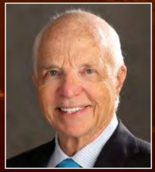
EPOCH | Epoch Investment Partners, Inc.

Epoch's Quarterly Capital Markets Outlook



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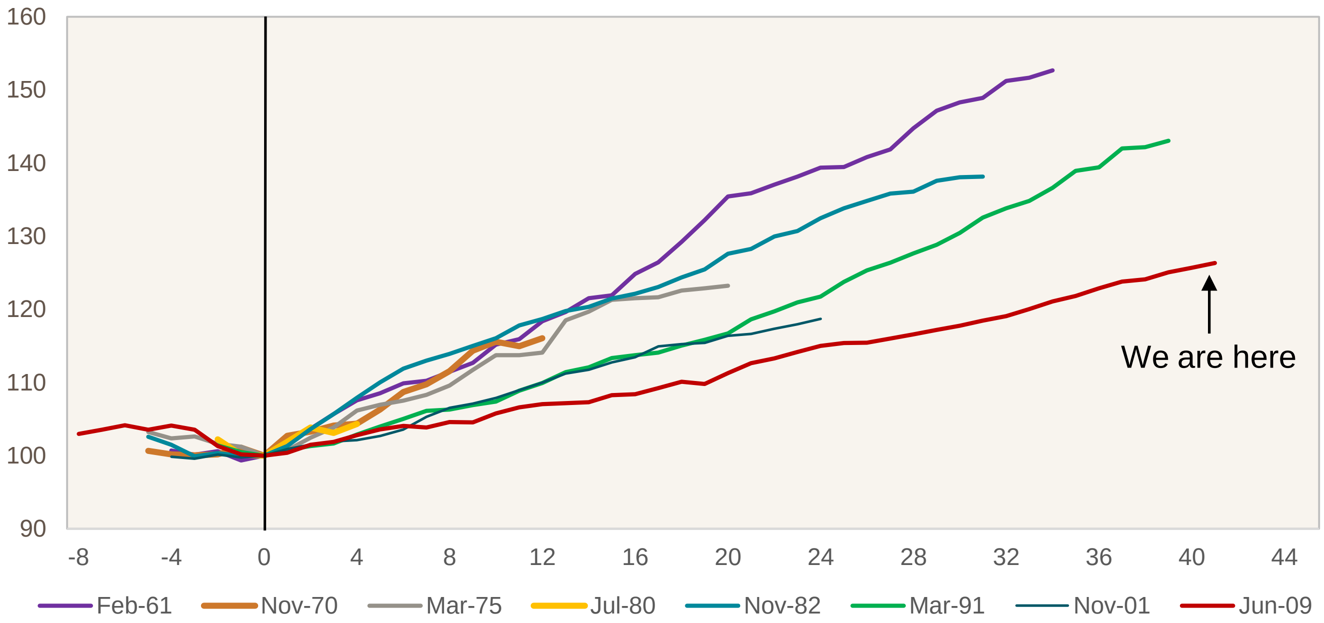
Wednesday, January 22, 2020 | The webinar replay is available on our website: **www.eipny.com**

Real Economy: The Longest and Flattest Recovery Ever!

Real GDP: Recoveries don't just die of old age



Source: Epoch Investment Partners, Bloomberg
Note: Date 0 measures the beginning of recovery, indexed to 100, with time measured in quarters

Why has growth been so tepid this cycle?

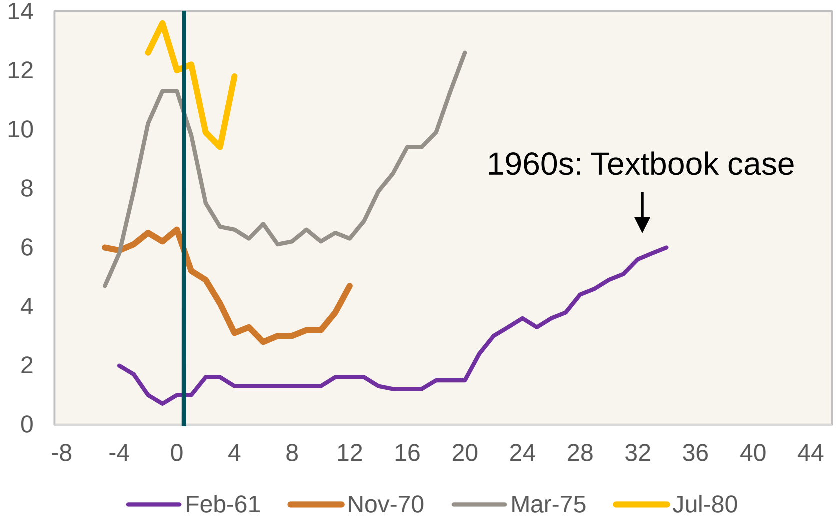
1) Debt hangover (Rogoff)
2) Secular stagnation (Summers)
3) Slowing innovation (Gordon)
4) Tech mismeasurement (Brynjolfsson)

What causes recessions?

1) Fed tightening: To head off inflation
2) Bursting bubble: Reflecting a massive misallocation of capital (housing, tech)
3) Exogenous shock (1973 OPEC)

Inflation: Technology Likely to Keep it in Check

Core CPI yoy (%):
1960s is the only textbook example

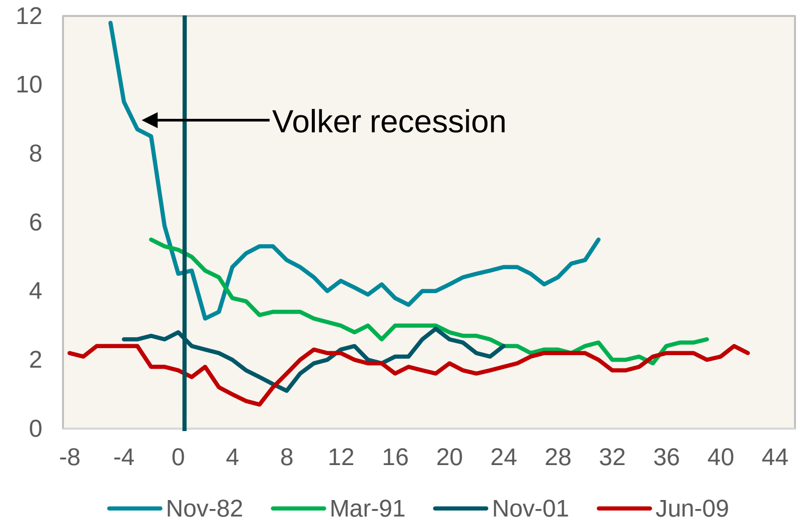


Source: Epoch Investment Partners, Bloomberg
Note: Date 0 measures the beginning of recovery, with time measured in quarters

Why benign inflation?

1. Depth of GFC: More ground to recover
2. Globalization/digital economy
3. Volker: Fed credibility, stable inflation expectations

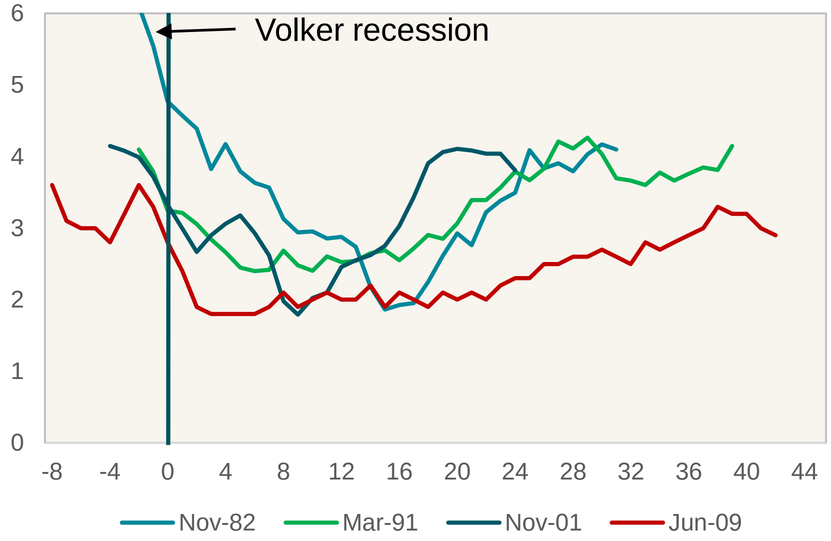
Unlearning ECO 101:
Inflation has been MIA for decades



Source: Epoch Investment Partners, Bloomberg
Note: Date 0 measures the beginning of recovery, with time measured in quarters

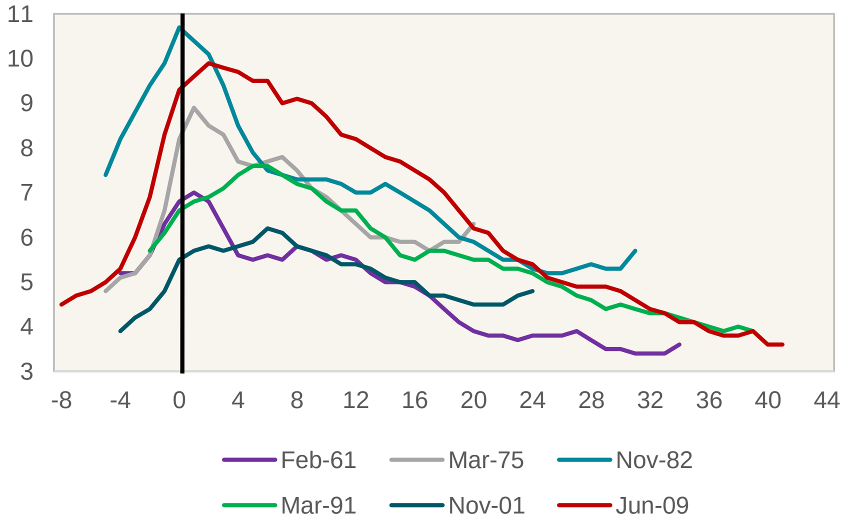
Wage-Push Inflation: Market's Obsession is (Likely) Misplaced

Average hourly earnings (yoy, %): Has remained in a tight 2 – 4% band for almost four decades now



Source: Epoch Investment Partners, Bloomberg
Note: Date 0 measures the beginning of recovery, with time measured in quarters

Unemployment rate (%): Market's nervousness is certainly understandable



Source: Epoch Investment Partners, Bloomberg
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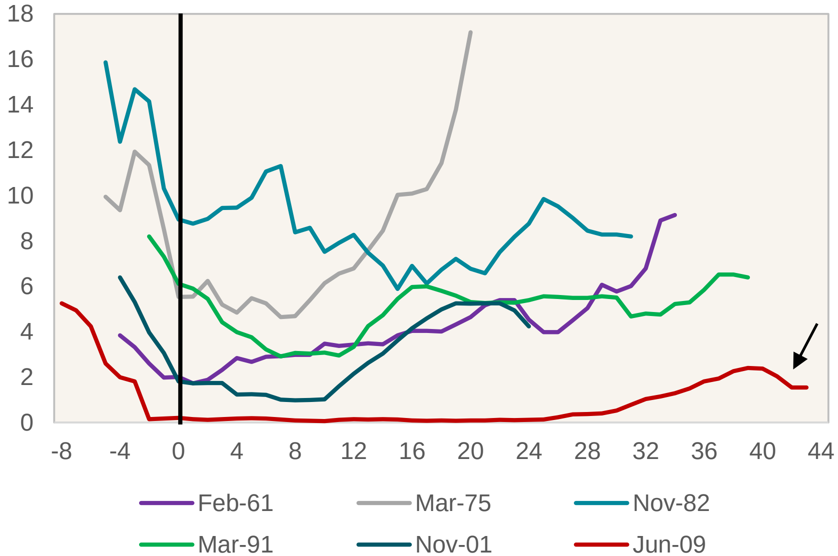
Powell Pivot: Key Market Event of 2019

FFR (%): The most dovish Fed ever, cuts with the unemployment rate at a 50-year low

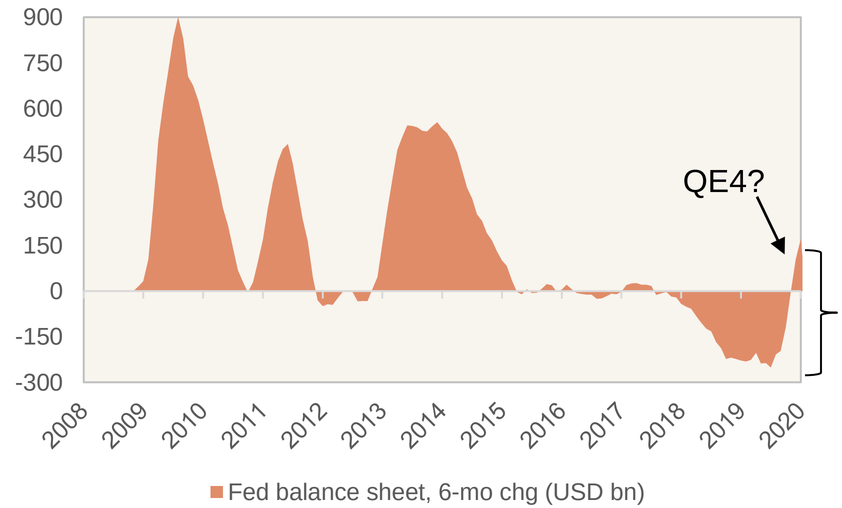


Source: Epoch Investment Partners, Bloomberg
Note: Date 0 measures the beginning of recovery, with time measured in quarters

180° turn: From hikes to cuts, and QT to QE

1) Impact on S&P 500: Responsible for 60% of gains last year (Cornerstone Macro)
2) Absent the pivot: We'd likely already be in recession
3) What allowed the Fed's U-turn? Benign inflation and absence of a bubble

Fed liquidity: From shrinking at a $250 bn pace to expanding by $175 bn



Source: Epoch Investment Partners, Bloomberg

U.S. 2020 Outlook: Fading Concerns, Modest Returns

Consensus expects a market friendly outcome

	2018	2019	2020	2021
GDP (%, yoy)	2.9	2.3	1.8	1.9
Consumption (%, yoy)	3.0	3.2	2.4	2.0
NFPs (average, '000)	204	175	132	108
Unemployment (%, eoy)	3.9	3.7	3.6	3.8
Core PCE prices (%, yoy)	2.0	1.6	1.9	1.9
10Y Treasury (%, eoy)	2.7	1.9	1.9	2.1
Budget (% GDP)	-4.2	-4.7	-4.8	-4.7
Current account (% GDP)	-2.4	-2.4	-2.5	-2.5

Source: Bloomberg consensus, Jan. 19, 2020

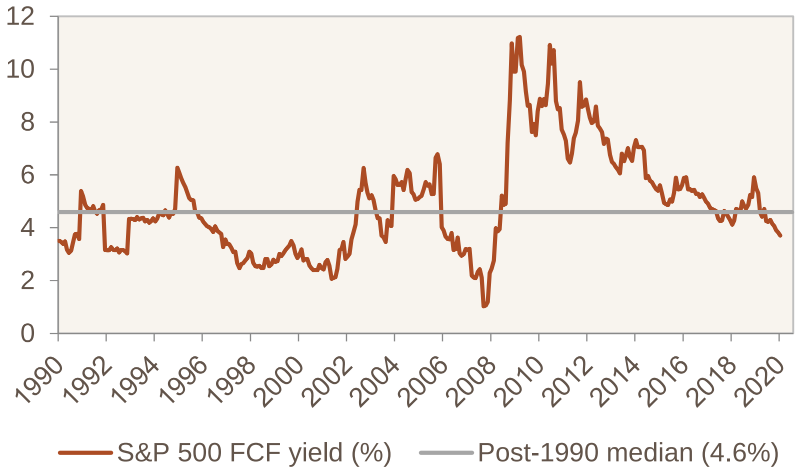
S&P 500	2018	2019	2020
Revenues (%, yoy)	8.8	3.9	5.4
Earnings (%, yoy)	20.1	0.2	9.5

Source: FactSet, Jan. 17, 2020

We expect EPS growth of 3% to 5%

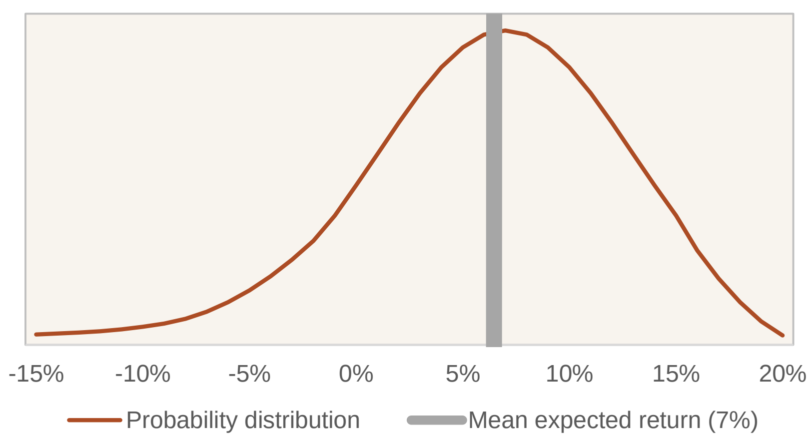
- Plus a dividend yield of just under 2%
- PE multiples: Flat to slightly up, but with the balance of risks lying to the downside

FCF yield (%): Currently lowest since early 2008



Source: Epoch Investment Partners, Bloomberg

2020 estimated return distribution for S&P 500



Source: Epoch Investment Partners

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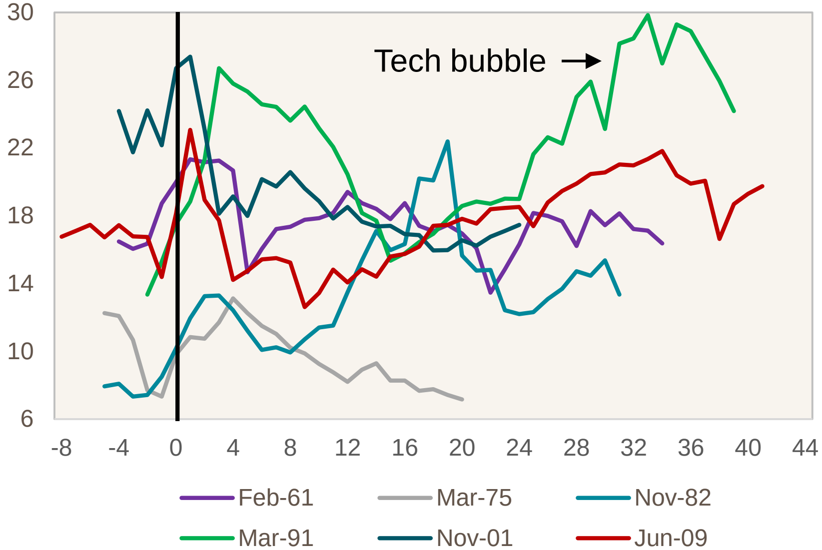
Equity Multiple: Unlikely to Expand Much Further in 2020

SPX T12M PE (x): Was only higher once, in the '90s



Source: Epoch Investment Partners, Bloomberg
Note: Date 0 measures the beginning of recovery, with time measured in quarters

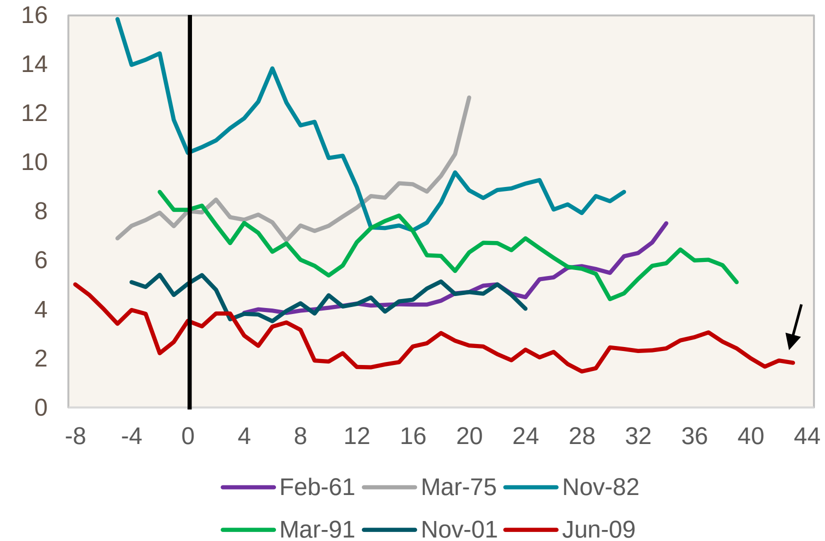
Low rates reflect

1) Hyper-active central banks
2) Demographics: Especially Japan & Europe
3) Tech is the new macro: Transition from atoms to bits is deflationary

What could drive multiples higher?

1) Even looser Fed policy: But there aren't many bullets left
2) Improved outlook for earnings growth and margins: Difficult given deglobalization
3) Lower economic and policy uncertainty: Unlikely in 2020

Historically low 10Y yield (%): Justifies today's higher multiple



Source: Epoch Investment Partners, Bloomberg
Note: Date 0 measures the beginning of recovery, with time measured in quarters

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Global Policy Uncertainty Index: Close to a Record High

Monetary and fiscal policy

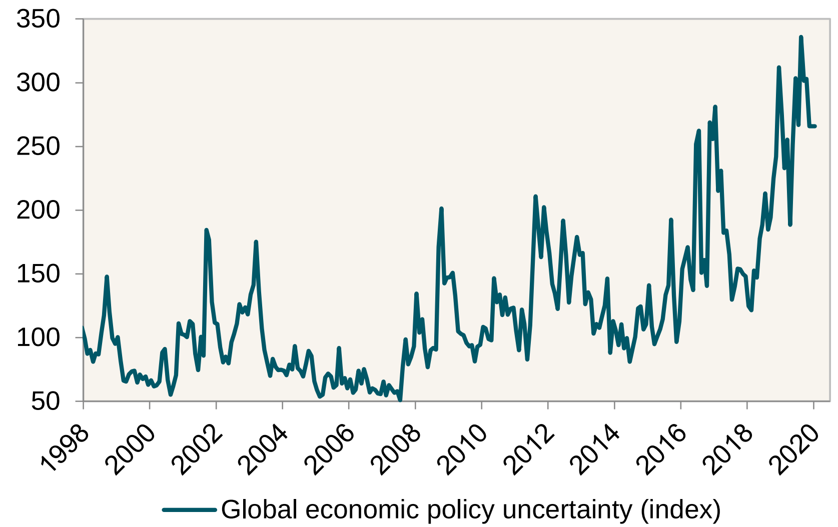
- Hyper-active central banks
  - Encouraging the mispricing of capital
  - Absence of price discovery in bonds
  - 40% of global sovereign bonds have negative yields
- Fiscal profligacy: America's trillion dollar deficit
  - In spite of 3.5% unemployment rate
  - MMT has a growing fan base

Trade policy and deglobalization

- Cold War 2.0
  - Phase 1 deal: A short-term political fix
  - Underlying conflicts are deep-rooted
- Digital tax: On U.S. tech firms' revenues
  - U.S. to retaliate against France & Italy
- Brexit: Tight, unrealistic deadline
  - U.K. to grow only 1.1% this year

Geopolitical

- HK: To wither on the vine
  - Taiwan rejects "One country, two systems"
- Iran: Indirect retaliation is likely



Source: Epoch Investment Partners, Bloomberg

November's election

- Trump re-elected is Trump unchained
  - Accelerates deglobalization
  - Second round of tax cuts
- Bernie Sanders: $91.2 tn spending plan
- Elizabeth Warren: $30.5 tn
  - Both estimates are over ten years
- Russian interference

Geopolitical Risk & Cold War 2.0: Challenging Multilateralism and the Liberal Order

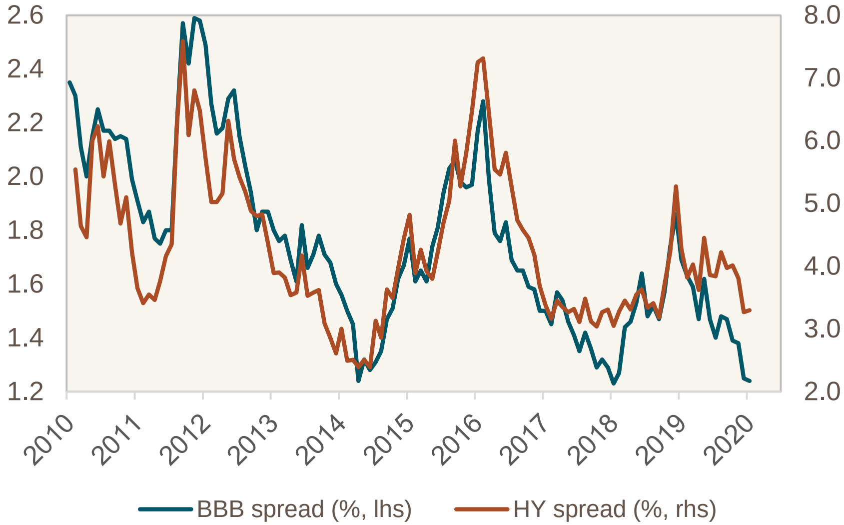
- Davos vs. Rest of the World
- Income Inequality and Populism
- Globalization vs. Sovereignty
- Trade tensions, Brexit, HK …
- China, Russia, Iran, Turkey, Hungary, Brazil …

"The global liberal order is coming apart. When you simultaneously challenge social norms and many of the values that anchor people – a sense of home, job security, and the prospects for growth – and amp it up with social media networks, you get serious blowback, as we are seeing in France and Britain with Brexit."

Bill Priest, *Barron's*, Jan. 2019

Corporate Debt: Likely to Be at the Epicenter of Next Recession

U.S. Corporate Bond Spreads

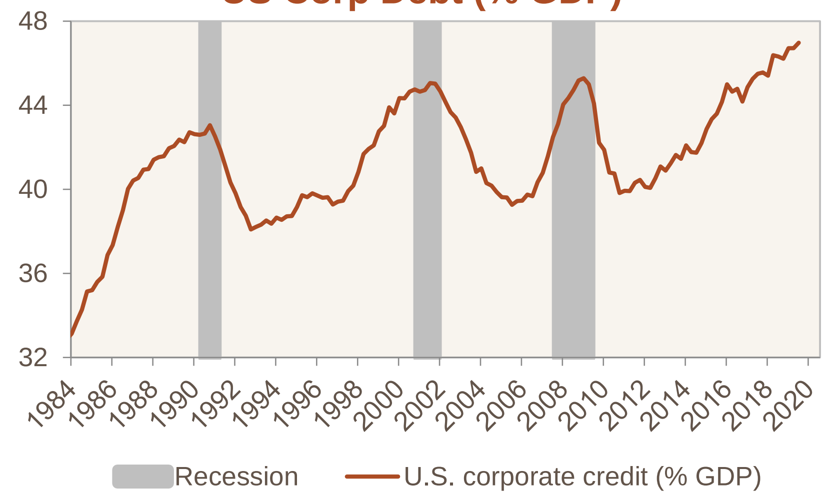


Source: Epoch Investment Partners, Bloomberg

A decade of QE: Destroys price discovery

- Especially in fixed income markets
- Credit spreads are too tight and 40% of sovereign bonds have negative yields
- For now, few are worried about the misallocation and mispricing of capital
- That is, until inflation accelerates, defaults spike, or central bank liquidity normalizes

US Corp Debt (% GDP)



Source: Epoch Investment Partners, Bloomberg

Next recession will be exacerbated by

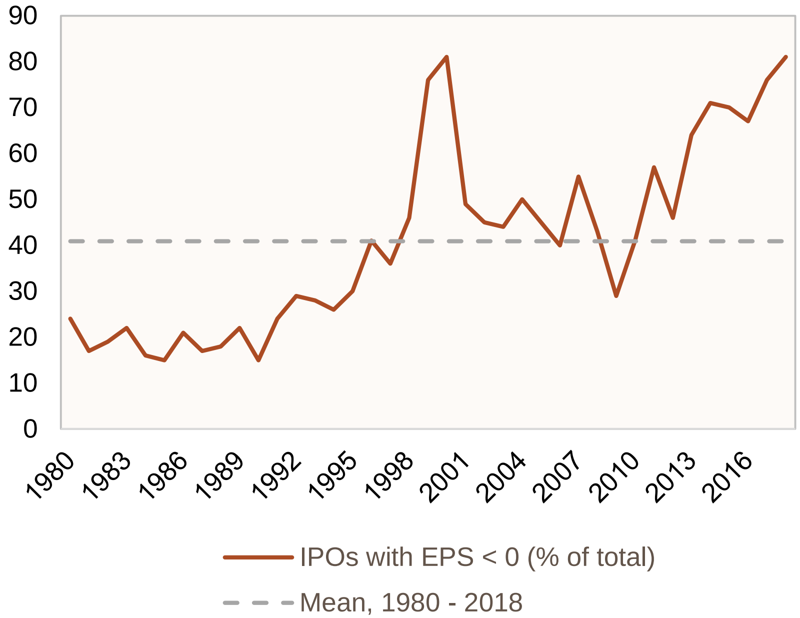
- Corporate spreads widening dramatically
- Avalanche of fallen angels (overwhelming HY market; 50% of IG index is BBB)
- Liquidity providers withdrawing

When Money is Free, Imagination is Real

Unicorns, IPOs, and the Fear of Repeating the Late 1990s

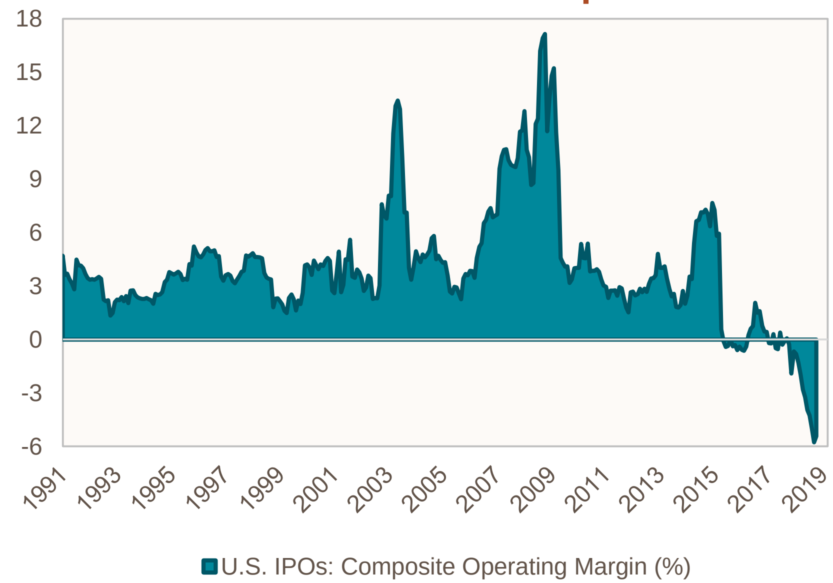
- Many recent IPOs appear to be highly speculative, with stratospheric valuations and possessing no clear pathway to becoming FCF-generative.
- 81% of recent IPOs are unprofitable, and the average operating margin has plummeted.

The Proportion of U.S. IPOs with Negative EPS Is Double the Historical Average



Source: Jay Ritter IPO database

The Composite Operating Margin for U.S. IPOs Has Collapsed



Source: Jay Ritter IPO database, Empirical Research Partners
Note: The margin is calculated on a trailing 12-month basis

China: Debt-Driven Growth

China's growth model: Debt-financed investment

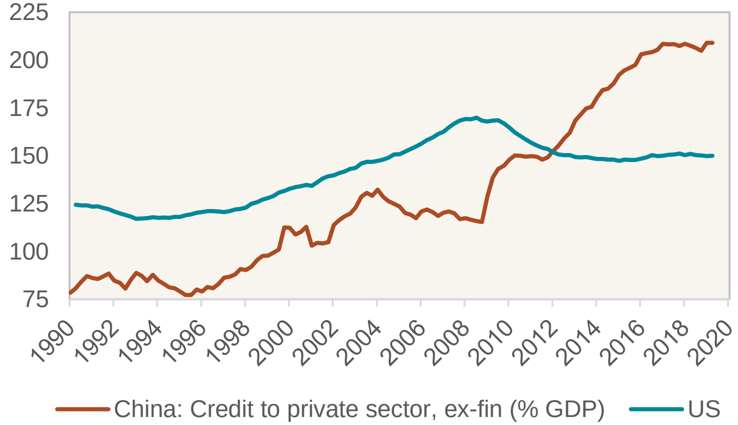
- Total social financing growth: Still 10.8% yoy
  - Deleveraging hasn't even started yet
- GDP growth is closer to 4.7% than 6.0%
- Desperate for IP and moving up the value chain

One Belt One Road

"… a house of cards because of debt overload, poor infrastructure, and a lack of transparency ..."

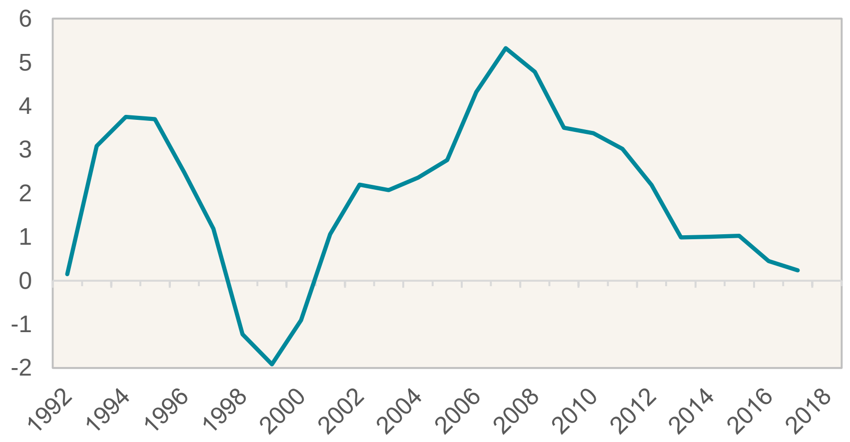
– *Adam Boehler, U.S. Int'l Development Finance Corp*

Credit to private sector, ex-fin (% GDP)



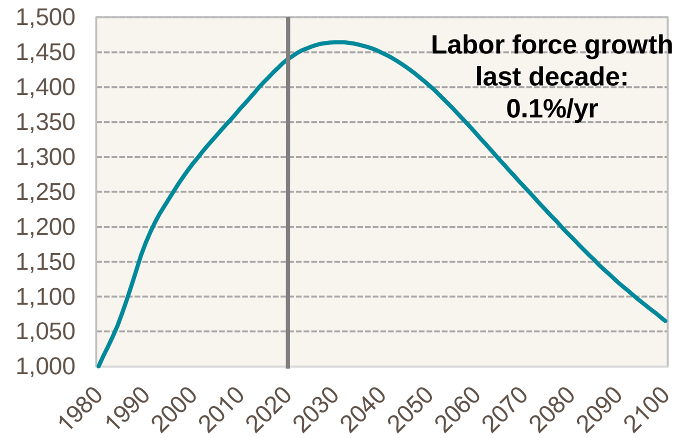
Source: Epoch Investment Partners, Bloomberg

China's total factor productivity growth (%)



Source: Epoch Investment Partners, Federal Reserve Economic Data

China's population (mn): Peaks in 2030



Source: Epoch Investment Partners, United Nations

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Trade War Consequences: The End of Margin Expansion

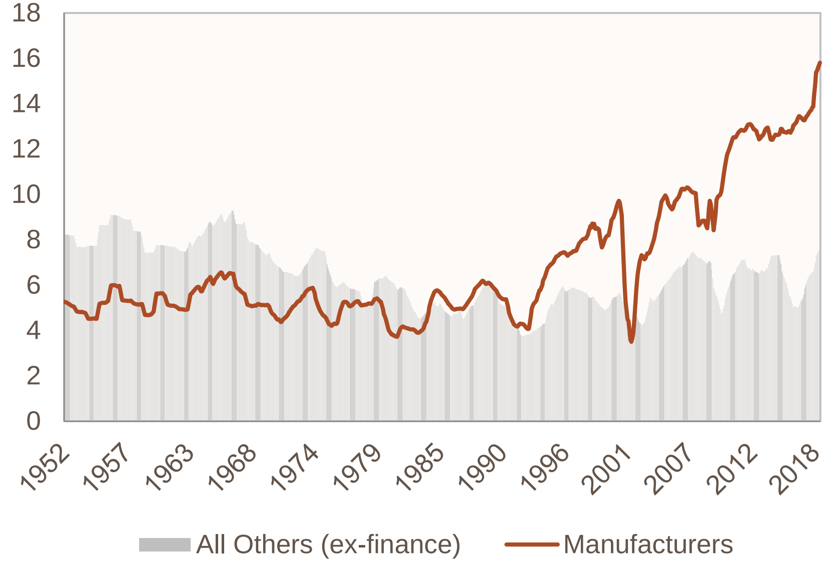
Globalization has faltered: Negative for economic growth, top-line revenues and corporate margins

Emerging pattern of trade: More regional (Asian) and more focused on services and global supply chains

- Large and sustained increases in the cross-border flow of goods, services, capital, ideas and people have been the most important factor in world affairs for the three decades following 1989
- But now, most measures of global integration (trade, FDI, MNCs) are in retreat or stagnating

S&P 500, net profit margins (%)

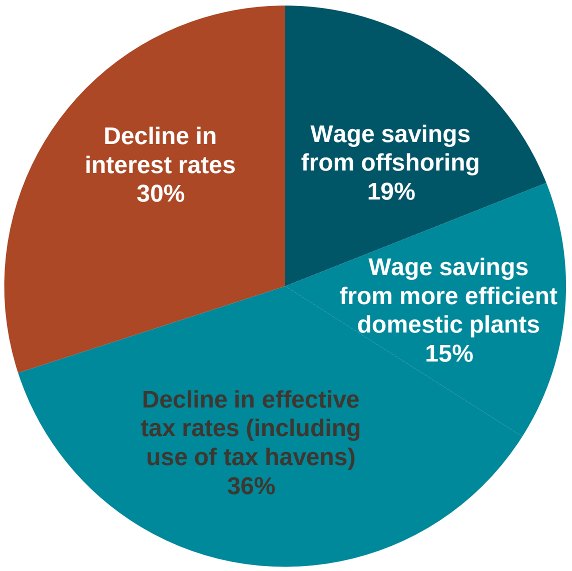
Manufacturers Have Enjoyed Tremendous Margin Gains during the Last 30 Years



Source: Empirical Research Partners
Note: Net profit margins for S&P 500 companies, trailing 4 quarters, smoothed.

S&P 500 Manufacturers Margin: 2018 vs 2000

The Margin Expansion Can Be Attributed to Four Factors



Source: Empirical Research Partners

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Cold War 2.0: Geostrategic Competition and the Weapons of Choice

"And when it comes to 5G … none of us would have installed Soviet technology. Right?"

— Secretary of State, Michael Pompeo, Jan. 13, 2020

The CFIUS Bazooka: Blocking investments in the US

- Committee on Foreign Investment: Reviews national security implications of foreign investments
- Chaired by Treasury Secretary: Includes reps from Defense, State, Homeland Security & Commerce
- Under President Trump, CFIUS has blocked numerous Chinese acquisitions of U.S. companies

The Dollar Goes to War: Cutting off access to USD transactions

- Sanctions cut-off firms from USD transactions: Freezing them out of the global financial system
- Controlling access to USD-funding and SWIFT network: Part of America's "exorbitant privilege"
- If used against Huawei, it would risk global network blackouts and severe economic damage

Export Administration Regulations: Blacklisting Chinese firms

- Entity list: First used in 1997 to fight the proliferation of WMD
- Huawei placed on entity list, May 2019: Claiming it threatened America's national-security interests
- Prohibits the export of components from America to Huawei and its subsidiaries

Technological decoupling: Forcing Huawei to obtain components from non-US competitors

- Other Chinese firms are doing the same for fear of similar treatment
- National security considerations: Imply an unravelling of tech supply chains

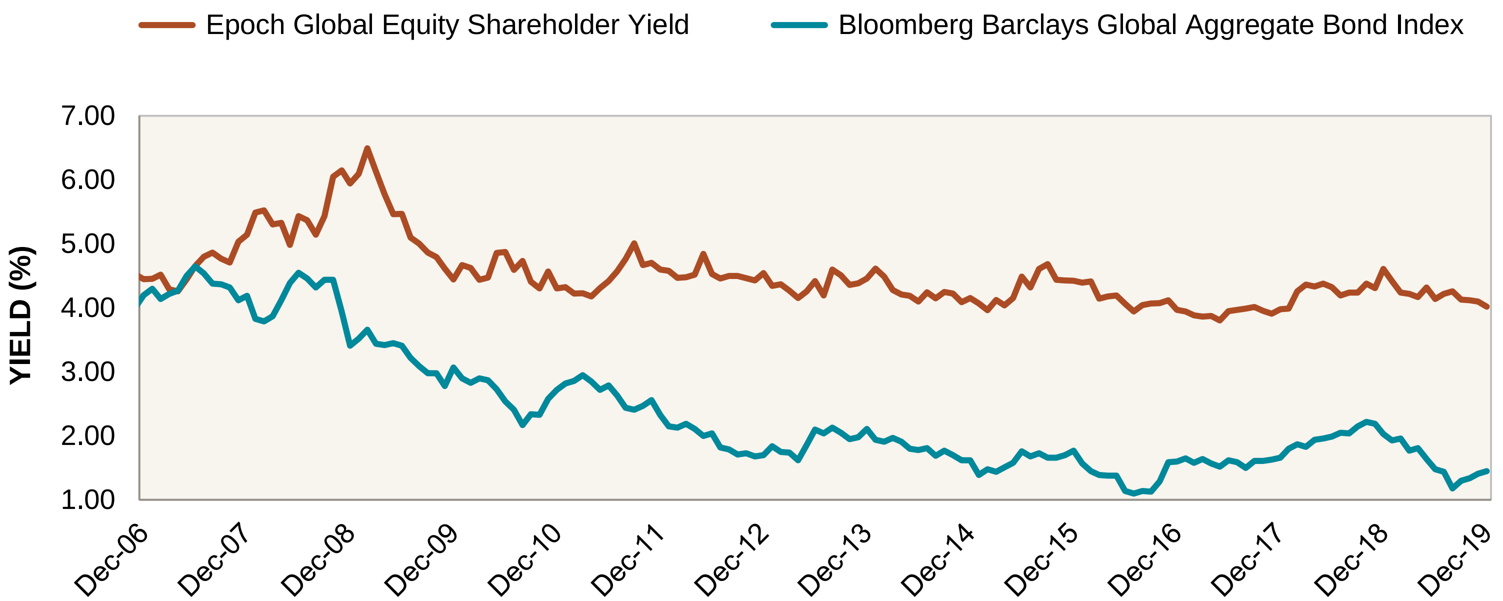
Source: The Economist

Equity Yield: Superior to Bond Yields

- U.S. SPX: Dividend yield of 1.8% + buyback* yield 2.9%
- Europe SXXE: Dividend yield of 3.1% + buyback* yield 1.3%
- Japan TPX: Dividend yield of 2.3% + buyback* yield 1.1%

*Buyback yield = value of shares repurchased divided by market capitalization
Source: Bloomberg, Epoch Yardeni, Goldman Sachs

Global Equity Shareholder Yield



Source: Bloomberg, FactSet. As of December 31, 2019
The data shown for Global Equity Shareholder Yield is of a representative account and such data may vary for each client in the strategy due to market conditions, client guidelines and diversity of portfolio holdings.

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Brexit: Three and a Half Years and Counting

Political upheaval has been the defining feature thus far . . .

June 23, 2016
UK votes to leave the EU

January 31, 2020
UK set to leave the EU

Three Prime Ministers
Two General Elections
Multiple Deadline Extensions


Daily Mail
HISTORIC EDITION
TAKE A BOW, BRITAIN!
It was the day the quiet people of Britain rose up against an arrogant, out-of-touch political class and a contemptuous Brussels elite. Read the Mail's incomparable writers on the most tumultuous event of our times


Daily Mail
MONEY MAIL
BREXIT IN CRISIS
Exactly 1,000 days ago, Britain voted to leave the EU. Today incompetent MPs and hard Brexit zealots have made us a laughing stock – and now Brussels is telling us 'to think again'. The result...
1,000 WASTED DAYS
SPECIAL REPORTS AND ANALYSIS


Daily Mirror
How to cure your festive spending hangover
BREXIT SHAMBLES
No deal.. No hope.. No clue.. No confidence
Most humiliating Commons defeat in history as MPs kill off May's deal
Corbyn launches bid for No10 as he calls vote to spark an election


DAILY EXPRESS
GENERAL ELECTION SPECIAL
VICTORY FOR BORIS... AND FOR BREXIT!
Exit poll results Tory 368 Labour 191 SNP 55 Lib Dem 13 Others 23

Brexit: The End is in Sight?

January 31, 2020: UK leaves the EU

- UK legally ceases to be a member of the EU
- UK and EU enter into transition period lasting until year end
- During transition, most existing arrangements between the UK and EU remain intact
- UK loses its representation in EU decision-making institutions, agencies, and bodies
- UK and EU will attempt to negotiate a trade deal; UK free to negotiate with other countries too

December 31, 2020: Transition period ends

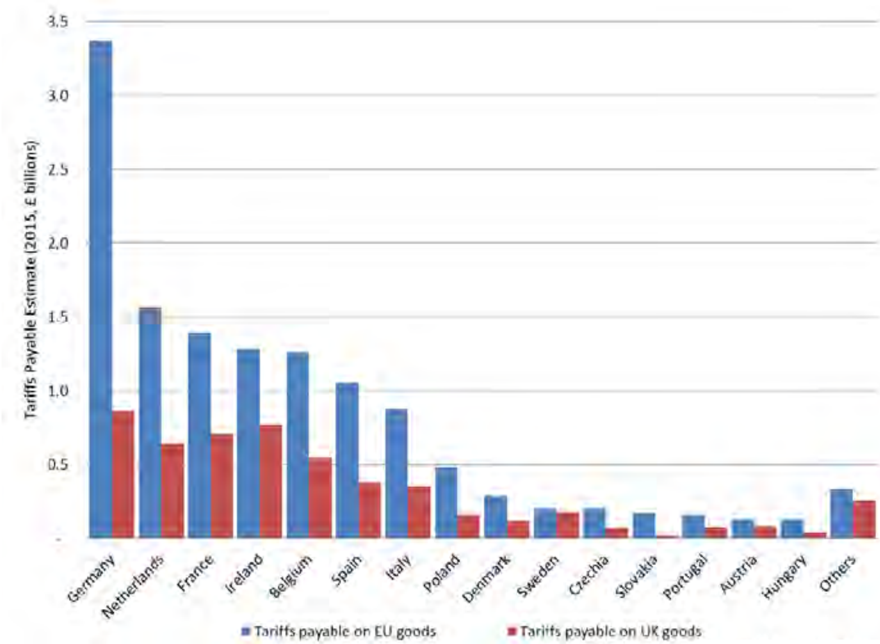
- UK and EU will begin trading under new terms on January 1, 2021
  - Newly negotiated trade deal or
  - WTO rules
- Boris Johnson has ruled out an extension of the transition period
  - Time frame to agree to new trade deal is aggressive
  - UK has until June 2020 to request extension
  - Maximum extension to end of 2022

Brexit: New Trade Deal or WTO?

Absent a negotiated trade deal, the UK and EU will revert to WTO rules

- Average EU tariff is 2.8% for non-agricultural products but there is a wide range
- Autos and agricultural products would be hard hit
- UK exporters could face £5 billion of tariffs; EU exporters £13 billion
- Financial services could be problematic

Estimate of annual tariffs payable on UK and EU goods by EU Partner Country



Source: Civitas, WTO, UN

Biggest Losers by Value: UK and EU industries facing the most tariffs (£ millions)

	EU Exporters of	Tariff Estimate		UK Exporters of	Tariff Estimate
1.	Vehicles (including parts and accessories)	£3,896m	1.	Vehicles (including parts and accessories)	£1,348m
2.	Meat	£1023m	2.	Meat	£378m
3.	Dairy produce	£956m	3.	Dairy produce	£331m
4.	Preparations of meat and fish	£563m	4.	Plastics and plastic products	£286m
5.	Plastics and plastic products	£498m	5.	Nuclear reactors, boilers and mechanical appliances	£210m
6.	Electrical machinery and equipment (including parts)	£477m	6.	Mineral Fuels, oils and other products their distillation	£167m
7.	Preparations of vegetables and other parts of plants	£372m	7.	Preparations of meat and fish	£154m
8.	Nuclear reactors, boilers and mechanical appliances	£366m	8.	Electrical machinery and equipment (including parts)	£144m
9.	Vegetables	£326m	9.	Organic chemicals	£134m
10.	Preparations of cereals	£303m	10.	Waste from food industries and animal fodder	£123m

Source: Civitas

Brexit: Will Great Britain Become Little England?

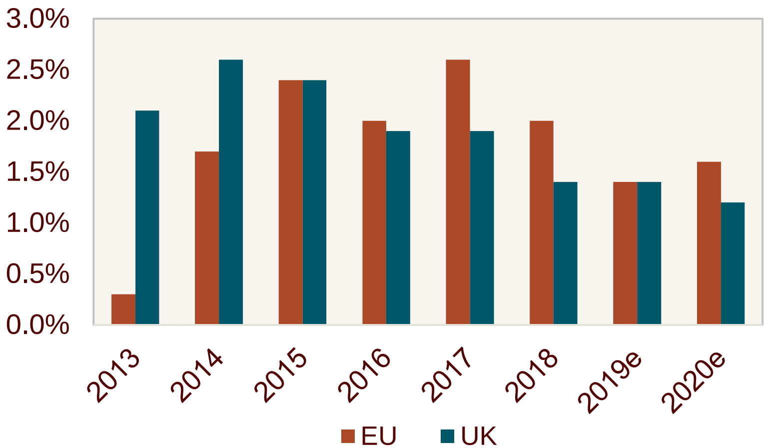
EU Membership has its benefits or does it?

- The Four Freedoms, i.e. the free movement of:
  - Goods
  - Services
  - Capital
  - People
- "Leave" voters saw the movement of people (immigration) as the most tangible impact of EU membership

UK Risk Mitigants

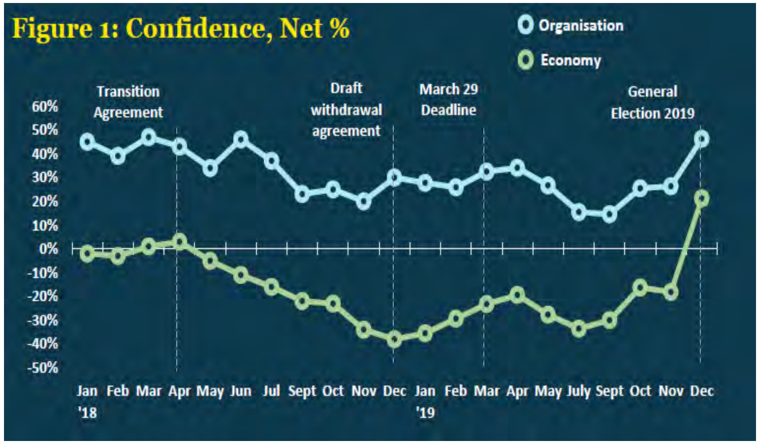
- UK has its own currency
- UK has its own central bank and monetary policy
- Prime Minister Boris Johnson enjoys a significant majority in Parliament

EU and UK GDP Growth



Source: The World Bank

UK Business Confidence Tracker



Source: Institute of Directors

Brexit: Market Implications

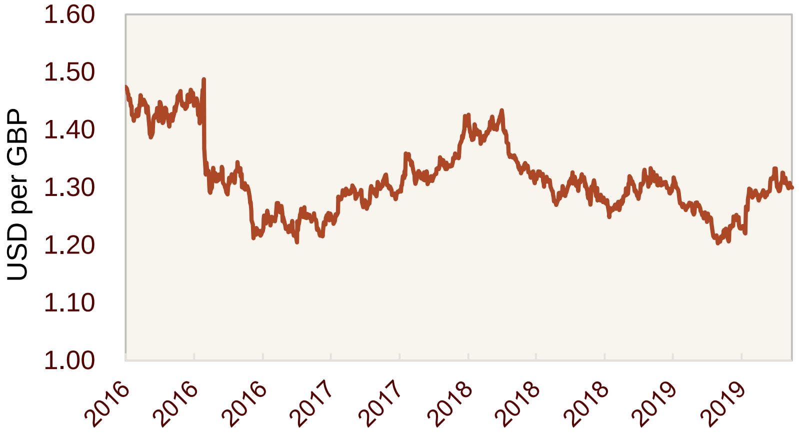
Brexit is approaching the finish line, but challenges remain and volatility will likely persist

- Remember: investors buy companies not countries
- Country of domicile provides important context: legal and regulatory framework and macroeconomic conditions
- Key considerations when evaluating a company against the backdrop of Brexit:
  - Exposure to trade
  - Exposure to the UK economy (recession risk)

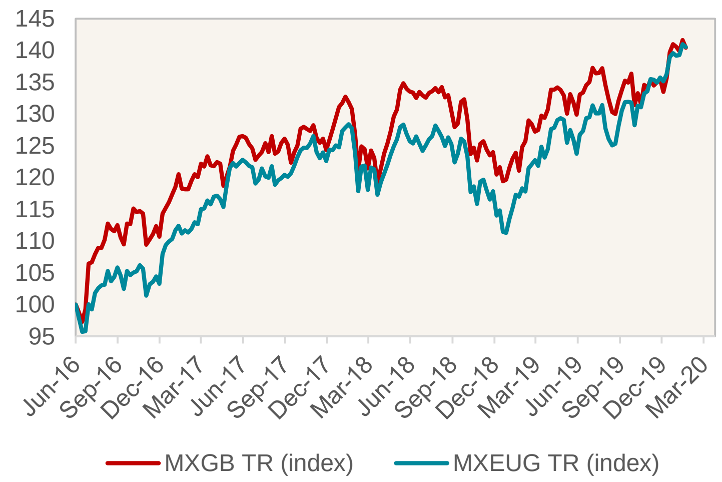
Ultimately, we expect the UK to be just fine

- Supportive monetary policy
- Potential fiscal stimulus
- Market drawdowns on Brexit developments may be an opportunity for long-term investors

FX: British Pound vs. U.S. Dollar



UK and Europe Equity Market Performance



Source: Bloomberg

Investment Implications: Fading Concerns, Modest Returns

1. **Hyper-active central banks:** A year ago, reflecting tightening liquidity and rising trade tensions, a recession appeared increasingly likely. The Fed responded with the "Powell Pivot", which has since broadened into a global easing cycle. The resultant onslaught of liquidity has provided a welcome, albeit temporary, tailwind for equities. However, it has also promoted the mispricing of capital and the absence of price discovery, especially in bonds.
2. **Trade is the battle, tech is the war, values are the stakes:** The Phase 1 deal is a short-term political fix. However, the underlying conflicts are deep-rooted, so trade tensions are likely to remain a source of volatility. We're particularly concerned about the impact on margins of a bifurcation in global supply chains (especially affecting tech). Further restrictions on investment and capital flows are probable (citing national security issues), and there is a rising risk of a currency war.
3. **Tech is the new macro, data is the new oil:** Technology is positive for all three ROE components — profit margins, asset utilization, and leverage. Among other things, this implies corporate margins can remain high for a prolonged period and don't necessarily need to revert. Equally importantly, suggests companies will continue to return a higher proportion of cash to shareholders.
4. **A World of Yield Starvation:** Bond yields have been driven lower by elevated levels of policy uncertainty, demographic challenges and hyper-aggressive central banks. However, dividends and buybacks remain robust, partially reflecting a capital-lite world. Consequently, the yield available from equities can be far superior to that available in fixed income markets.

As a result of the above points, it is ever more important to favor companies with a demonstrated ability to produce FCF and allocate that cash flow wisely between return of capital options and reinvestment/ acquisition opportunities.

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The webinar replay will be available
on our website: **www.eipny.com**

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Join us each episode as host and Portfolio Manager Steve Bleiberg takes on current topics and issues concerning capital markets, portfolio management and the asset management industry.

“Cold War 2.0”

The trade truce between the U.S. and China has been well received by markets. But the conflict is bigger than trade or even tech. At stake are the values that will determine the architecture and governance of the global world order.

“Blitzscale and Hope: Unicorns, IPOs and the Fear of Repeating the Late 1990s”

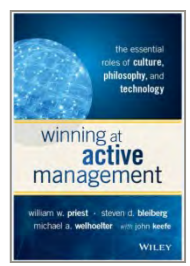
Hype about digital platforms, blitzscaling and winner-takes-most markets has fueled a surge in IPO listings and produced stratospheric valuations that are difficult to reconcile with free-cash-flow (FCF) fundamentals. Are we repeating the excesses of the dot-com boom?

“The P/E Ratio: A User's Manual”

Does a stock's price and its P/E ratio tell you how much a company is worth? Conventional wisdom says yes, but we think otherwise …

“When ‘Bits’ Meet ‘Atoms’”

The Digital Age and the transition from “atoms” to “bits” imply a capital-light economy in which technology is being substituted for labor and physical assets. Its impact is widespread and stretches beyond the technology sector.



Winning at Active Management

Authored by three Epoch portfolio managers, the book examines the issues facing the investment management industry and explores the essential roles of culture, philosophy and technology.