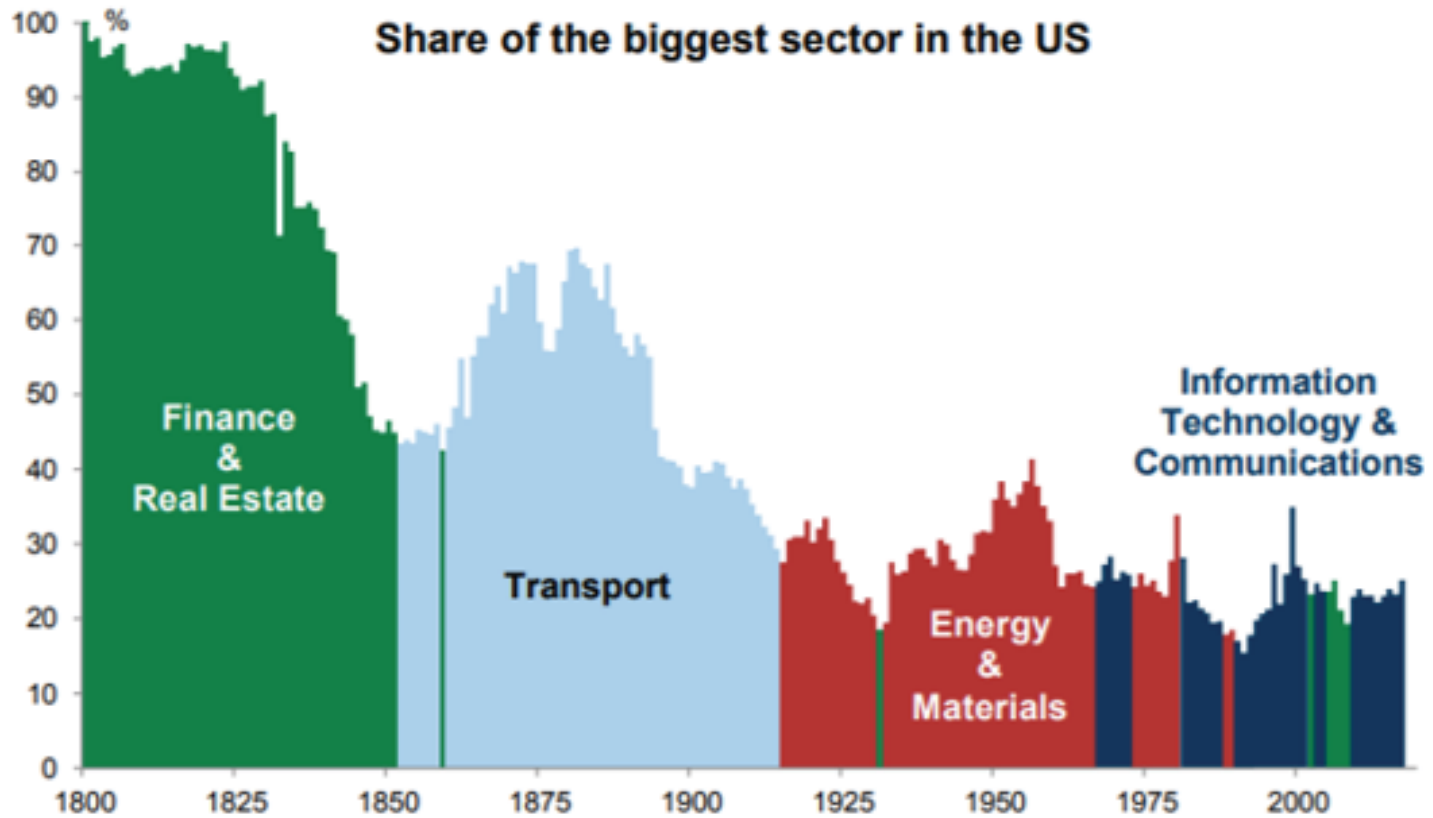
- Moore's Law
- Automation
- A powerful deflationary force
- The sharing economy
- Blockchain and AI
- Disruption
- Recent outperformance of technology
- History of market-sector dominance

Recent Technology-Sector Dominance



Source: FactSet, Goldman Sachs Investment Research

Sector Dominance Changes Over Time



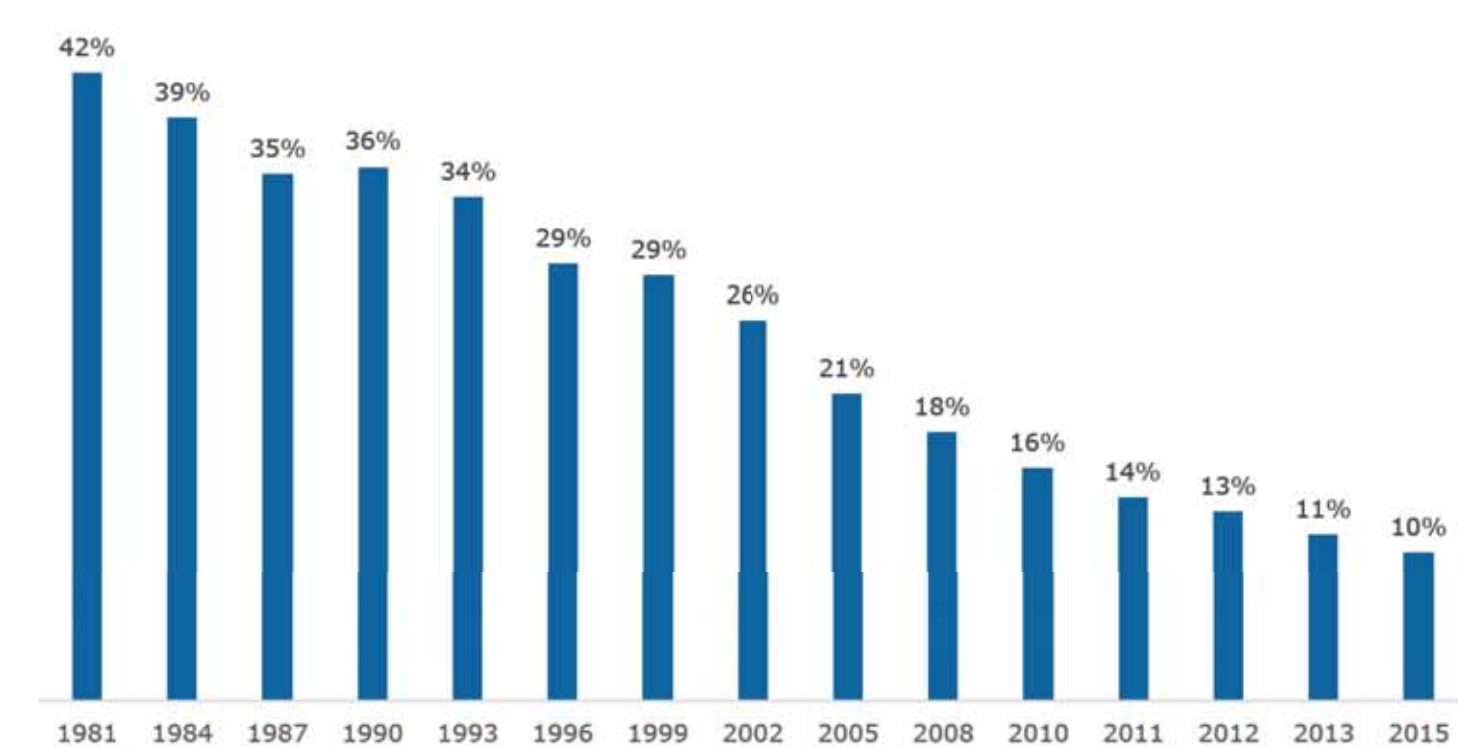
Source: GFD, Goldman Sachs Global Investment Research

What Globalization/Trade/Technology Have Meant to the World

- World output of goods and services quadrupled from 1970 – 2008
- Proportion of people living in extreme poverty plummeted from 42% of the global population in 1993 to 18% in 2008
- A large middle class arose across the emerging markets, particularly in China
- The number of electoral democracies increased from 35 to 110 between 1970 and 2008
- Global manufacturing moved steadily from the developed markets to the emerging markets
- The middle class suffered in the developed world
- Economic inequality increased between - and - within countries
- Many societies underwent rapid social change

The World is Getting Richer

Poverty Headcount Ratio (% of World Population)
Measured at \$1.90 per Day, 2011 Purchasing Power Parity



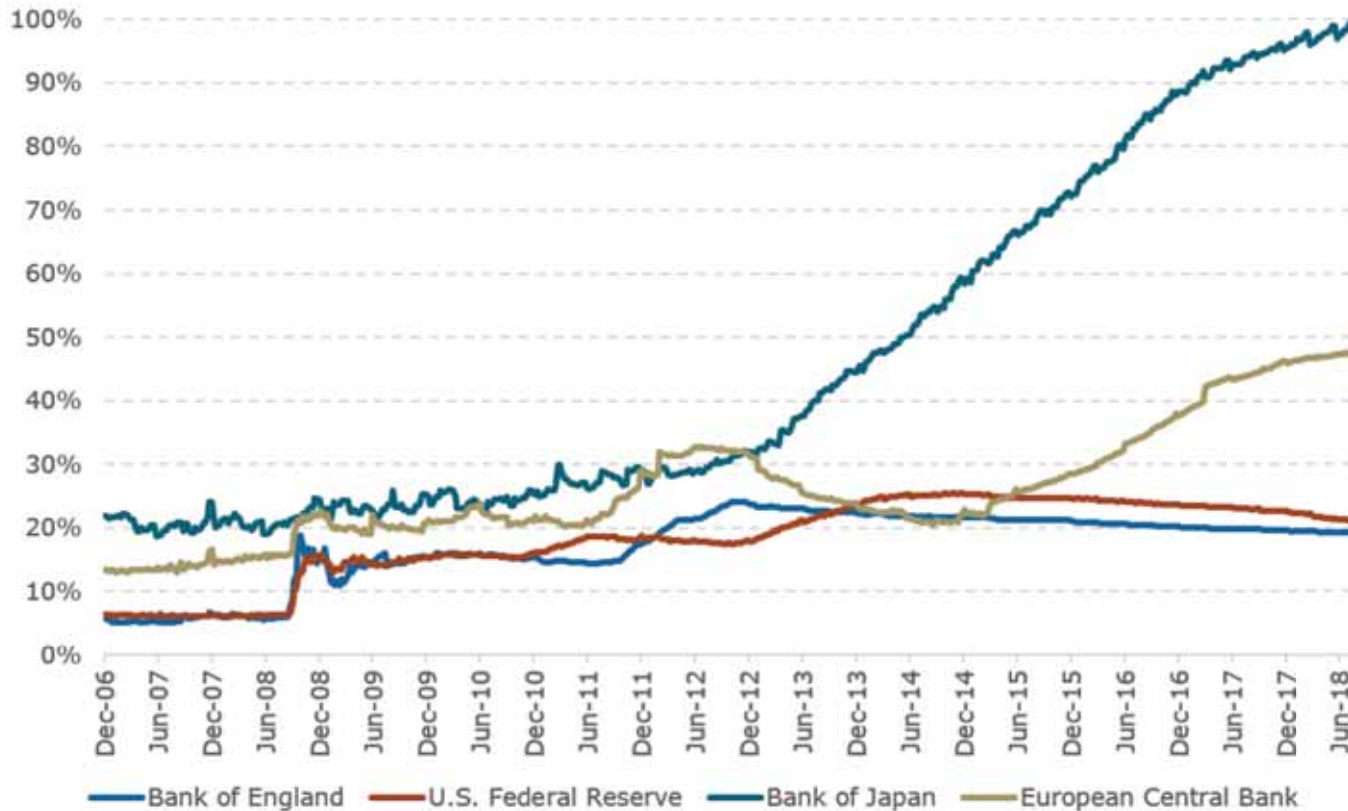
Source: *Poverty and Equity*

The 2008 Global Financial Crisis: 10 Years On

- Massive global central bank intervention and balance sheet expansion
- Transfer of financial system debt to public debt
- Several subsequent cycles of deflation kept central banks accommodative
- Financial repression did not create intended reflation
- Inability to reduce debt burdens; debt remains cheap
- Resulting in low costs of capital, depressed wages, anemic credit growth, and weak capital investment
- Capital/real estate win as labor loses in the high-cost developed markets
- Deflationary oversupply of global products after long investment boom in the emerging markets leads to depressed profitability
- Led to ruling class loss of credibility particularly in the developed world
- Further leading to illiberal tendencies across the globe

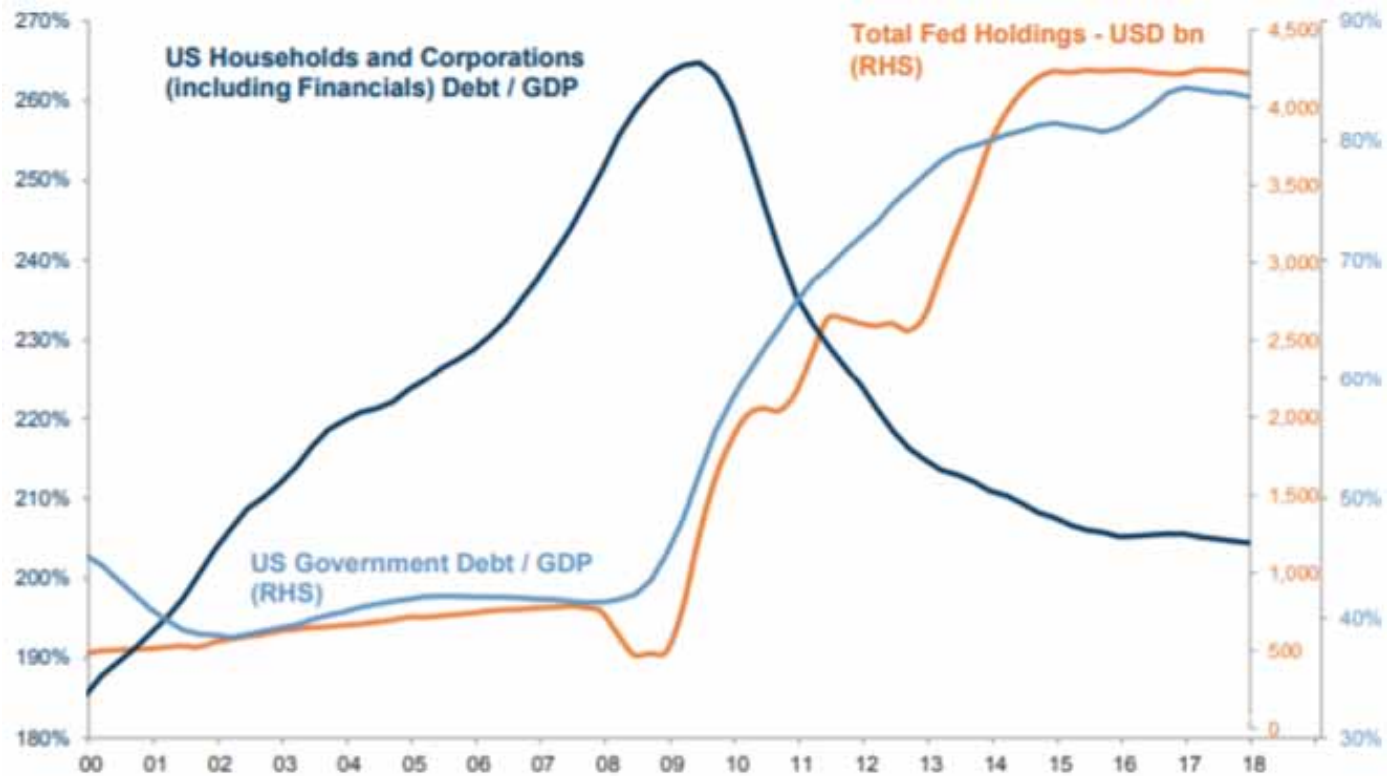
Massive Global Central Bank Firepower

Central Bank Balance Sheet Assets (% of GDP)



Source: FactSet

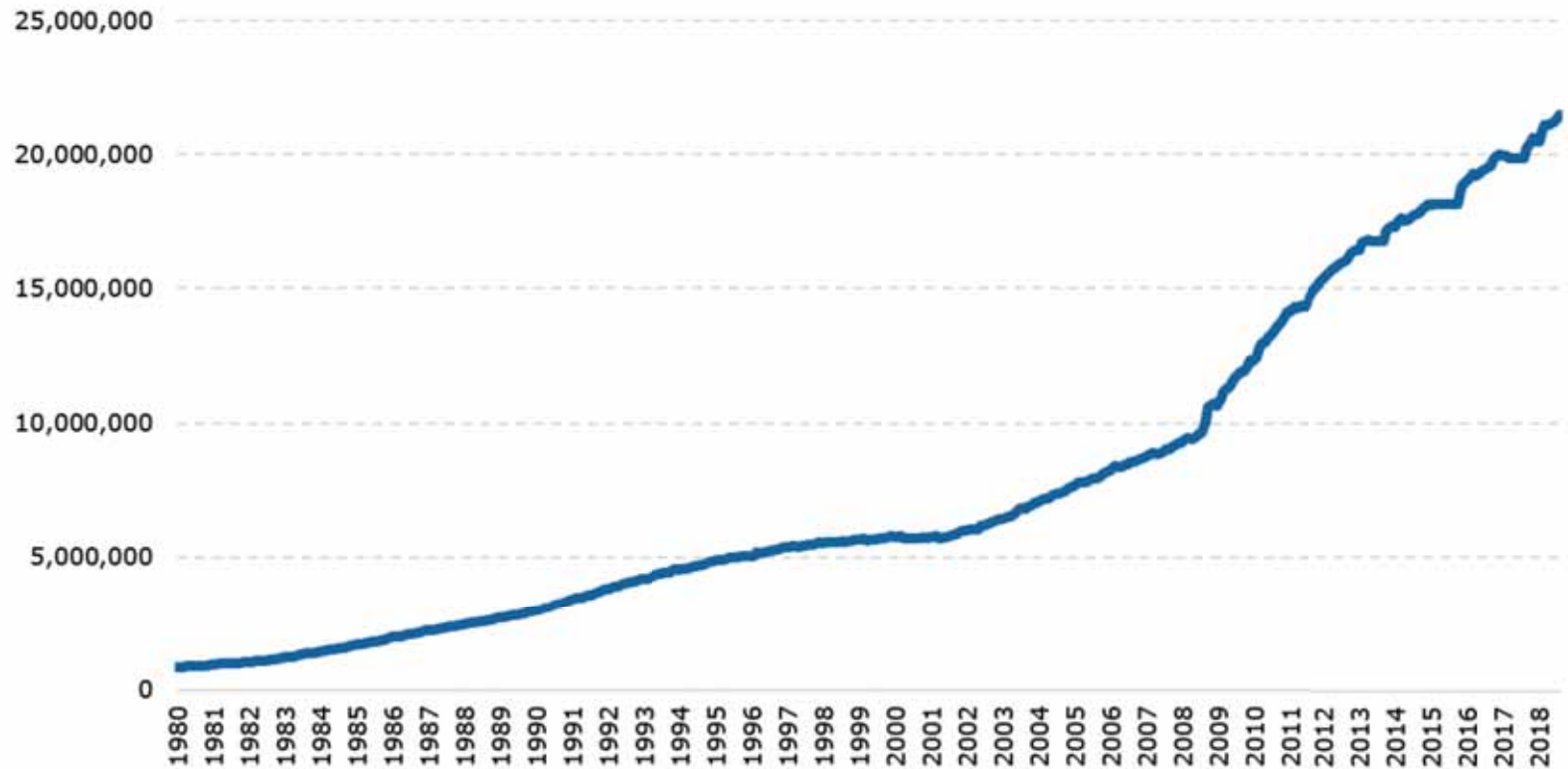
Higher Public Debt



Source: Goldman Sachs Global Investment Research

Debt Rises Further with Cheap Capital

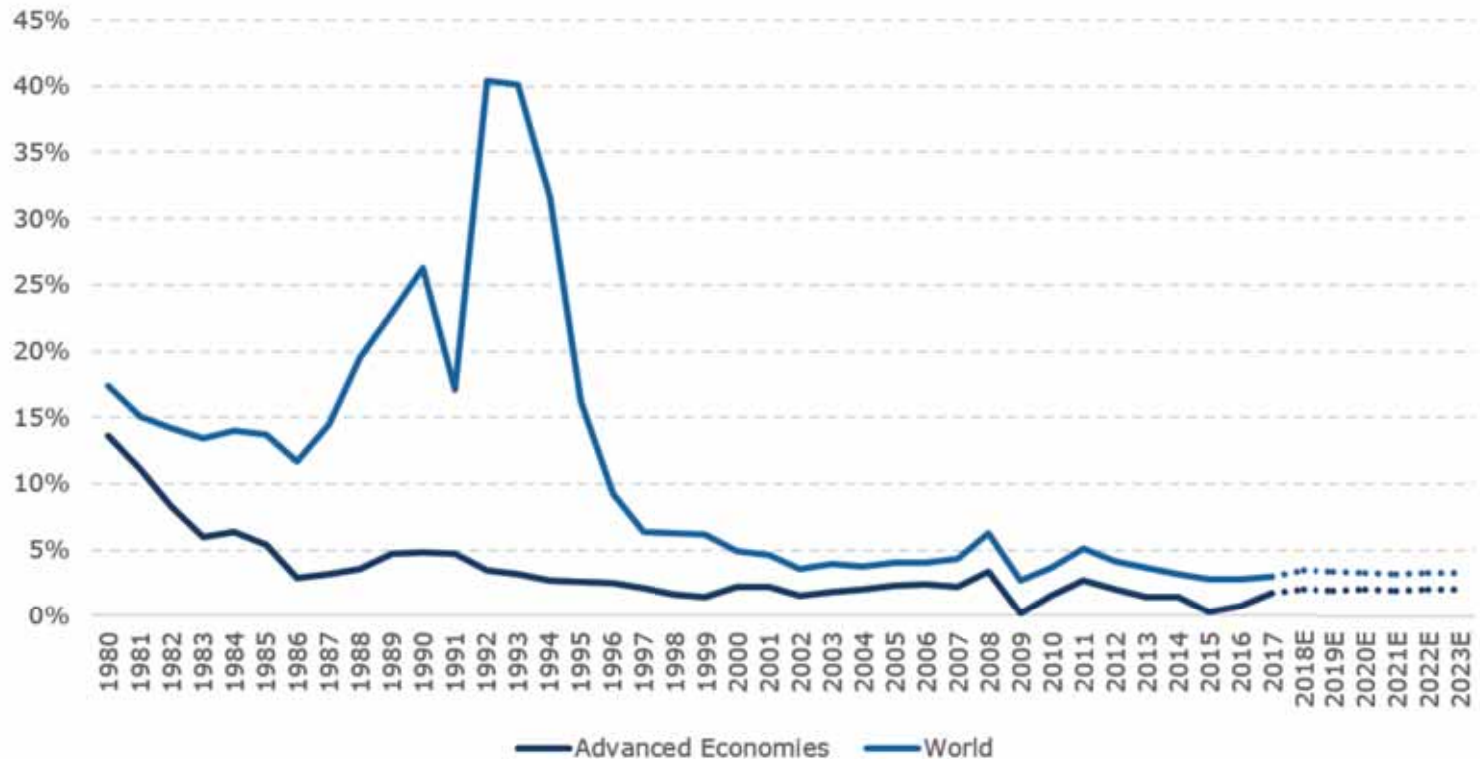
U.S. Federal Debt Outstanding (\$ Millions)



Source: FactSet

Inflation Trending Down Over Time

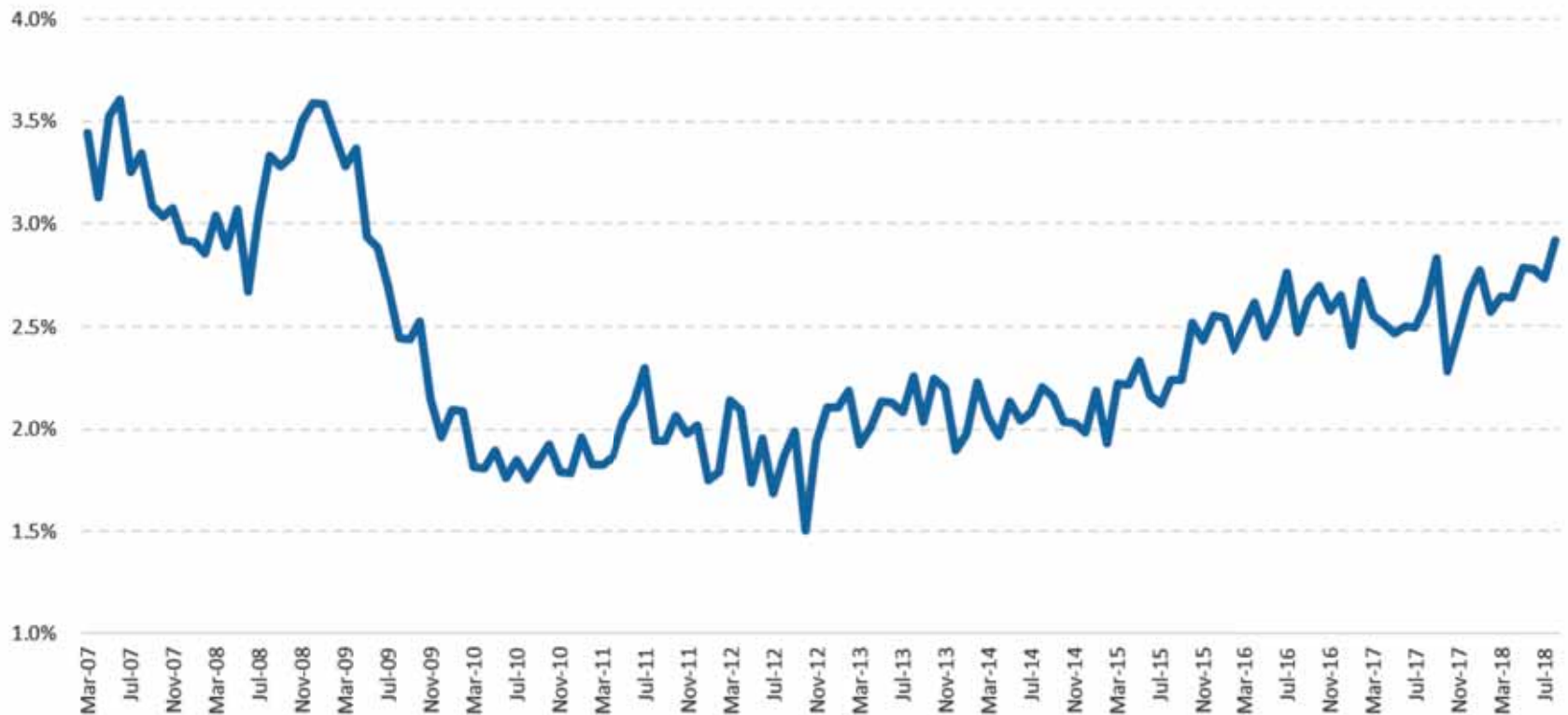
Inflation Rate, Average Consumer Prices (Annual % Change)
Historical and Projected (1980 – 2023E)



Source: International Monetary Fund

Wages Have Been Restrained

U.S. Average Hourly Earnings of All Private Employees
Year-Over-Year % Change, Seasonally Adjusted



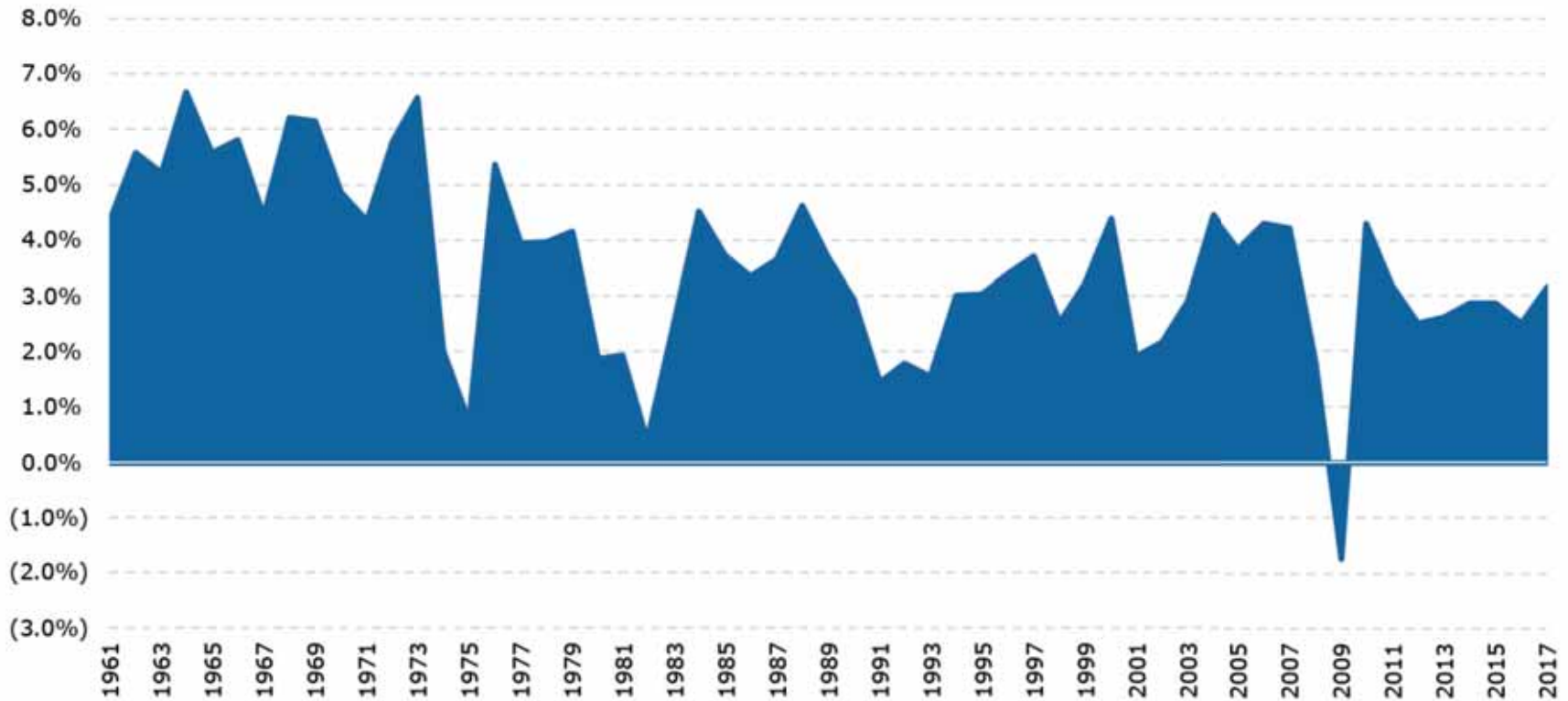
Source: Federal Reserve Bank of St. Louis

Populism and Protectionism: The Rise of Political Risk

- Confluence of forces and events
- The European Sovereign Debt Crisis and the Arab Spring
- Backlash against the establishment post-Global Financial Crisis: Brexit
- Declining rates of economic growth in the developed markets
- Further decline of labor's share of GDP in era of cheap capital
- Middle class angst and economic stagnation/falling behind
- Global phenomena: Fragmentation and polarization
- The rise of illiberal powers and authoritarian leaders
- Migration pressures
- Generational divergences
- Europe failing to deal with demographic decline and upsurge in migration

Slowing Economic Growth Over Time

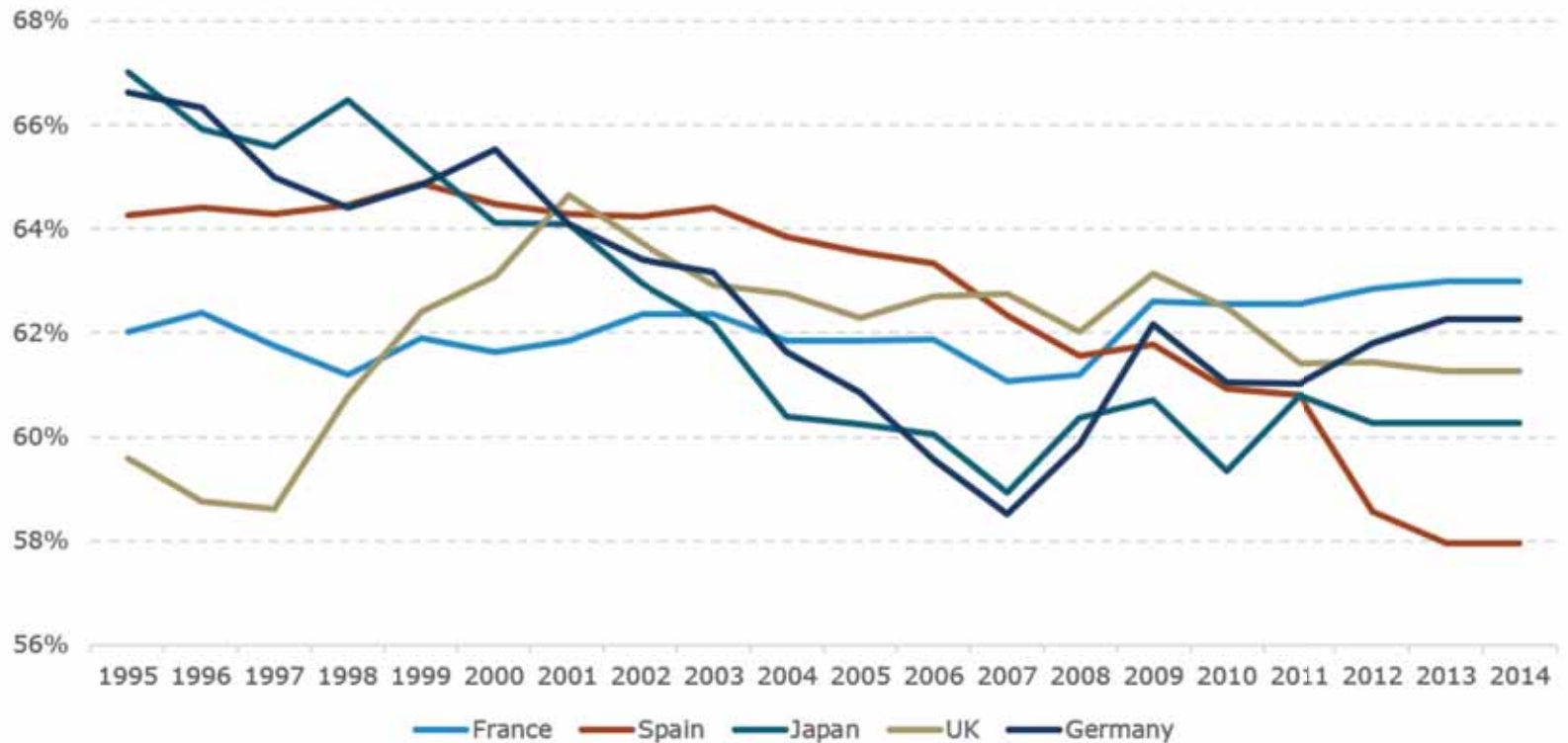
Annual Global GDP Growth (1961 – 2017)



Source: The World Bank

Labor Loses as Capital Gains

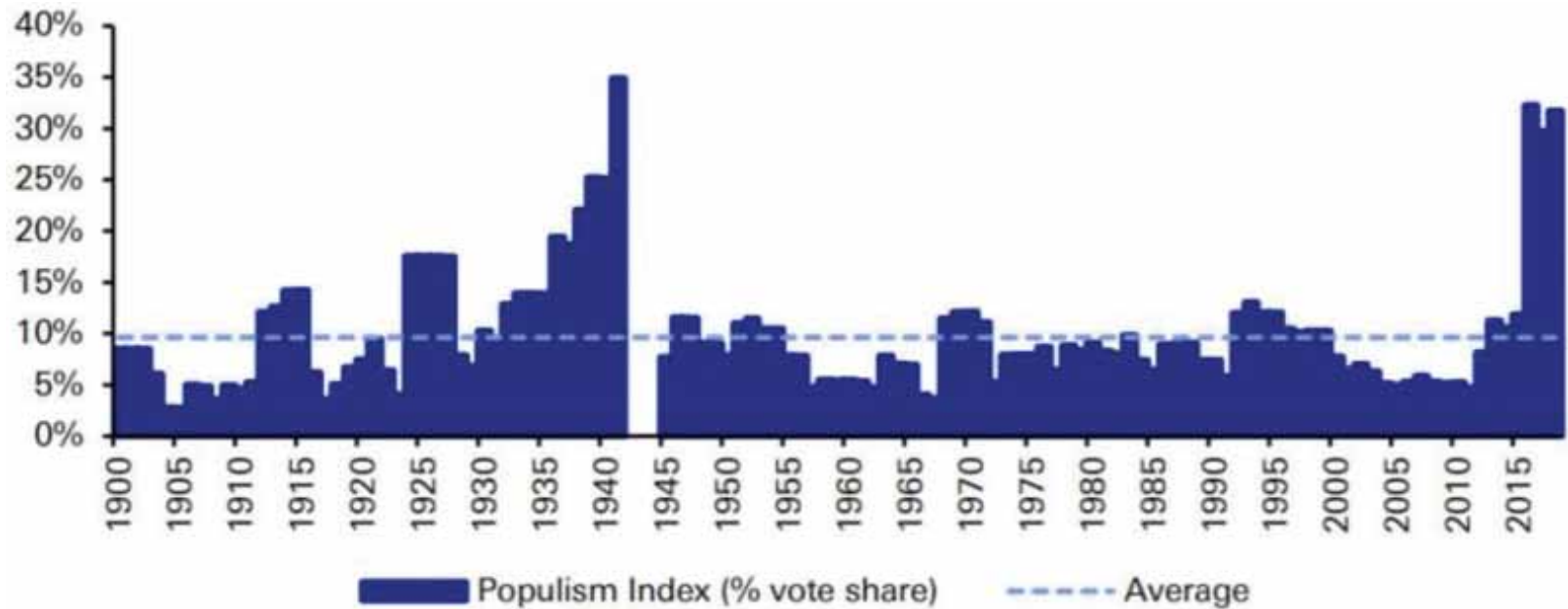
Labor Share as a % of GDP (1995 – 2014)



Source: Federal Reserve Bank of St. Louis

Back to The 1930s

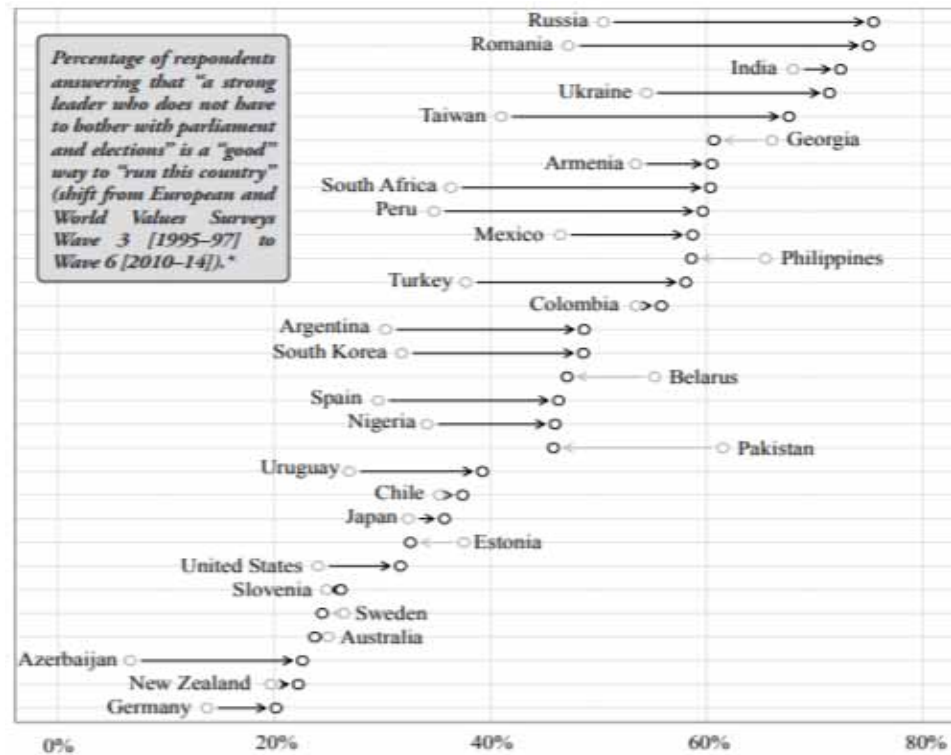
Populism % of Vote Across Key Countries
Population-Weighted (1900 – 2017)



Source: Deutsche Bank, Author's Calculations

Greater Tolerance for Authoritarianism

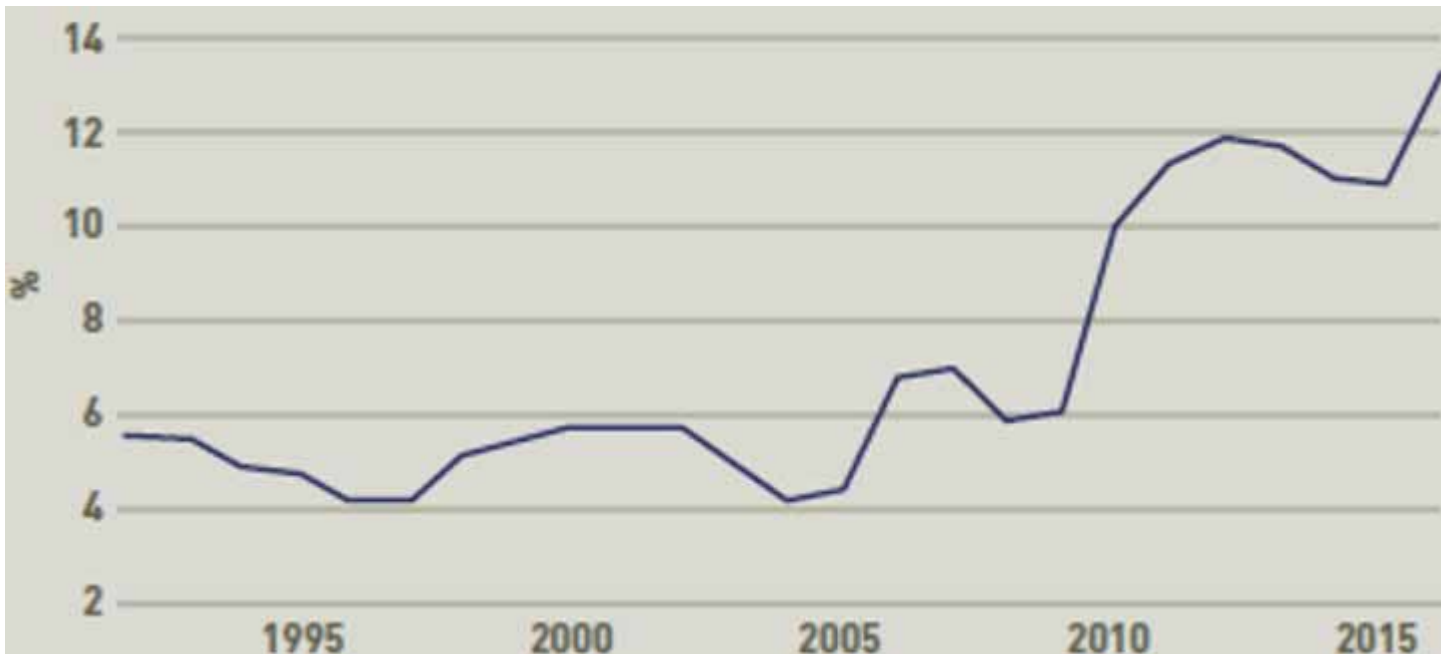
Growth in Share of Citizens Wishing for a Strong Leader “Who Does Not Have to Bother with Elections”



Source: “The Signs of Deconsolidation” by R.S. Foa and Y. Mounk, *Journal of Democracy*, January 2017

Support for Anti-Establishment Parties Grows

Seats Held by Non-Centrist Parties in European Parliament (% of Total Seats including Austria, Belgium, Finland, France, Germany, Greece, Italy, the Netherlands, Portugal, and Spain)



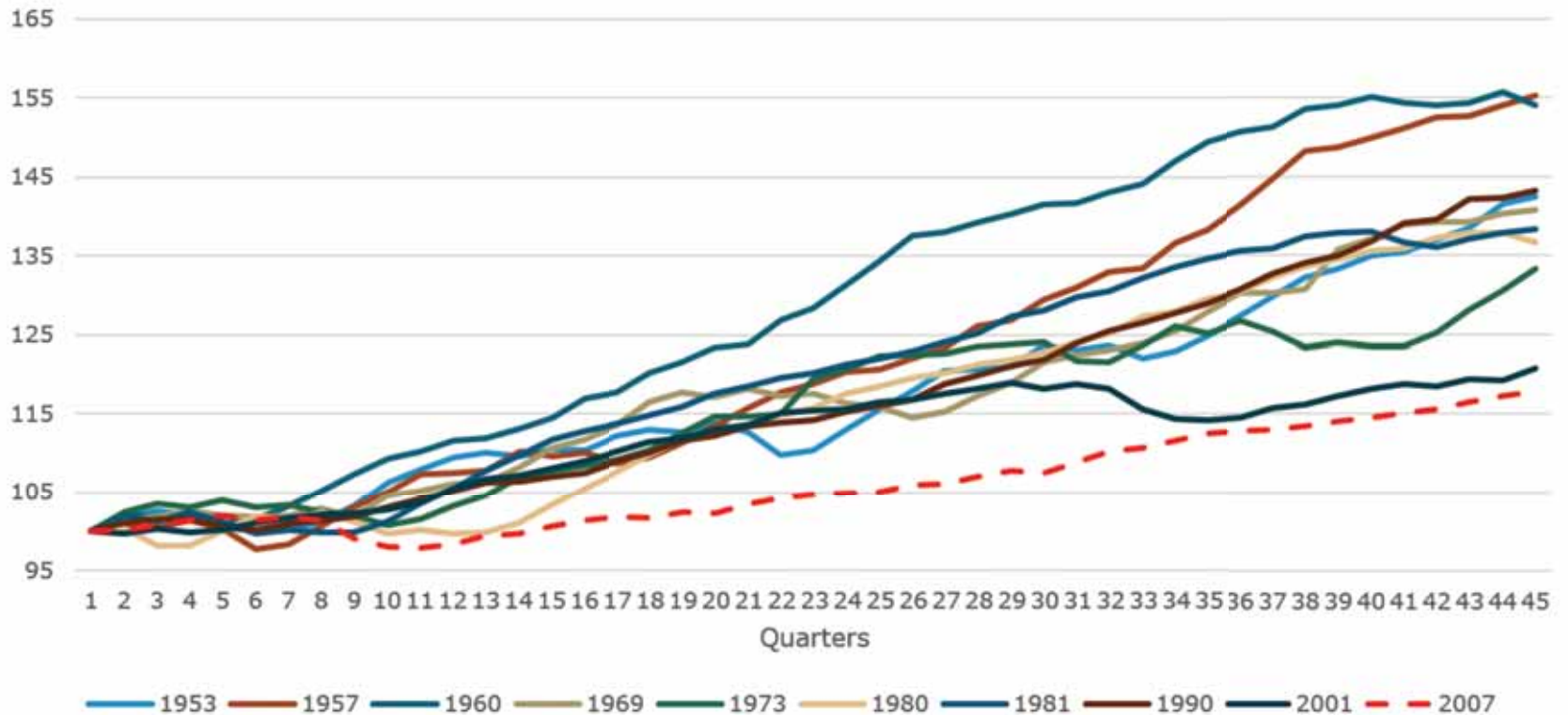
Source: BCA Analytics, www.bcaresearch.com

Current Economic Backdrop: Where Are we now?

- A different kind of cycle: weak economic growth yet strong markets
- Global economy growing, but OECD lead indicators falling
- Debt burdens not declining
- China rebalancing from an investment-led to a consumer-led economy
- Tax reform/deregulation provided massive late-cycle push to U.S. economy
- Strong U.S. profits and business confidence
- Global synchrony replaced by U.S. outperformance
- U.S. Fed draining the world of USD
- Higher interest rates/stronger dollar/elevated oil prices/trade frictions not supportive of emerging markets
- The emerging markets have entered a bear market

Real GDP Growth this Cycle Has Been Underwhelming...

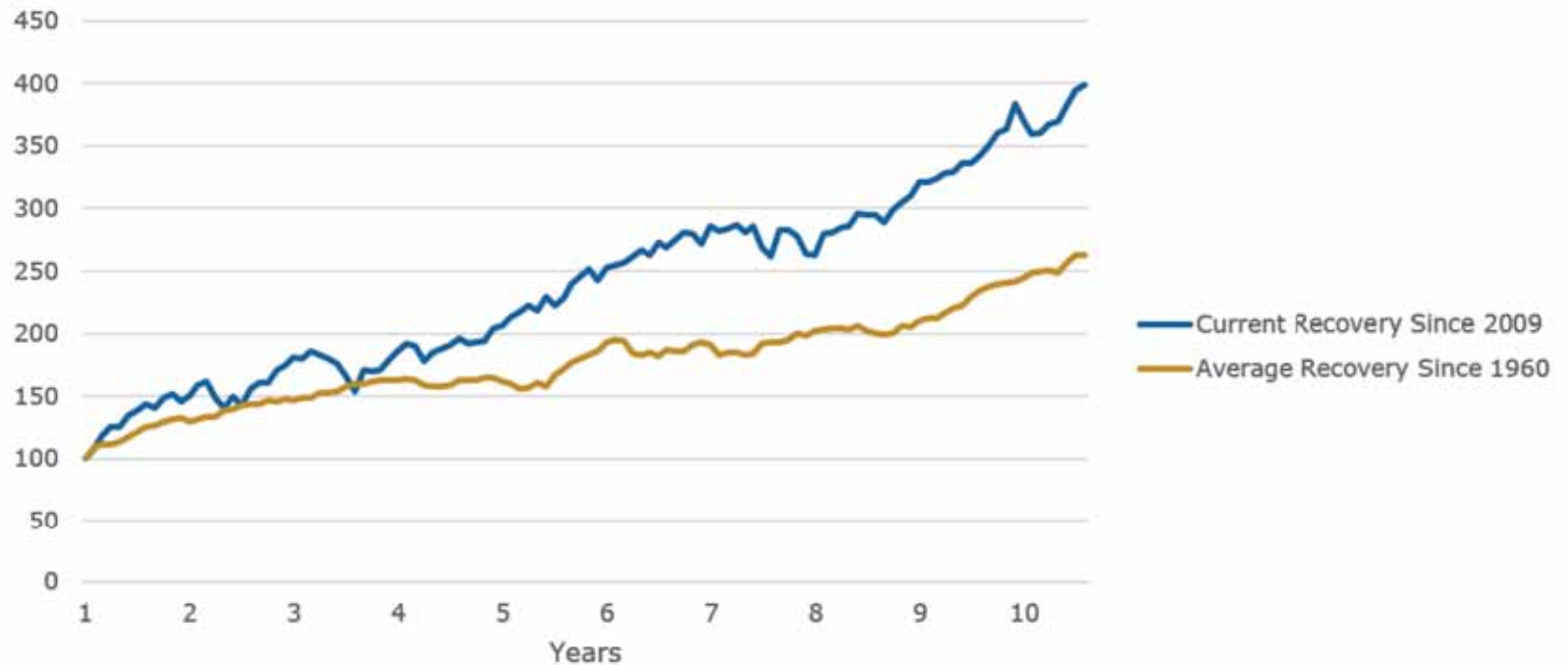
U.S. Real GDP Growth Following Recessions



Source: FactSet, PNC Capital Advisors Calculations

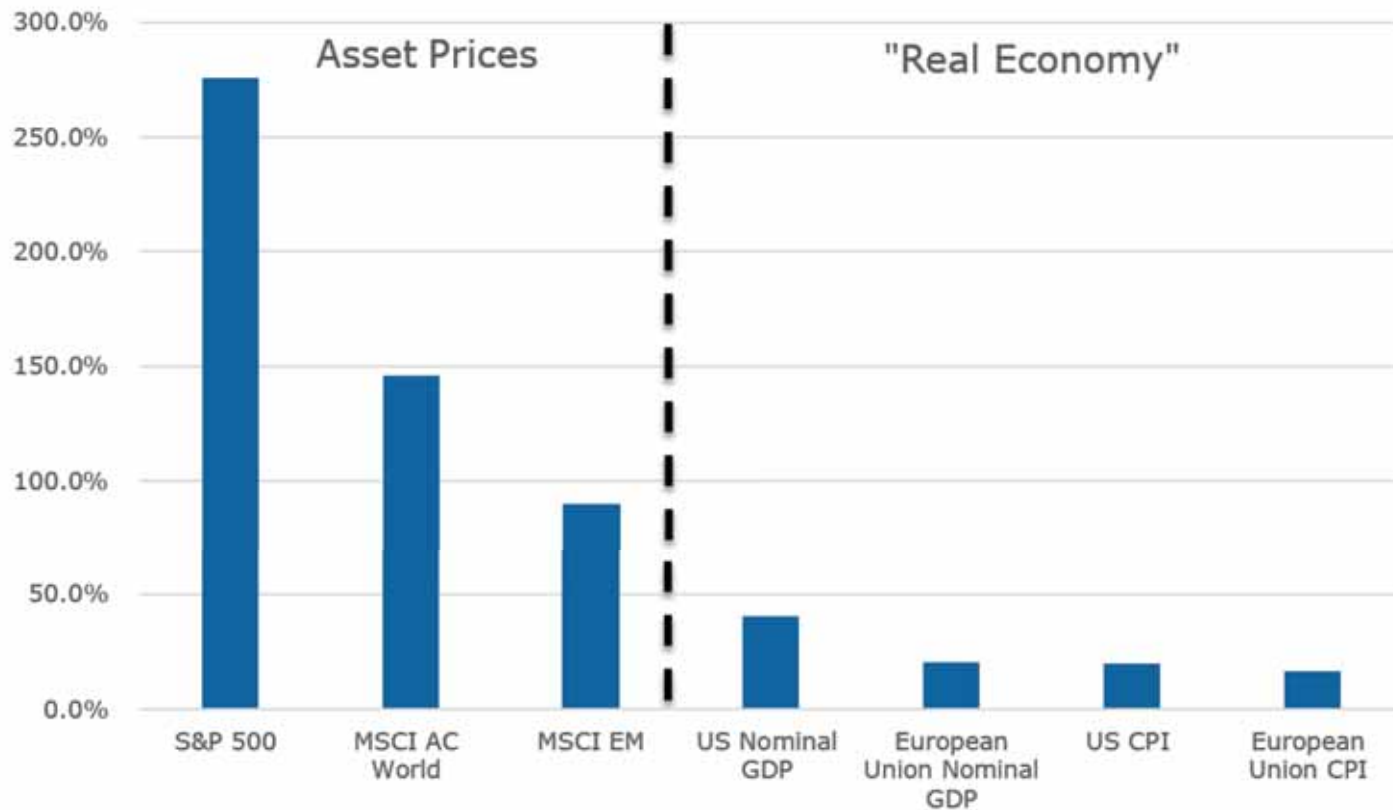
...But Markets Performing Better Than Usual

Markets Are Recovering Much Faster Than Usual



Real Assets Vs. Economic Performance

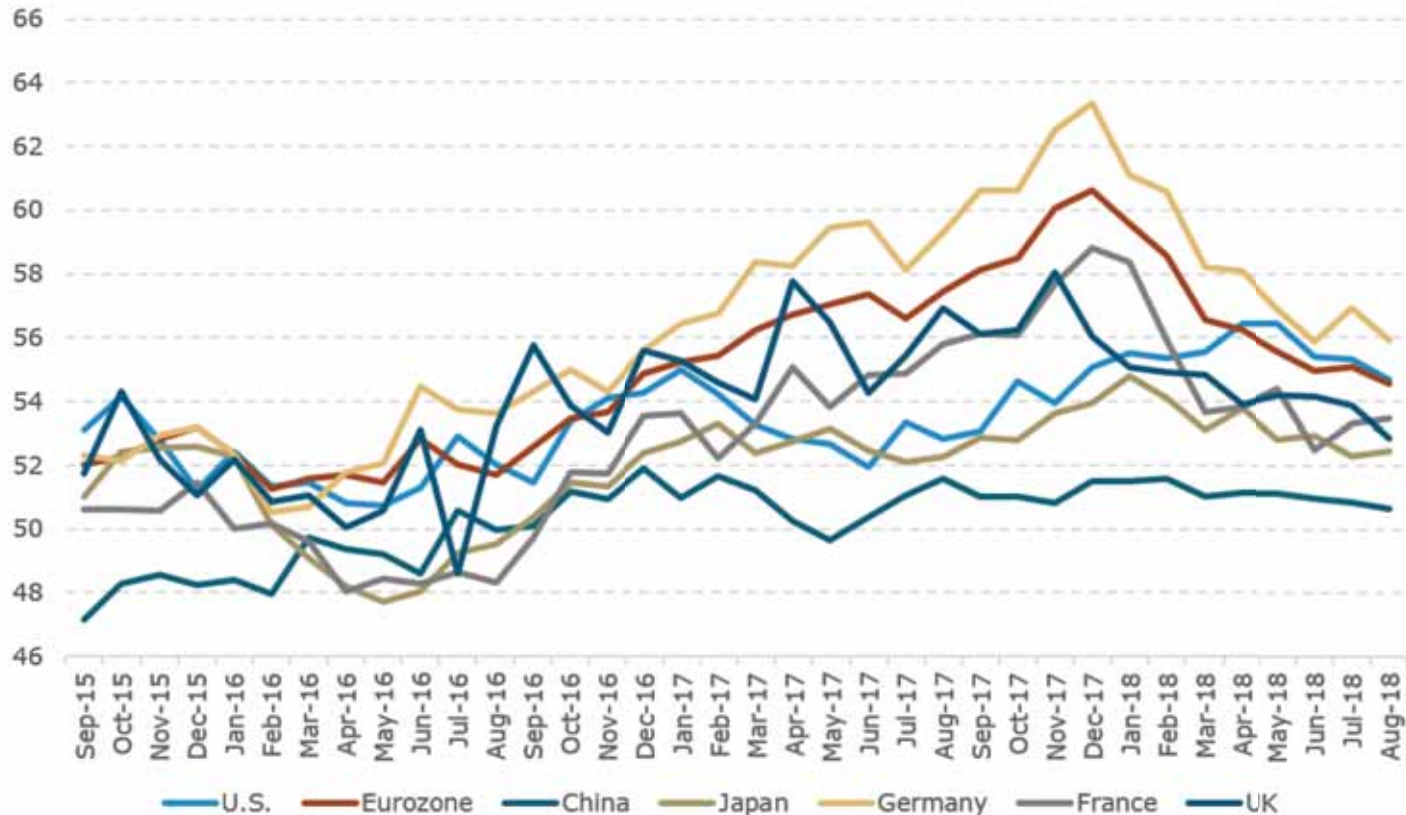
Large Difference Between Asset Inflation and "Real Economy" Inflation
Total Returns Since January 2009



Source: FactSet, PNC Capital Advisors Calculations

Growth Strong but Slowing...

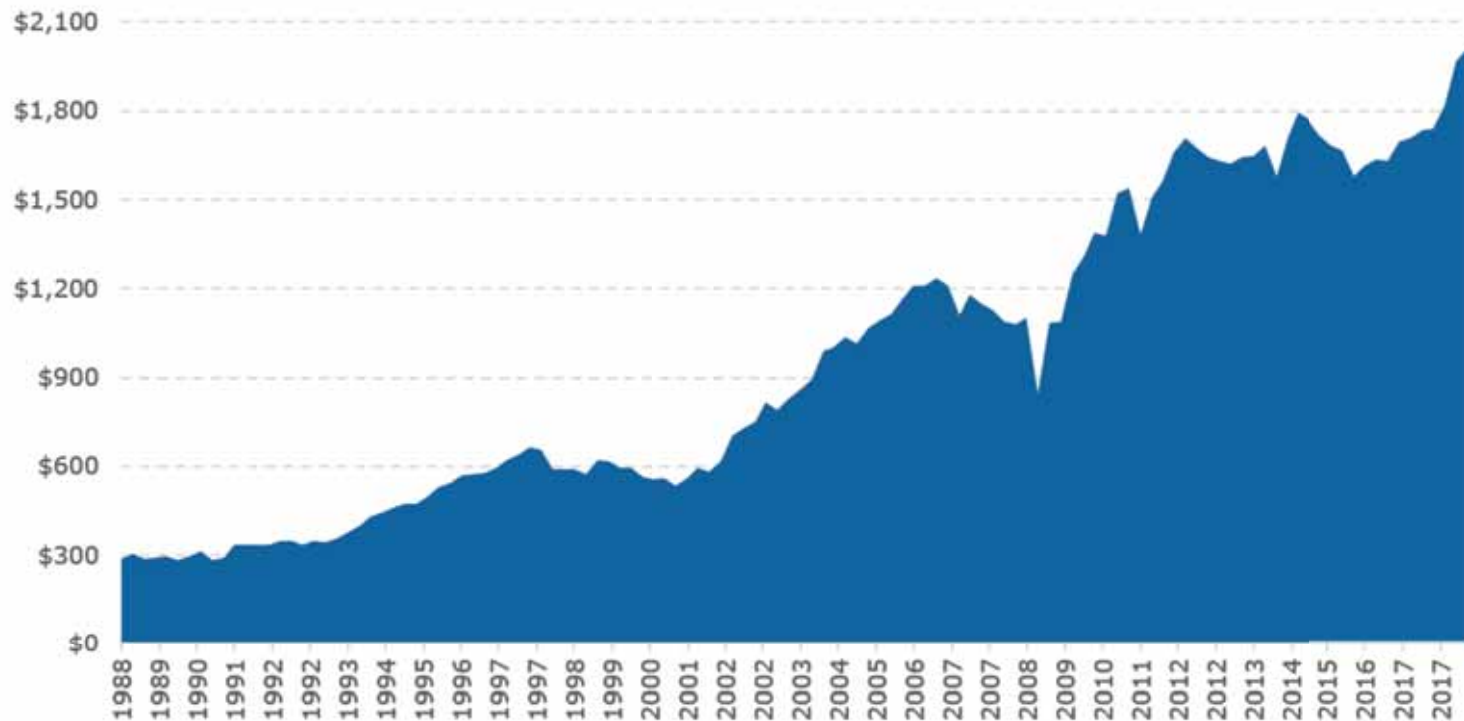
Global Purchasing Managers Indexes (PMIs)



Source: FactSet

...Even as Corporate Profits Surge

Corporate Profits (\$ in Billions)*
Seasonally Adjusted Annual Rate (1988 – 2018)



*Note: Inclusive of Inventory valuation adjustment and capital consumption adjustment
 Source: FactSet

U.S. Business Confidence All-Time Highs

NFIB Small Business Optimism Index
Seasonally Adjusted, Indexed to 1986



Source: FactSet

Is U.S. Dollar Strength Sustainable?

Intercontinental Exchange U.S. Dollar Price Index



Source: FactSet

Emerging Markets' Currencies Weakening

Selected Foreign Exchange Rates vs. USD
Indexed, 2 Years Ending September 2018



Source: FactSet

Clear Divergence: U.S. Outperforming International

MSCI All Country World Index ex US vs. S&P 500 Index



Past performance is not indicative of future results
 Source: FactSet

Potential Near and Long-term Investment Implications

- The post-WWII consensus is ending: the rise of political risk
- Trade frictions affect emerging markets, export economies, & specific sectors
- Globalization is not ending, but it is changing
- The question of European unity and fragmentation
- Post-2008 market and economic cycle is slowly ending
- Late-cycle attributes with a bear market on the horizon: Not if, but when
- U.S. dollar to decline longer term (the USD will pay the price for U.S. deficits)
- U.S. vs. international and growth vs. value
- Innovation to drive future technology adoption and sector resilience
- Buy select emerging market equities within 1-2 years

Is U.S. Dollar Strength Sustainable?

Intercontinental Exchange U.S. Dollar Price Index



Source: FactSet

Growth Has Outperformed Value

MSCI World Value Index Relative to the MSCI World Growth Index



Past performance is not indicative of future results
 Source: FactSet

Technology Continues to Dominate



Source: FactSet, Goldman Sachs Investment Research

Global Profit Increase Led by U.S...

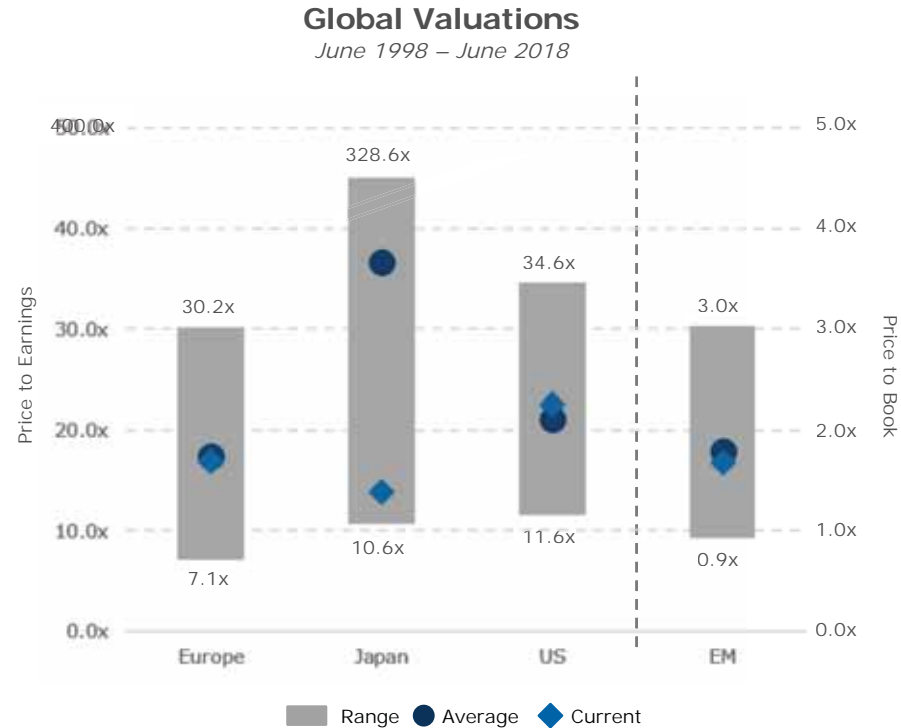
Global Earnings
Last 12 Months, Indexed to 2009



Past performance is not indicative of future results
 Source: FactSet

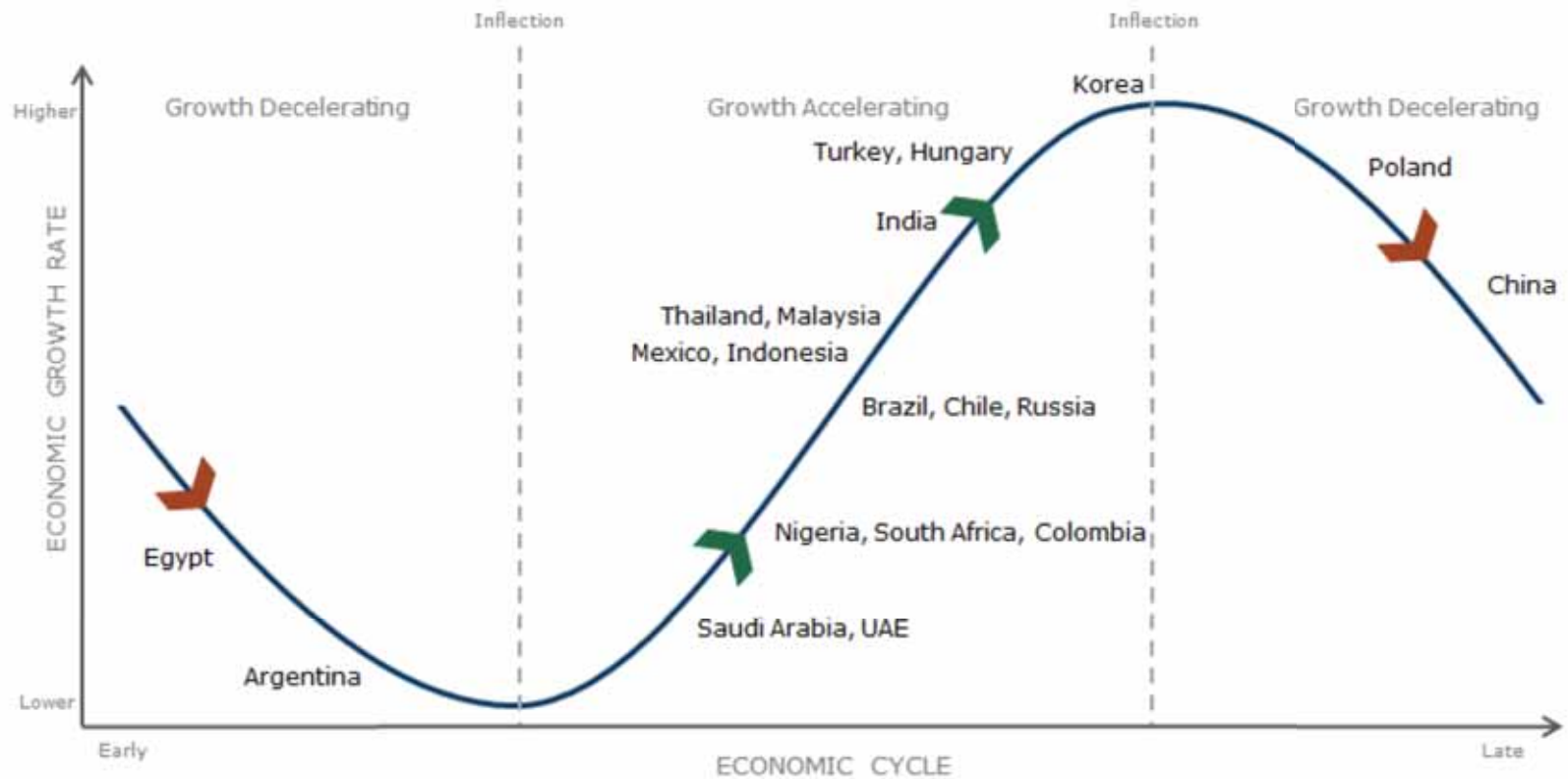
...Making the U.S. Expensive

Global Valuations



Source: FactSet

Positive Long-term Outlook for Emerging Markets



*For illustrative purposes only
Source: PNC Capital Advisors analysis*

Questions?



Martin C. Schulz
Managing Director, International Equity

To learn more visit pncfunds.com

Disclosures

You should consider the investment objectives, risks, charges and expenses of PNC Funds carefully before investing. A prospectus with this and other information may be obtained at 800-622-FUND (3863) or pncfunds.com. The prospectus should be read carefully before investing.

NOT FDIC INSURED | NO BANK GUARANTEE | MAY LOSE VALUE

PNC Capital Advisors, LLC (PCA), a subsidiary of The PNC Financial Services Group, Inc., serves as investment adviser and co-administrator to PNC Funds and receives fees for its services. PNC Funds are distributed by PNC Funds Distributor, LLC (PFD). PFD is not affiliated with PCA and is not a bank.

Mutual funds involve risk, including possible loss of principal. International investments are subject to special risks not ordinarily associated with domestic investments, including currency fluctuations, economic and political change, and differing accounting standards that may adversely affect portfolio securities. These risks may be heightened in emerging markets. Investments in value companies can continue to be undervalued for long periods of time and be more volatile than the stock market in general. Investments in growth companies can be more sensitive to the company's earnings and more volatile than the stock market in general. Investments in small- and mid-capitalization companies present a greater risk of loss than investments in large companies.

Registered representative are associated with PNC Funds distributor, LLC which is not affiliated with PNC Capital Advisors, LLC or its affiliates.

For institutional investors only, as defined by Rule 2210. Do not give, show, or quote to any other person. Not to be used with retail investors.

©The PNC Financial Services Group, Inc. All rights reserved.

For Investment Professional Use Only. Not for public distribution.

CE CREDITS

This webcast qualified for the following continuing education credits:

CFP Board – 1 hour

Investments & Wealth Institute™ (previously known as IMCA) – 1 hour

If you would like to receive credit for participating in this webcast, please follow the directions below.

***NOTE: YOU WILL HAVE 10 DAYS TO REPORT COMPLETION OF THIS WEBCAST VIA OUR WEBSITE. FINANCIAL ADVISOR MAGAZINE WILL THEN REPORT TO THE CFP BOARD AND CIMA ON YOUR BEHALF. AFTER 10 DAYS THE WEBCAST WILL NO LONGER BE AVAILABLE FOR REPORTING.**

1. Visit our website at http://www.fa-mag.com/ce_center.php
2. Select the designation you would like to report the webcast to.
3. If you have already registered to complete and report CE credits with us, please login using your username and password. If you are new to our CE Center, please complete a registration form in its entirety.
(Note: You will need to supply your ID# generated from Investments & Wealth Institute™.)
4. Once you are logged in to your CE Center account, SCROLL TO THE BOTTOM OF THE PAGE to find the list of CE exams and webcasts we offer. (Please read the important information on that page regarding the CE reporting process.)
5. Click on the webcast you are interested in and complete the short questionnaire and print the “Certificate Of Completion” page for your records.
6. The webcast credit will be reported by *Financial Advisor* magazine the first week of the new month for the previous month. Allow 10 business days for the credit to be posted on your account.

If you have any questions regarding CE credit reporting, please email Sherri Scordo at sherri@fa-mag.com

To view the slides and a recording of this webcast please visit:

<http://www.fa-mag.com/PNCWebcastOct11>

For upcoming webcasts, please visit: <http://www.fa-mag.com/webcasts.html>

Please send your questions, comments and feedback to: dawn@fa-mag.com

Sponsored by



Presented by

