Strategic Frontier Management

CURB YOUR ENTHUSIAM

INVESTMENT STRATEGY AND CAPITAL MARKET OUTLOOK

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ECONOMIC & MARKET FORECASTS

- Global Equity and Bond overvaluation combined with rising yields and slowing growth are headwinds that should limit returns. Risk of financial crisis in government debt increases with QT + volatility + high deficit + investor sentiment + liquidity concerns
- Global Small-cap and Value equity tilts should outperform, while higher market volatility boosts Global Tactical Asset Allocation and active management. *Countries Still Matter.*
- Central Banks assumed transitory inflation—we didn't. Rising inflation expectations plus central banks selling bonds increase global interest rate risk, normalize yield curves.
- Emerging Market economies, margins, and therefore future returns lag, risk increases. Competitive Advantages of EMs reversing with onshoring. Currency risk can adversely impact EM markets. China, now Russia, remain particular concerns.

Economic Forecasts	**2019**	**2020e**	**2021e**	**2022e**	**2023e**	**2024e**
GDP Growth (Y/Y Real)	**2.4**	**-2.5**	**5.5**	**3.0**	**2.5**	**2.3**
S&P500 Op Earnings Gr	**0.6**	**-13.1**	**45.3**	**7.2**	**5.4**	**4.3**
CPI Inflation (Y/Y)	**2.3**	**1.5**	**7.1**	**5.0**	**4.0**	**3.0**
Unemployment	**3.5**	**6.5**	**5.2**	**3.9**	**4.2**	**4.5**
Fiscal Deficit (vs.GDP%)	**-4.7**	**-15.0**	**-15.0**	**-10.0**	**-10.0**	**-10.0**
Fed Funds Target[1]	**1.75**	**0.25**	**0.25**	**2.25**	**3.25**	**3.25**
10y Treasury Notes	**1.92**	**0.91**	**1.50**	**3.60**	**4.50**	**4.00**
S&P 500 Target	**3231**	**3756**	**4766**	**4500**	**4700**	**5000**

Source: Strategic Frontier Management (Year-end or Y/Y change)

1. Target denotes top of published policy target range

EQUITY & BONDS—CURB YOUR ENTHUSIASM

Fragile confidence bolstered by misguided fiscal and monetary policies that undermine financial stability and increase uncertainty. Geopolitical risks difficult to manage with less policy flexibility.

Asset Valuation

- Global Bonds extremely overvalued after extended global interventions
- Global Equity valuations stretched -- US Earnings Yield appealing w/ low rates, but slowing earnings growth and rising interest rates troublesome
- US margins still exceed global markets, but Emg Markets problematic
- *Curb your Enthusiasm* –US & EM Equities and Global Bonds

Economic Conditions

- Global economic fiscal hangover of excessive government spending
- Loose monetary, soaring fiscal deficit spending, and poor economic policy decisions ushered in inflation and other economic imbalances
- Global inflation expectations rose as secular disinflation/globalization moderated, even with tumbling *labor, resource, and energy intensity*.
- Misguided US policies reduced global competitiveness, potential growth and profit margins→lower earnings growth, financial & economic risks.

Interest Rates

- Persistent negative global bond returns with interest rate hikes (+2%) and decline in QE holdings--High bond convexity increases volatility.
- Explicit Moral Hazard of extended yield curve manipulation distorted risk premium. Reversing interest rate & monetary stimulus amplify Volatility, Risk of *Financial Debt Crisis* in long duration + leveraged bond portfolios.

Market Interrelationships

- Changing volatility and correlation, volatility-of-volatility → higher risk
- Private market (σ,ρ) risk assumptions disappoint, lagging mark-to-market
- Indices increasing investable dimensions bolster risk factor investing
- Don't dismiss MPT/Balanced Portfolio resilience : *Countries Still Matter*

WHAT MATTERS TO INVESTORS?

Great Inflection Point Normalizing Interest Rates and Quantitative Tightening

- Adverse ***Explicit Moral Hazard*** normalizing central bank policies of low rates, QE and forward guidance manipulated global bond markets for an extended period, bonds extremely overvalued.
- Global Gov't Bonds overvalued with real yields <0% and high convexity--Negative bond returns
- Rising interest rates + negative money supply growth of QT with high debt/fiscal deficits limit potential growth, also risk greater economic volatility and ***Global Debt Crisis****.*

Asynchronous Global Expansion at a Trecherous Geoeconomic Crossroads

- Greater regional dispersion in growth, inflation, margin and currency volatility, *Countries Still Matter*
- Forces of *secular disinflation and Fourth Industrial Revolution* taken for granted*,* but now waning.
- Varying effects of *re-tooling* and *workforce re-skilling* with re-shoring manufacturing and services.
- Tax, trade, and regulatory reform still supporting US competitive advantage with narrow Majority
- US Midterm Election key to US Government policy agenda, but reduced global competitiveness, evident: US potential growth: 2.7%→2.0%, profit margins: 10%→5%, CPI inflation 2.2%→3.0%.

US Equity and Bond Valuations Stretched despite as Low Rates Rising

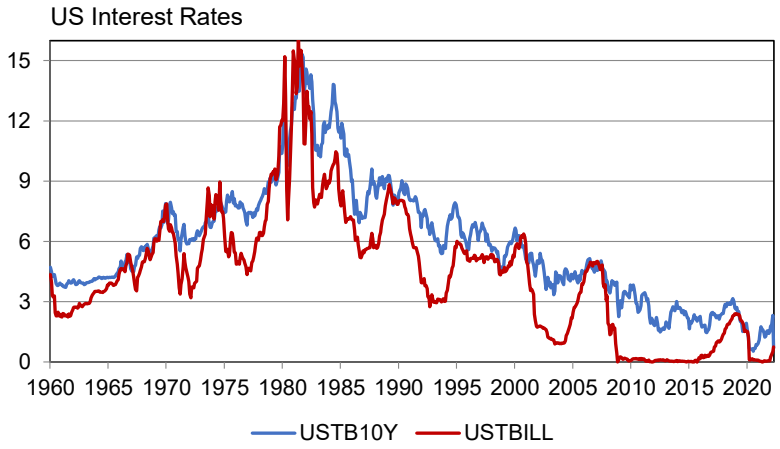
- Equity rebound exceeds strong profit recovery—US valuations approaching 2000 peak, Value, International and Small-cap outperform, Large Comm/Media Tech regulatory-risk (GOOG, FB, etc)
- Earnings recovery overshot economic rebound, but risk of monetary/fiscal policy-driven stagflation
- Global Equities still outperform Bonds, World > US Equity, Real Estate muddling through. .

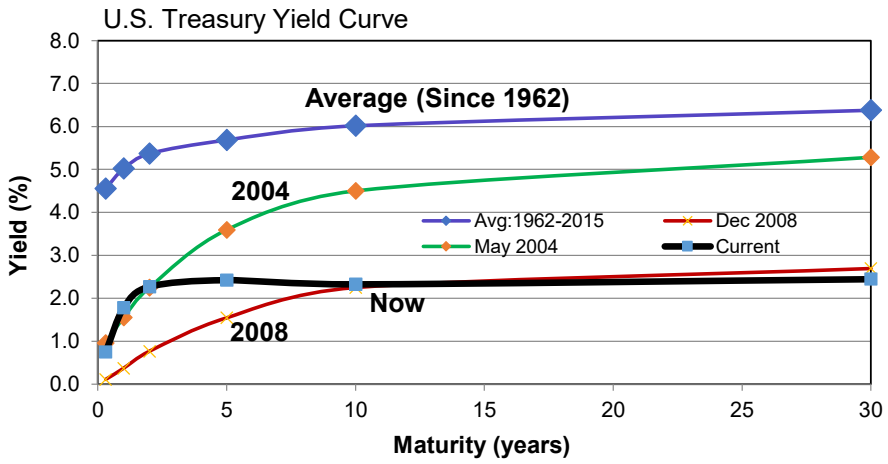
How ***Policy Asset Allocations*** should differ?

- Rotation: *Simpler Smarter Approach to Investing—Shorter Duration Bonds, Avoid Alternatives*
- Opportunistic Alpha-driven: Global Tactical Asset Allocation & Currency Mgmt, Real Estate, Hedge Funds, Value and Small-cap tilts, security selection with return dispersion of greater volatility.
- Avoid Risk Parity, LDI, Gold & Crypto, Private Markets (fees > return) during Normalization
- **Private Market/Liquid Alts** performance lag: high cost, crowded sandbox, illiquidity premium myth

INTEREST RATES MUST NORMALIZE

- *Great Inflection Point*: US Treasury yields declined for four decades, now manipulated rates and monetary policy (QE: $1T to $9T) unsustainable. Declining Fed support new paradigm.
- Interest rate *normalization* is required with resilient economic growth and rising inflation—thus expect negative real bond returns for years, as US/global yield curves must steepen
- No support for exceptional monetary policy at emergency levels (low rates, extended Fed balance sheet)—Global interest rates too low for too long risk explicit moral hazard
- Central bank QE and forward guidance to "keep interest rates low for an extended period" regrettably induced *moral hazard,* extinguished inflation risk premium, risks crowding out.
- Fixed income liquidity an increasing concern as risk variables evolve (μ σ, ρ) with excess leverage, debt issuance, high convexity, and manipulation thus extended bond valuation.
- Credit spreads tight, so High Yield may not perform with *stagnation* + *crowding out* this time.





Source: Federal Reserve

EXTINGUISHING EMERGENCY MONETARY POLICY RISKS HIGHER BOND VOLATILITY, DEBT CRISIS

- Federal Reserve regime change as it pivots from QE tapering to reducing holdings Fed Funds *policy normalization should systematically* proceed toward 3-3½%. Taylor Rule: 9%.
- *Inflation targeting* problematic and Fed's long-term reduced inflation and policy rate must increase. BoE, BoC and BoJ increased ahead of Federal Reserve, expect ECB & RBA next.
- New secular regime of higher inflation and interest rate expected as competitive advantages (labor, energy, resources) of emerging markets diminish, which had limited inflation of consumer products and services.
- US Long-run Inflation: 2% → 2.5%, CPI: 3% & Fed Funds: 2¾% → 3¼%. Extreme Interest Rate Risk with high bond convexity–record gov't debt/deficits with extended global QE holdings will result in higher Bond volatility, risk of Global Government Debt Crisis.

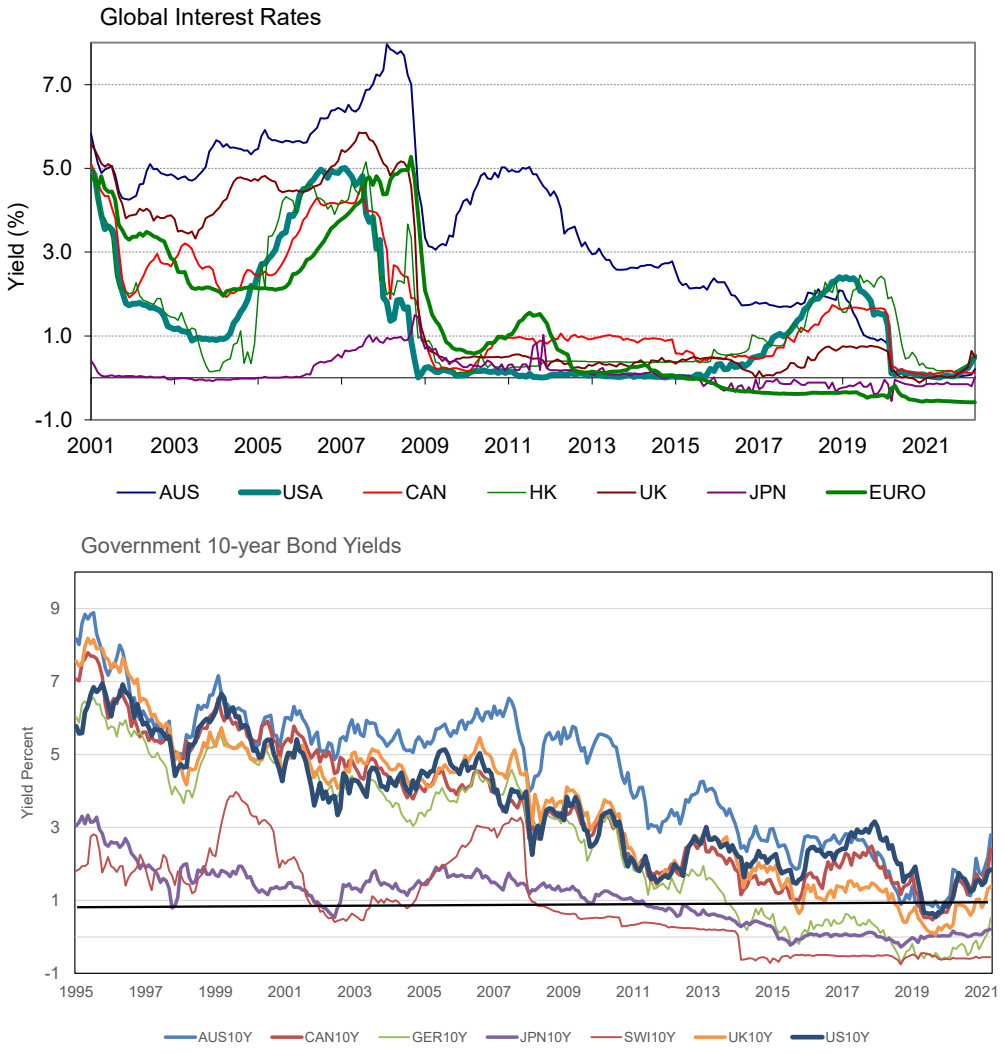
Median Forecast								LongRun Forecast	
U.S. Fed %	2018	2019	2020	2021e	2022e	2023e	2024e	Fed	SFM
GDP	3.05	2.15	-2.40	5.90	2.80	2.20	2.00	1.80	2.00
U.Rate	3.70	3.55	6.70	4.80	3.50	3.50	3.60	4.00	4.50
PCE	1.85	1.45	3.40	4.20	4.30	2.70	2.30	2.00	2.50
Core PCE	1.85	1.50	3.00	3.70	4.10	2.60	2.30	2.00	2.50
Implied CPI	2.35	2.00	1.50	3.50	4.80	3.20	2.80	2.50	3.00
Federal Funds	2.38	1.55	0.09	0.13	2.05	2.81	2.79	2.43	3.25

Interest Rates	2018	2019	2020	2021e	2022e	2023e	2024e	Longer Run
FOMC Avg.	2.38%	1.63%	0.13%	0.13%	2.05%	2.81%	2.79%	2.43%
SFM[1]	1.75%	1.75%	0.25%	0.25%	2.25%	3.25%	3.25%	3.25%
Rate Change	0.25%	0.00%	-1.50%	0.00%	2.00%	1.00%	0.00%	

1. Top-end of indicated Fed Funds range

Source: U.S. Federal Reserve (March 2022) and Strategic Frontier Management

GLOBAL INTEREST RATES

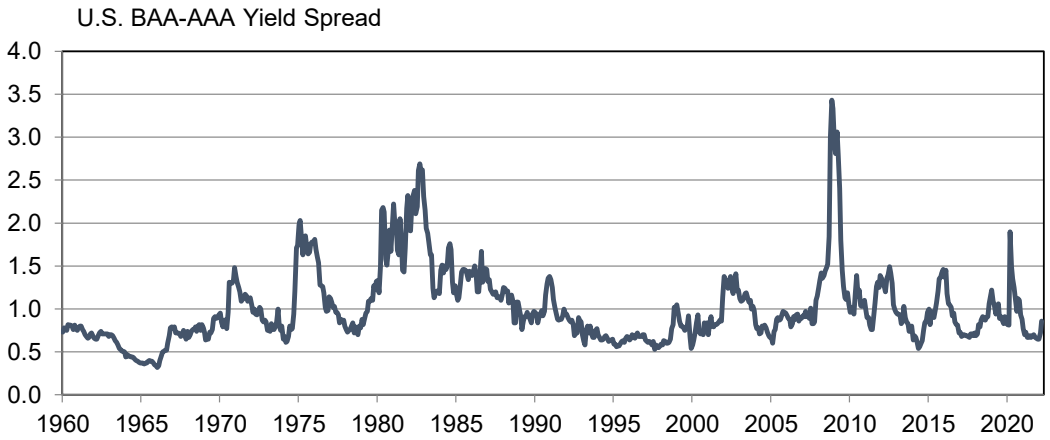


- Global policy interest rates have been too low for too long, risking explicit moral hazard
- Inflection point of new US interest rate regime in 2022, bolstering the U.S. dollar, but gold, oil, cryptos, and other commodities lag inflation after peaking
- US Economic recovery completed by 1H/2021, so the Fed late in transitory narrative with no need for *emergency* monetary or fiscal stimulus. This only extended financial imbalances, so bond yields may overshoot equilibrium
- U.K., Canada, and Japan actually moved earlier than US, but Eurozone targeting requires hikes as well.

Source: Refinitiv DataStream & Strategic Frontier Management

CREDIT SPREAD: CHASING YIELD AT ANY COST?

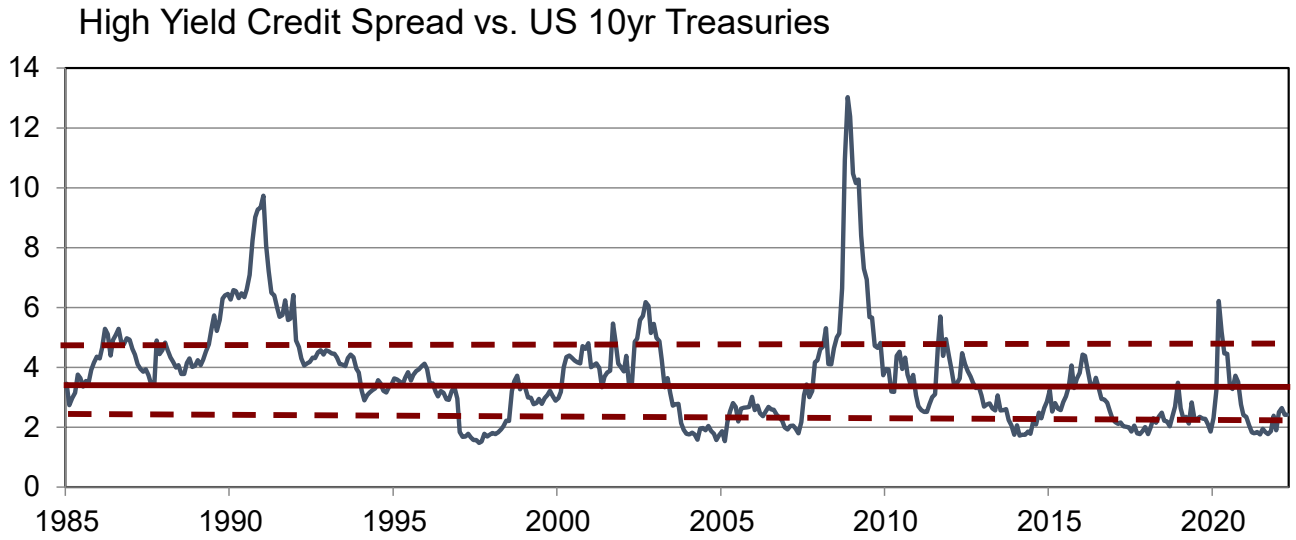
Investor demand for yield has driven credit spreads to low levels once again



Low yields bolstered demand as default rate declined, yet investors can't seem to get enough yield despite overvaluation, extreme issuance

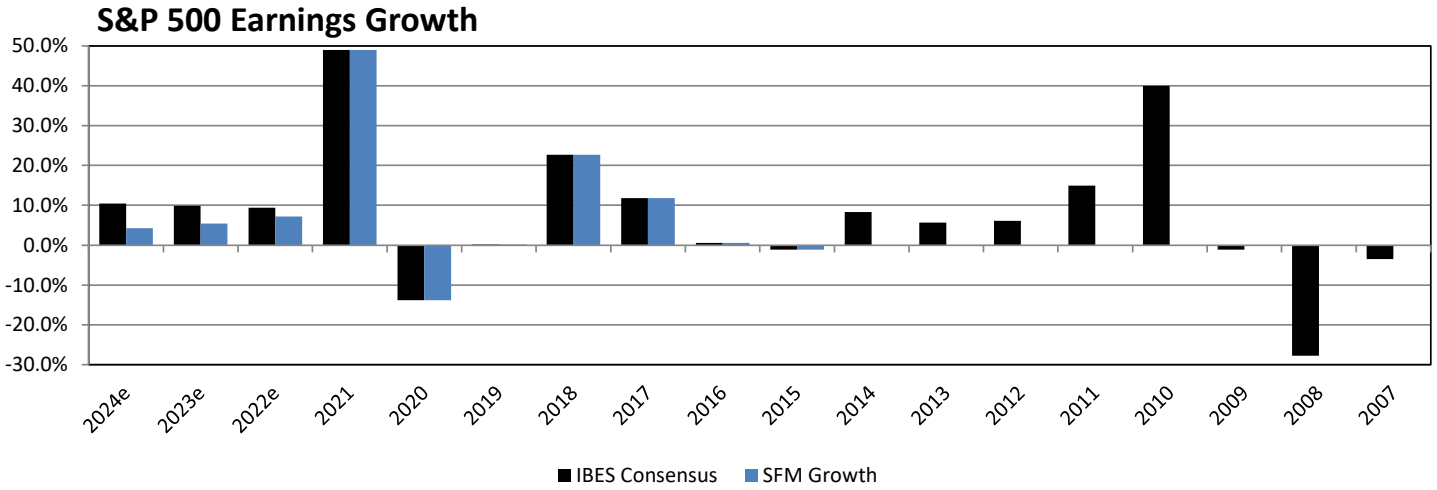
Credit Spreads tend to remain tight until risk of recession increases

Source: Moody's & Federal Reserve



S&P 500 EARNINGS—KEY TO EQUITY OUTLOOK

- Have US Equities exceeded earnings recovery, as extrapolating earnings disappoint?
- Valuations seem priced for V-perfection, have yet to embrace inflation or higher rates
- High inflation and monetary tightening should slow earnings growth below potential
- Policies consequences: Lower potential growth, profit margin, global competitiveness

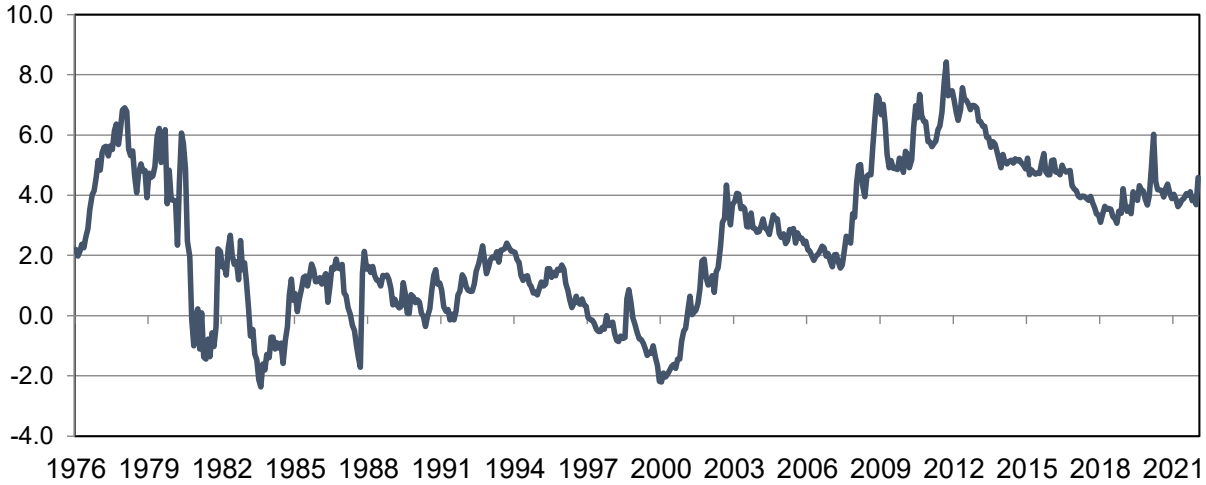


Operating Earnings	2024e	2023e	2022e	2021	2020	2019	2018	2017
IBES Consensus	276.39	250.23	227.70	208.11	139.72	162.17	161.93	132.00
Growth	10.5%	9.9%	9.4%	48.9%	-13.8%	0.1%	22.7%	11.8%
Strategic Frontier Mgmt	245.00	235.00	223.00	208.11	139.72	162.17	161.93	132.00
Growth	4.3%	5.4%	7.2%	48.9%	-13.8%	0.1%	22.7%	11.8%
S&P 500 @18x SFM TE	4410	4230	4014	3746	2515	2919	2915	2376
SFM Target S&P 500	5000	4700	4500	4766	3756	3231	2507	2674
SFM S&P 500 P/F12E	16.41	16.20	19.15	21.37	18.05	23.12	15.46	16.51

Source: Refinitiv I/B/E/S and Strategic Frontier Management estimates and actuals

US EQUITY VALUATION DEPENDS ON RATES

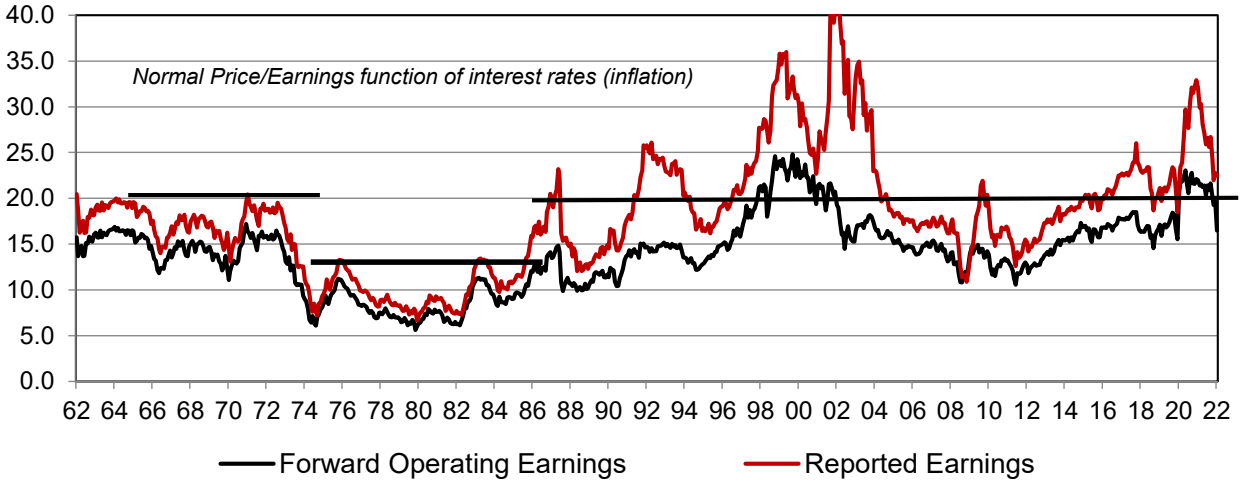
S&P 500 Equity Valuation: Earnings Yield Gap



Earnings yield gap still constructive with neg. real rates, but P/E & P/FE approached 2000 levels.

Large-cap P/Sales (2.58) is far above 2000 peak (Small-cap (0.95) and Mid-cap (1.28).

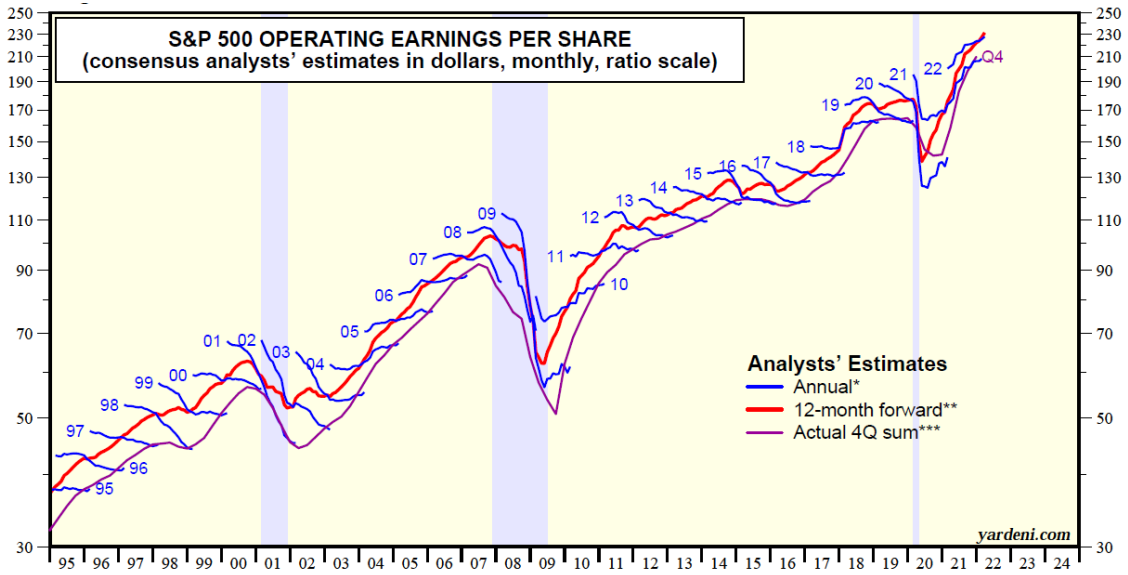
S&P 500 Price / Forward Operating Earnings

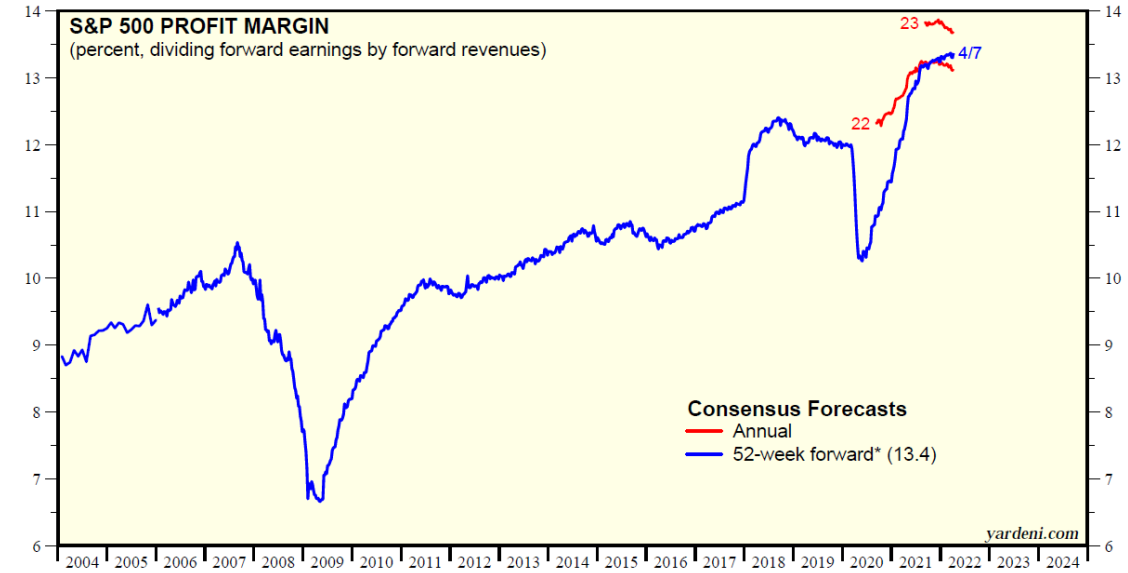


Tax advantaged dividend yields supportive, even if equity valuations are stretched

Source: Strategic Frontier Management

US S&P 500 VS WORLD PROFIT MARGIN





* Time-weighted average of the consensus estimates for current year and next year. Monthly through December 2005, then weekly.
Source: I/B/E/S data by Refinitiv.

- High US profit margin as companies struggle to fill vacancies and had to do more with fewer workers. This bolstered earnings with growth in recovery—but high margins not sustainable.

- As labor, resources, and energy costs rise, margins moderate and inflation expectations become ingrained leading to consumer price increases—inflation is not transitory, we believe.

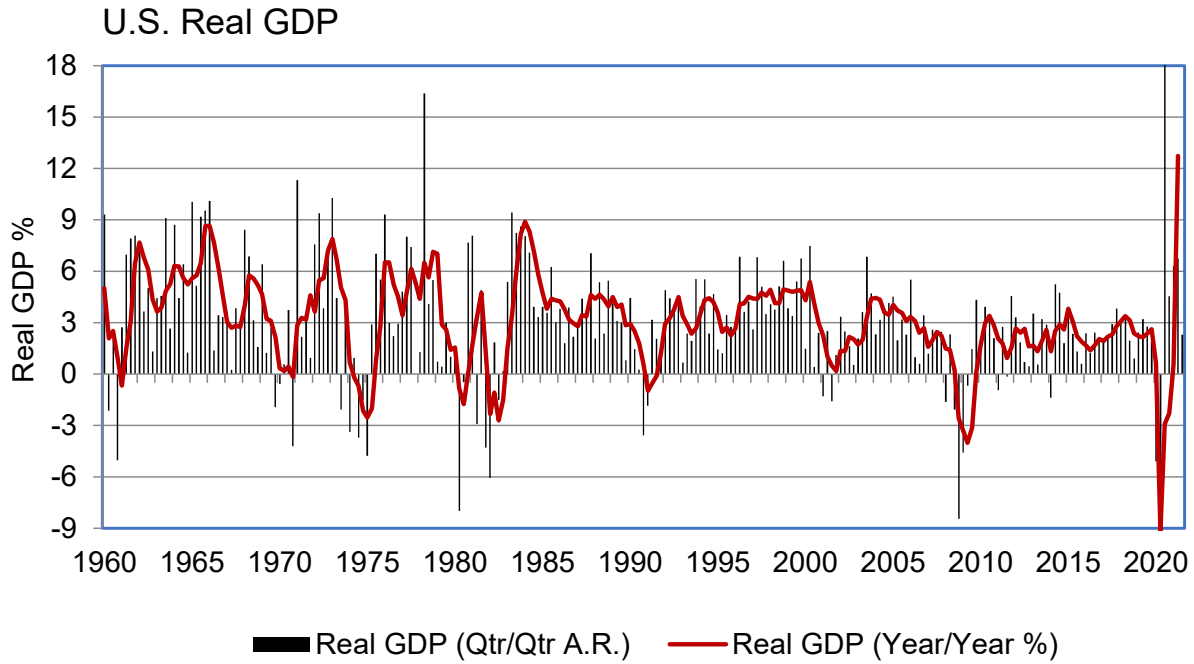
Select Operating Margins

US S&P 500 (13.4)
United Kingdom (11.3)
Europe ex-UK (10.0)
Japan (7.6)
China (4.6)
Emerging Markets (7.6)
World ex-US (9.3)

Source: Yardeni Research

REAL GROWTH IN GROSS DOMESTIC PRODUCT

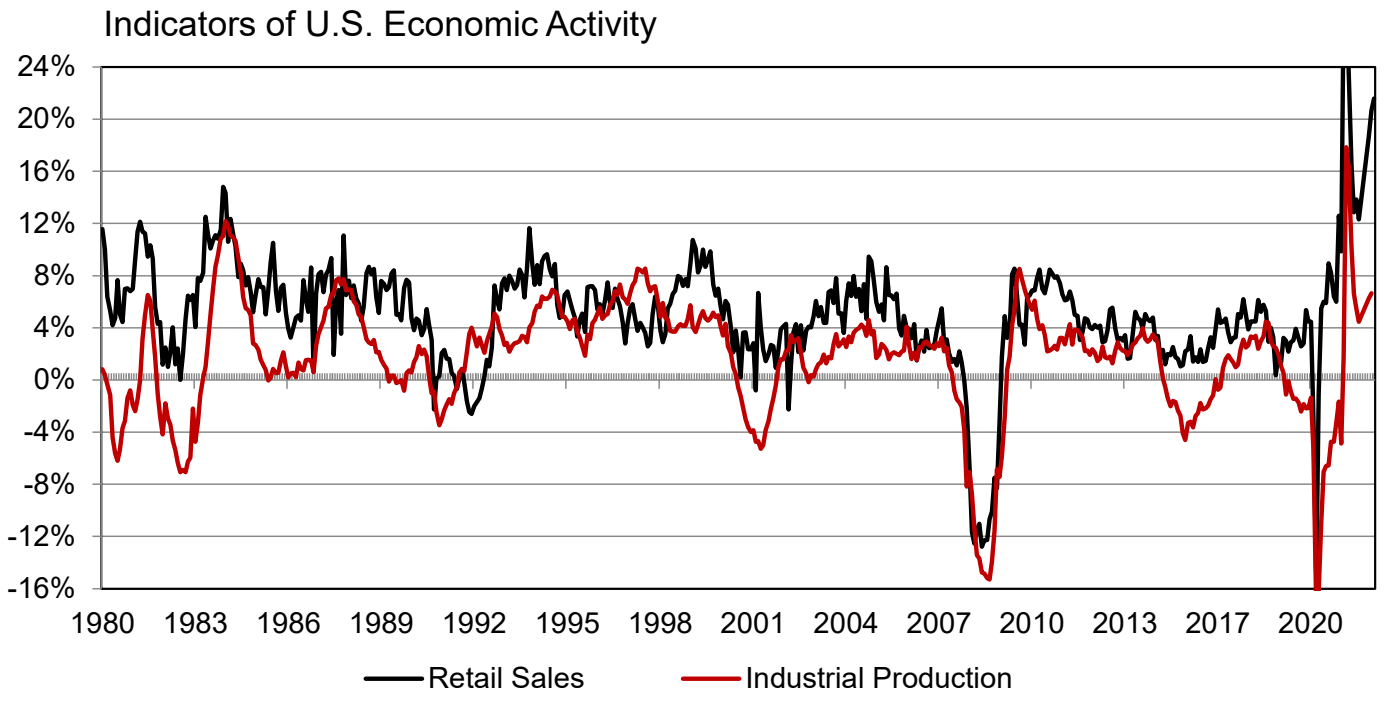
- Real GDP (5.5%) in 2021 exceeded our estimate of short-lived decline and strong-V recovery, no secular stagnation or double dip from other variants.
- Expect ***Economic Hangover*** (Cliff) of declining economic and earnings growth from pullback of excessive fiscal & monetary stimulus and various poor policy decisions.
- Increasing inflation isn't ***transitory*** with increasing *secular inflation expectations, which will depress real economic growth (Q1: 1.5-2% AR) and corporate earnings.*
- *US Potential Growth* downgraded from 2.7% to 2.0% with regulatory, energy, and trade policy changes in 2021, undermining US competitiveness, productivity & profit margins.



Source: U.S. Government Data

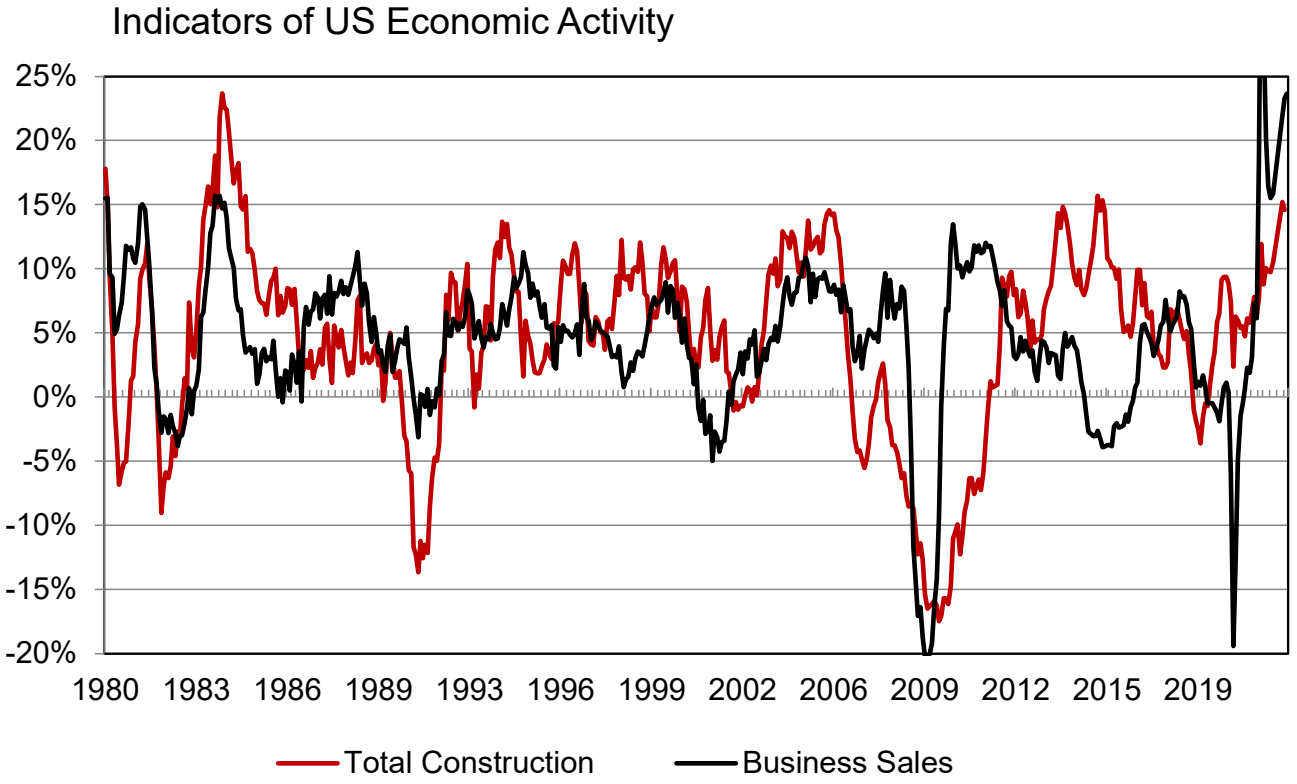
MONTHLY ECONOMIC GROWTH INDICATORS

- Global pandemic recession short-lived, about 4 months
- Fiscal and Monetary Stimulus boosted incomes and pulled forward consumption, but trade, supply chains, housing, and energy production struggles to adapt to changing disruptive demand increasing economic volatility.
- Aggressive stimulus pulled forward demand: US Potential Growth (2.7%→ 2.0%) declined, as undermined by terrible fiscal (tax, spend) and regulatory policies. Rise in embedded inflation expectations further increase housing, energy, and labor costs.



INVESTMENT AND BUSINESS ACTIVITY

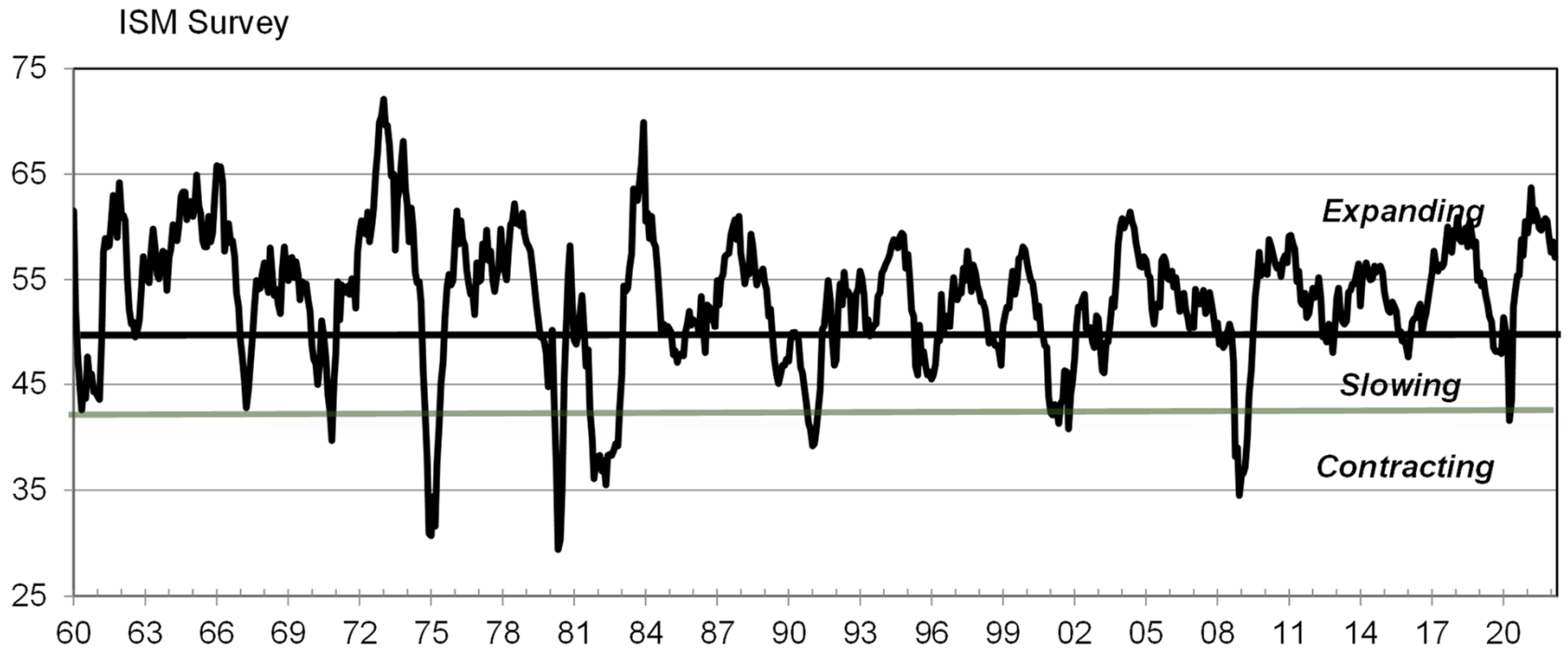
- Business Sales and Construction more cyclical, growth remains high
- Housing deficit emerged after 2008 Financial Crisis, but Construction ramping
- No secular stagnation, but likely *Big Stimulus Hangover* (like *Fiscal Cliff*)



Source: U.S. Government Data

U.S. MANUFACTURING TRENDS

ISM rolling over from year-end peak, but still near recent highs. We expect US real growth to moderate as interest rates rise and ongoing inflationary supply chain issues and labor shortages hamper more robust real activity.

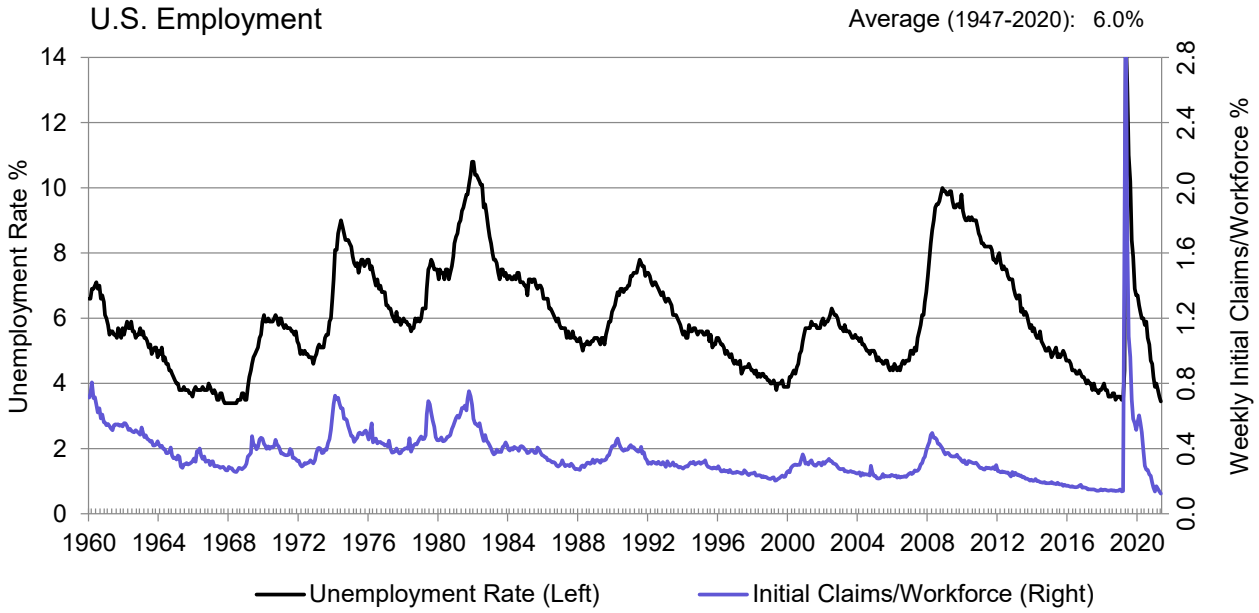


Source: ISM

ISM Purchasing Managers Survey is one of the most timely and best predictors of the business cycle. "50" equates to potential growth (~2.7%) over the next year, 50-42 suggests slowing economy, and below 42 suggests contraction or recession.

UNEMPLOYMENT KEY TO FED OUTLOOK

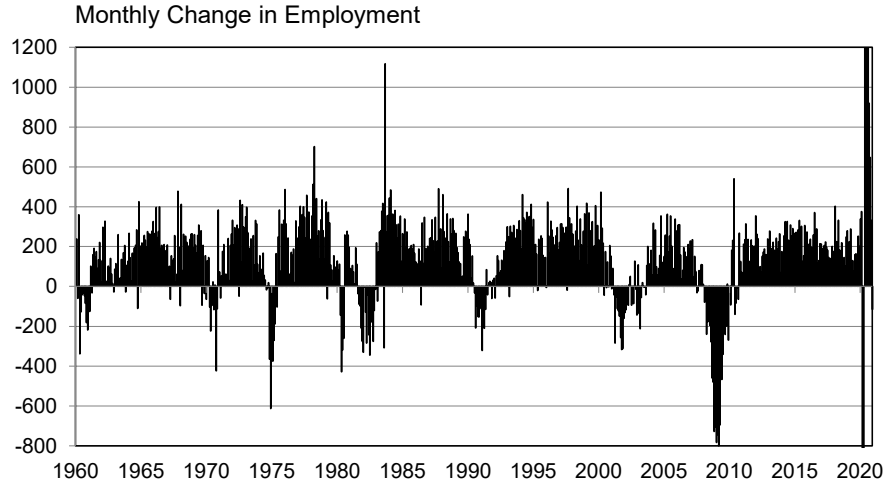
- Federal Reserve: Still pursuing emergency QE monetary policies with low interest rates
- Peak unemployment over 14% (April 2020), but now 3.4% vs. 6.0% historical average. Further evidence 2021 US Stimulus was not needed—unemployment peaked in.
- Record jobs available—labor shortage accelerated with extended Unemployment/UBI Reluctance to work/return to work and *Great Resignation* (job hopping—salary, career).
- Secular change affected nature of work, also education and evolving skill needs. Higher inflation expectations + minimum wage increases drive even higher labor costs. Cheap Energy + Investment vs. Declining Labor Intensity: *Race Against the Machines*

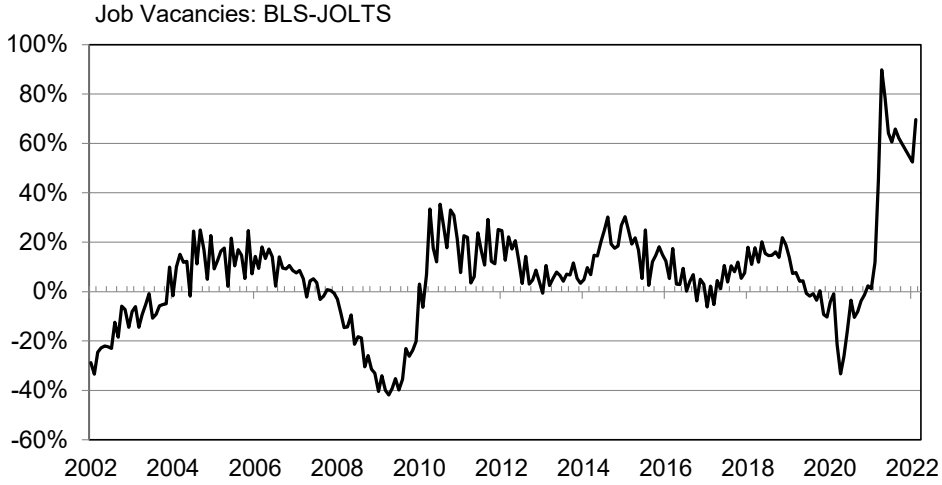


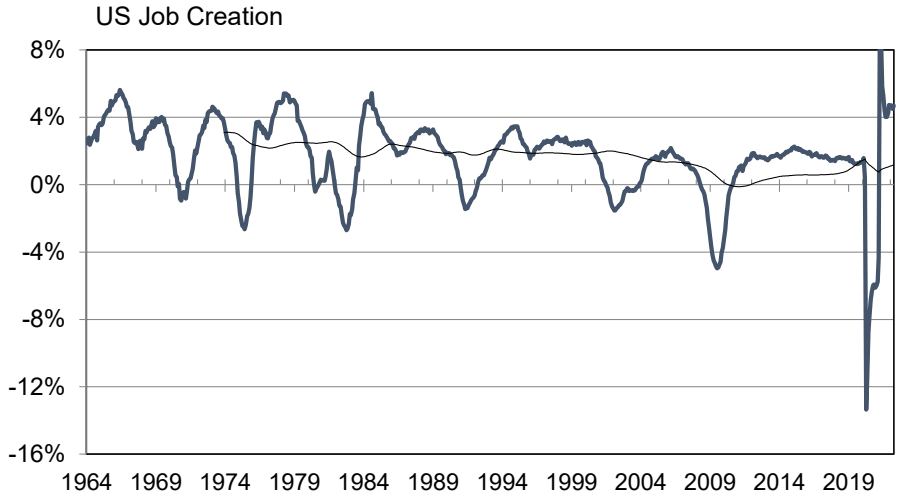
Source: U.S. Government Data

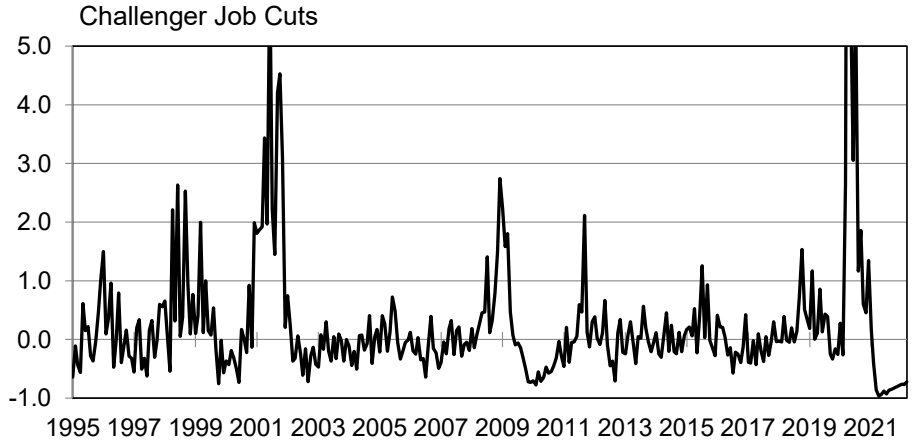
U.S. EMPLOYMENT CONDITIONS

Recession Likelihood Very Low Given US Labor Conditions







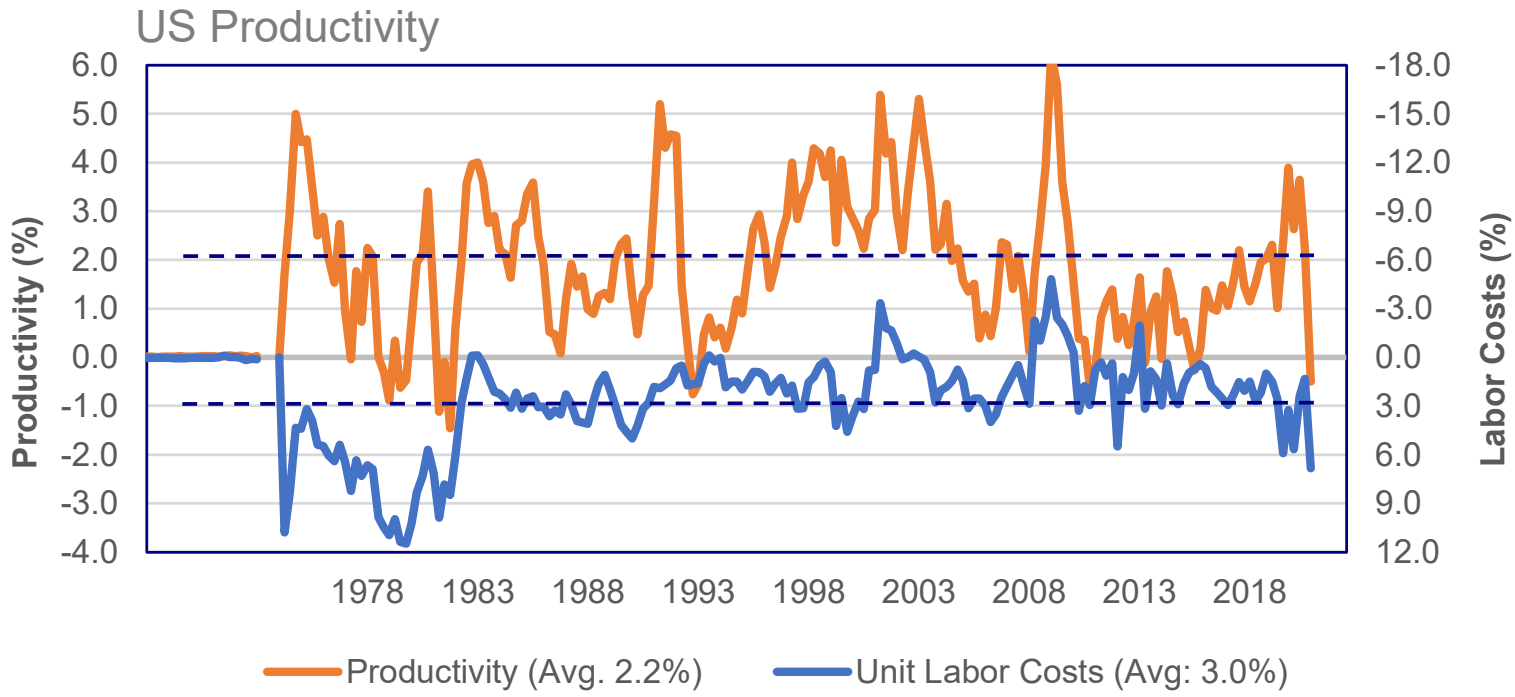


Source: U.S. Government Data

PRODUCTIVITY AND UNIT LABOR COSTS

Real GDP = G + C + I + T = Workforce Growth + Productivity

Labor Costs near average, but productivity has been subpar this cycle until recently

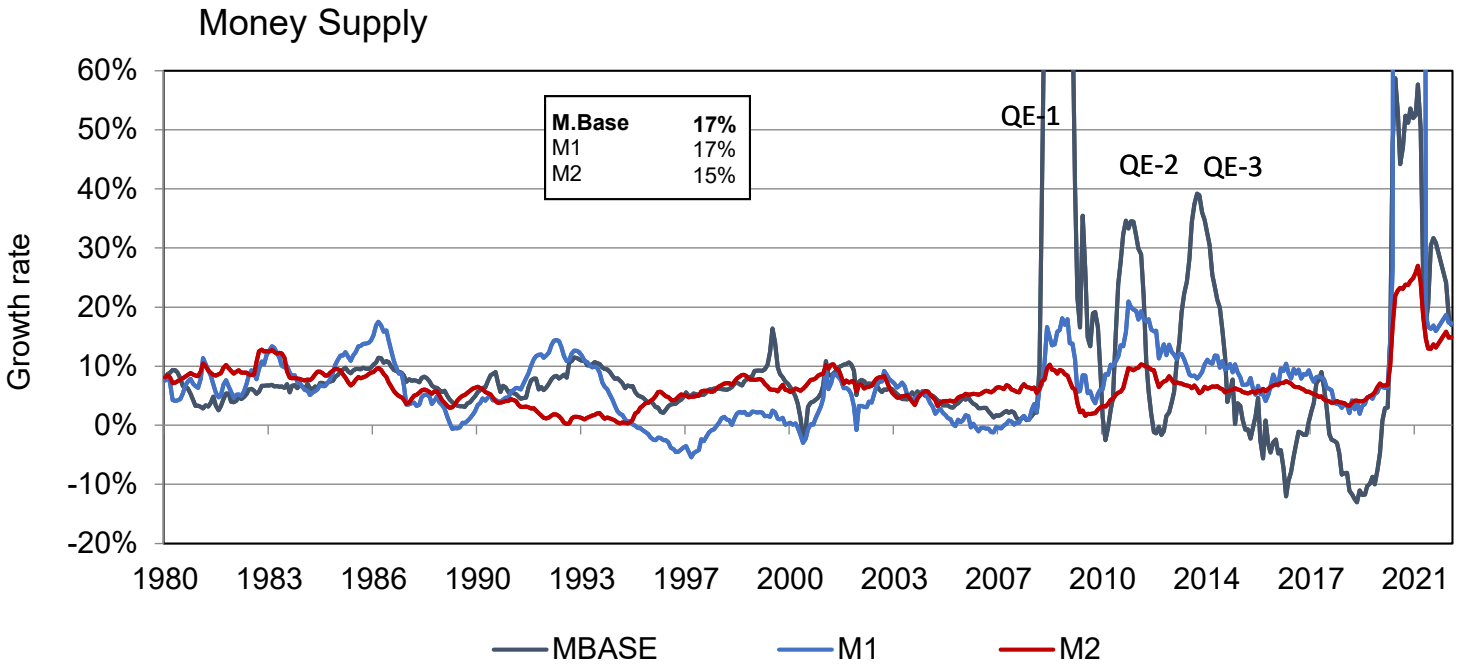


G = Gov't Spending
C = Consumption
I = Investment
T = Net Exports (Trade)

Source: U.S. Government Data

MONEY SUPPLY VOLATILITY INCREASES EQUITY VOL, BUT HARDLY HELPS ECONOMY

- Fed added massive liquidity, manipulated bond market and increased moral hazard
- Doesn't appear excess liquidity helped economy in QE-2, QE-3 or 2020…
- Normalization of monetary policy needed to minimize imbalances, including inflation
- Reversing QE/reducing bond holdings will slow money growth, money velocity needed
- Proving as stupid as before, and imperils ability to respond to the next real crisis



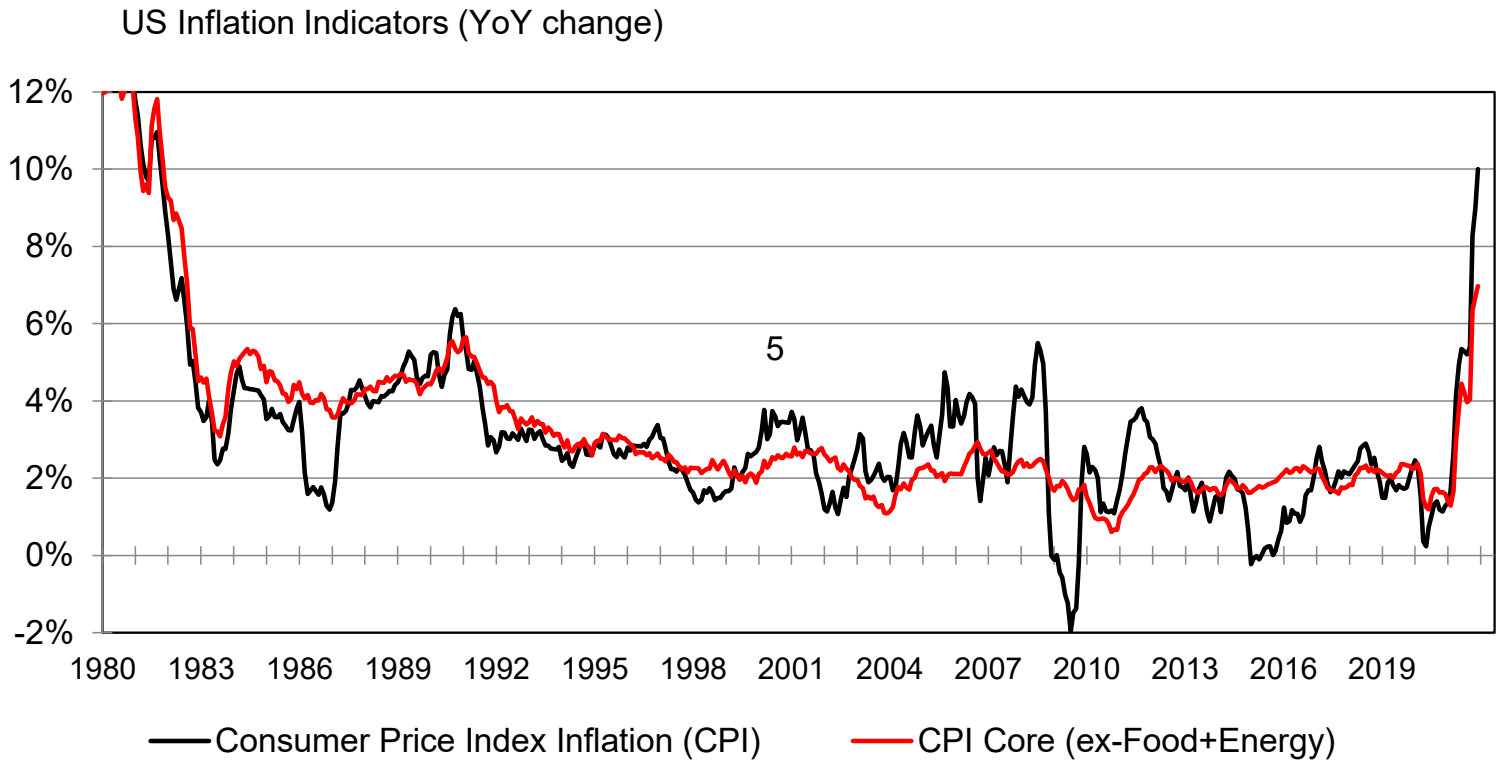
Assets GDP%
BoJ 134%
ECB 67%
Fed 36%
PBOC 33%

ECB (9.6 T)
Fed (8.9 T)
PBOC (6.4 T)
BOJ (6.2 T)

Source: U.S. Federal Reserve

US CPI INFLATION WILL SETTLE HIGHER ~3%

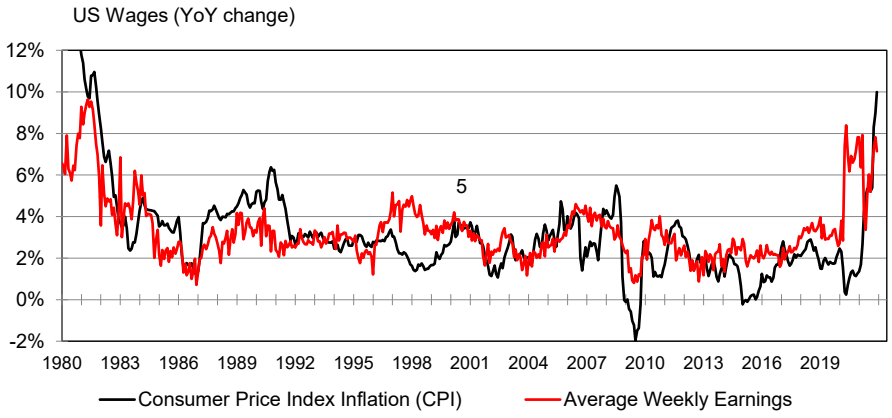
- Moderating *secular disinflationary forces* (EM/globalization, innovation, comparative advantaged trade, creative destruction) after poor policy decisions in energy, labor, housing, welfare, fiscal, trade, and monetary policy boosted inflation expectations.
- Higher *inflation expectations* will persist, increasing labor, housing and energy costs
- Cyclical inflation dependent on commodities, resources, and materials more transitory

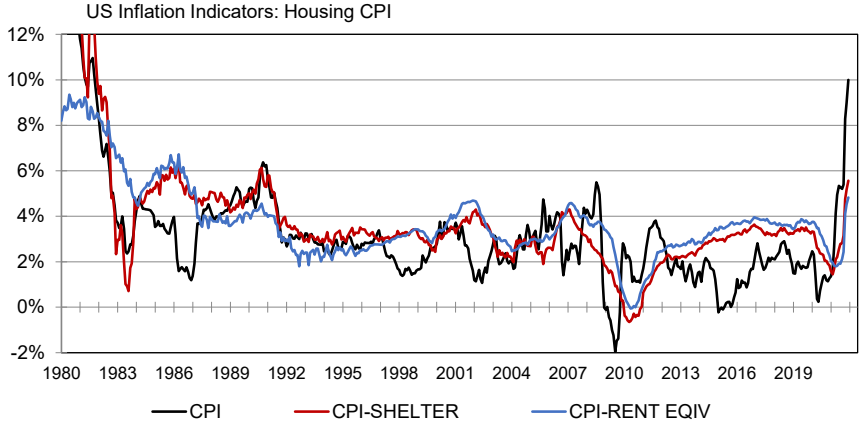


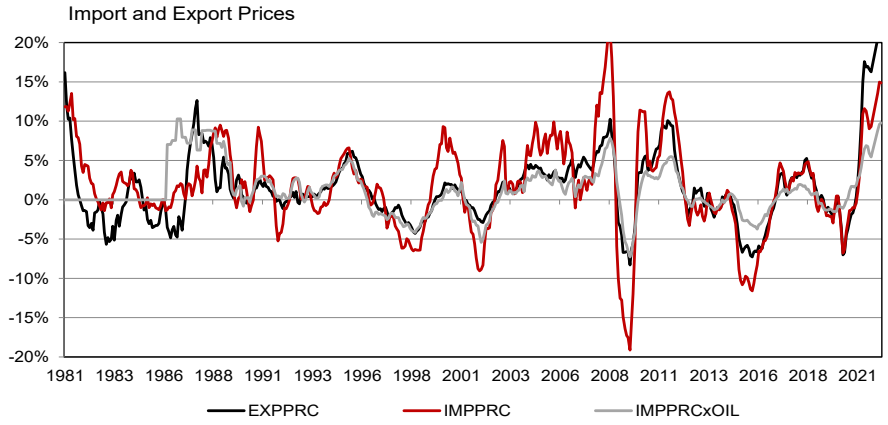
Source: U.S. Government Data

BROAD-BASED INFLATION SPREADING GLOBALLY

Broad-based US Inflation accelerating since Jan. 2021 has spread globally. Clearly it isn't transitory, impacting more than energy, basic resources, and commodities. Rising inflation expectations embedded in labor and housing.





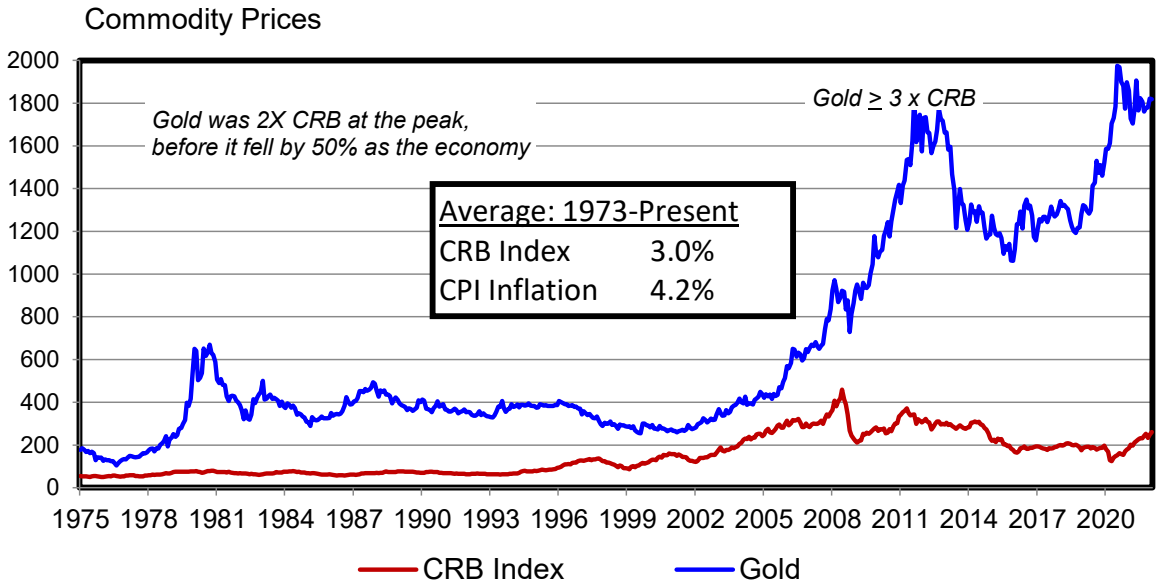


Global Inflation Tracking (CPI)

United States	8.6%
Europe (EMU)	5.5%
United Kingdom	9.0%
Australia	2.9%
Canada	5.6%

BASIC RESOURCES INTENSITY DECLINING

- Gold too volatile to be *store of value* and will likely lag inflation as interest rates rise.
- Input costs can't exceed output prices, thus commodity returns can't exceed inflation.
- Commodity return = Inflation – Holding costs, so given volatility are not a prudent strategic allocation. Exposure adds to portfolio risk more than is diversified.
- *Cash* is a better store of value and better market hedge than Commodities or Crypto.



Correlation	Commodity	Gold
S&P 500	18%	1%
UST 10yr	-24%	3%
Cash	-9%	-3%
Inflation	25%	21%

Note: Monthly returns for 1s3-2017 CRB Index

Commodity Returns:
1871 – 2007: Goldman/The Economist/IMF: Real return = -0.4%
1900 – 2008: Credit Suisse 2.5% vs. 3.0% inflation Real return = -0.5%
1973 – 2009: 4.75% vs. 4.5% (inflation) Real return = 0.25%

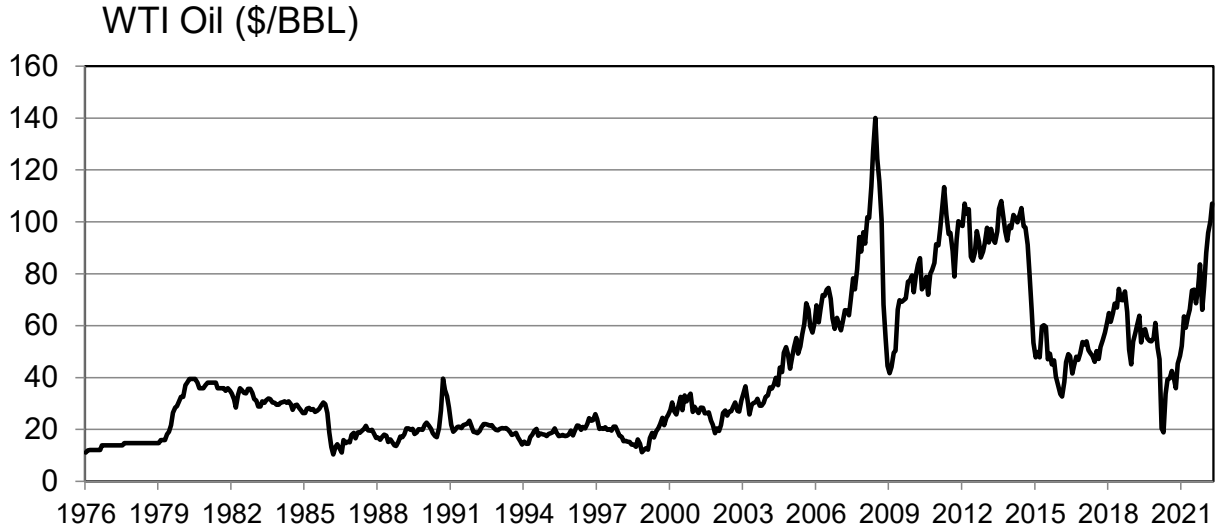
Source: Refinitiv DataStream & Strategic Frontier Management

WHAT IS THE EQUILIBRIUM OIL PRICE?

Balancing global growth and peak oil concern vs. offsetting demand destruction from triple threat of *Conservation, Substitution, Innovation* (C-S-I). WTI Oil range-bound.

That Which Is Measured Is Managed…so, must address both *Supply & Demand*

- Energy innovation: new engines, lighter vehicles, reduced subsidies, efficiency
- Growth in oil consumption limited by CSI, but high oil prices drive exploration
  - Conservation efforts reduce energy intensity, as shale gas/oil increased supply
  - Alternative power + extraction efficiency lower energy costs, increase capacity
  - Increasing US CAFE standards also reduced overall demand even with growth
  - Efforts to limit exploration, production, and transport (pipelines) drive higher prices

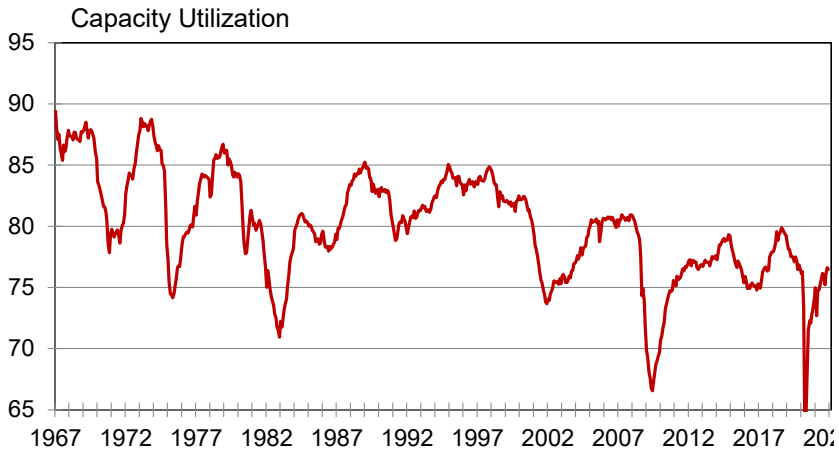


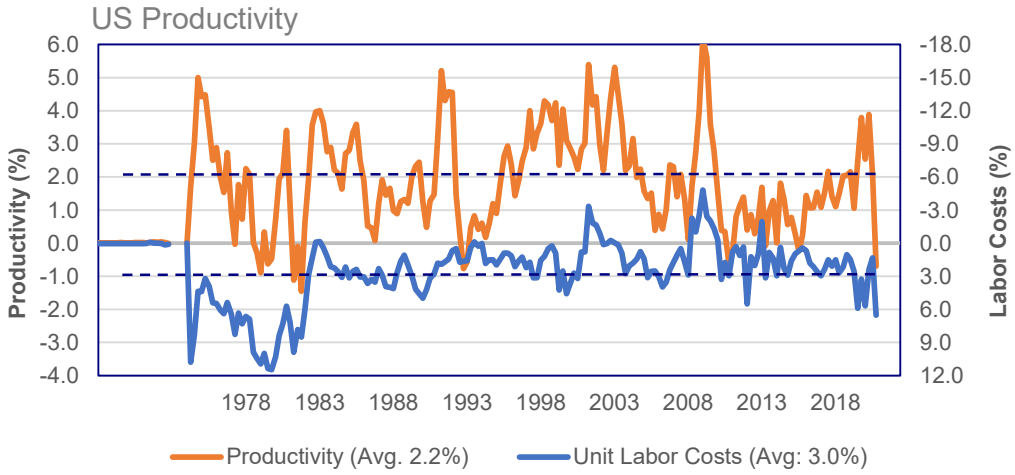
We believe normal equilibrium price for WTI is $55-60

Source: EIA

RISING CAPACITY UTILIZATION

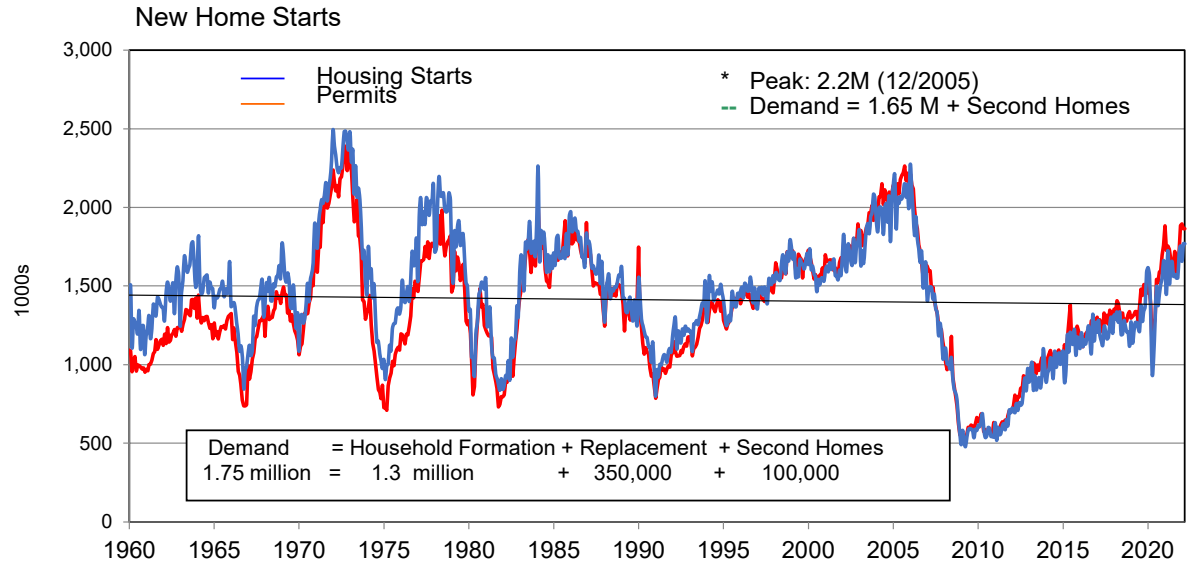
- Higher Capacity Utilization Drives Inflation and Investment, but…forces of secular disinflation and *Fourth Industrial Revolution* long taken for granted, are now waning.
- Offshoring/globalization trends reversing with automation reducing labor intensity – transportation, energy, and basic material costs more critical than labor costs, thus competitive advantages playing a greater role, affecting China and others most.
- Innovation and Creative Destruction still lowering basic resources, energy, and labor intensity tending to moderate inflation (or secular disinflation)
- Increased share of Services tends to limit concern when above 75-80%



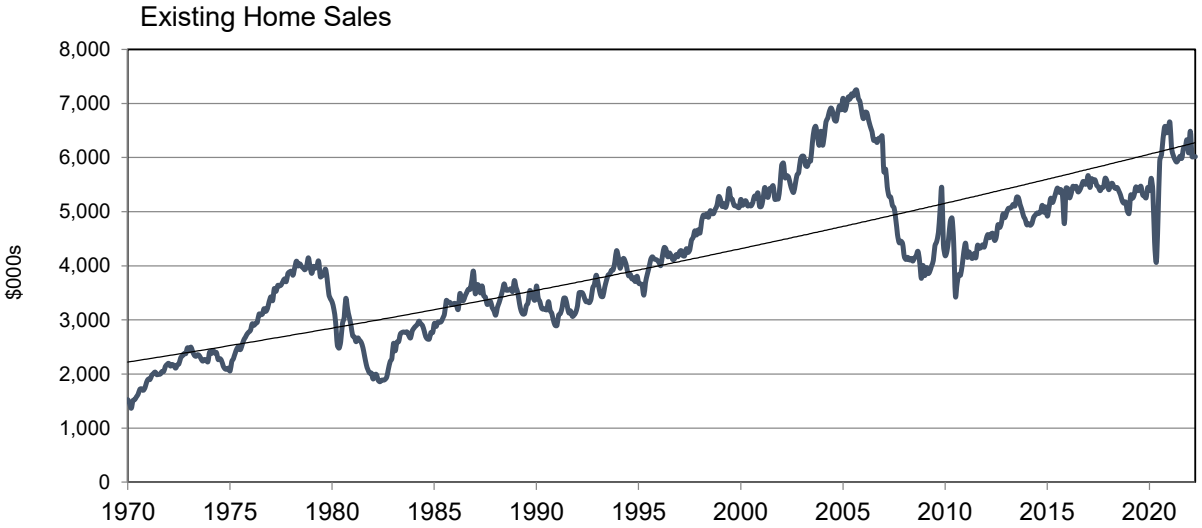


Source: U.S. Government Data

HOUSEHOLD FORMATION DRIVES HOUSING



Limited new homes
Household formation plus replacement (fire, flood, old)
New second home demand is increasing construction



Housing sales at a post-GFC high as housing demand followed employment recovery. So, why is it surprising housing inflation would follow, as inputs of basic resources and energy prices soar, combined with shortage of new homes.?

Source: U.S. Government Data

CAPITAL MARKETS—EM, VALUE, SMALL

Total Return	3-mon	6-mo	**1-Yr**	3-Yr	5-Yr	10-Yr	20-Yr	30-Yr
S&P 500 Index	-4.6	6.5	**15.6**	18.9	16.0	14.6	9.3	10.6
NASDAQ Composite	-9.1	-2.3	**6.6**	23.0	19.7	17.5	11.7	13.0
Russell 2000	-7.5	-9.7	**-5.8**	11.7	9.7	11.0	8.7	9.5
Russell Value-Growth	8.3	3.4	**-3.3**	-10.6	-10.6	-5.3	-2.4	-0.5
Non-US (World xUS)	-4.7	-2.2	**3.6**	9.1	7.7	6.8	6.7	6.5
Emerging Markets	-6.9	-15.4	**-11.1**	5.3	6.4	3.7	9.0	6.7
Small-cap Global	-6.5	-5.2	**0.3**	12.1	10.2	9.8		
US 10-Year Treasury	-7.0	-6.3	**-2.8**	2.8	2.5	2.4	4.6	5.2
US Aggregate Bonds	-5.9	-5.9	**-5.5**	1.7	2.1	2.2	4.0	5.1
BAML High Yield Bonds	-4.5	-3.0	**-0.3**	4.4	4.6	5.7	7.3	7.3
Short-term Bonds	0.0	-0.7	**-0.4**	2.1	2.1	1.5	2.6	3.8
JPM Non-US Bonds	-7.1	-10.6	**-10.2**	-1.3	0.7	-0.4	4.1	4.4
Cash (US T-Bills)	0.1	0.1	**0.1**	0.7	1.0	0.6	1.2	2.3
US Dollar (TWI)	0.3	2.5	**1.2**	0.1	-0.5	2.4	-0.9	0.1
CRB Commodity Index	27.1	38.5	**59.8**	17.9	10.9	0.2	4.1	5.4
WTI Oil (US$)	33.3	36.2	**69.5**	18.5	14.7	-0.3	6.9	5.6
Gold (US$)	6.6	10.0	**13.9**	14.4	9.2	1.6	9.7	6.0

Source: Returns as of March 31, 2022 in US Dollars. Performance exceeding 1-year annualized.

S&P 500 SECTOR TOTAL RETURNS

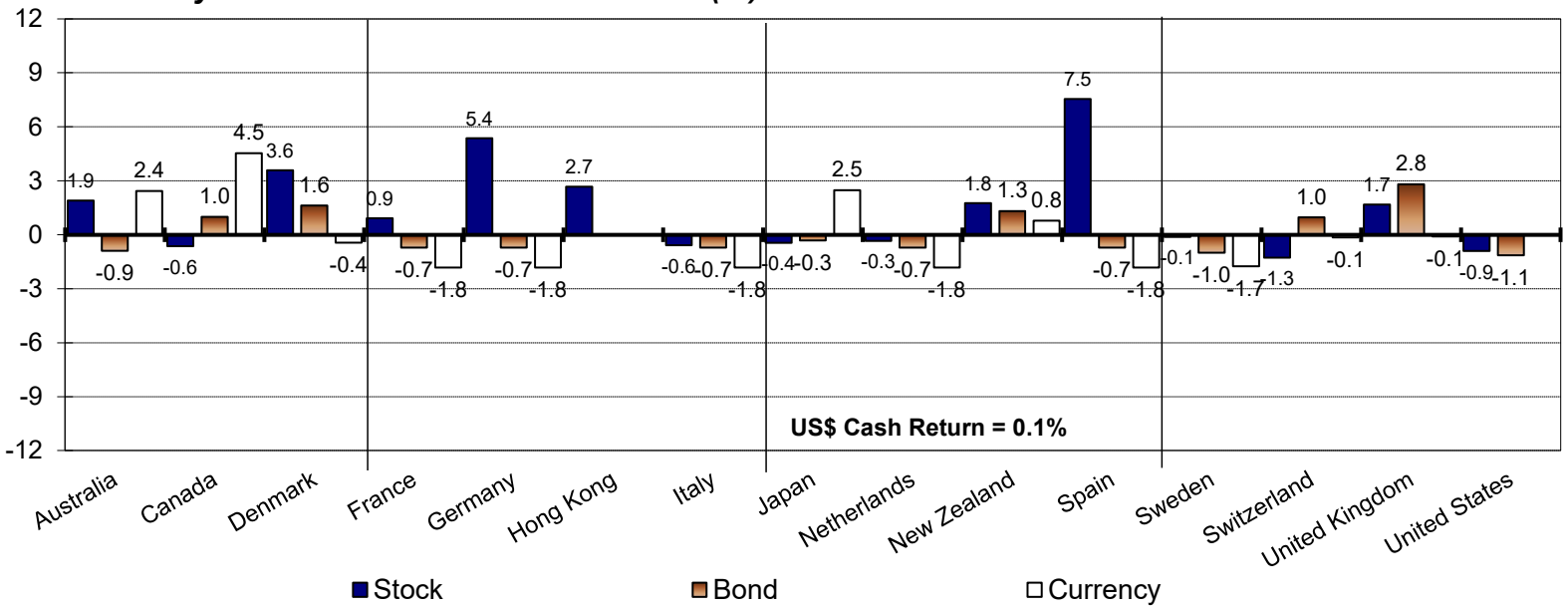
- Technology vs Communications + C.Discretionary to Nasdaq (1yr: 6.6%) Return
- Energy reflects significant increase in Oil and Gas prices, boosting reserves
- Banks should benefit relatively from steepening yield curve, rising rates
- Value and higher dividend stocks benefiting from rotation from most overvalued

S&P 500 Sector Return	3 mo	6 mo	1-Year	3-year	5-year	10-year	20-year	30-year	U.S. Dollars
Energy	39.0%	47.6%	**64.3%**	11.0%	6.7%	4.2%	7.6%	9.3%	SPENGY
Technology	-8.4%	8.4%	**20.9%**	30.5%	26.8%	20.6%	12.5%	13.9%	SPINFT
Utilities	4.8%	20.4%	**19.9%**	12.2%	11.4%	11.8%	8.8%	8.3%	SPUTIL
Health Care	-2.6%	9.9%	**19.1%**	16.5%	15.1%	15.9%	9.3%	11.1%	SPHCAR
Consumer Staples	-1.0%	11.8%	**16.1%**	14.0%	10.2%	11.5%	9.1%	9.9%	SPCONS
S&P 500	**-4.6%**	**6.5%**	**15.6%**	**18.9%**	**16.0%**	**14.6%**	**9.3%**	**10.6%**	**SP500RI**
Financials	-1.5%	5.8%	**14.7%**	16.8%	12.4%	13.9%	5.1%	9.2%	**SPFINL**
Materials	-2.4%	8.5%	**13.9%**	19.2%	13.3%	11.4%	9.2%	8.6%	SPBASIC
Real Estate	-1.2%	9.4%	**11.3%**	16.1%	12.3%	12.0%	9.0%	8.6%	SPREIT
Consumer Discretionary	-9.0%	2.7%	**9.8%**	18.6%	17.2%	16.7%	10.8%	11.2%	SPCAPG
Industrials	-2.4%	1.6%	**6.1%**	13.2%	11.3%	12.7%	8.5%	10.0%	SPINDU
Communication Services	-11.9%	-10.5%	**-0.9%**	15.5%	9.6%	9.9%	6.7%	6.9%	SPTELE
S&P 500 Quality	-8.8%	1.2%	**12.0%**	19.4%	17.8%	15.5%	10.4%	11.9%	Quality
S&P 500 Low Volatility	-3.8%	6.5%	**13.8%**	11.8%	12.5%	13.0%	9.3%	10.5%	Low Vol
S&P 500 Low Vol+Hi Div	-1.5%	7.0%	**11.1%**	11.6%	10.4%	12.1%	8.6%		Low Vol + Hi Div
Invesco Revenue Wgt ETF	1.2%	10.6%	**17.7%**	18.3%	14.3%	14.0%			Rev Weighted
S&P Global Infrastructure	7.5%	14.1%	**16.7%**	8.0%	7.7%	7.8%	9.7%		Infrastructure

Source: Refinitiv DataStream and Strategic Frontier Management
Note: Market returns as of March 31, 2022. Performance longer than 1-year is annualized.

GLOBAL TAA FORECASTS FAVOR EQUITIES, GREATER RETURN DIVERGENCES EXPECTED

Quarterly Local Tactical Return Forecasts (%)



Global Tactical Asset Allocation Quarterly Forecasts(%)

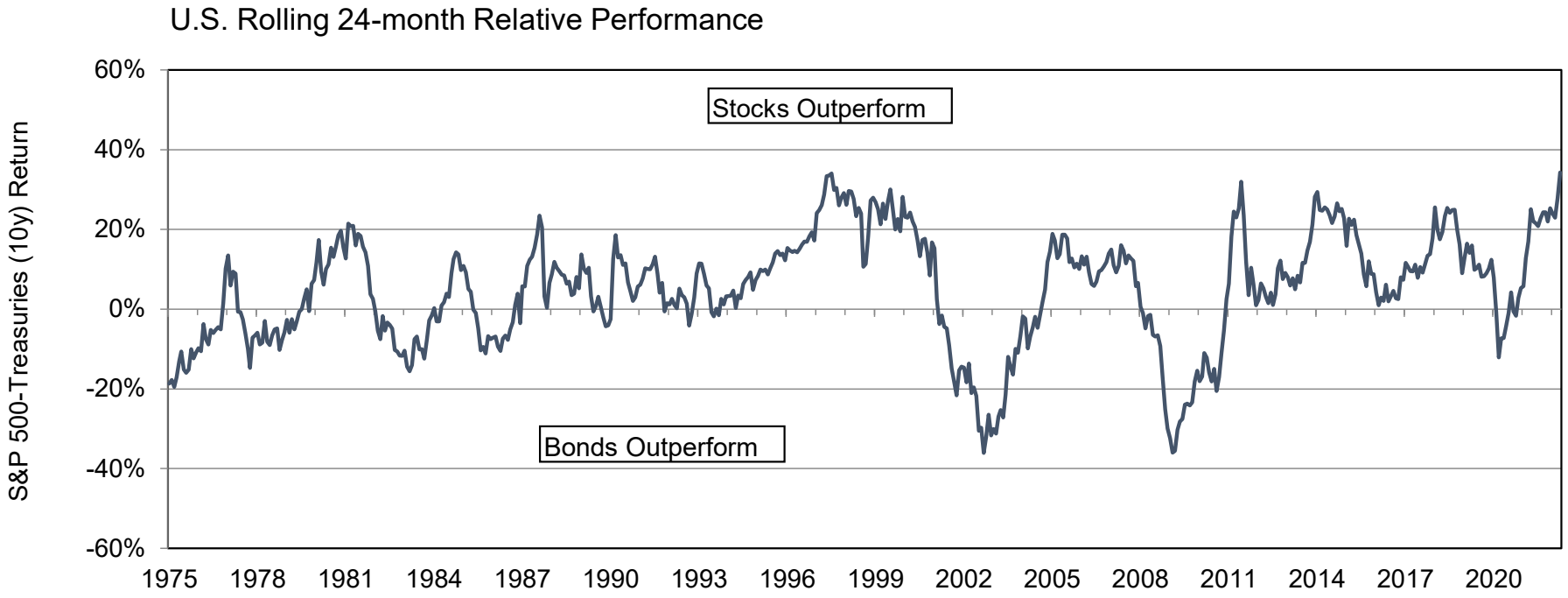
MSCI	WrldGvt	Apr 2022	Local Markets Equity	Local Markets Bond	In (US$) **Stock**	In (US$) **Bond**	US$ Currency
100%	100%	World	-0.3	-0.6	**-0.1**	**-0.6**	0.2
18%	38%	Europe	1.8	-0.2	**0.6**	**-2.2**	-1.4
8%	20%	Pacific Basin	0.5	-0.4	**2.7**	**2.1**	2.4
30%	59%	Non-US World	1.2	-0.2	**1.7**	**-0.2**	0.5
70%	41%	US	-0.9	-1.1	**-0.9**	**-1.1**	
		Cash		0.3		**0.3**	

	Lg-Sm	Va-Gr	High Yield - 10yT
US Style	-4.9%	-0.7%	0.6%
	Small -	*Growth*	*HighYld*

Source: Strategic Frontier Management - Global TAA Models (April 2022)

ROLLING 10-YR STOCK VS. BOND RETURN

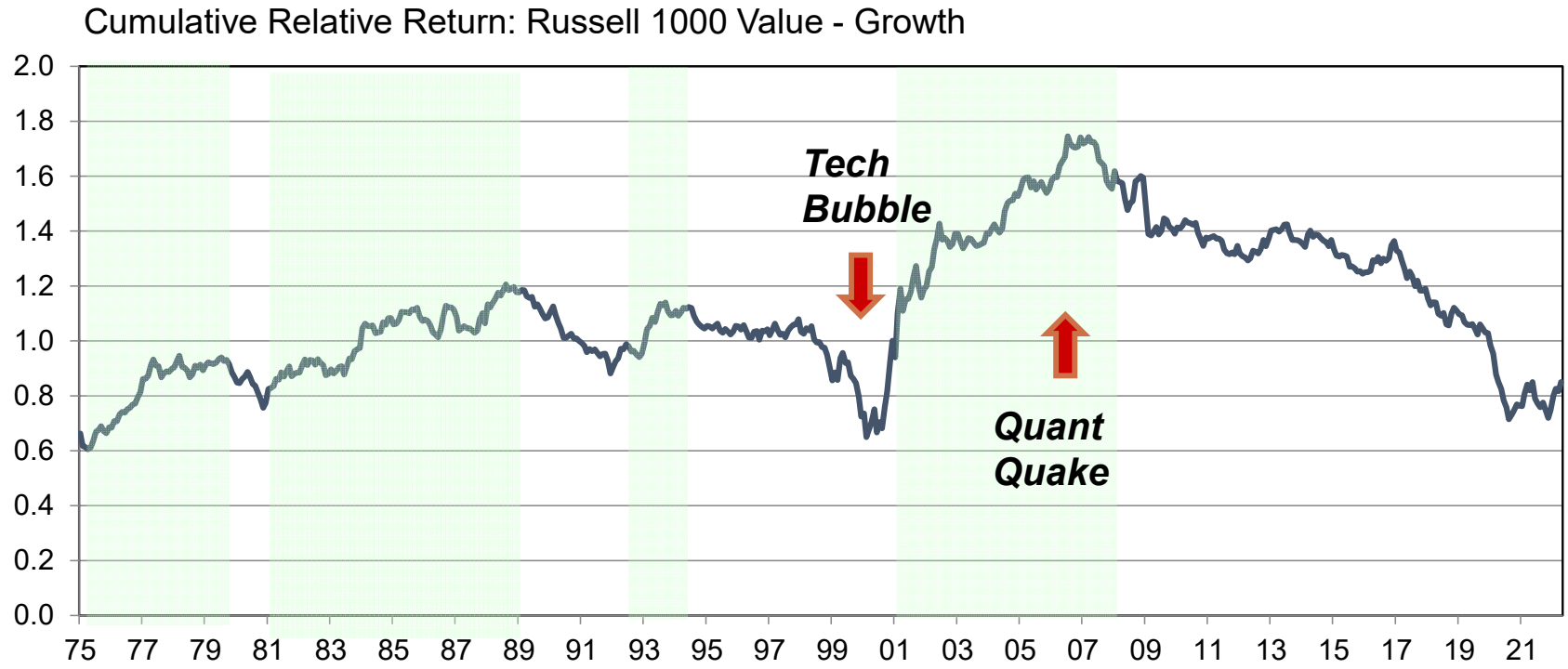
- Outperformance of equities reinforces equity sentiment, similarly so for large-cap and growth equity tilts despite relative valuation extremes
- US Treasuries overvaluation can trigger an Asset Allocation rotation (re: LDI, risk parity), particularly after pandemic drove record neg. real yields
- *Real bond valuation eventually critical*



Source: Strategic Frontier Management, Standard & Poor's, Bloomberg-Barclays Indices

VALUE INVESTING MIA SINCE 2007-QUANT QUAKE

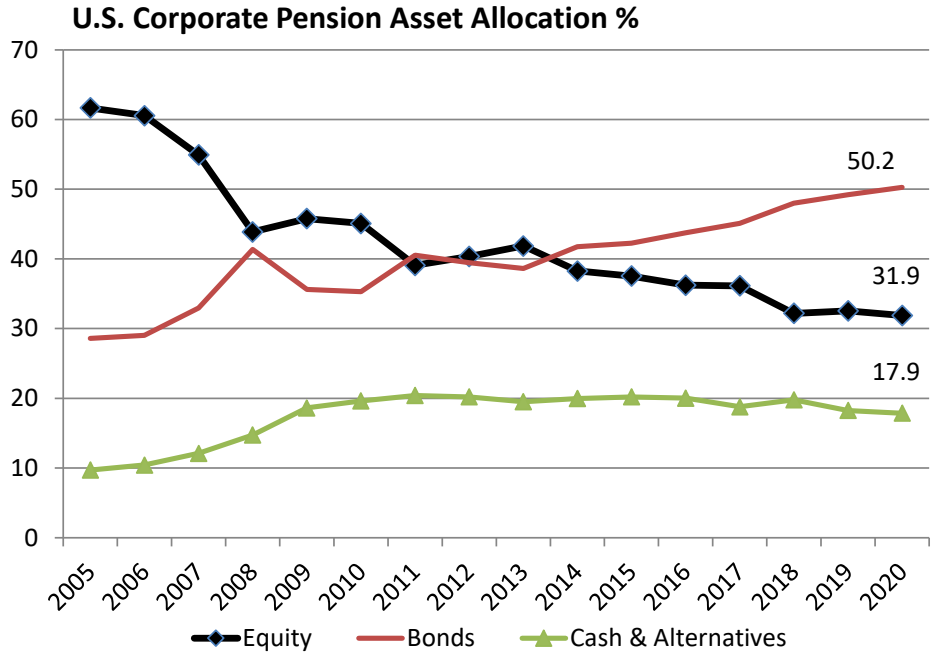
- Historical advantage of a tilt toward *Value* has been vanquished…it (plus, small-cap risk premium) must rebound for active management to be revived
- Smart-Beta has also suffered as Size and Value premiums failed
- Long-term risk premiums such as Value-Growth and Small Size (large vs. small) are cyclical, but also can be exploited tactically. Other risk factors similarly cyclical.

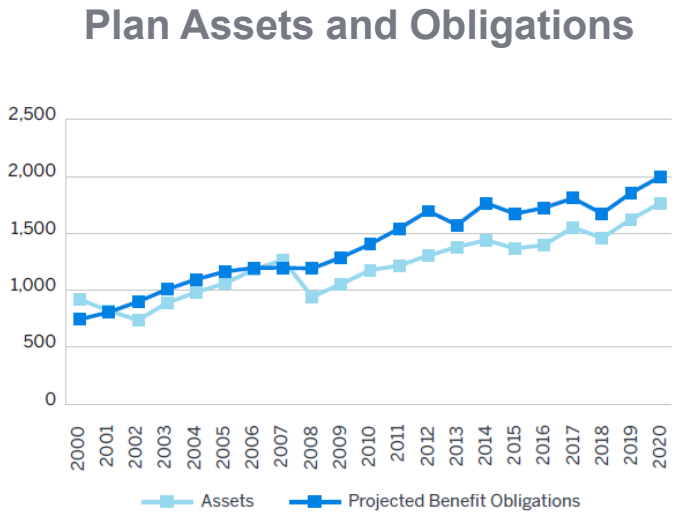


Source: Refinitiv DataStream & Strategic Frontier Management

PENSION FUNDS AT LOWEST EQUITY AND HIGHEST BOND EXPOSURE EVER

- Return expectations averaging 7% are still too high, particularly given Lower Equity + Higher Bond allocations despite continuing need for interest rate normalization
- Pension gap worsening with compounding of underfunded liabilities—Negative Bonds
- Funded ratio increased to 88% on strong equity returns, but also significant plan contributions of $127 B from employers since 2018, still digging out from 2008 (80% level) with Bonds > Equities.
- Losses in LDI or Risk Parity strategies could be significant if Treasury yields doubled to even 3%.



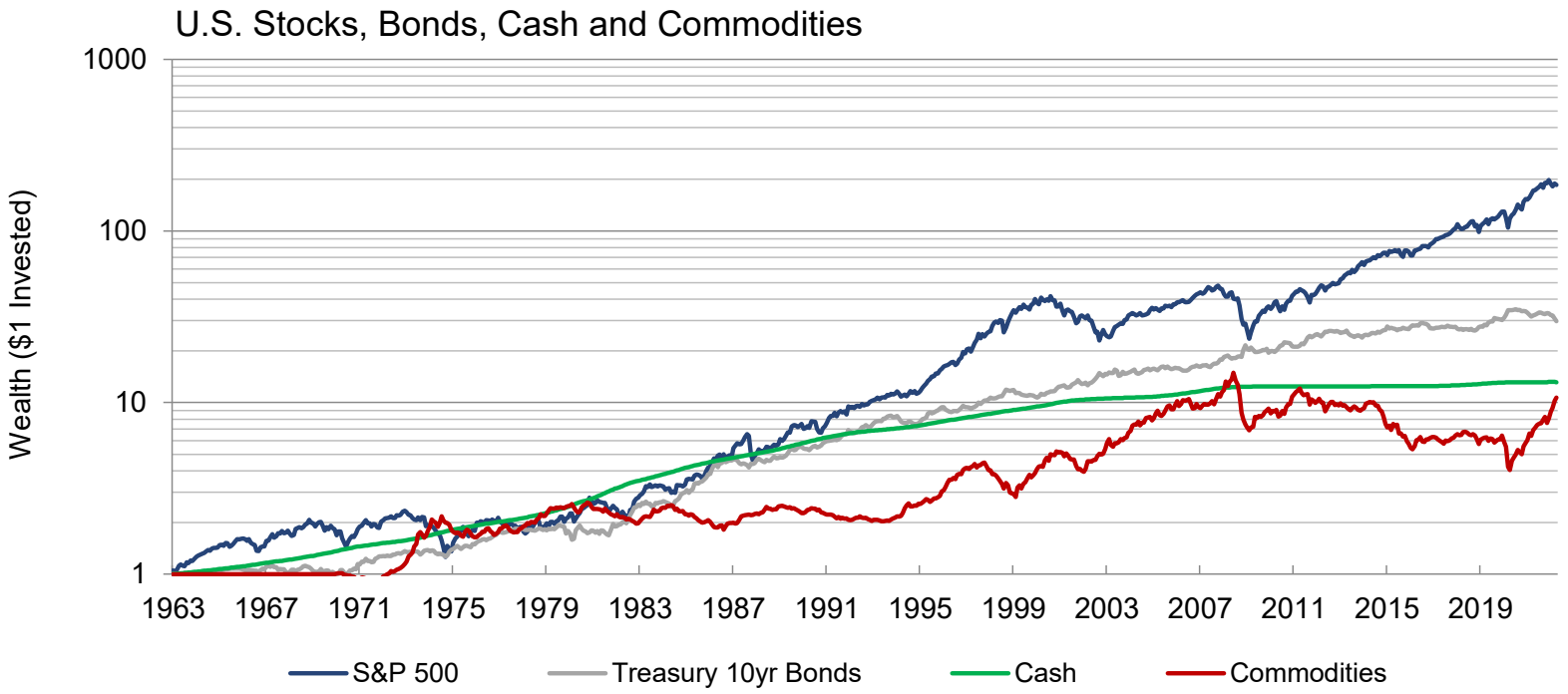


Source: Milliman Pension Study, May 2021

Lower Equity Allocations Can't Close Funding Gap if Bonds Decline
Regret & Envy May Fuel Asset Allocation Rotation away from LDI & Risk Parity

LONG-TERM ASSET CLASS RETURNS

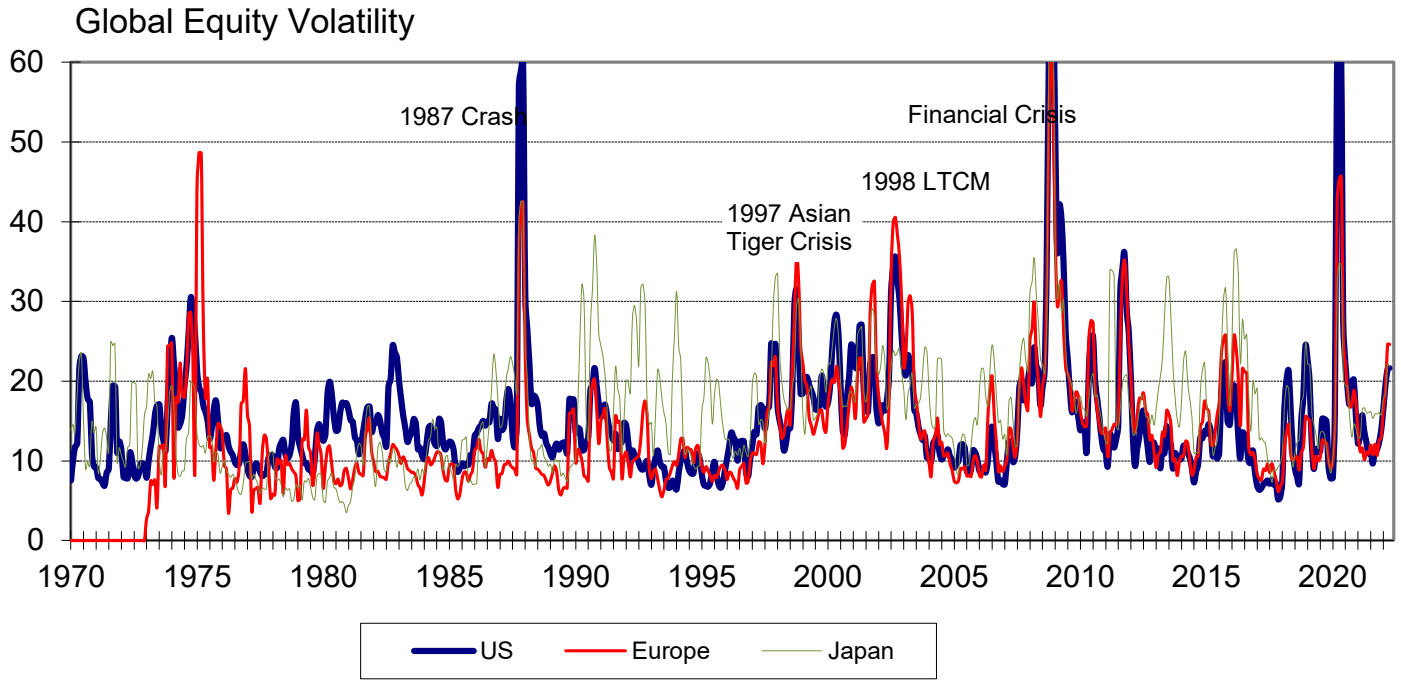
- US Equities is the best way to stay ahead of inflation, particularly as overvalued bonds struggle with normalization (raising rates, reducing bond holdings)
- Commodities lag both cash and inflation since *input costs can't exceed output costs.*
- Cryptocurrencies are speculative commodities, not a currency (too volatile), and without benefit of yield (interest), intrinsic value, or inflation support.
- Cash is and has been a better store of value than more volatile Commodities or Gold.



Source: Refinitiv DataStream and Strategic Frontier Management

GLOBAL EQUITY MARKET VOLATILITY

- Return of *volatility-of-volatility* in Equities, as well as Bonds, Commodities & Currencies
- Nature of market volatility changed, so have correlations. Expect US Equity: 12-17.
- Selling volatility short < 15 for income is imprudent—surprising investors still chasing income even after 2018, as evident in 2020 losses among institutions that know better.
- Hazard of leveraged, narrow, commodity, and exotic ETFs enabling investor losses, considering losing speculative derivative strategies (i.e., 2008, 2012, 2018, 2020).



Source: Strategic Frontier Management

ASSET CLASSES: LONG-TERM (10-YEAR) RETURN

	10-year Returns[3]		30-Year Returns[3]		1900-2020[2]	10-year Forecast		Sharpe	
Asset Class	Return	Risk	Return	Risk	LT Return	E[Return][1]	Risk	Ratio	2021
U.S. Stocks (S&P 500)	16.6%	13.5%	10.6%	14.5%	9.7%	3.5%	14.5%	0.03	28.7%
U.S. Small-cap	13.2%	18.9%	10.1%	19.1%	-.-	6.2%	19.1%	0.17	14.8%
World (ex-US)	8.4%	15.0%	6.3%	16.0%	6.1%	5.4%	16.0%	0.15	13.2%
Emg. Market Equity	5.9%	17.7%	7.6%	21.8%	6.8%	3.6%	21.8%	0.03	-2.2%
U.S. 10Yr Treasury	1.5%	7.0%	5.4%	7.1%	5.0%	1.0%	7.1%	-0.28	-2.4%
US BBG Agg Bond	2.9%	2.9%	5.3%	3.5%	-.-	2.1%	3.5%	-0.26	-1.5%
US BBG Gov/Cr 1-3y	1.5%	1.2%	3.8%	1.6%	-.-	2.5%	1.6%	-0.34	-1.0%
US High Yield (ML/BoA)	6.7%	6.5%	7.8%	8.2%	-.-	1.5%	8.2%	-0.19	5.4%
JPM Non-US Bond	0.3%	7.5%	4.4%	7.9%	-.-	-0.5%	7.9%	-0.45	-9.5%
Commodities (CRB)	-2.1%	16.6%	4.6%	16.1%	2.6%	2.2%	16.1%	-0.05	38.5%
Gold (US$)	1.5%	15.1%	5.6%	15.3%	3.7%	2.5%	15.3%	-0.03	-4.0%
Cash (T-Bills)	0.6%	0.4%	2.3%	0.6%	3.7%	3.0%	0.6%		0.0%
US Inflation (CPI)	2.1%	1.1%	2.4%	0.9%	2.9%	2.5%	0.9%		7.1%
Global Multi-Asset	8.6%	12.4%	7.3%	13.2%	4.0%	3.6%	13.2%	0.04	10.9%
Infrastructure	7.4%	12.8%				3.9%	12.8%	0.07	7.3%
Private Equity[4]	15.0%	18.9%	14.7%	19.1%		1.7%	19.0%	-0.07	

(1) Expected return as of March 31, 2022 refers to long-term return over an investment cycle

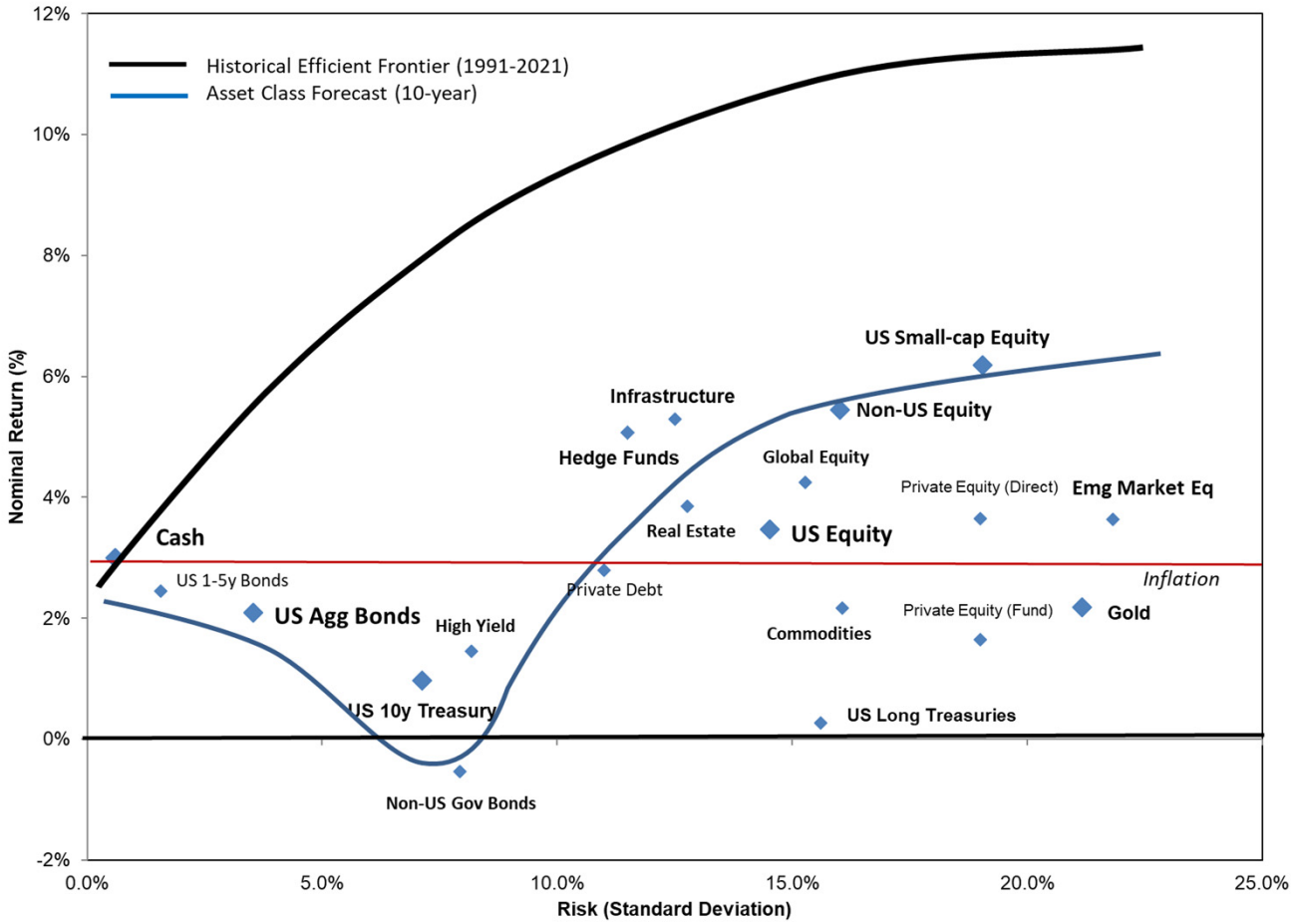
(2) 1900-2020 annualized data from Credit Suisse Global Investment Returns Yearbook

(3) Periods greater than 1-year are annualized. Returns as of Dec. 31, 2021

Source: Strategic Frontier Management, December 31 2021
Additional Sources: Refinitiv DataStream, 2019 Credit-Suisse Yearbook)

STRATEGIC 10-YEAR EXPECTED RETURNS

- Disappointing Gov't Bond returns with normalizing interest rates, reversing QE.
- Private illiquidity risk premium < 0%? Lagging mark-to-market is not diversification
- Cash is preferred low risk store of value. Crypto-"currency" Vol >40, Return: <1%



Forward looking information and forecasts contained herein are the opinion of Strategic Frontier Management. Future market returns may differ significantly from our expectations. As of April 1, 2022..

RECOMMENDED GLOBAL ASSET ALLOCATION

- Global economic and market overvaluation headwinds with higher inflation ahead, so its time to *Curb Your Enthusiasm*---likelihood of balanced portfolios exceeding 4-5% are slim Overvalued US/Global bond portfolios suffering negative real returns for 2-3 years.
- Not embarking on a new business/market cycle, but an interrupted and still extended cycle after a transitional artificial recession. Later cycle behavior of higher inflation, lower growth, declining profit margins aggravated by adverse fiscal, regulatory, energy, policies.
- Favor US/Global small-cap and Value tilts, Non-US Developed equities, and industrial & Financials, Non-interest rate sensitive (also, avoid communications/Media mega-tech)
- Best hedge for inflation, normalizing monetary policy : *Cash & Alpha (inc: hedge fund).* Avoid Gold, Cryptocurrencies, Private Funds (high fees, low returns).

Asset Class Model Targets

Global Equity	Underweight
Global Bonds	More Underweight
Cash	Overweight

Overweight
- EU, UK, AUS/NZ equities
- Industrials, Financials
- UK, NZ Bonds
- A$, CA$, Yen

Neutral

GBP

Underweight
- Bonds: US, CA, EU
- US, SW Equities
- Euro
- Gold, Low Vol, Crypto

EASIER TO DO THE COMFORTABLE THING

What is the difference between a bleak and a bright future?

- We can overcome transitory economic disruption. often sooner than discounted by investors–*Fundamental discipline is critical*
- Resilience lies in liberty, competition, and free market capitalism
- Investment in innovation and accessible education are critical to promoting prosperity, rewarding entrepreneurship / capital at risk.
- Rapid innovation fundamentally lifted our living standards, but good fiscal and economic policies with smart regulation are key
- Somebody else's *New Normal* doesn't have to be our destiny

Investment Opportunity

*"**The best way to predict the future is to invent it**. Really smart people with reasonable funding can do just about anything that doesn't violate too many of Newton's Laws."*

— Alan Kay, inventor of Smalltalk

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