

**UTIMCO BOARD OF DIRECTORS  
MEETING AGENDA  
September 10, 2020**

UTIMCO  
210 West 7<sup>th</sup> Street, Suite 1700  
Austin, Texas 78701

Time		Item #	Agenda Item
Begin	End		
			<b>OPEN MEETING:</b>
9:00 a.m.	9:05 a.m.	1	<a href="#">Call to Order of the Meeting/Discussion and Appropriate Action Related to Minutes of June 11, 2020 Meeting*</a>
9:05 a.m.	9:10 a.m.	2	<a href="#">Discussion and Appropriate Action Related to Corporate Resolution: - Election of Corporate Officers*</a>
9:10 a.m.	9:50 a.m.	3	<a href="#">Market Update</a>
9:50 a.m.	10:10 a.m.	4	<a href="#">Tactical Asset Allocation Presentation</a>
10:10 a.m.	10:30 a.m.	5	<a href="#">Fixed Income Presentation</a>
10:30 a.m.	10:50 a.m.	6	<a href="#">Risk Management Presentation</a>
10:50 a.m.	10:55 a.m.	7	<a href="#">Report from Audit and Ethics Committee</a>
10:55 a.m.	11:00 a.m.	8	<a href="#">Report from Cyber Risk Committee</a>
11:00 a.m.	11:05 a.m.	9	<a href="#">Report from Risk Committee</a>
11:05 a.m.	11:25 a.m.	10	<b>Executive Session</b> Pursuant to Section 551.074 <i>Texas Government Code</i> , the Board of Directors may convene in Executive Session to deliberate individual personnel compensation and evaluation matters. <b>Reconvene into Open Session</b> <a href="#">Report from Compensation Committee</a>
11:25 a.m.	11:30 a.m.	11	<a href="#">Report on 2021 Meeting Dates</a>
11:30 a.m.			<b>Adjourn</b>

\* Action by resolution required

\*\* Resolution requires further approval from the Board of Regents of The University of Texas System

<b>Next Regularly Scheduled Meeting: December 10, 2020</b>
--

**RESOLUTION RELATED TO MINUTES**

RESOLVED, that the minutes of the Meeting of the Board of Directors held on **June 11, 2020**, be, and are hereby, approved.

**MINUTES OF ANNUAL MEETING  
OF THE BOARD OF DIRECTORS OF  
THE UNIVERSITY OF TEXAS/TEXAS A&M INVESTMENT MANAGEMENT COMPANY**

The Board of Directors (the "Board") of The University of Texas/Texas A&M Investment Management Company (the "Corporation") convened in an open meeting on **June 11, 2020**, in person and by means of video and telephone conference enabling all persons participating in the meeting to hear each other, at the offices of the Corporation located at 210 West 7<sup>th</sup> Street, Suite 1700 in Austin, said meeting having been called by the Chairman, Jeffery D. Hildebrand ("Chairman"), with notice provided to each member in accordance with the Bylaws. The audio portion of the meeting was electronically recorded and broadcast over the Internet. Participating in the meeting were the following members of the Board:

Jeffery D. Hildebrand  
Ray Rothrock  
Robert Gauntt  
Janet Handley  
R. Steven Hicks  
Janiece Longoria  
Ray Nixon  
Clifton L. Thomas, Jr.  
James C. "Rad" Weaver

thus constituting a majority and quorum of the Board. Employees of the Corporation attending the meeting were Britt Harris, President, CEO and Chief Investment Officer; Rich Hall, Deputy Chief Investment Officer; Joan Moeller, Secretary and Treasurer; Cecilia Gonzalez, Corporate Counsel and Chief Compliance Officer; Eddie Lewis, Managing Director – Real Return; Pat Pace M.D., Managing Director – Private Equity and other team members and interns. Other attendees were Keith Brown of the McCombs School of Business at UT Austin; and Jerry Kyle of Orrick, Herrington & Sutcliffe LLP. Chairman Hildebrand called the annual meeting to order at 9:04 a.m. Copies of materials supporting the Board meeting agenda were previously furnished to each member of the Board.

**Minutes**

The first item to come before the Board was approval of the Minutes of the Board of Directors Meetings held on March 24, 2020. Upon motion duly made and seconded, the following resolution was unanimously adopted by the Board:

RESOLVED, that the minutes of the Meeting of the Board of Directors held on March 24, 2020, be, and are hereby, approved.

**Corporate Resolution - Election of Officers**

Chairman Hildebrand nominated Director Ray Rothrock to serve as Vice Chairman of the Board and Director Hicks to serve as Vice Chairman for Policy. He then requested nominations for the office of Chairman. Director

Rothrock nominated Chairman Hildebrand to serve as Chairman of the Board. There being no other nominations, Chairman Hildebrand then requested a motion to approve the corporate resolution designating the officers for the Corporation. As stated in the Bylaws, Officers for the ensuing year are to be elected at the Annual Meeting. Employees that are designated as Officers by the Board meet the definition of Key Employees in the Corporation's Code of Ethics. Upon motion duly made and seconded, the following resolution was unanimously adopted:

RESOLVED, that the following persons are hereby appointed to the respective office or offices of the Corporation set forth opposite their names, to serve until the next Annual Meeting of the Corporation or until their resignation or removal.

<u>Name</u>	<u>Office or Offices</u>
Jeffery D. Hildebrand	Chairman
Ray Rothrock	Vice Chairman
R. Steven Hicks	Vice Chairman for Policy
Britt Harris	President, Chief Executive Officer and Chief Investment Officer
Rich Hall	Deputy Chief Investment Officer
Joan Moeller	Senior Managing Director, Treasurer and Secretary
Susan Chen	Managing Director
Russ Kampfe	Managing Director
Edward Lewis	Managing Director
Pat Pace	Managing Director
Ryan Ruebsahm	Managing Director
Mike Sjolander	Managing Director
Scott Slayton	Managing Director
Uzi Yoeli	Managing Director

### **Performance and Market Update**

Chairman Hildebrand asked Mr. Hall to present the Fund's performance and market update. Mr. Hall began with an overview of the market as well as the S&P 500 concentration and dispersions. He then reviewed benchmark performance and an overview of funds. He presented UTIMCO's performance results as of March 31, 2020 and reported a total of \$46.1 billion of assets under management, noting that number has since increased to around \$49 billion. Mr. Hall also compared performance and risk adjusted returns relative to other foundations and endowments. Mr. Hall concluded with a brief review of the economic forecast.

### **The Future after COVID-19 Presentation**

Chairman Hildebrand asked Britt Harris to present his predictions for what the future will look like after COVID-19. Mr. Harris discussed the changes he expects the economy may face post COVID. Mr. Harris discussed de-urbanization, technology advancement, the entertainment industry, online learning for academia, travel, and healthcare. Mr. Harris also discussed how governments around the world may invest in infrastructure to monitor citizens, which means less privacy, changes to dependence on global supply chains, retail services, and family and community connections. Mr. Harris concluded his presentation and answered questions from the Directors.

### **Real Return Presentation**

Chairman Hildebrand asked Mr. Lewis to present the update on the Real Return program. Mr. Lewis highlighted returns over the past year noting that the team generated a 5.4% TWR, which is a compression from the last couple of years. Natural Resources, broadly across the industry, have compressed and our returns reflect that. Mr. Lewis noted that Real Estate is the largest exposure representing 46% of the real return net asset. Natural Resources is 38% and Infrastructure is 16%. Both Real Estate and Infrastructure are in growth mode. Mr. Lewis next discussed how the markets impacted the portfolio. Mr. Lewis answered the Directors' questions.

### **Private Equity Presentation**

Chairman Hildebrand asked Dr. Pace to update the Board on the Private Equity Team and their current work. The presentation covered the current market conditions for private equity investments, the portfolio performance summary, and the Q1 activity and expectations. The Private Investments portfolio is \$8.2 billion or 23.5% of the endowments. The goal of the Private Equity Team is to increase that percentage to 25% over the long term. The portfolio is divided among Buyouts, Private Equity, Venture Capital, Emerging Markets, and Private Credit. Dr. Pace answered the Directors' questions.

### **Board Fiduciary Education**

Chairman Hildebrand asked Mr. Kyle of Orrick, Herrington & Sutcliffe LLP, fiduciary counsel of UTIMCO, to present an Overview of Fiduciary Duties of Directors. Mr. Kyle reviewed the fiduciary duties of obedience, loyalty, and care. Failure to comply with applicable standards of conduct and fiduciary duties can result in Director liability. Mr. Kyle also reviewed fiduciary duty under Texas Corporate Law and special responsibilities of UTIMCO Directors. Mr. Kyle answered the Directors' questions.

### **Report from Audit and Ethics Committee**

Chairman Hildebrand asked Director Handley to provide a report on behalf of the Audit and Ethics Committee (the "Committee"). Director Handley reported that the Committee met on June 4, 2020. The Committee's agenda included approval of Committee minutes; discussion and appropriate action related to engaging corporate external auditor; an update on UTIMCO's compliance, reporting, and audit matters; a presentation of unaudited financial statements for the Investment Funds and the Corporation; and discussion and appropriate action related to the base salary for the Corporate Counsel and Chief Compliance Officer for the 2020-2021 Fiscal Year. The Committee also met in Executive Session for the purpose of deliberating individual personnel compensation and evaluation matters.

Director Handley noted that Ms. Gonzalez reported on the annual disclosure statements filed by outside financial advisors and service providers that were filed with the State Auditor's Office on April 15th and the annual report on Director Co-Investments. Ms. Gonzalez also reported to the Committee on contracts, leases, or other commercial arrangements of \$250,000 or more entered into during the quarter.

Director Handley reported that the Committee had approved the hiring of Deloitte and Touche LLP as the corporate auditor and requested that the Board take appropriate action related to hiring Deloitte and Touche LLP as the corporate auditor. Estimated fees for the FY 2020 audit services are \$46,300 plus out-of-pocket

expenses. This is a \$1,300 increase over the FY 2019 fee. Upon motion duly made and seconded, the following resolution was unanimously adopted by the Board:

RESOLVED, that the firm of Deloitte & Touche LLP be, and is hereby, engaged as the independent auditor of the Corporation for the year ended August 31, 2020.

### **Report from Risk Committee**

Chairman Hildebrand asked Director Gauntt to provide a report from the Risk Committee. Director Gauntt reported that the Risk Committee met jointly with the Policy Committee and separately on June 4, 2020. The Committee's agenda for the joint meeting included a discussion and appropriate action related to proposed amendments to the Investment Policy Statements and the MSCI Barra Total Plan Risk System presentation. Its separate meeting included discussion and approval of the minutes of its March 5, 2020 meeting; review and discussion of compliance reporting; and a market and portfolio risk update.

### **Report from Policy Committee**

Chairman Hildebrand asked Director Hicks to provide a report from the Policy Committee. Director Hicks reported that the Policy Committee met jointly with the Risk Committee on June 4, 2020. The Joint Committee meeting agenda included discussion and appropriate action related to proposed amendments to the Investment Policy Statements and the MSCI Barra Total Plan Risk System presentation.

The Investment Management Services Agreement (IMSA) requires that UTIMCO review the current Investment Polices for each Fund at least annually. The review includes long-term investment return expectations and expected risk levels, strategic asset allocation targets and ranges, expected returns for each Asset Class and Fund, designated performance benchmarks for each Asset Class and such other matters as the UT Board or its staff designees may request. At the joint meeting, the Policy and Risk Committees approved the amendments to the Investment Policy Statements for the Permanent University Fund ("PUF"), the General Endowment Fund ("GEF"), Long Term Fund ("LTF"), and Permanent Health Fund ("PHF"), as proposed by the Team, subject to approval by the Board and the Board of Regents of UT System. There were no recommended amendments to any other investment policies. Upon motion duly made and seconded, the following resolution was unanimously adopted by the Board:

RESOLVED, that amendments to the Investment Policy Statements of the Permanent University Fund, General Endowment Fund, Permanent Health Fund, and Long Term Fund, as presented be, and are hereby approved, subject to approval by the Board of Regents of The University of Texas System.

### **Report from Cyber Risk Committee**

Chairman Hildebrand asked Director Rothrock to provide a report from the Cyber Risk Committee. Director Rothrock reported that the Cyber Risk Committee met on June 4, 2020. The Committee's meeting agenda included approval of Committee minutes and a security program overview. The Committee also met in Executive Session to receive an update on computer security assessments related to information resources technology, including security assessments.

### **Executive Session**

Prior to going into executive session, Chairman Hildebrand announced that, "The Board of Directors of The University of Texas/Texas A&M Investment Management Company having been duly convened in Open Session and notice of this meeting having been duly given, I hereby announce the convening of a closed meeting as an Executive Session to deliberate individual personnel compensation matters, including the CEO and Chief Investment Officer, pursuant to Texas Government Code Section 551.074. The date is June 11, 2020, and the time is now 10:52 a.m." Except for Mr. Harris, Mr. Hall, Ms. Moeller, and Mr. Kyle, all others left the meeting at this time. Mr. Harris, Mr. Hall and Ms. Moeller left the meeting during discussion of Mr. Harris' compensation.

### **Reconvene in Open Session**

The Board reconvened in open session and Chairman Hildebrand announced that, "The Open Session of the Board of Directors of The University of Texas/Texas A&M Investment Management Company is now reconvened. The date is June 11, 2020, and the time is now 11:20 a.m. During the Executive Session, the Board deliberated individual personnel compensation matters, including the CEO and Chief Investment Officer, but no action was taken nor decisions made, and no vote was called for or had by the Board in Executive Session."

### **Report from Compensation Committee**

Chairman Hildebrand asked Director Rothrock to provide a report from the Compensation Committee. Director Rothrock stated that the Compensation Committee met on June 4, 2020. The agenda included approval of the minutes of the March 5, 2020 meeting; discussion and appropriate action related to the base salaries for the UTIMCO officers and other UTIMCO Compensation Program ("Plan") Participants for the 2020-2021 Fiscal Year, discussion and appropriate action related to the CEO's Qualitative Performance Standards for the Plan for the Performance Period ending June 30, 2021; and discussion and appropriate action related to the UTIMCO Compensation Program, Amended and Restated effective July 1, 2020. The Committee also met in Executive Session for the purpose of deliberating individual personnel compensation matters. Director Rothrock requested the Board take appropriate action on three resolutions, the base salary for the Corporation's CEO, the CEO's qualitative performance standards, and the proposed amendments to the Plan. Upon motion duly made and seconded, the following resolutions were unanimously adopted by the Board:

RESOLVED, that the Board of Directors of UTIMCO hereby approves the Base Salary of the Corporation's CEO for the Fiscal Year 2020-2021 in the amount of \$828,000.

And

WHEREAS, Section 5.4(b) of the UTIMCO Compensation Program (the "Plan") provides that the Board will determine the Performance Standards of the CEO for each Performance Period; and

WHEREAS, the Board has reviewed the CEO's Qualitative Performance Standards for the Performance Period ending June 30, 2021, as prepared by the CEO, and recommended by the Compensation Committee and set forth in the document presented to the Board.

NOW, THEREFORE, be it:

RESOLVED, that the Board approves the Qualitative Performance Standards for the CEO for the Performance Period ending June 30, 2021, as set forth in the document presented to the Board.

And

WHEREAS, Section 7.2. of the UTIMCO Compensation Program (the "Plan") provides that UTIMCO, by action of its Board of Directors (the "Board"), has the right in its discretion to amend the Plan or any portion thereof from time to time; and

WHEREAS, the Compensation Committee of the Board (the "Committee") has reviewed the proposed amendments to the Plan incorporated into an Amended and Restated Plan, effective July 1, 2020 (the "Amended and Restated Plan"), in the form previously provided to the Board but deferred to the Board on action on the Amended and Restated Plan; and

WHEREAS, the Board has reviewed the Amended and Restated Plan.

NOW, THEREFORE, be it:

RESOLVED, that the Board hereby approves and adopts the Amended and Restated Plan, effective as of July 1, 2020, subject to the approval of the Board of Regents of The University of Texas System.

### **Corporation Budget**

Chairman Hildebrand asked Mr. Harris and Mr. Hall to discuss the Corporation's budget for the next fiscal year. Mr. Harris and Mr. Hall explained the changes to the proposed budget compared to the prior year's budget and actual for the last fiscal year. The Corporation's budget is subject to approval by the Board and the Board of Regents of UT System. Upon motion duly made and seconded, the following resolution was unanimously adopted by the Board:

RESOLVED, that the UTIMCO Management Fee of \$55,610,211 and the Other Direct Fund Costs of \$7,208,101 resulting in Total Fees of \$62,818,312, Capital Budget of \$1,200,000 and the Allocation Schedule; as provided to the Board for the period beginning September 1, 2020 through August 31, 2021, be, and are hereby, approved, subject to approval by the Board of Regents of The University of Texas System.

### **Adjourn**

There being no further business to come before the Board, the meeting was adjourned at approximately 11:44 a.m.

Secretary: \_\_\_\_\_  
Joan Moeller

Approved: \_\_\_\_\_ Date: \_\_\_\_\_

Jeffery D. Hildebrand,  
Chairman, Board of Directors of  
The University of Texas/Texas A&M Investment Management Company

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Discussion and Appropriate Action Related to Corporate Resolution: Election of Corporate Officers

**Developed By:** Moeller, Gonzalez

**Presented By:** Harris

**Type of Item:** Action required by UTIMCO Board

**Description:** Mr. Harris will request that Michael Dean and Carolina de Onis be appointed officers of the Corporation. Managing Directors are considered officers of the Corporation. Mr. Dean was appointed Managing Director – Human Resources, effective September 1, 2020. Ms. de Onis was appointed as Managing Director - General Counsel, effective August 31, 2020.

**Recommendation:** Mr. Harris will request that the Board approve appointment of Mr. Dean and Ms. de Onis as corporate officers.

**Reference:** None

<b>RESOLUTION RELATED TO CORPORATION OFFICER</b>
--

RESOLVED, that Michael Dean and Carolina de Onis are hereby appointed to the office of Managing Director of the Corporation to serve until the next Annual Meeting of the Corporation or until his or her resignation or removal.

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Market Update

**Developed By:** Harris, Hall, Morris

**Presented By:** Harris, Hall

**Type of Item:** Information Item

**Description:** Mr. Harris and Mr. Hall will present a review of UTIMCO's performance, financial markets and global trends.

**Reference:** *Market Update* presentation



# Market Update

---

Britt Harris, CEO, Chief Investment Officer, President  
Rich Hall, Deputy Chief Investment Officer

September 10, 2020

---

# UTIMCO Update

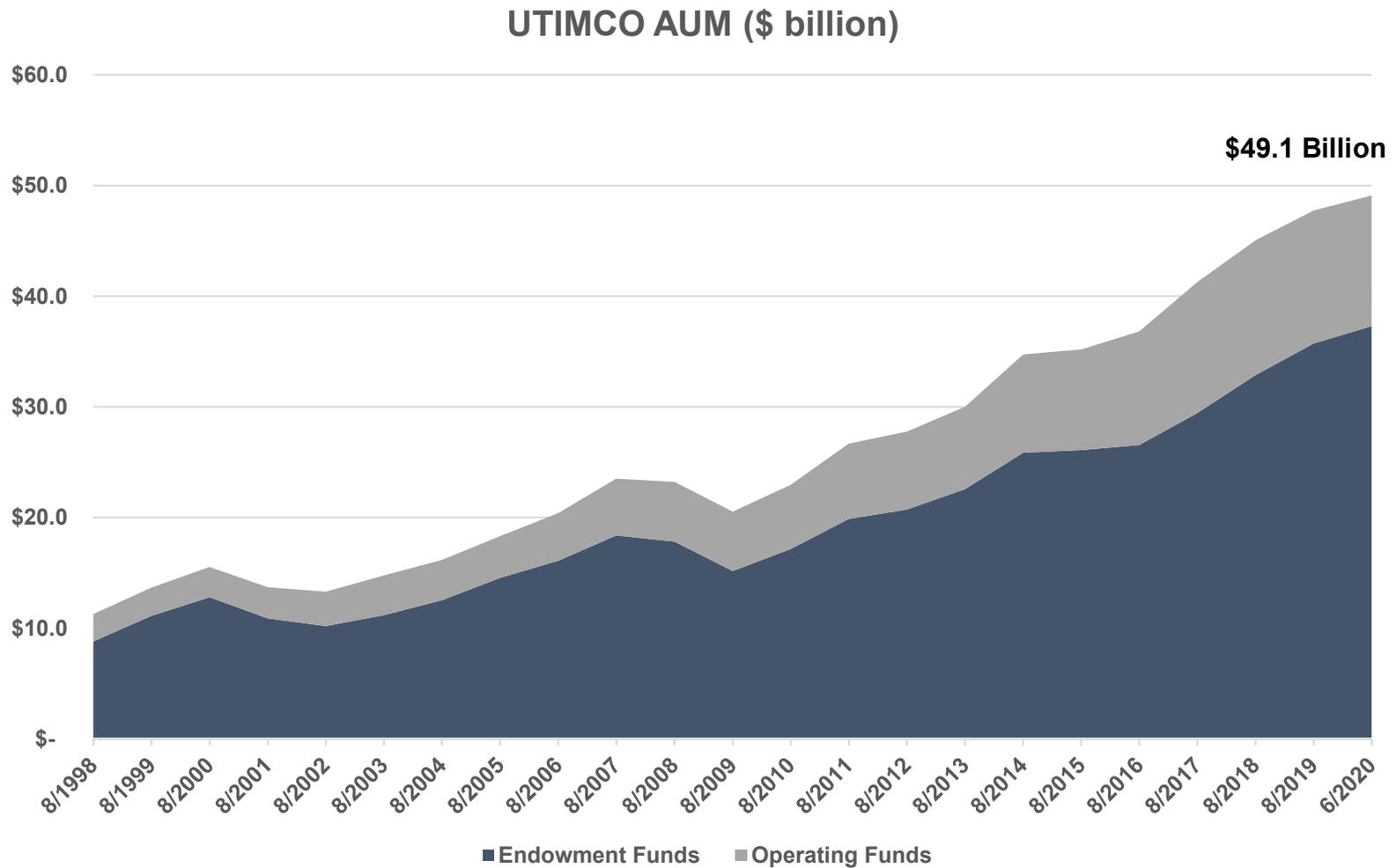
---





# Growth in Assets Under Management

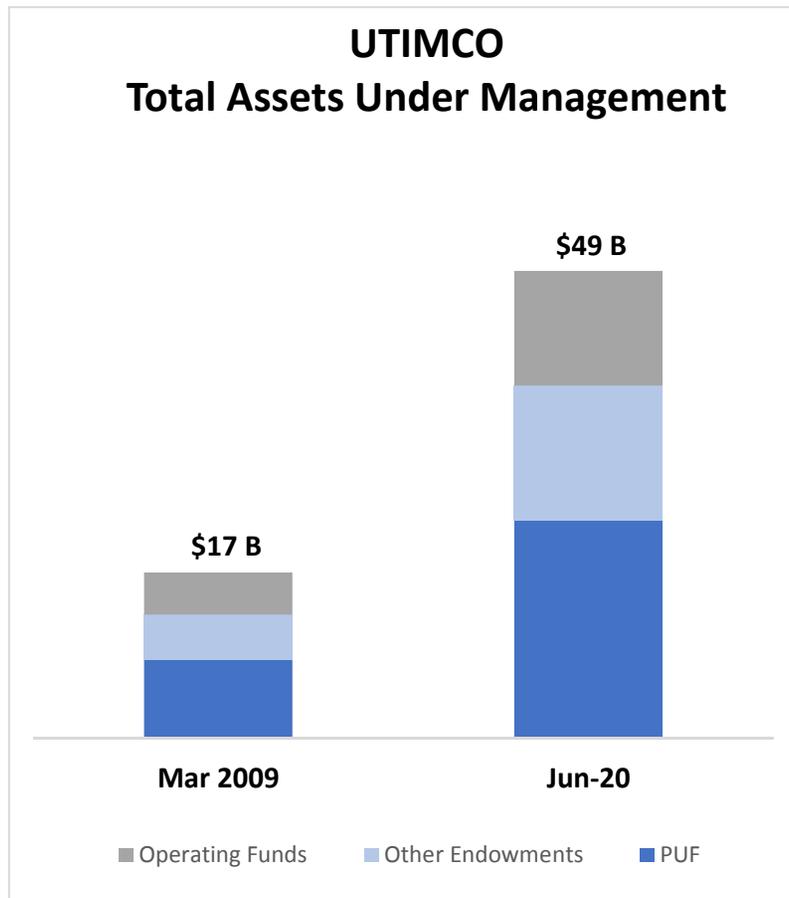
Total Assets through June 30, 2020





# UTIMCO Results

March 2009 – June 2020



## Endowment Returns (PUF) Returns

	UTIMCO	Benchmark	Alpha
Returns	9.2%	7.8%	1.4%
Standard Deviation	6.1%	6.5%	
Tracking Error	2.2%		
Information Ratio	0.63		
Beta	0.87		
Sharpe Ratio	1.43		

## Total Endowment Flows

Contributions:	\$15.9B
Distributions:	-\$13.2B
Investment Return:	\$21.6B
UTIMCO Value-Add:	\$4.9B

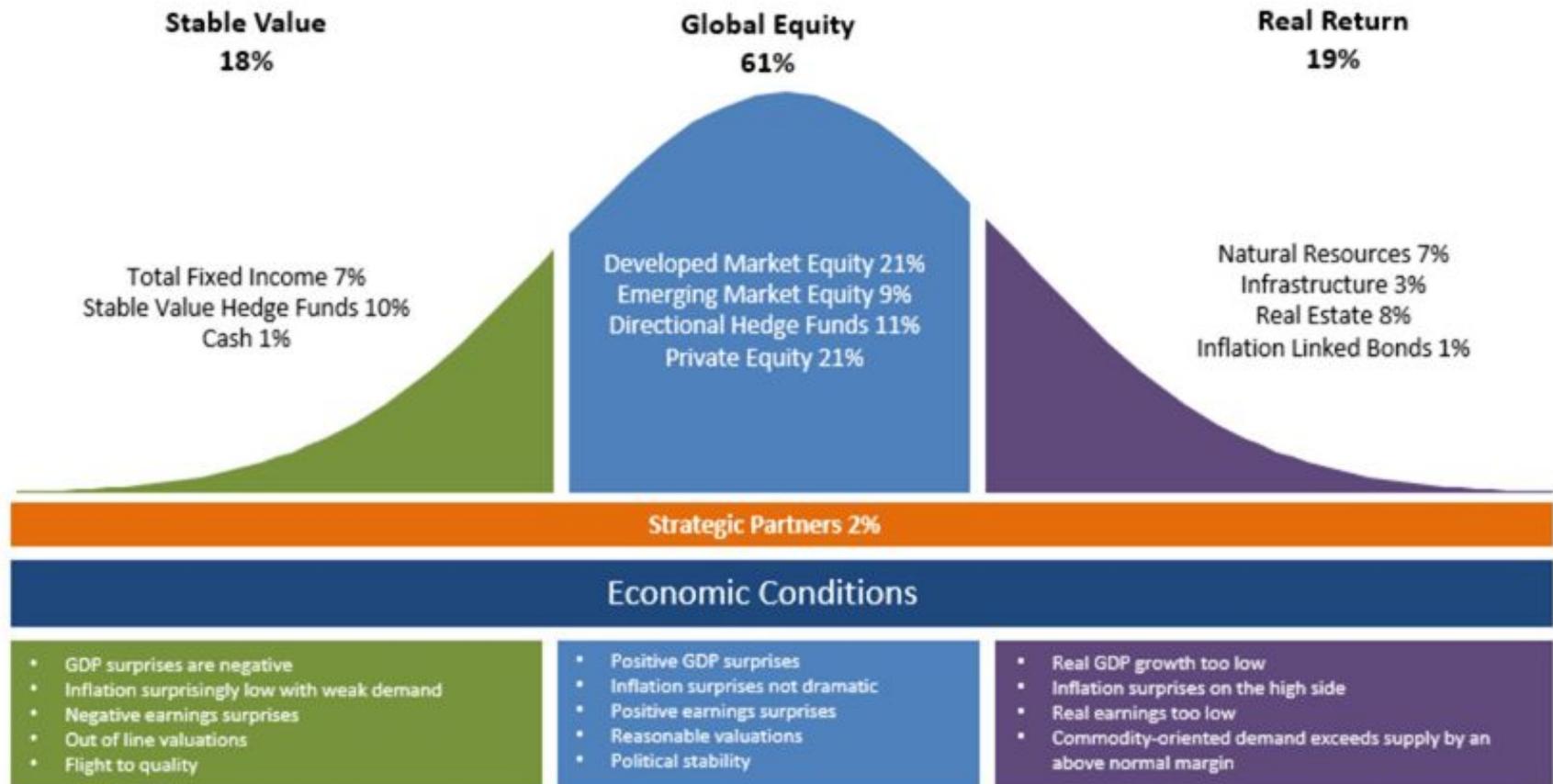
## Use of GEF Endowment Distributions

Research	25%
Instruction	21%
Scholarships	15%
Academic Support	9%
Institutional Support	7%

Note: Based on trailing 3-year data



# UTIMCO Diversification Framework



Endowment Policy Targets as of 8/31/20



# UTIMCO Alpha

Period from March 1, 2009 through June 30, 2020 (Annualized)

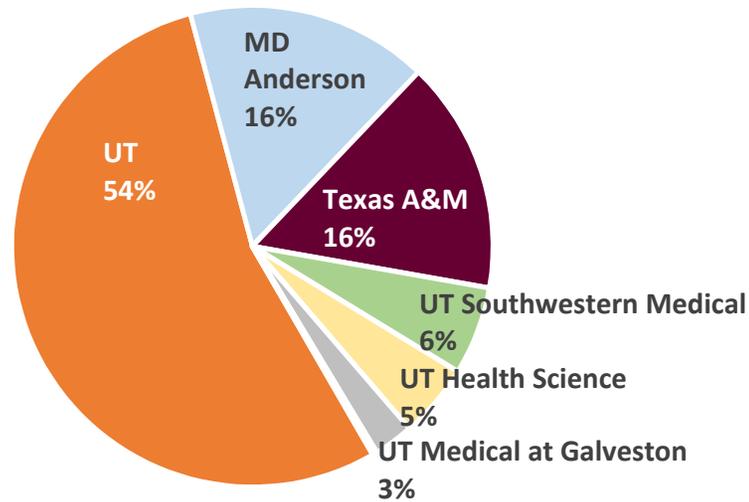
		Return	Alpha
<b>Global Equity</b>	US Equity	14.2%	(1.1%)
	Non-US Equity (EAFE)	10.0%	1.8%
	Global Equity	13.6%	1.4%
	Emerging Equity	11.6%	2.8%
	Private Equity	12.6%	2.7%
	Directional Hedge Funds	7.2%	3.8%
<b>Stable Value</b>	Total Fixed Income	5.5%	1.2%
	Stable Value Hedge Funds	6.1%	2.8%
<b>Real Return</b>	Natural Resources	6.4%	0.9%
	Infrastructure	14.4%	4.9%
	Real Estate	14.4%	1.2%
<b>UTIMCO</b>		<b><u>9.2%</u></b>	<b><u>1.4%</u></b>

Note: Asset Class returns reflect performance in the PUF



# AUM by Institution

Total AUM



<u>Affiliated Institution</u>	<u>Total AUM</u>	<u>% of Total AUM</u>
UT	\$ 26.6	54%
MD Anderson	\$ 8.0	16%
Texas A&M	\$ 7.7	16%
UT Southwestern Medical	\$ 2.9	6%
UT Health Science	\$ 2.4	5%
UT Medical at Galveston	\$ 1.3	3%
Other	\$ 0.2	
	\$ 49.1	

---

# Market Update

---





# Market Dashboard: Year to Date

## Rates

	12/31/2019	Today 8/31/2020	Change
Fed Funds	1.75	0.25	-1.50
5-yr Treasury	1.69	<b>0.27</b>	<b>-1.42</b>
10-yr Treasury	1.92	<b>0.70</b>	<b>-1.21</b>
30-yr Treasury	2.39	<b>1.47</b>	<b>-0.91</b>
Investment Grade Bonds	2.92	2.04	-0.88
High Yield	5.81	5.86	0.05

## Equities

	12/31/2019	8/31/2020	Change
S&P 500	3,231	3,500	<b>10%</b>
Forward P/E	18.3x	22.8x	4.5x
Trailing P/E	21.2x	27.3x	6.1x
Shiller P/E	27.6x	29.8x	2.3x
Forward Earnings Yield	5.5%	4.4%	-1.1%
Europe	416	367	<b>-12%</b>
Japan	1,721	1,618	<b>-6%</b>
China (Onshore)	3,050	3,396	<b>11%</b>
Developed: MSCI World	6,910	7,278	<b>5%</b>
Emerging: MSCI EM	528	530	<b>0%</b>
Global: MSCI ACWI	282	296	<b>5%</b>

## Inflation

	12/31/2019	8/31/2020	Change
5-yr TIPS	-0.02	-1.45	-1.44
5-yr TIPS Breakeven	1.7	<b>1.7</b>	<b>0.0</b>
10-yr TIPS	0.13	-1.10	-1.23
10-yr TIPS Breakeven	1.8	<b>1.8</b>	<b>0.0</b>

## Commodities

	12/31/2019	8/31/2020	Change
Gold	1,517	1,968	<b>30%</b>
Oil	61	43	<b>-30%</b>
Copper	280	304	9%
Bloomberg Commodities Index	172	156	-9%

Source: Bloomberg



# Market Dashboard: Market Lows to Today

## Rates

	3/23/2020	Today 8/31/2020	Change
Fed Funds	0.25	0.25	0.00
5-yr Treasury	0.41	<b>0.27</b>	<b>-0.14</b>
10-yr Treasury	0.79	<b>0.70</b>	<b>-0.08</b>
30-yr Treasury	1.35	<b>1.47</b>	<b>0.12</b>
Investment Grade Bonds	4.07	2.04	-2.03
High Yield	14.84	5.86	-8.98

## Equities

	3/23/2020	8/31/2020	Change
S&P 500	2,237	3,500	<b>58%</b>
Forward P/E	13.4x	22.8x	9.4x
Trailing P/E	14.7x	27.3x	12.6x
Shiller P/E	19.0x	29.8x	10.9x
Forward Earnings Yield	7.5%	4.4%	-3.1%
Europe	280	367	<b>31%</b>
Japan	1,292	1,618	<b>25%</b>
China (Onshore)	2,660	3,396	<b>28%</b>
Developed: MSCI World	4,711	7,278	<b>55%</b>
Emerging: MSCI EM	360	530	<b>47%</b>
Global: MSCI ACWI	192	296	<b>54%</b>

## Inflation

	3/23/2020	8/31/2020	Change
5-yr TIPS	0.03	-1.45	-1.48
5-yr TIPS Breakeven	0.4	<b>1.7</b>	<b>1.3</b>
10-yr TIPS	-0.03	-1.10	-1.07
10-yr TIPS Breakeven	0.8	<b>1.8</b>	<b>1.0</b>

## Commodities

	3/23/2020	8/31/2020	Change
Gold	1,553	1,968	<b>27%</b>
Oil	23	43	<b>82%</b>
Copper	212	304	<b>43%</b>
Bloomberg Commodities Index	132	156	18%

Source: Bloomberg



# Economic Forecasts

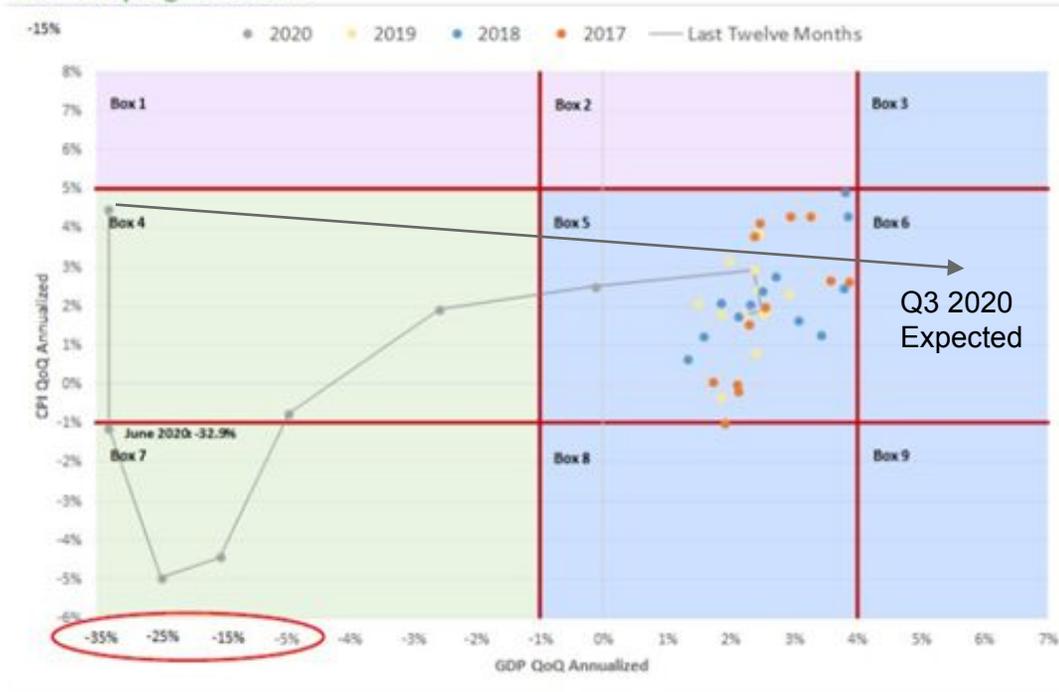
Estimates as of 8/28/20

	2020 GDP				GDP		S&P 500 EPS		Unemployment		Core PCE	
	Q1A	Q2A	Q3	Q4	2020	2021	2020	2021	2020	2021	2020	2021
AGMR			43%	18%	1.3%	4.9%	\$131		6%	5%	1.4%	1.8%
Barclays			25%	5%	-4.3%	3.4%	\$120	\$150	9%	7%	1.4%	1.6%
BofA			15%	5%	-5.3%	2.9%	\$115	\$155	9%	8%	1.3%	1.4%
Citi			28%	10%	-3.6%	5.1%	\$132	\$160	7%	6%	1.4%	1.9%
Credit Suisse			15%	6%	-5.3%	3.4%	\$125	\$155	8%	6%	1.4%	2.0%
Goldman			30%	6%	-3.8%	6.1%	\$130	\$170	9%	7%	1.3%	1.4%
ISI			25%	10%	-3.2%	6.2%	\$128	\$165				
JP Morgan			28%	4%	-4.2%	2.6%	\$120	\$155	9%	8%	1.4%	1.4%
Morgan Stanley			21%	0%	-5.3%	3.4%	\$130	\$168	10%	7%	1.6%	2.0%
UBS			13%	6%	-6.6%	5.2%			10%	5%	1.4%	1.5%
<b>Average</b>	<b>-5%</b>	<b>-32%</b>	<b>24%</b>	<b>7%</b>	<b>-4.0%</b>	<b>4.3%</b>	<b>\$126</b>	<b>\$160</b>	<b>9%</b>	<b>6%</b>	<b>1.4%</b>	<b>1.7%</b>
<b>12/31/19</b>					<b>1.8%</b>		<b>\$172</b>		<b>4%</b>		<b>2.3%</b>	



# Current Economic Regime

US Policy Signal Chart



Box #	Move to	Stay in	Total
1	-	-	-
2	12.6%	-14.9%	-0.4%
3	-	-	-
4	-30.0%	38.6%	-12.1%
5	15.7%	7.2%	8.5%
6	14.8%	11.9%	12.7%
7	-48.6%	-15.2%	-26.5%
8	18.4%	20.2%	19.1%
9	-	-	-

Legend:

- Green: Stable Value
- Blue: Global Equity
- Purple: Real Return

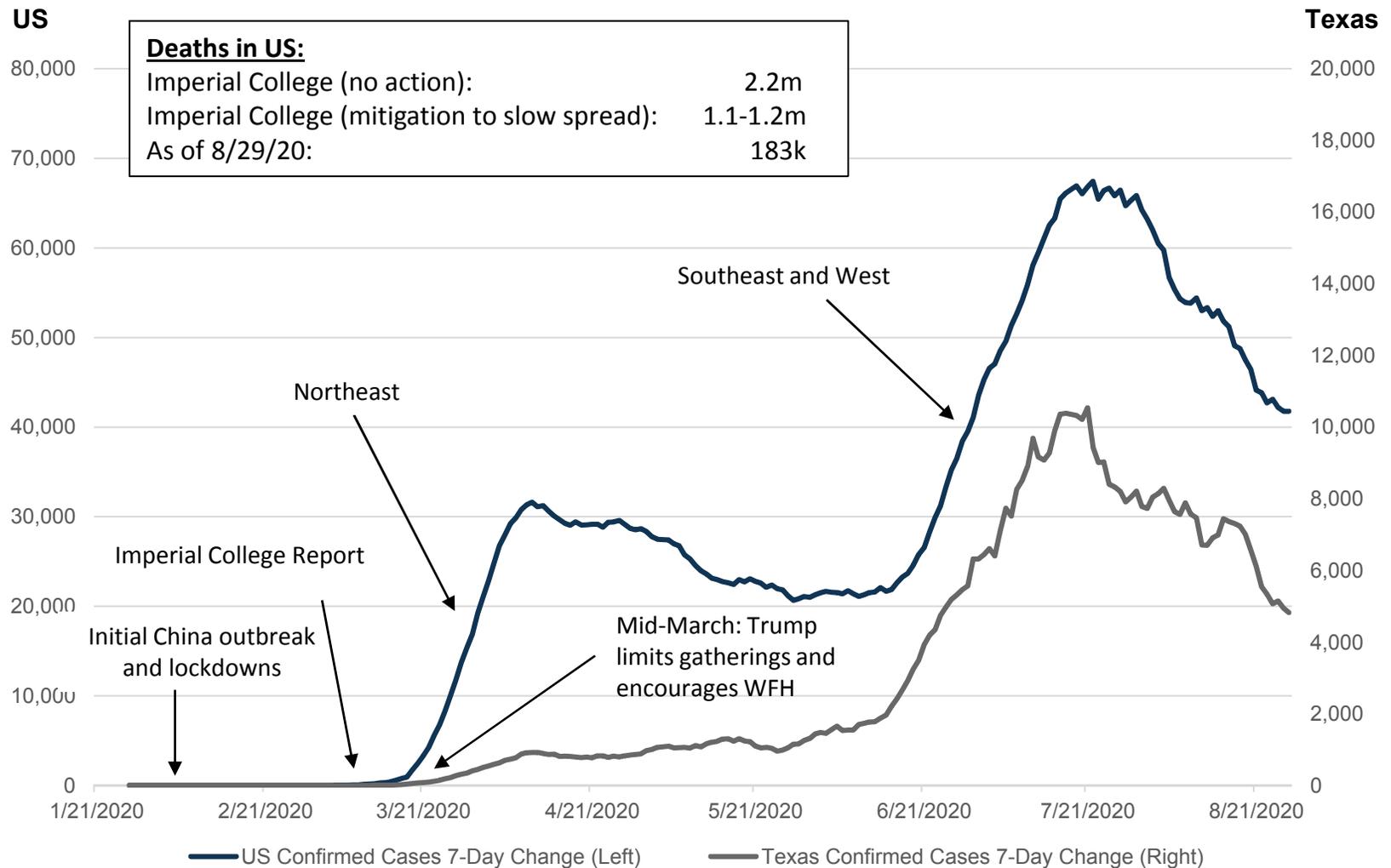
Global Policy Signals Summary

Quarterly Signals	6/30/2020	3/31/2020	12/31/2019
US	7	4	5
Europe	4	4	5
Japan	4	4	4
China	9	4	3



# Under Attack: US and Texas Confirmed Cases

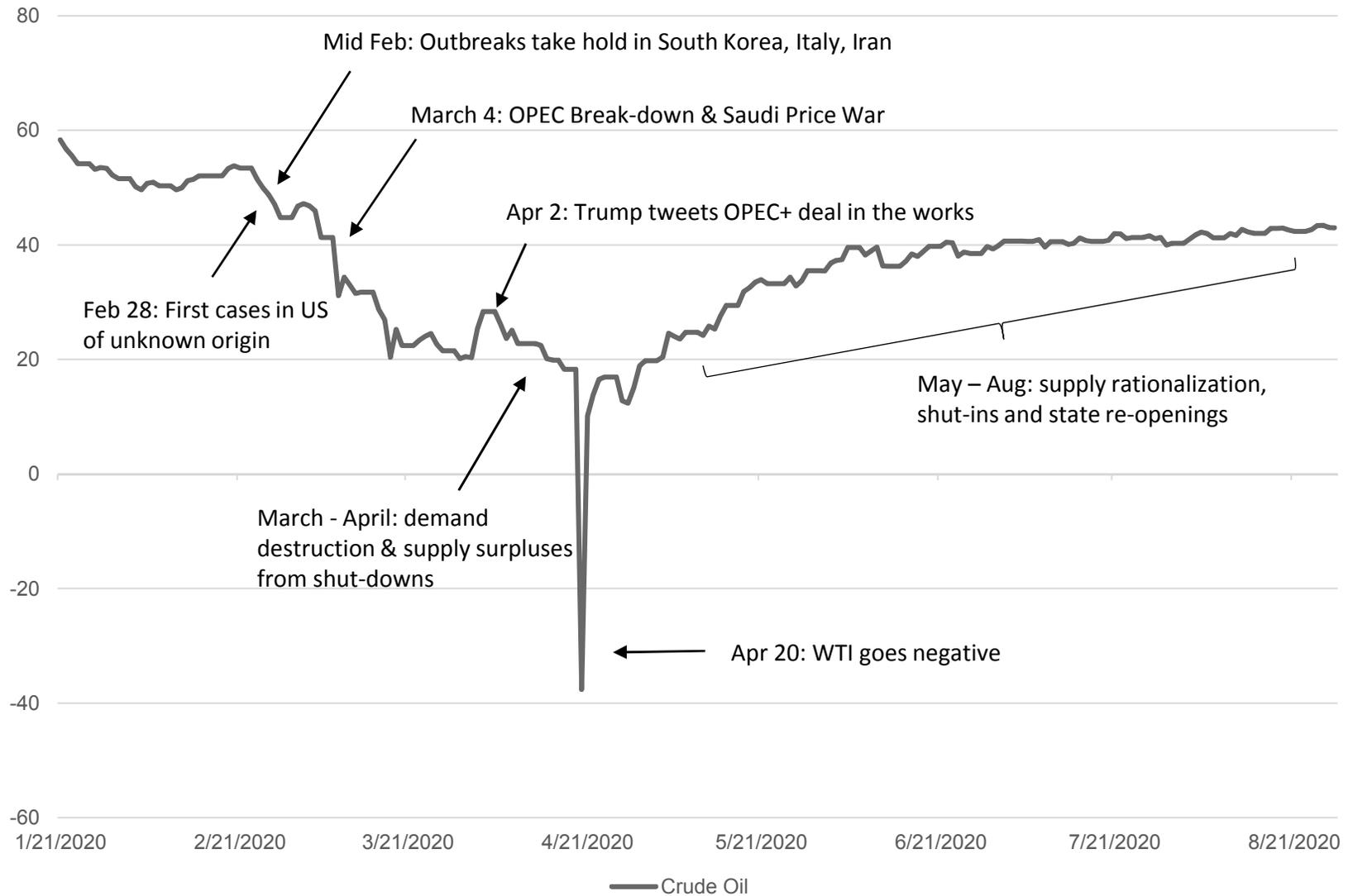
## Daily Change (7-day Average)



Source: Bloomberg

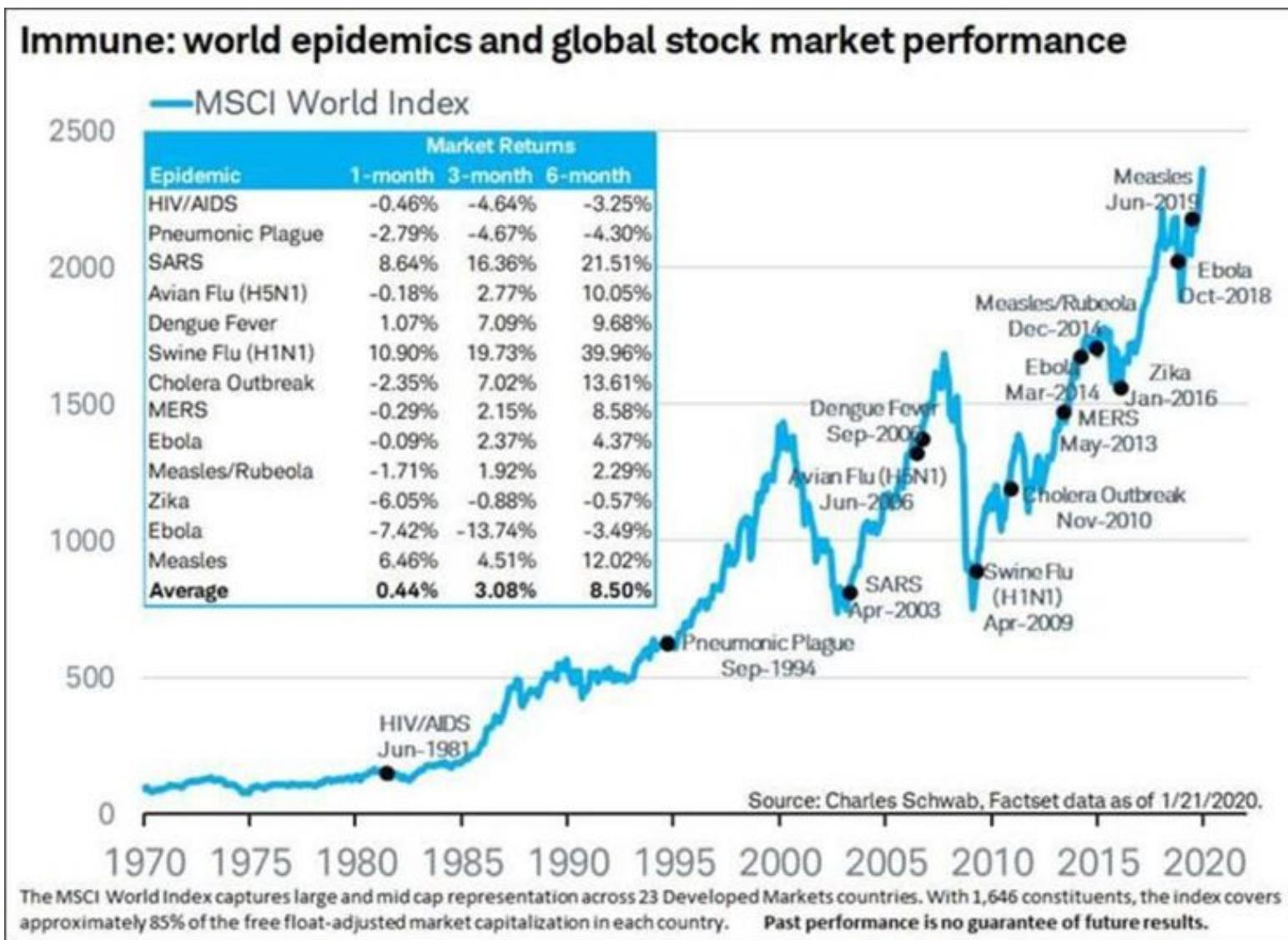


# Under Attack: Crude Oil



Source: Bloomberg

# Under Attack: Epidemics and Market Performance

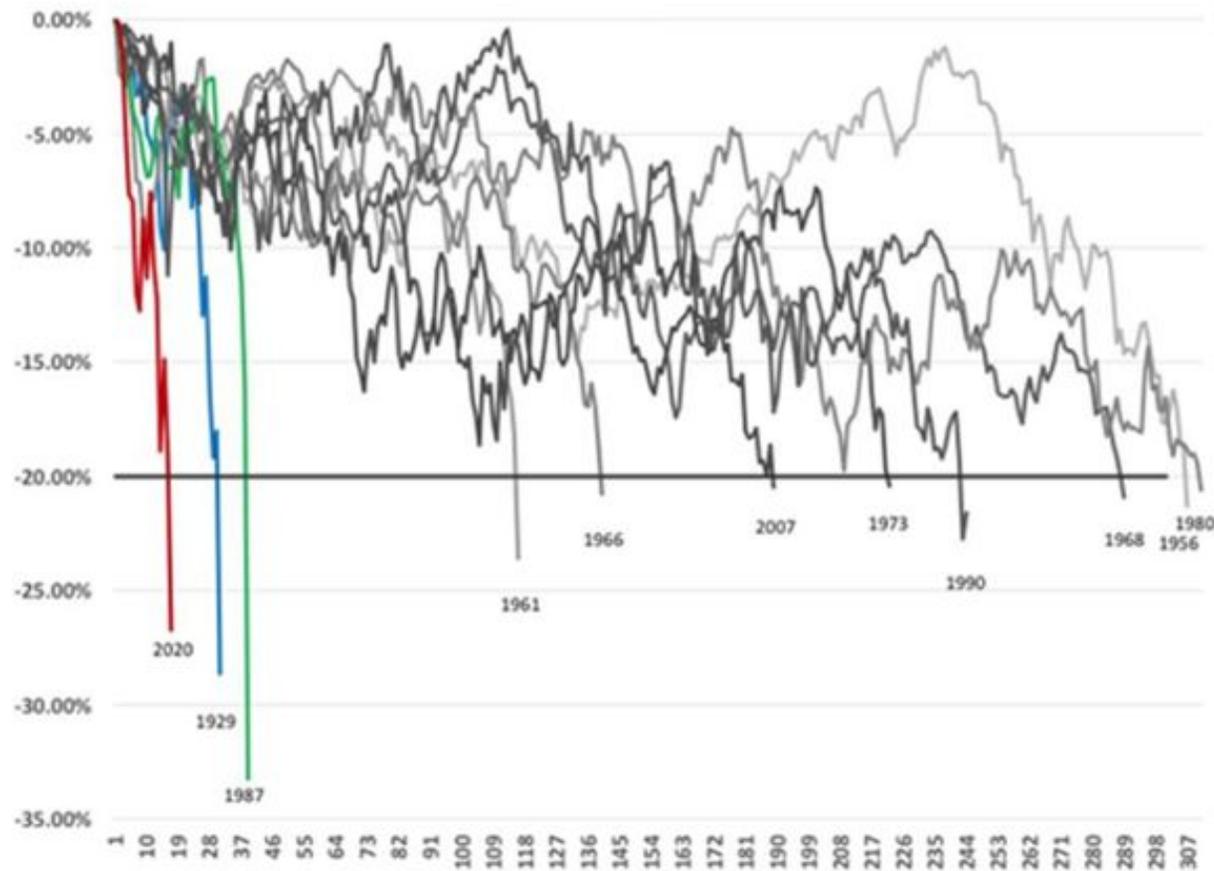




# Under Attack: Fastest 20% Market Decline

**Exhibit 1: The S&P500 has dropped 20% from peak faster than in any other stock market crash before**

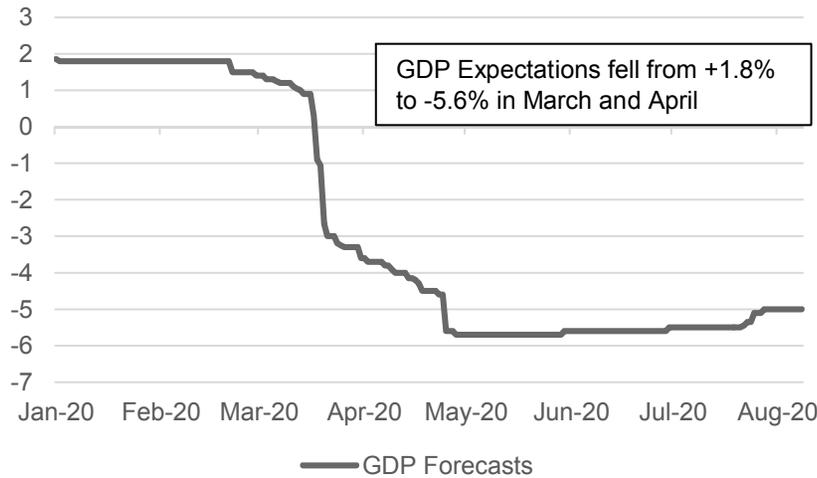
*Performance until the day it surpassed the -20% threshold (vertical axis); Trading days from peak (horizontal axis)*



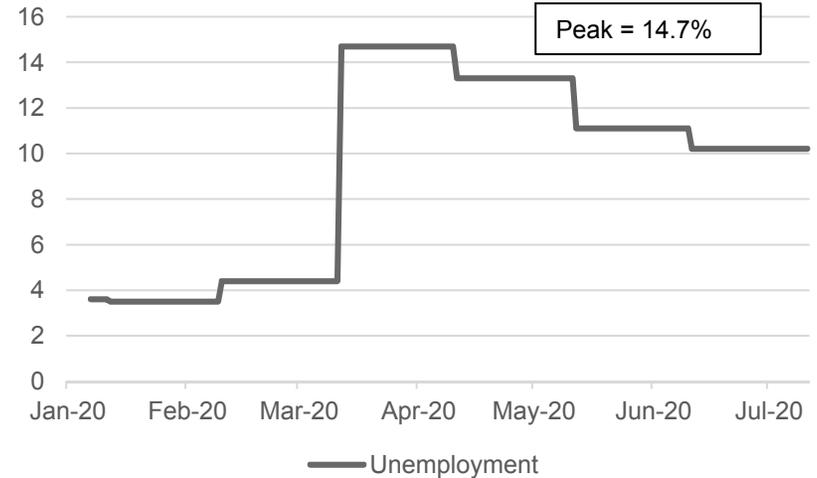
Source: Bloomberg, Goldmoney Research



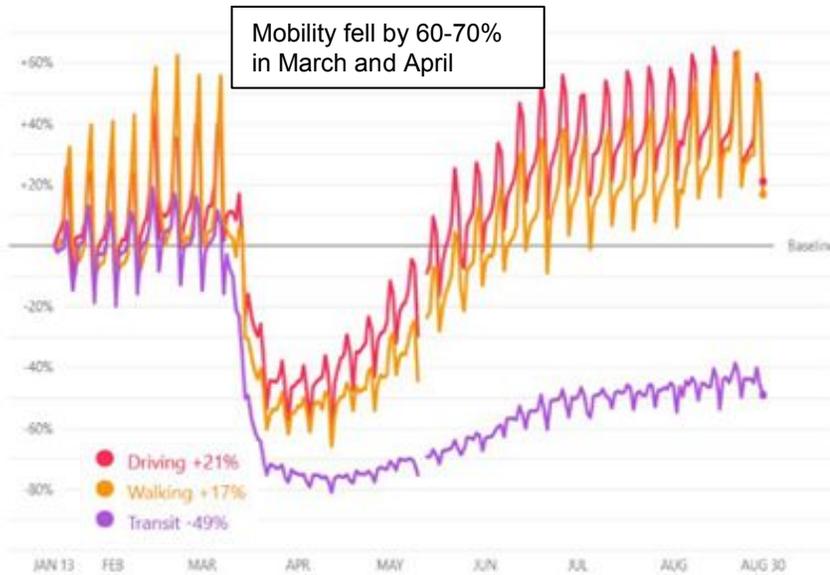
# Under Attack: Economic Activity



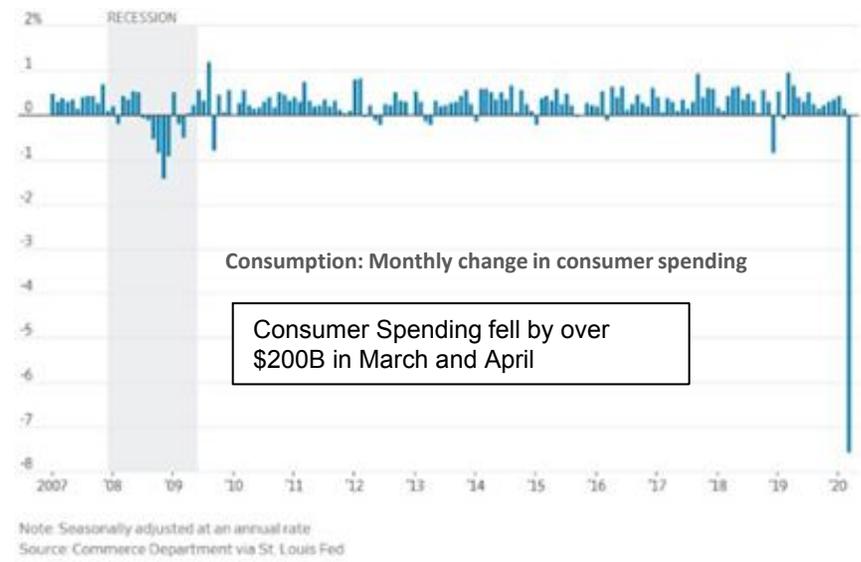
Source: Bloomberg



Source: Bloomberg

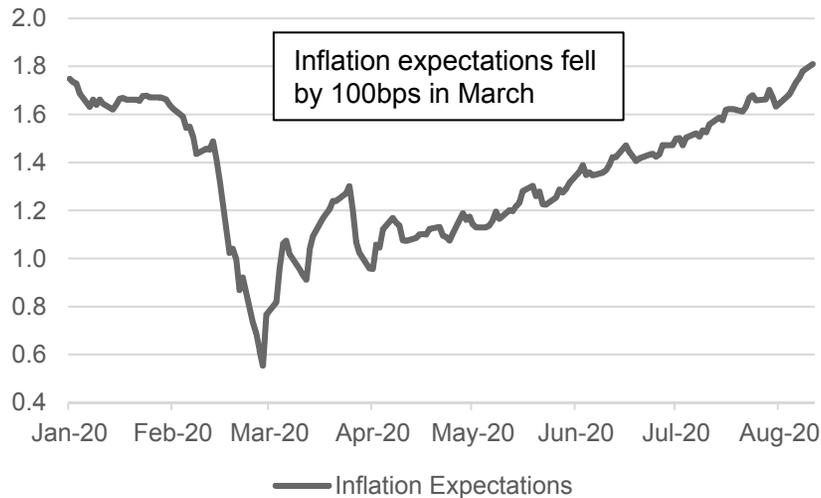


Source: Apple

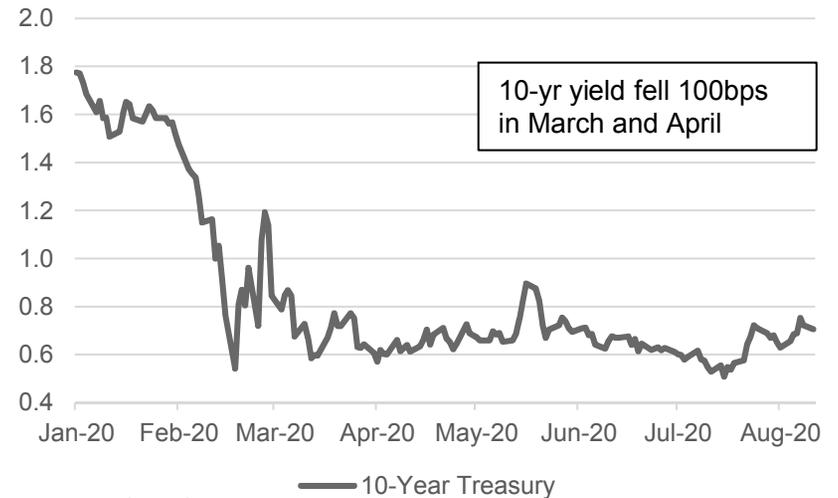




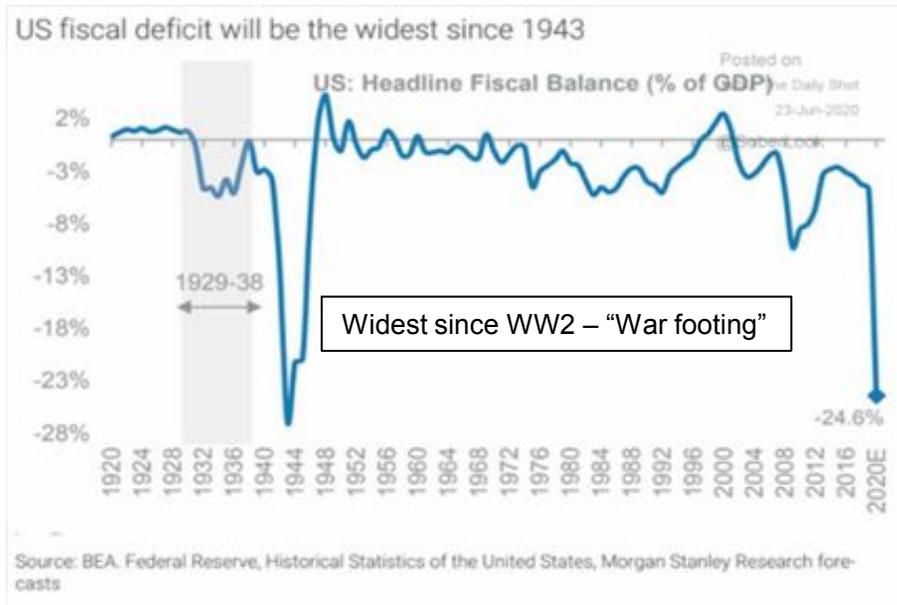
# Under Attack: Economy and Markets



Source: Bloomberg



Source: Bloomberg



Global Fiscal and Monetary Response to COVID-19 (Feb to June)

	Monetary	Fiscal	Combined	
	% of GDP	% of GDP	\$ Tln	% of GDP
US	29%	15%	9.5	44%
Europe	13%	30%	5.8	44%
Japan	20%	40%	3.1	60%
UK	9%	5%	0.4	14%
China	9%	8%	2.5	18%
Other			3.0	
<b>Total</b>	<b>13%</b>	<b>15%</b>	<b>24.4</b>	<b>28%</b>

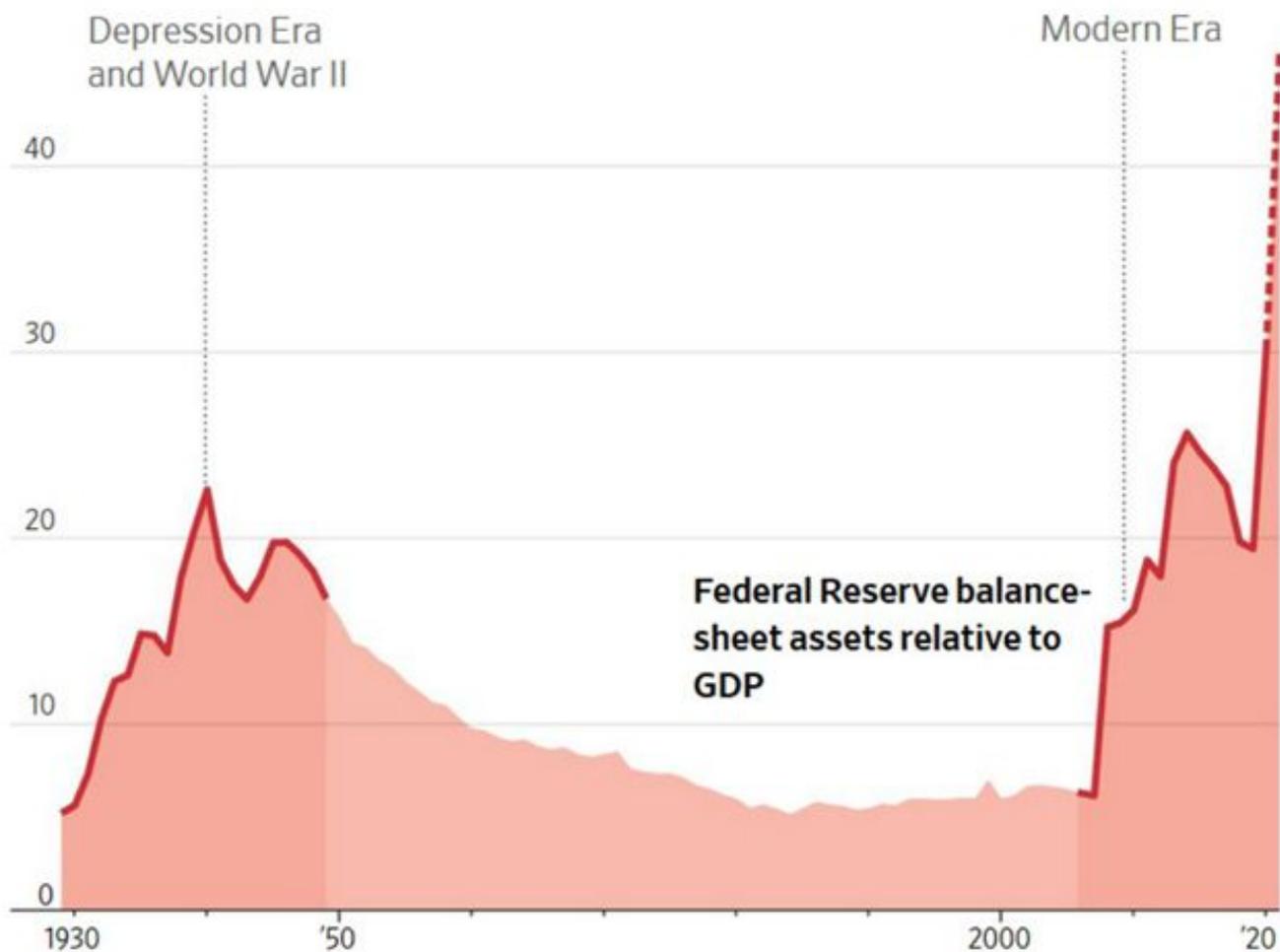
Source: Cornerstone Macro



# Return Fire: Monetary Spending

## Uncharted Territory

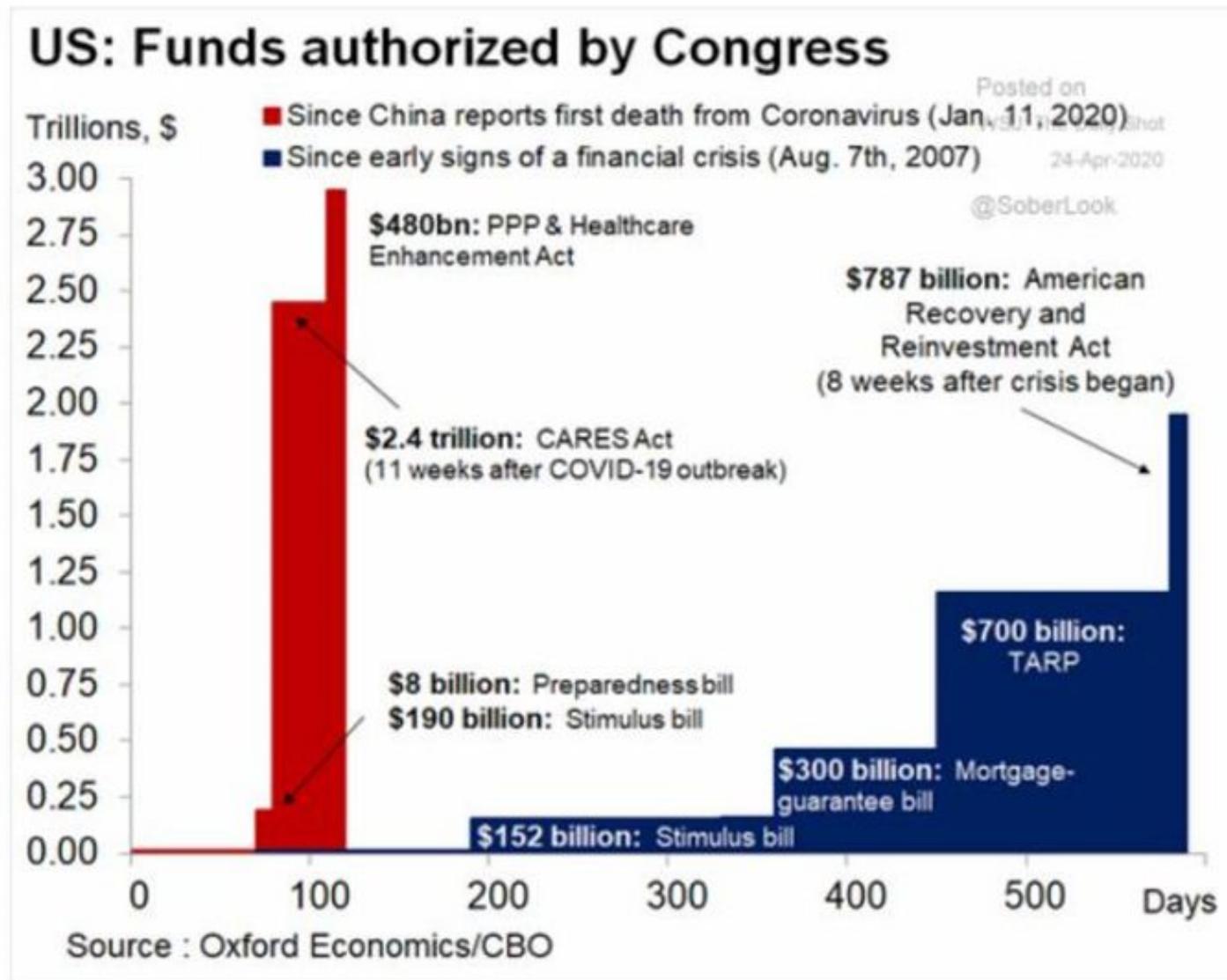
The Fed's portfolio of bonds, loans and new programs will swell to \$8 trillion-\$11 trillion, economists estimate.



Source: Bloomberg



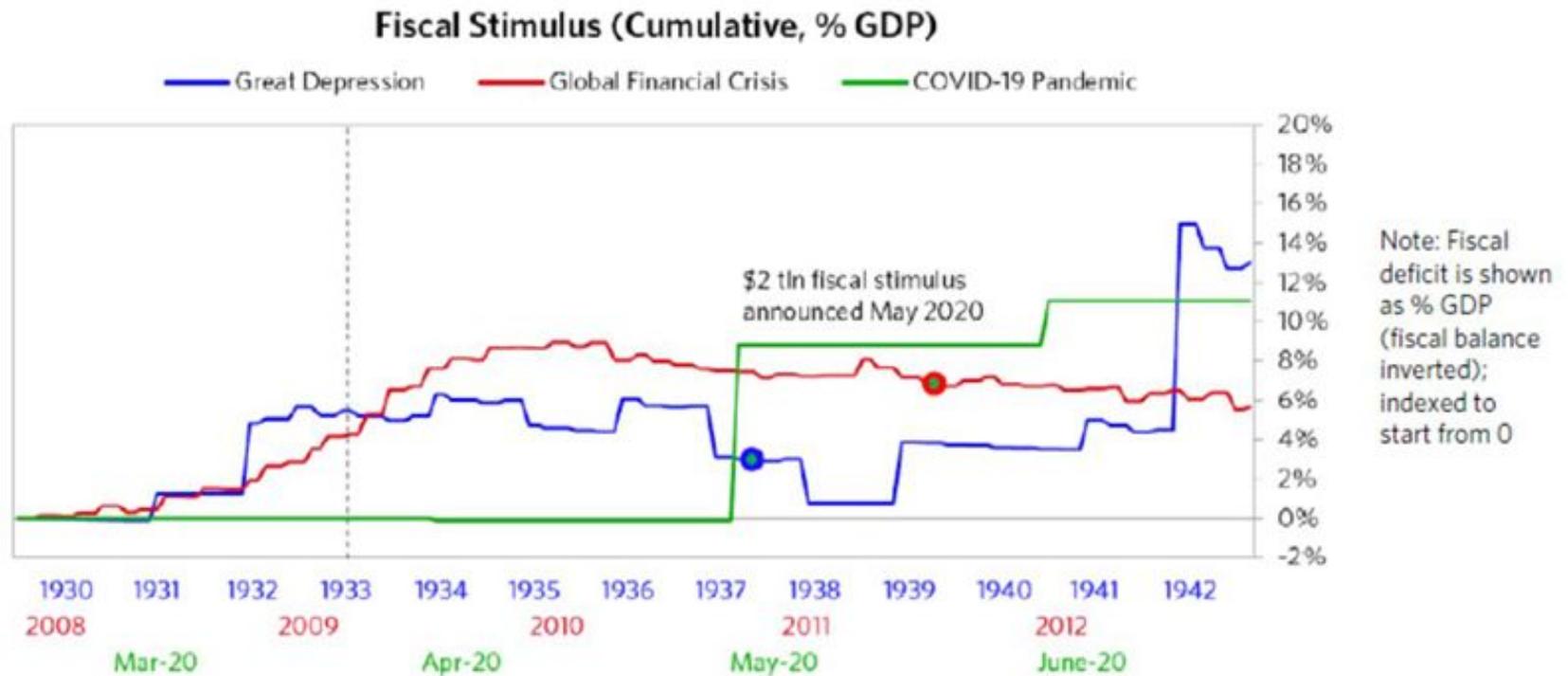
# Return Fire: Fiscal Spending



Source: Oxford Economics



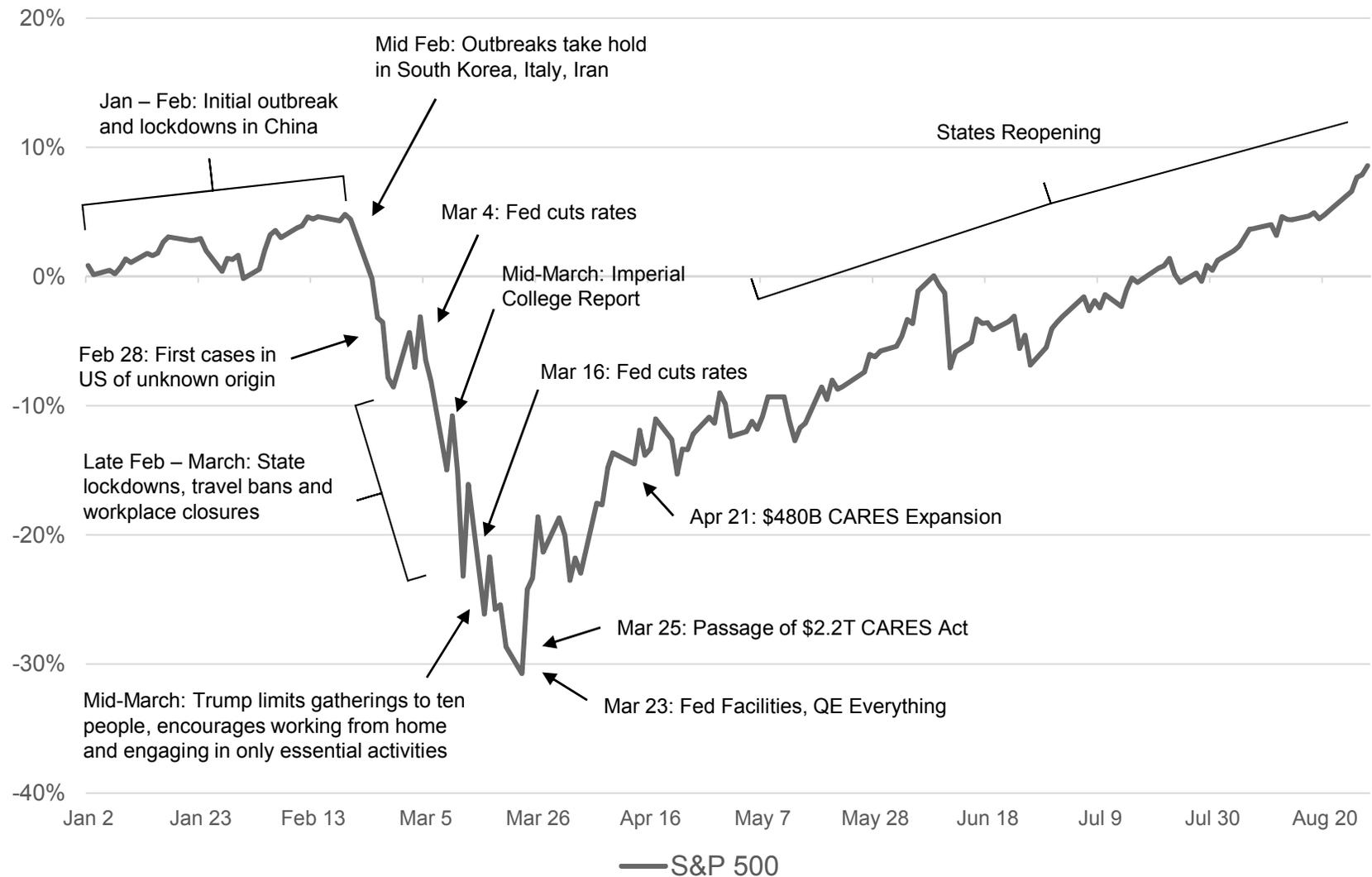
# Fiscal Stimulus (Cumulative, % of GDP)



Source: Bridgewater



# S&P 500: +10% YTD



Source: Bloomberg

---

# Nine “Super Factors” For the Future

---





## Nine “Super Factors” for the Future

---

- New Paradigm
- Fixed Income
- Zero Bound
- Index Concentration
- US vs. Non-US
- US Dollar
- US / China Relationship
- Energy / Renewables
- Millennials

The Future Started Three Years Ago....

---

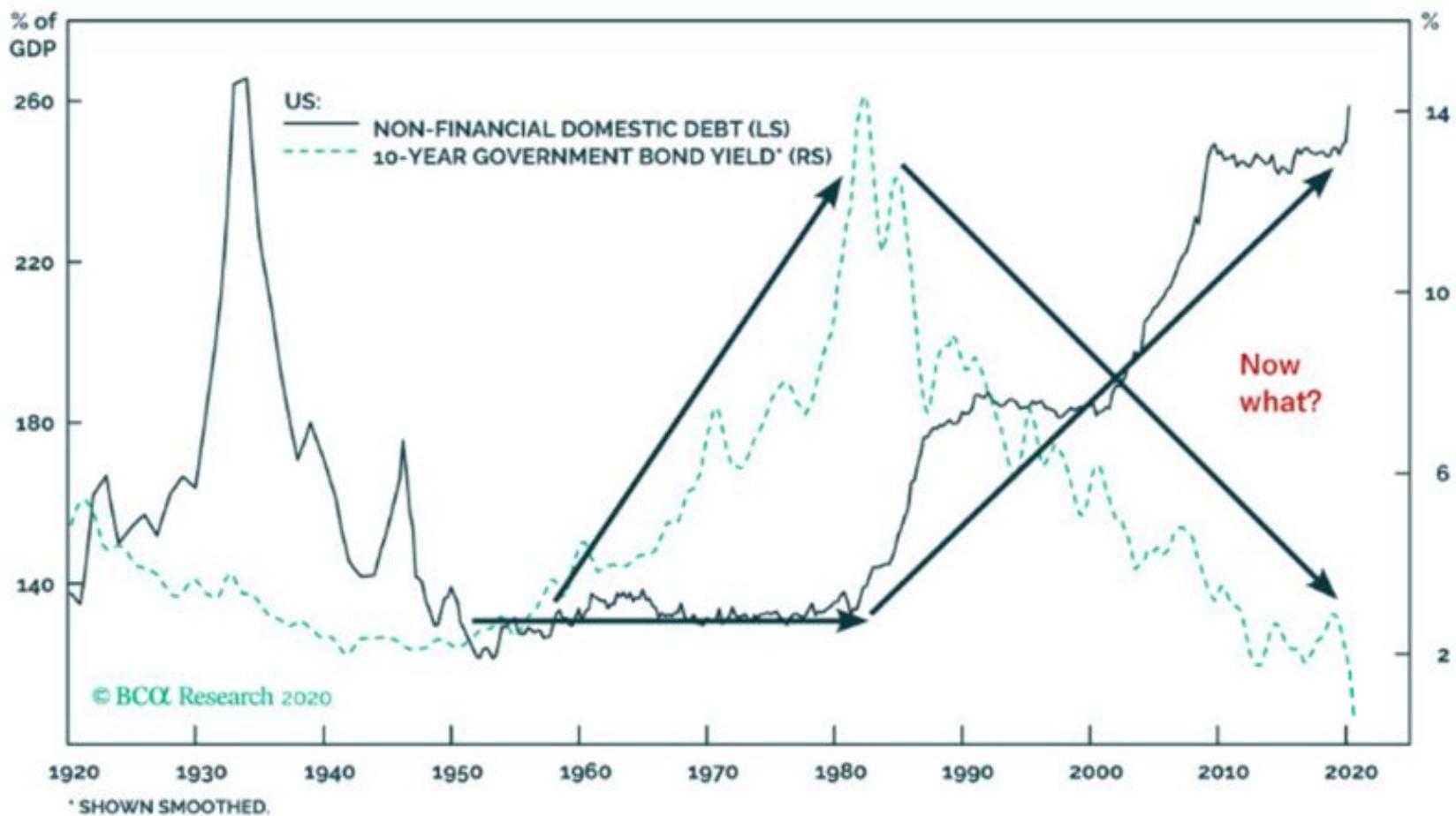
# New Paradigm

---



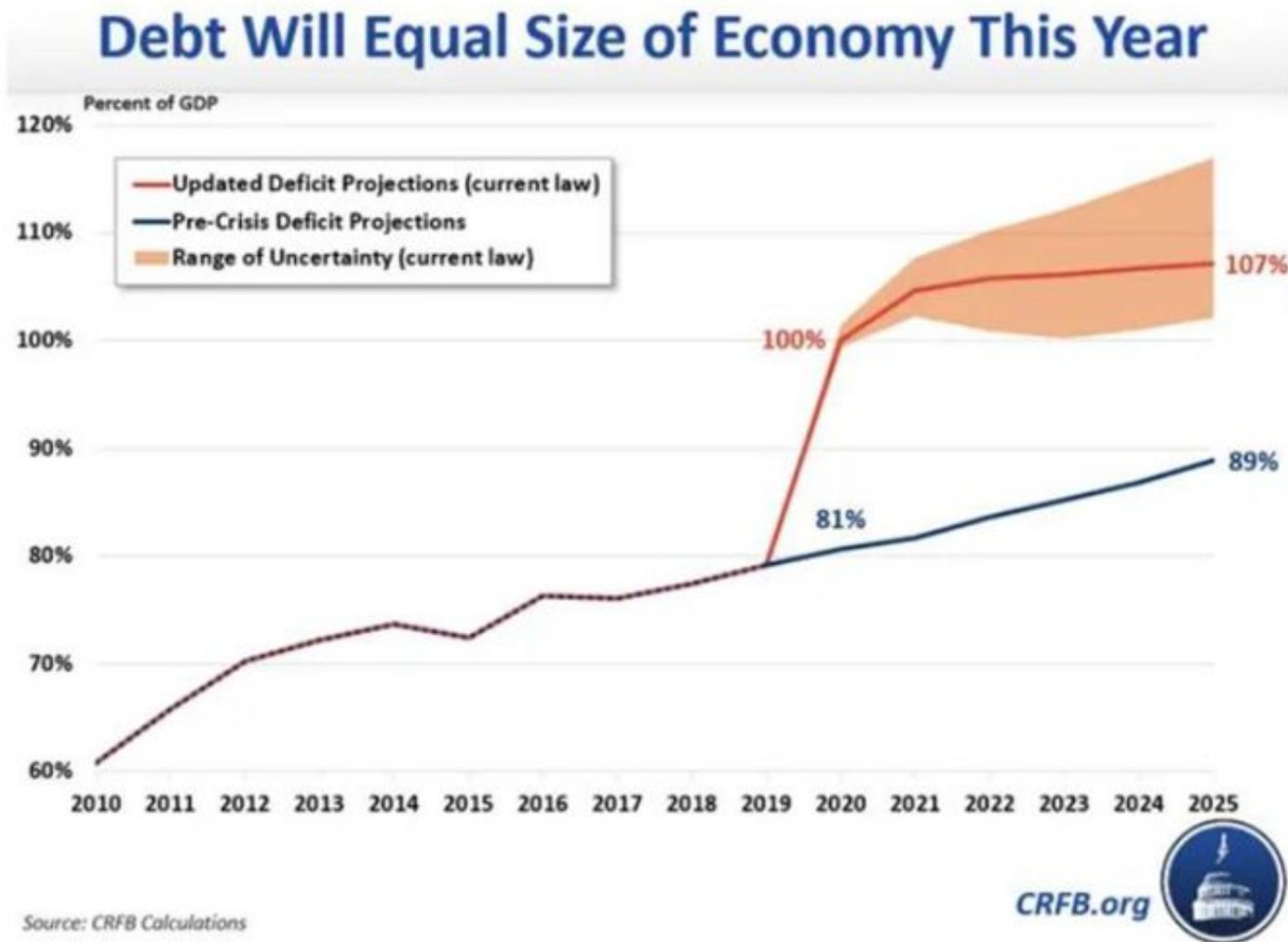


# US Long Term Debt Super Cycle



Source: BCA

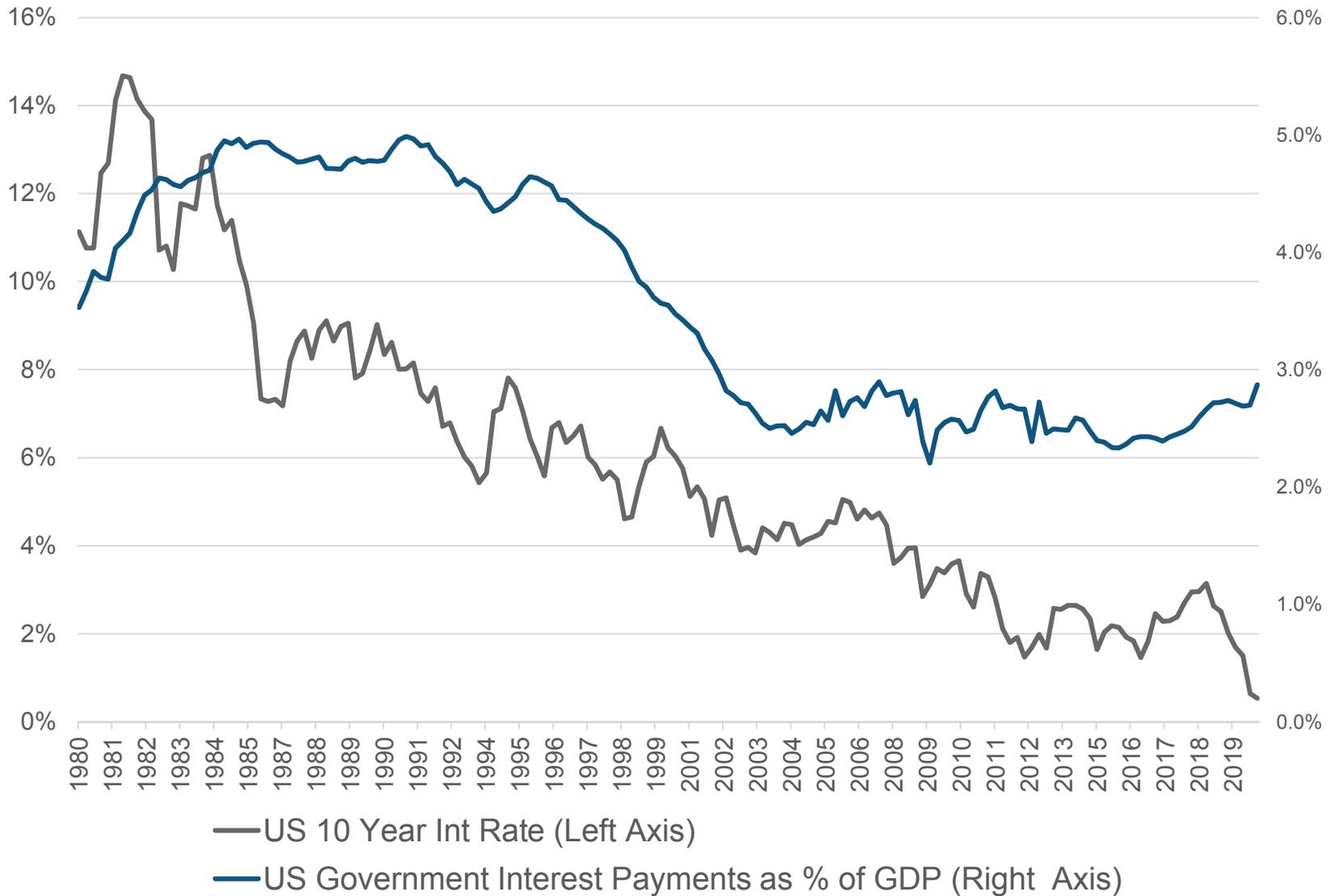
# US Debt Increasing



Source: CRFB



# Debt Service Remains Low



Source: Bloomberg



# Change in Yields During Bear Markets

## 20%+ Equity Drawdowns and Yield Compression

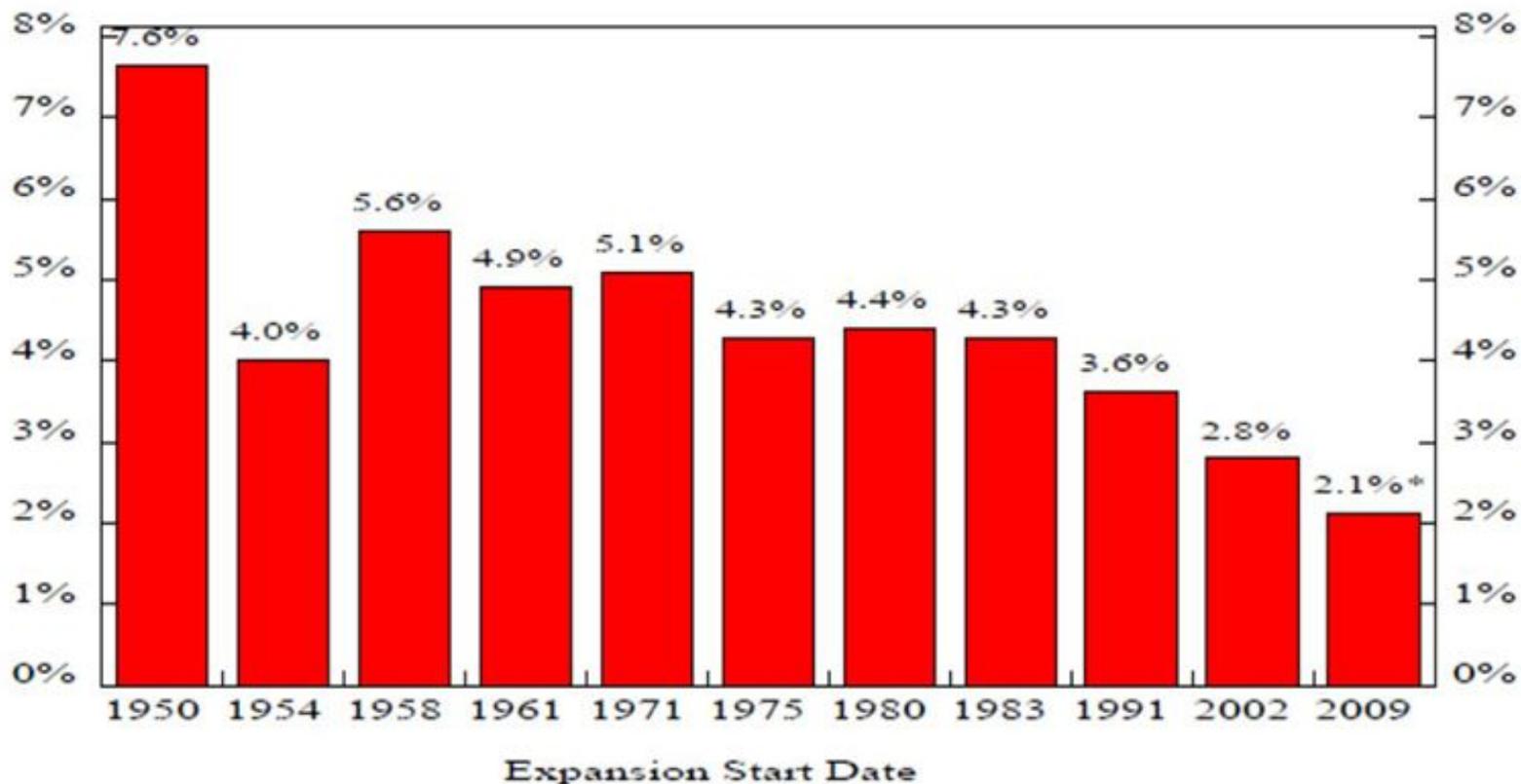
Equity Drawdowns				US Aggregate			
Peak	Trough	Days	S&P 500	Starting Yield	Change in Yields	Ending Yield	Duration
Aug-87	Dec-87	101	-34%	8.8	0.4	9.2	-
Jul-90	Oct-90	87	-20%	9.0	-0.4	8.5	5.4
Sep-00	Oct-02	768	-47%	7.0	-3.3	3.7	5.5
Oct-07	Mar-09	517	-55%	5.4	-2.0	3.4	5.1
Feb-20	Mar-20	33	-34%	2.1	-0.9	1.2	6.3
<b>Average</b>		<b>351</b>	<b>-38%</b>		<b>-1.2</b>		

Note: Change in Yields measured from Peak to Six Months After Equity Trough



# Real GDP Growth During Expansions

Real GDP Growth During Expansions  
annualized rates of expansion from NBER trough to peak

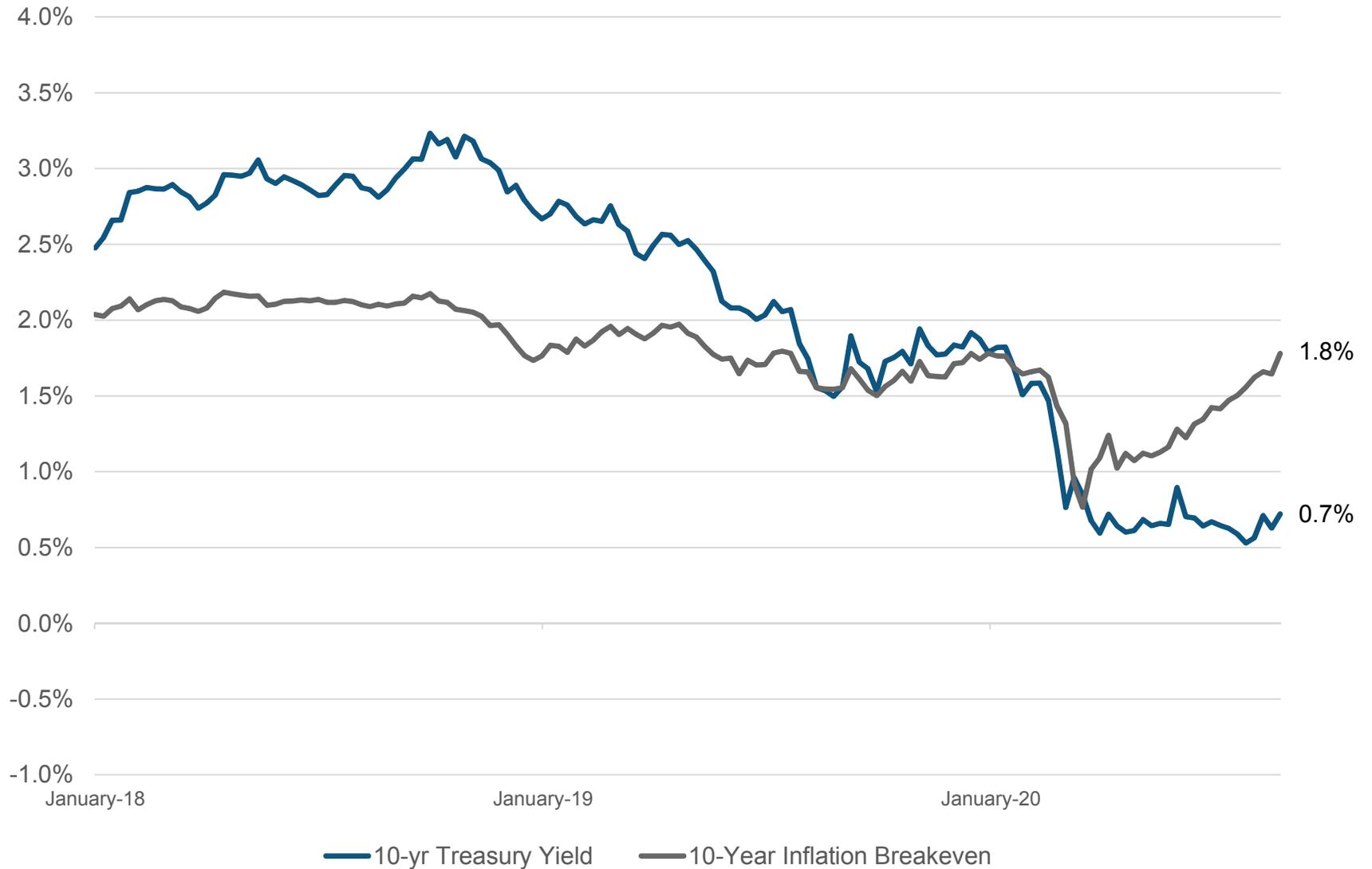


\* Through 1Q 2020

Source: Bureau of Economic Analysis and National Bureau of Economic Research



# 10-Yr Treasury and 10-Yr Inflation Breakeven



Source: Bloomberg

---

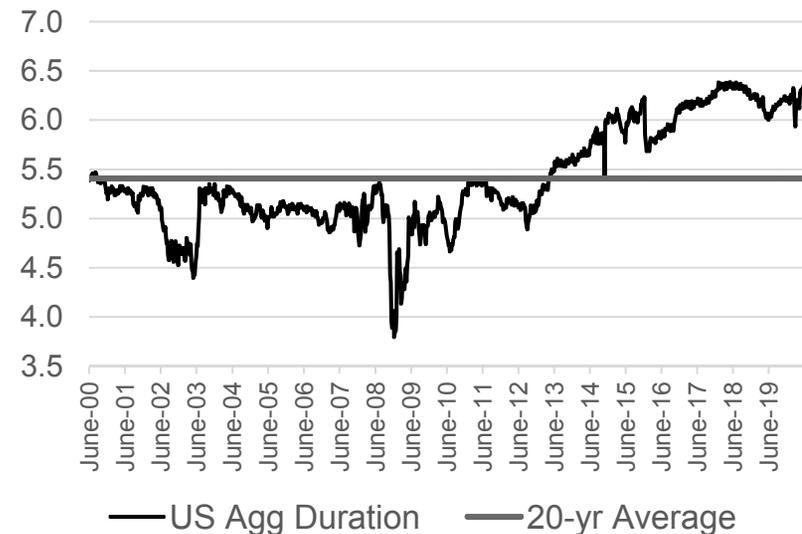
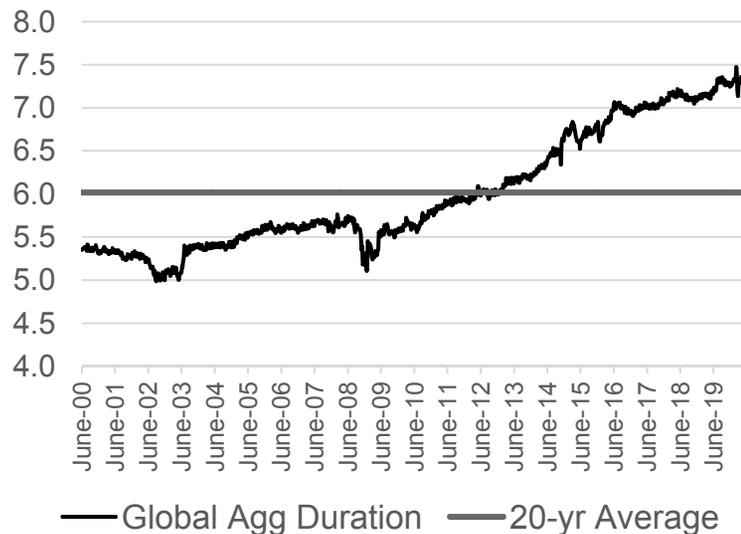
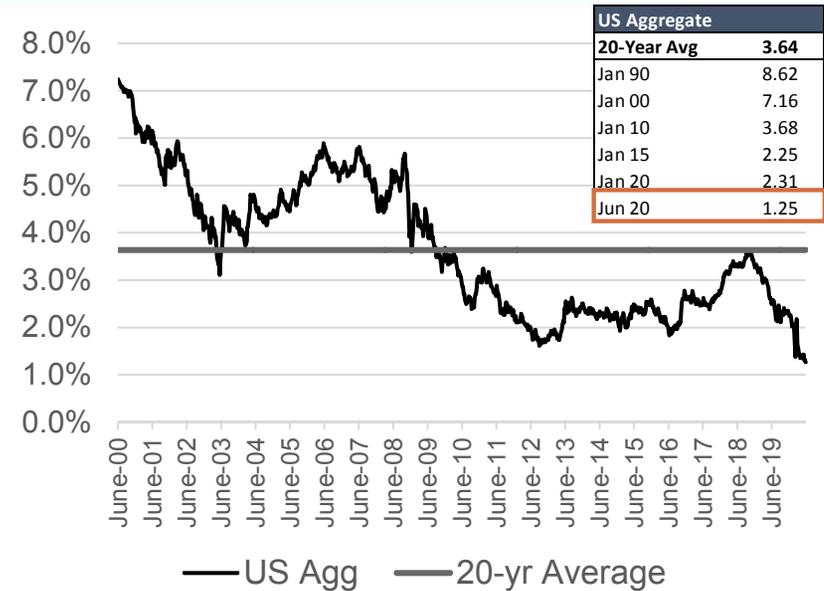
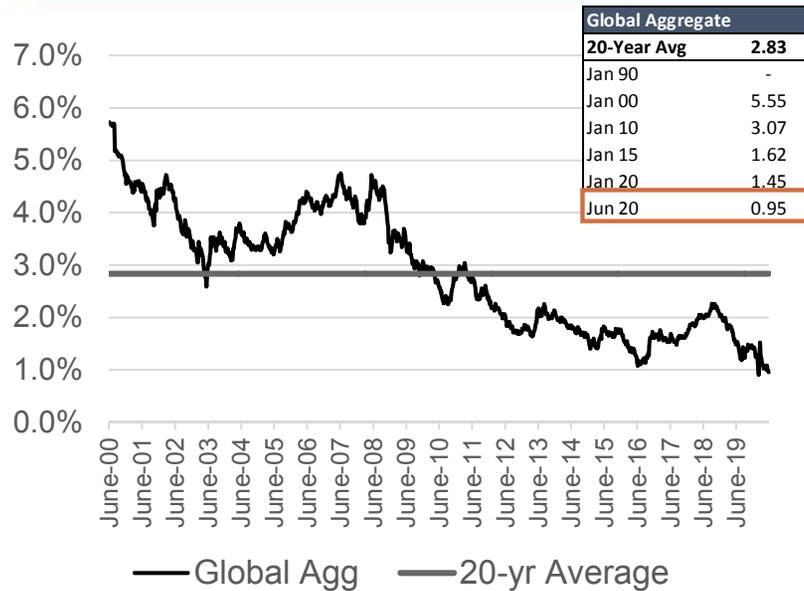
# Bonds and the Zero Bound

---





# Change in Yields and Duration



Source: Bloomberg



# Mental Model for Bonds

Starting Yield  $+$  Return from Change in Yield  $+$  FX  $=$  Total Return

## 10-Year Bond Returns

	Starting Yield on 6/30/10	Change in Yields Over 10 Years	Duration	Ann. Return from Change in Yield	FX	10-Year Returns	
						Estimated	Actual
United States	2.8%	-1.6%	6.4	1.0%	-	3.8%	3.8%
Europe	3.0%	-2.7%	8.0	2.1%	-	5.1%	5.0%
China	3.3%	-0.3%	5.4	0.2%	-0.4%	3.4%	3.8%
Mexico	6.3%	-0.8%	5.5	0.5%	-5.7%	1.1%	1.5%
Brazil	9.4%	-5.0%	2.9	1.5%	-10.5%	0.4%	0.5%

## Forward Return for US: Starting Yield of 1.2%

	Starting Yield	Change in Yields	Return from Change in Yield*	Estimated Forward Return
Yields to Zero	1.2%	-1.2%	7.7%	8.9%
Yields -100bps	1.2%	-1.0%	6.4%	7.6%
Yields +100bps	1.2%	1.0%	-6.4%	-5.2%
Yields +200bps	1.2%	2.0%	-12.8%	-11.6%
Yields +300bps	1.2%	3.0%	-19.2%	-18.0%

## Forward Return for US: At the Zero Bound

	Starting Yield	Change in Yields	Return from Change in Yield*	Estimated Forward Return
Yields to Zero	0.0%	0.0%	0.0%	0.0%
Yields +100bps	0.0%	1.0%	-6.4%	-6.4%
Yields +200bps	0.0%	2.0%	-12.8%	-12.8%
Yields +300bps	0.0%	3.0%	-19.2%	-19.2%

Source: Bloomberg



# What's a 70/30 Investor to Do?

## Illustrative 70/30 Portfolio 1 Year Return - Equity Return Hurdle Rate

Portfolio Size	\$10,000
Target Return (Nominal)	7.5%

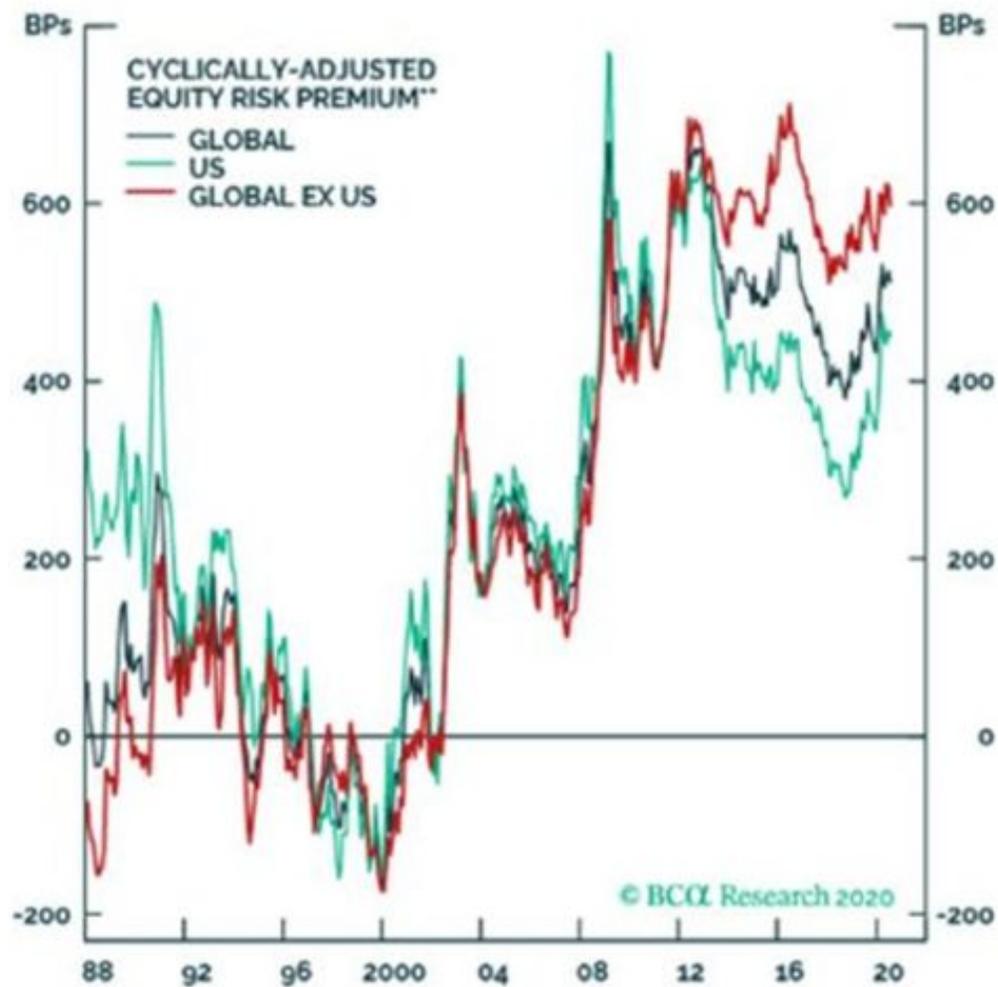
<u>SAA</u>	<u>%</u>	<u>\$</u>
10 Yr UST	30%	\$3,000
Equities	70%	\$7,000

	<u>1990</u>	<u>2000</u>	<u>2010</u>	<u>Now</u>
10 Yr UST YTW	9%	5%	4%	1%
Needed \$ Return	\$750	\$750	\$750	\$750
Bond \$ Return	270	150	120	30
Balance	\$480	\$600	\$630	\$720
<b>Equity Hurdle Rate</b>	<b>6.9%</b>	<b>8.6%</b>	<b>9.0%</b>	<b>10.3%</b>

*Note: Assumes no compounding or rebalancing.*



# Equity Risk Premium More Likely to Fall than Rise



Source: BCA

---

# Index Concentration

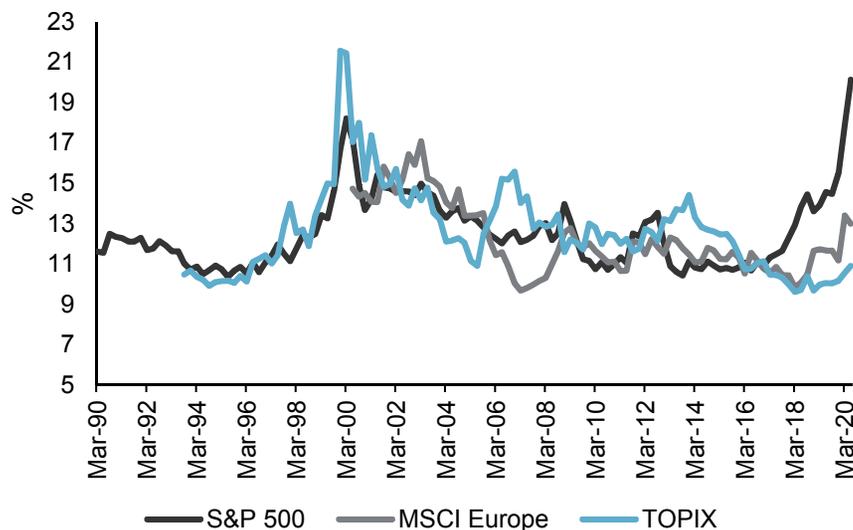
---



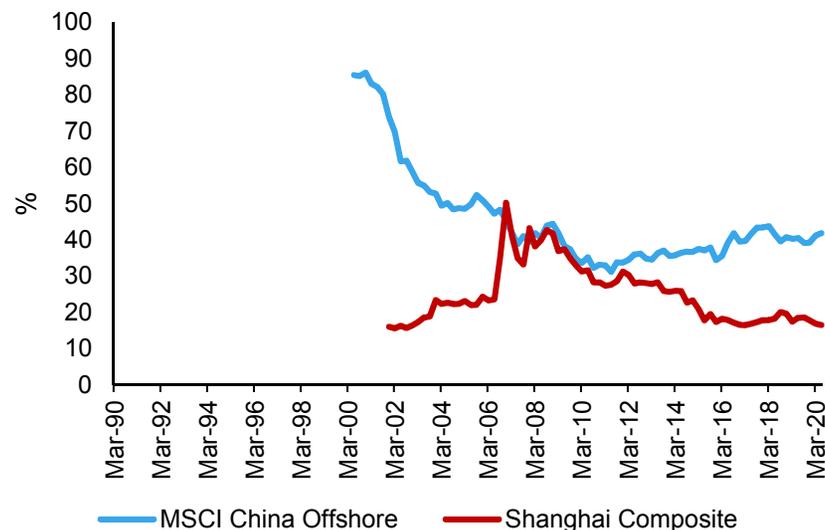


# Index Concentration

## Top 5 Concentration - June 2020



## Top 5 Concentration - June 2020



S&P 500	%
Microsoft	6%
Apple	6%
Amazon	5%
Facebook	2%
Alphabet	2%
<b>Top 5</b>	<b>20%</b>
<b>Top 10</b>	<b>27%</b>

MSCI Europe	%
Nestle	4%
Roche	3%
Novartis	2%
ASML Holdings	2%
SAP	2%
<b>Top 5</b>	<b>13%</b>
<b>Top 10</b>	<b>20%</b>

TOPIX	%
Toyota	3%
Sony	2%
Softbank	2%
Keyence Corp	2%
NTT	2%
<b>Top 5</b>	<b>11%</b>
<b>Top 10</b>	<b>17%</b>

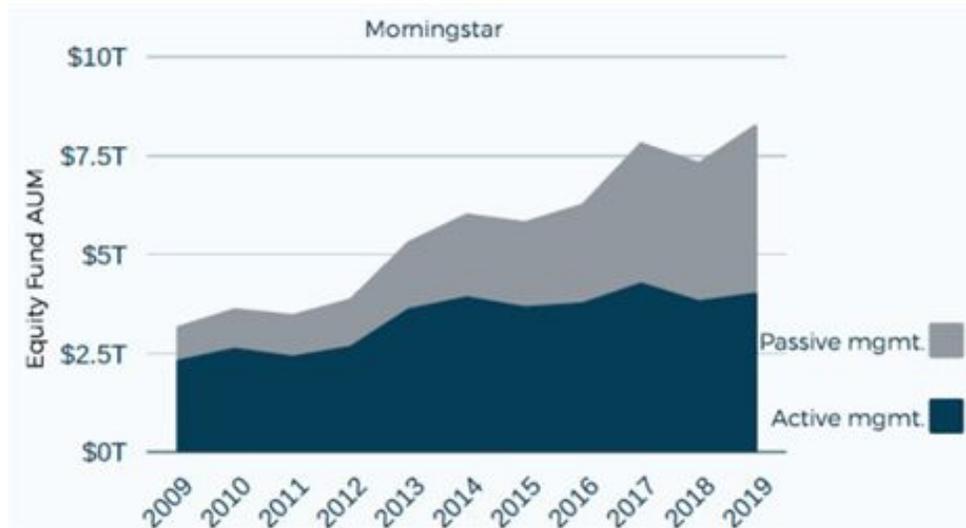
Shanghai Composite	%
Kweichow Moutai	5%
ICBC	4%
AgBank	3%
Ping An Insurance	2%
Bank of China	2%
<b>Top 5</b>	<b>16%</b>
<b>Top 10</b>	<b>25%</b>

MSCI China Offshore	%
Alibaba	17%
Tencent	16%
Meituan	3%
CCB	3%
Ping An Insurance	3%
<b>Top 5</b>	<b>42%</b>
<b>Top 10</b>	<b>50%</b>

Source: Bloomberg

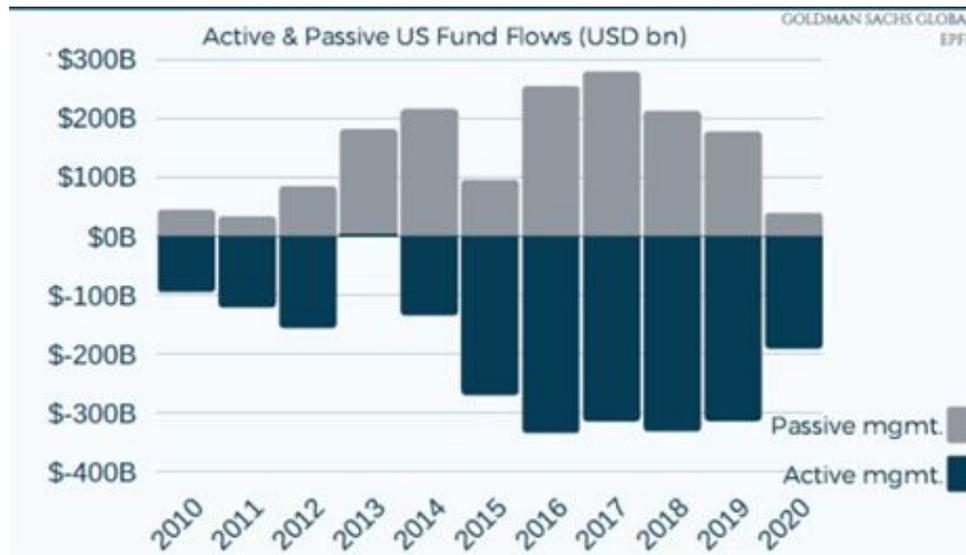


# Over 50% of Equity Fund AUM is Passive



**81% of ETF Market is controlled by three firms:**

- 1) BlackRock (38%)
- 2) Vanguard (27%)
- 3) State Street (16%)

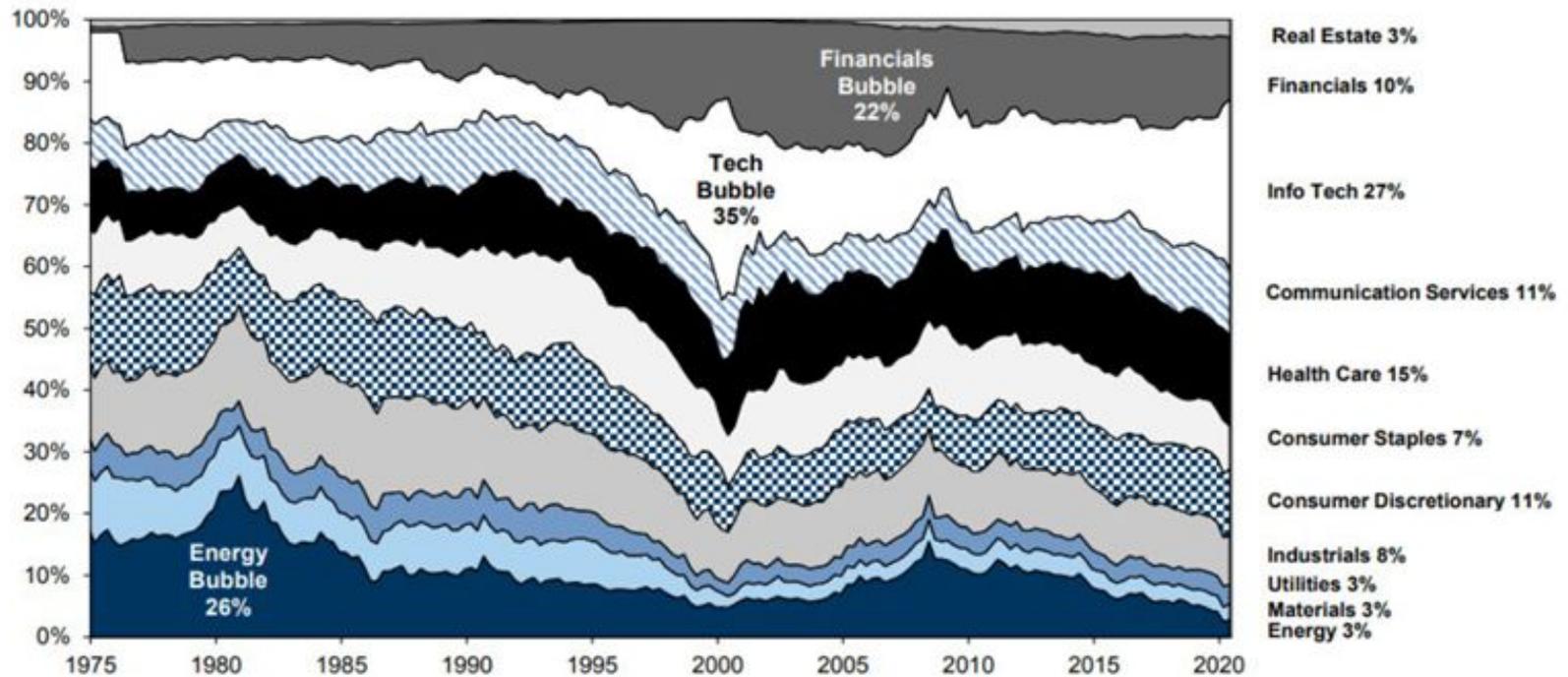


Source: Morningstar, Goldman Sachs



# S&P 500 Sector Weighting

Exhibit 11: Sector composition of the S&P 500 by equity capitalization, 1974-2020  
as of June 30, 2020



Source: Compustat, FactSet, Goldman Sachs Global Investment Research

Source: Goldman Sachs

---

# US vs. Non-US: Equities and US Dollar

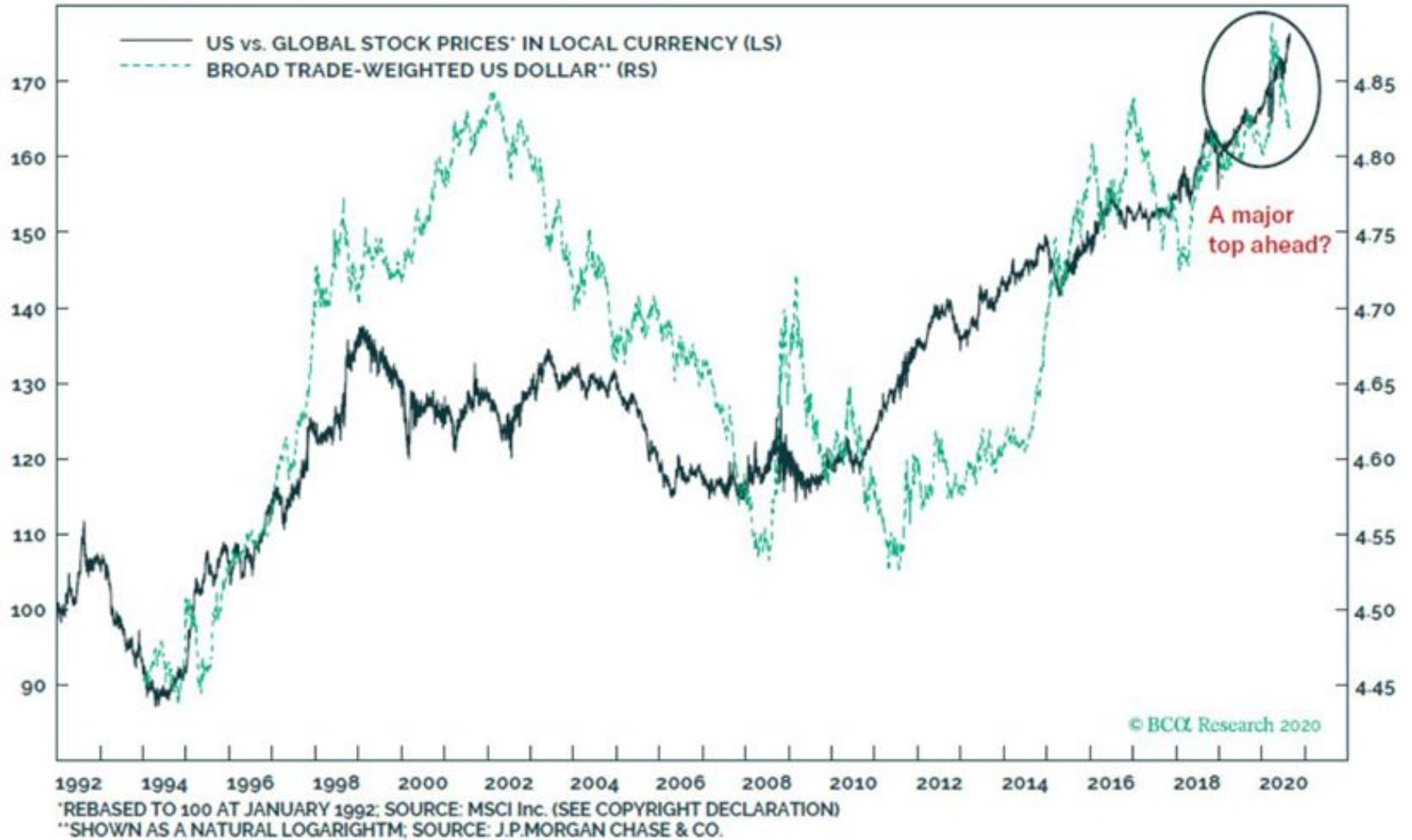
---





# US Equity Outperformance vs. Global

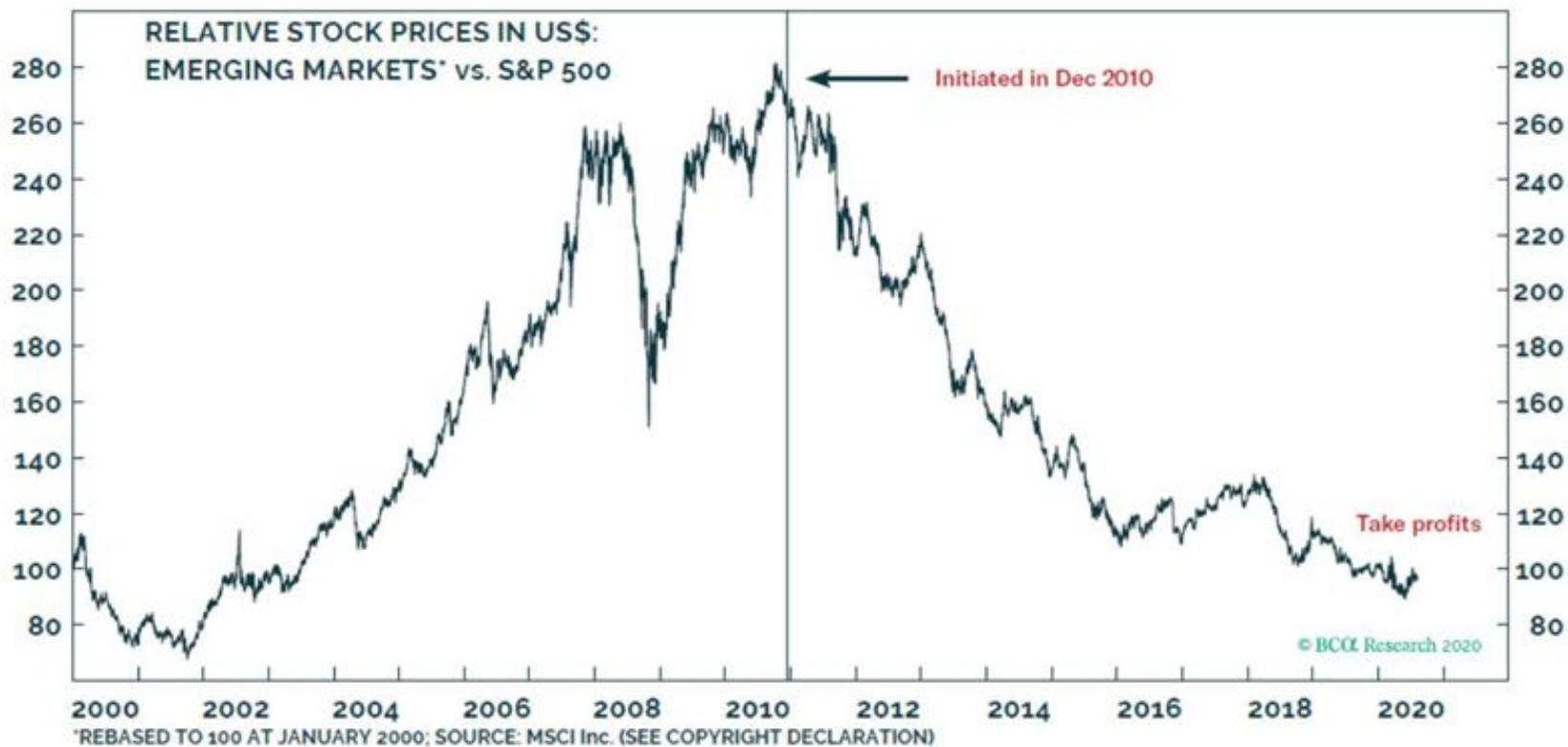
## US Equity Outperformance Is In Very Late Stages



Source: BCA



# US Equity Outperformance vs. EM



Source: BCA



# China Money Supply



Source: Bloomberg



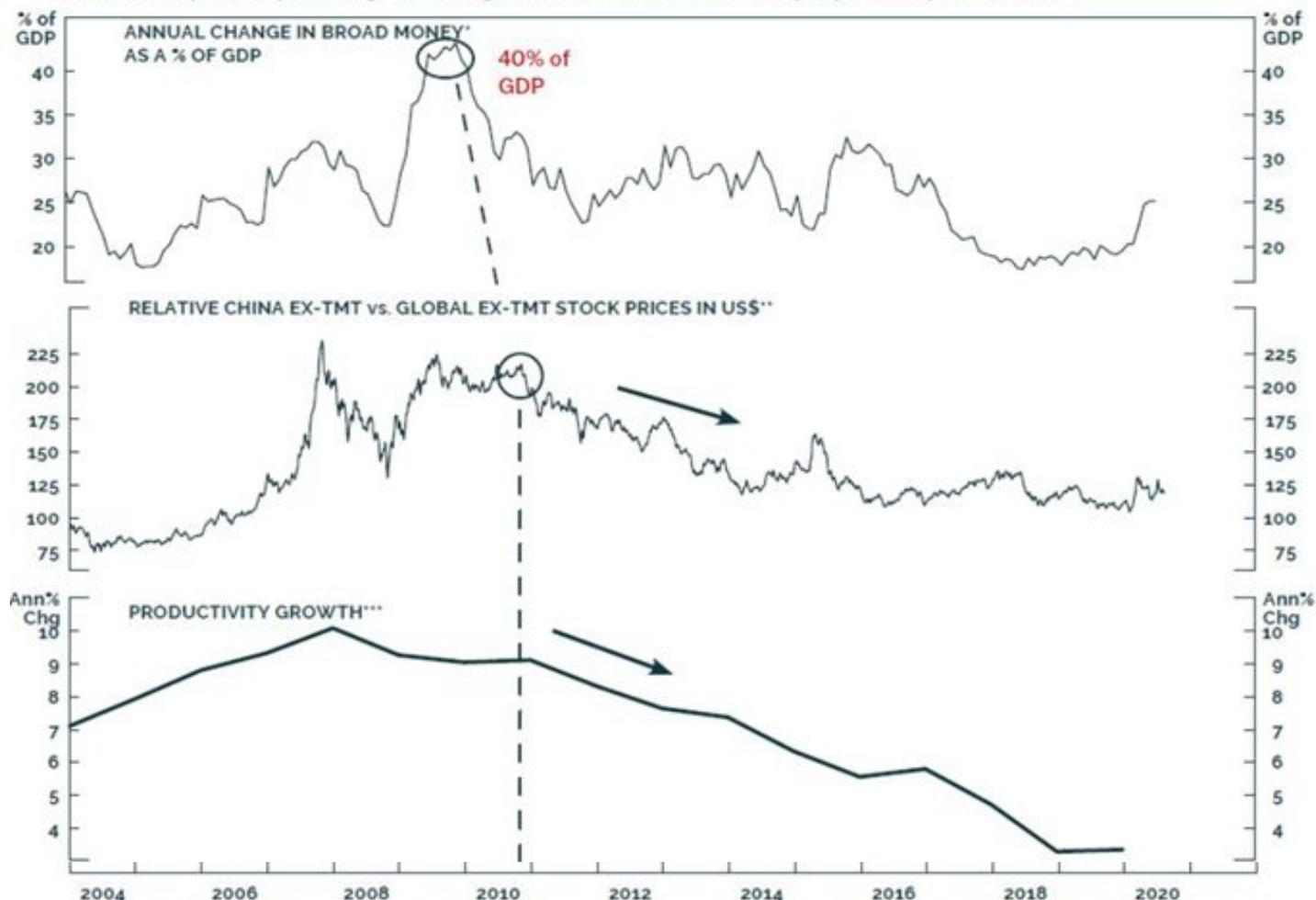
# PBOC Central Bank Balance Sheet



Source: Bloomberg

# Easy Money: China Performance

China: Easy Money Presaged Falling Return On Assets And Equity Underperformance

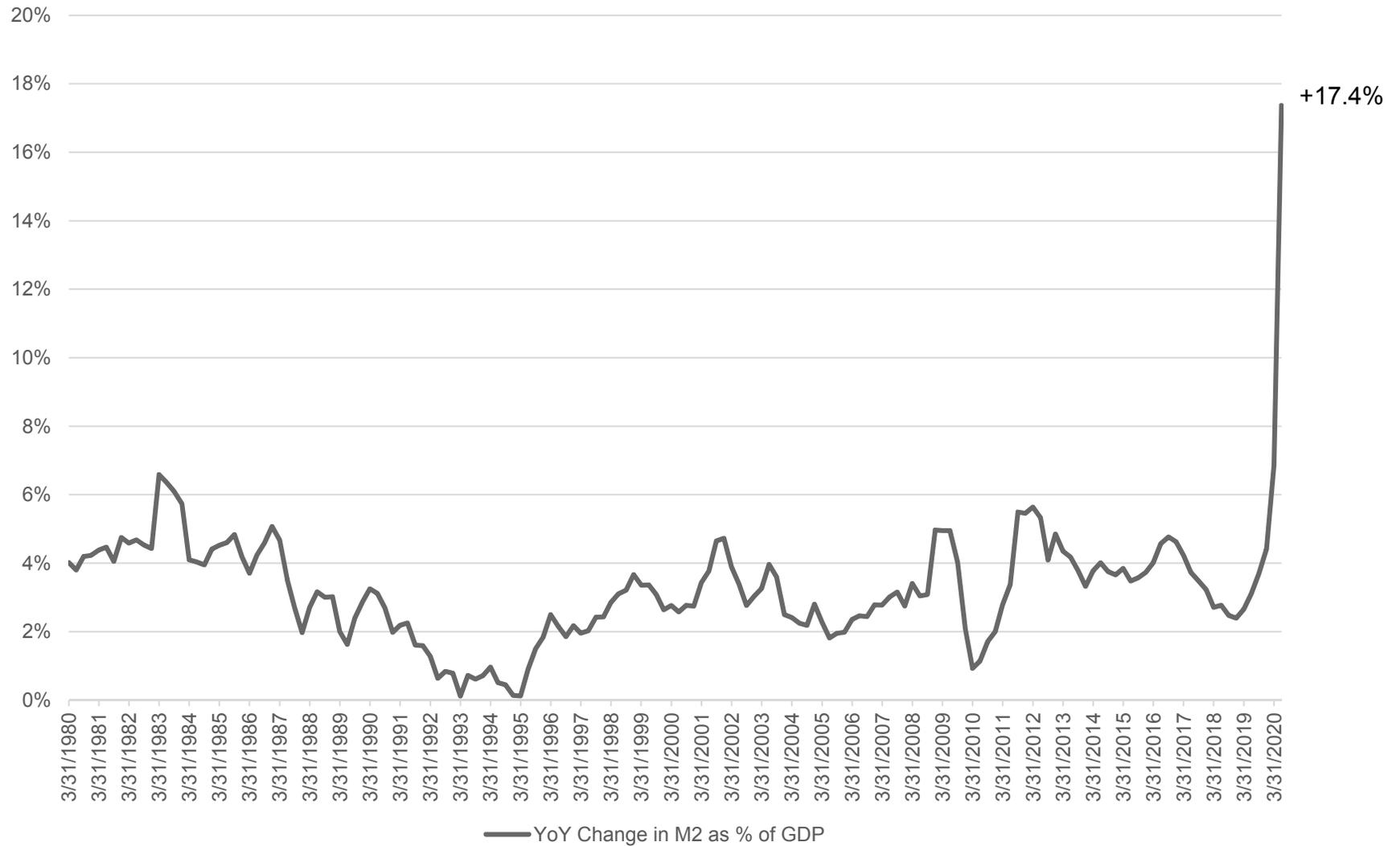


\*BCA CALCULATION; TOTAL OF NON-FINANCIAL INSTITUTIONS HOUSEHOLDS DEPOSITS, OTHER FINANCIAL CORPORATIONS, OTHER LIABILITIES AN RESERVE MONEY OF NON-FINANCIAL INSTITUTIONS AT PBOC. SOURCE: PBOC  
 \*\*EXCLUDES IT SECTOR BEFORE DEC 2018 AND EXCLUDES IT, MEDIA & ENTERTAINMENT AND INTERNET & DIRECT MARKETING RETAIL AS OF DEC. 20 REBASED TO 100 AT JANUARY 2000; SOURCE: MSCI Inc. (SEE COPYRIGHT DECLARATION)  
 \*\*\*SHOWN AS A 4-YEAR MOVING AVERAGE; SOURCE: CONFERENCE BOARD  
 \*\*\*\*SOURCE: WORLDSCOPE

Source: BCA



# Easy Money: US M2 YoY as % of GDP



Source: Bloomberg

---

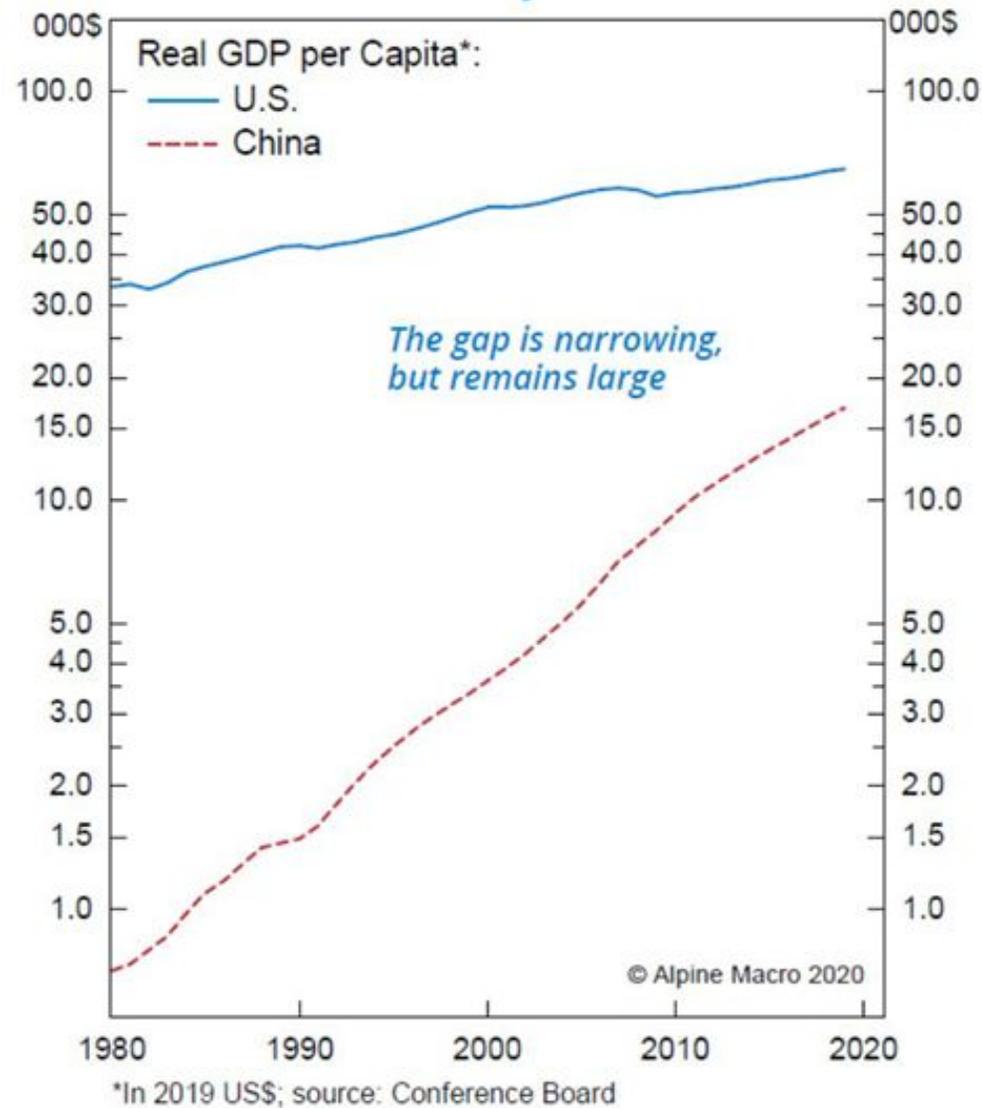
# US / China Relationship

---





# Real GDP per Capita: US-China Gap is Narrowing



Source: Alpine Macro Special Report

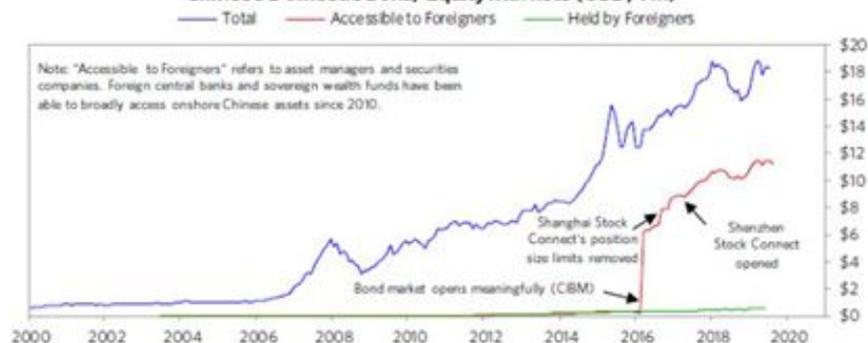


# China Asset Markets

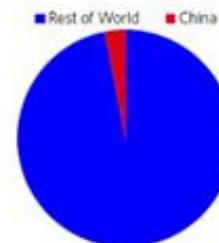
Global Rankings of Asset Markets (USD, Bln)

Rank	Equity Market Cap		Gov't Bonds Outstanding	
1	United States	\$31,422	United States	\$12,373
2	China	\$8,897	Japan	\$8,410
3	Japan	\$5,478	China	\$7,546
4	United Kingdom	\$2,725	United Kingdom	\$2,651
5	France	\$2,451	France	\$2,173

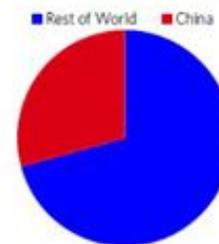
Chinese Domestic Bond/Equity Markets (USD, Tln)



Global 60/40 Portfolio Using Current Index Weights



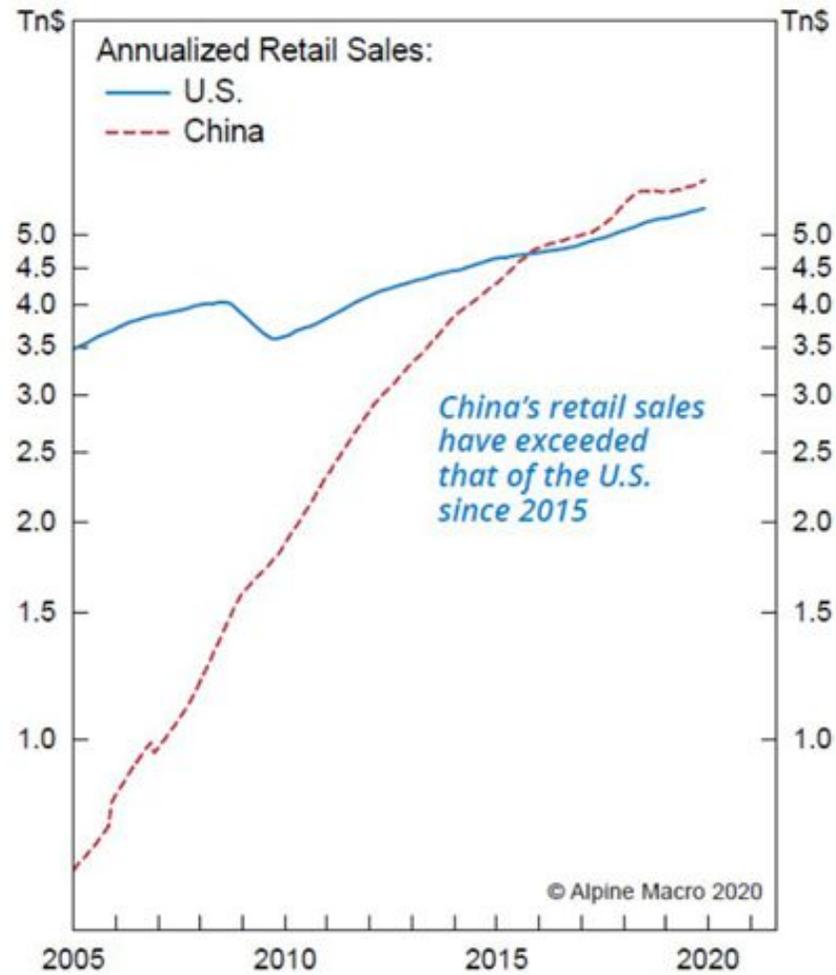
Same Portfolio Using Estimated Future Index Weights



Source: Bridgewater. Charts on left show data as of August 2019. Charts on right assume Chinese bond and equity market cap share grow to ~80% of US' current share of global market cap, in line with growth of past 10 years.



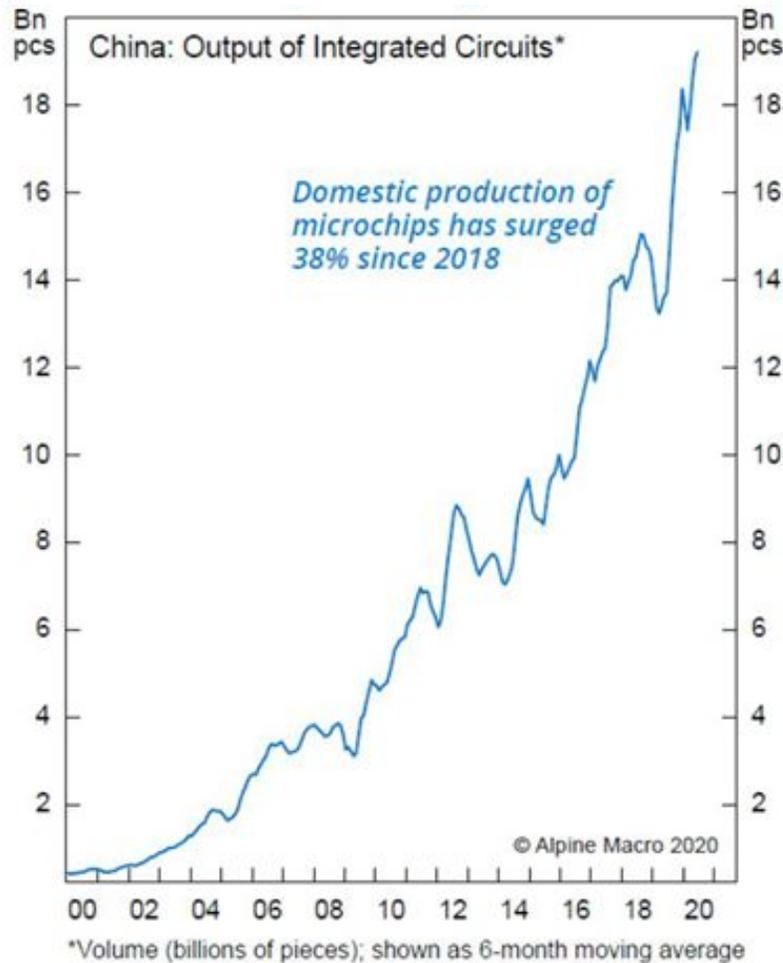
# China: Retail Sales



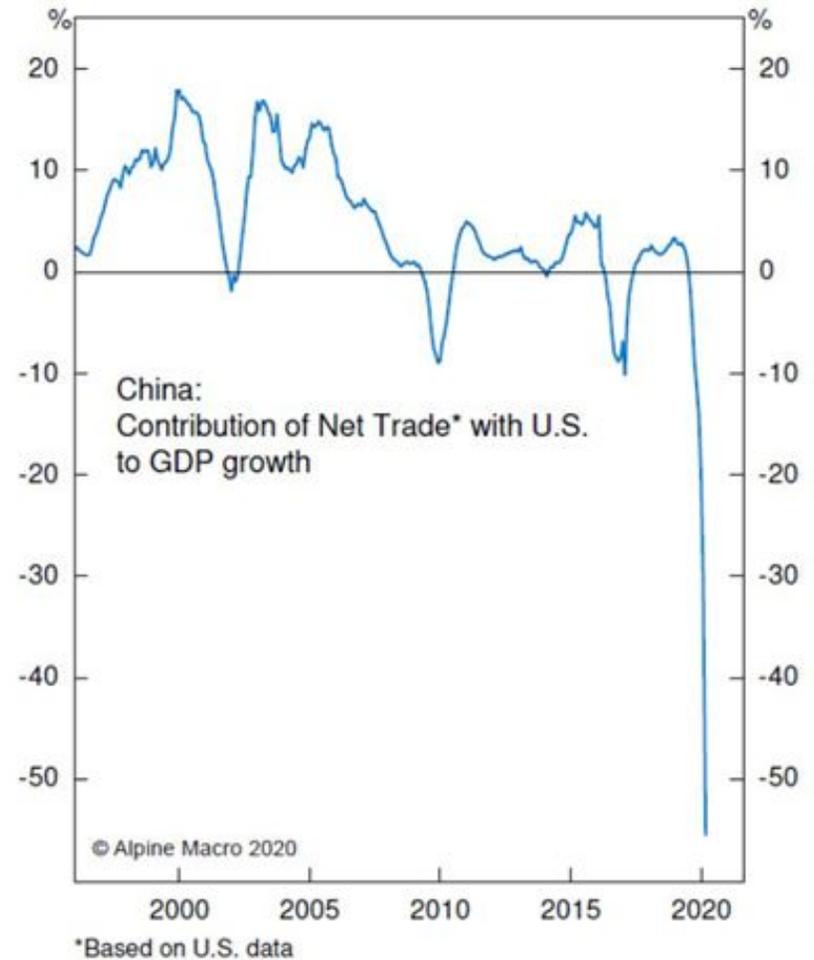
Source: Alpine Macro Special Report

# China: Reliance on US is Declining

## Increasing Domestic Chip Production



## Falling Contribution of US Trade to GDP growth

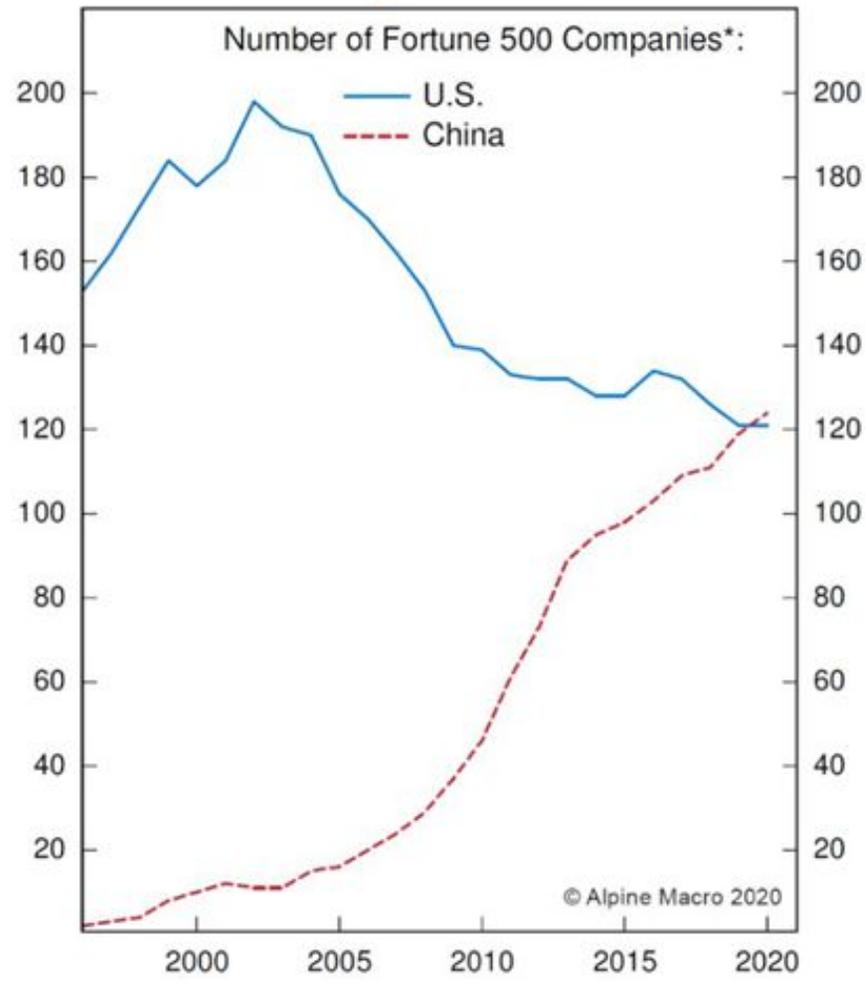


Source: Alpine Macro Special Report



# China Inc. Catching Up to USA Inc.

**Chart 11** China And U.S.:  
Trading Places



\*Source: Fortune 500

Source: Alpine Macro Special Report



# US vs. China Geopolitical Power

CHART 2  
The Thucydides Trap



NOTE: MEASURED AS A COUNTRY'S RAW POWER BASED ON ITS POPULATION, THE SIZE OF ITS ECONOMY AND IMPORTS, MILITARY EXPENDITURE, ARMS EXPORTS, AND PRIMARY ENERGY CONSUMPTION.  
SOURCE: BCA CALCULATIONS.

Source: BCA

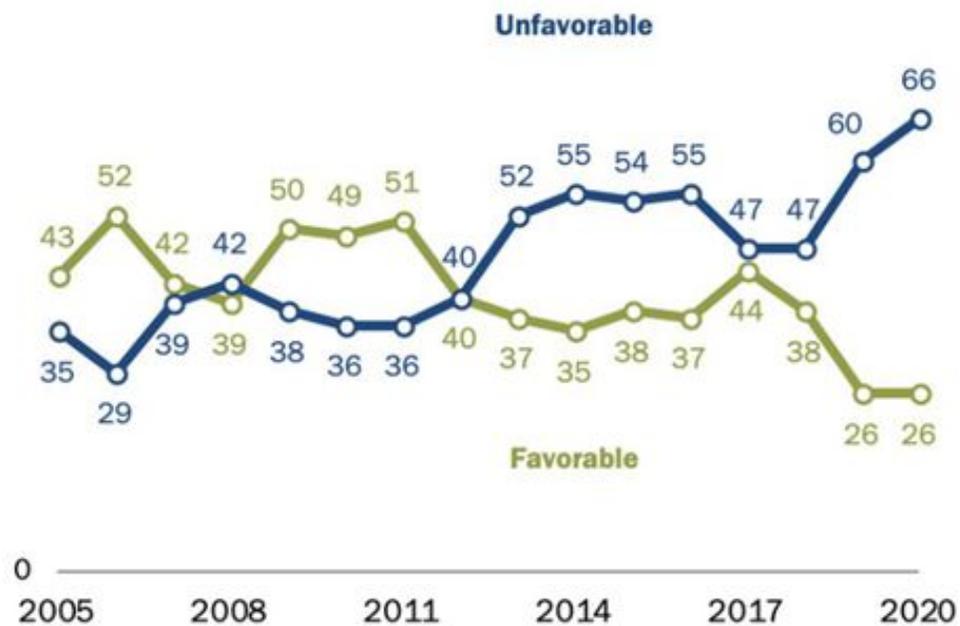


# Negative Views of China Continue to Grow

## Negative views of China continue to grow in U.S.

% who say they have a \_\_\_ opinion of China

100 %



Note: Don't know responses not shown.

Source: Survey of U.S. adults conducted March 3-29, 2020. Q5b.

"U.S. Views of China Increasingly Negative Amid Coronavirus Outbreak"

PEW RESEARCH CENTER

---

# Energy

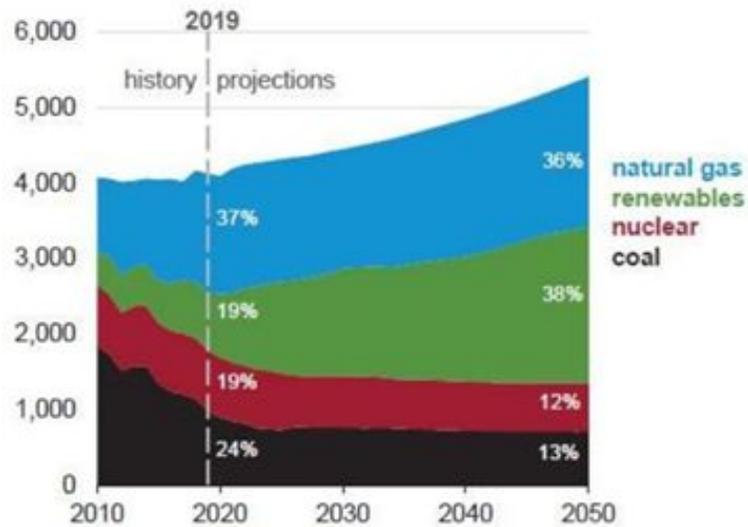
---



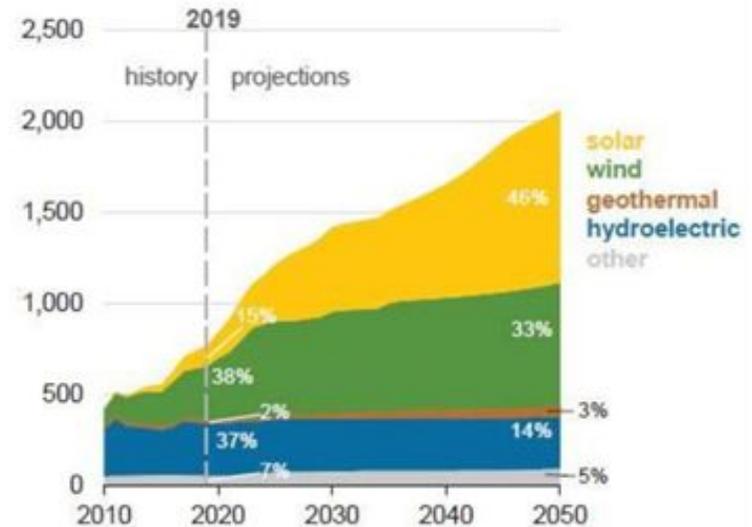


# Energy Outlook

**Electricity generation from selected fuels (AEO2020 Reference case)**  
billion kilowatthours



**Renewable electricity generation, including end use (AEO2020 Reference case)**  
billion kilowatthours



U.S. Energy Information Administration

#AEO2020 | [www.eia.gov/aeo](http://www.eia.gov/aeo)

Source: US EIA

---

# Millennials

---

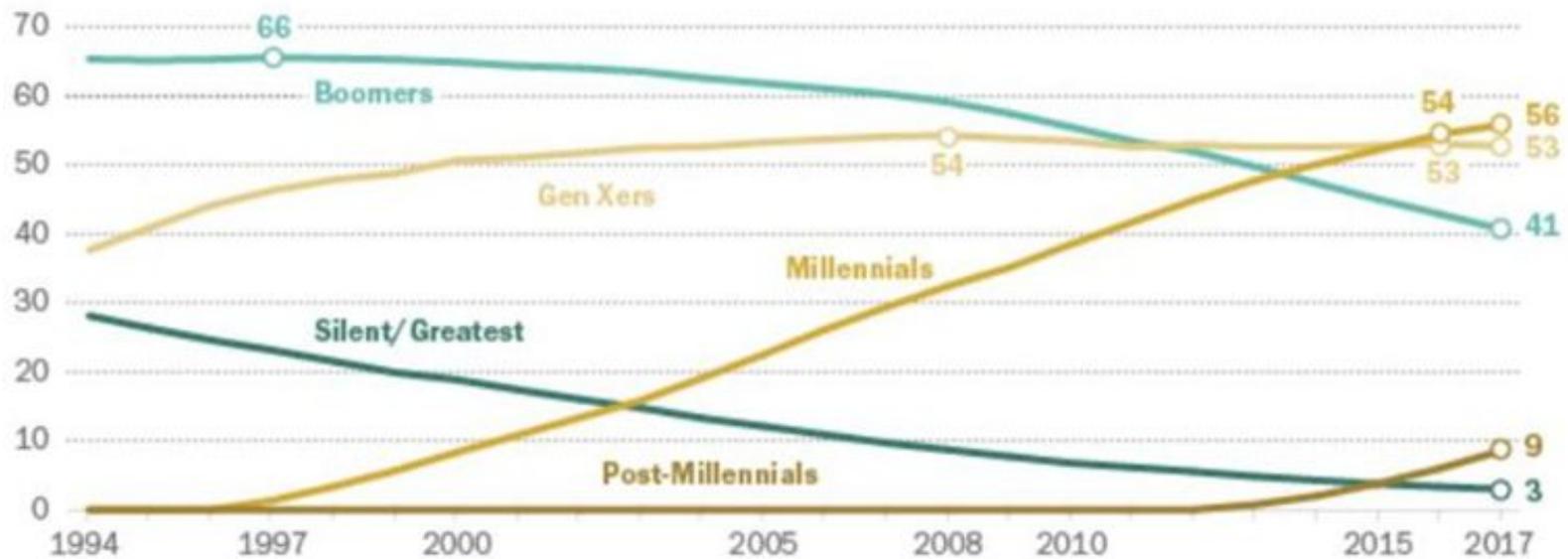




# Millennials Largest Generation in Labor Force

## Millennials became the largest generation in the labor force in 2016

U.S. labor force, in millions



Note: Labor force includes those ages 16 and older who are working or looking for work. Annual averages shown.  
Source: Pew Research Center analysis of monthly 1994-2017 Current Population Survey (IPUMS).

PEW RESEARCH CENTER

---

# Summary

---

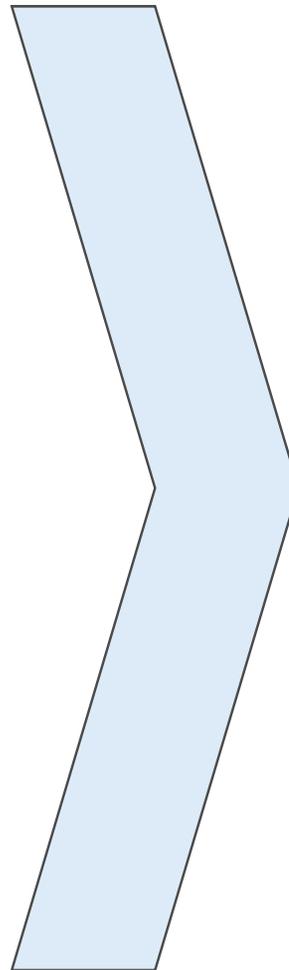




## A New Era Has Begun

---

- New Paradigm
- Zero Bound
- Fixed Income
- Index Concentration
- US vs. Non-US
- US Dollar
- US China Relationship
- Energy / Renewables
- Millennials



Strategic Asset  
Allocation Review  
Pending...

---

# Appendix

---





# Economic Forecast History Year to Date

## Median Over Time

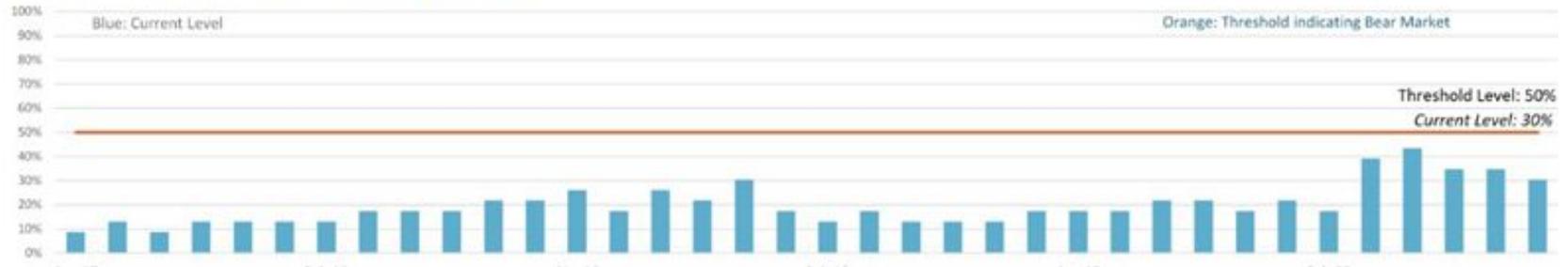
	2020 GDP				GDP		S&P 500 EPS		Unemployment		Core PCE	
	Q1	Q2	Q3	Q4	2020	2021	2020	2021	2020	2021	2020	2021
8/28/2020	-5%	-32%	25%	6%	-4.3%	4.2%	\$128	\$158	9%	7%	1.4%	1.6%
8/21/2020	-5%	-33%	20%	6%	-5.2%	4.2%	\$125	\$155	9%	7%	1.4%	1.6%
8/14/2020	-5%	-33%	20%	6%	-5.2%	3.5%	\$125	\$155	9%	7%	1.4%	1.5%
8/7/2020	-5%	-33%	20%	6%	-5.2%	3.5%	\$125	\$155	9%	7%	1.1%	1.4%
7/31/2020	-5%	-33%	21%	6%	-5.2%	3.8%	\$120	\$155	9%	7%	1.2%	1.4%
7/24/2020	-5%	-34%	20%	7%	-5.2%	4.6%	\$120	\$155	9%	7%	1.1%	1.4%
7/17/2020	-5%	-33%	20%	7%	-5.0%	4.6%	\$120	\$155	9%	7%	1.1%	1.4%
7/10/2020	-5%	-33%	20%	7%	-5.2%	4.6%	\$120	\$155	9%	7%	1.1%	1.3%
7/2/2020	-5%	-33%	20%	7%	-5.2%	4.6%	\$120	\$155	10%	7%	1.1%	1.3%
6/26/2020	-5%	-33%	20%	8%	-5.2%	4.3%	\$120	\$155	10%	7%	1.1%	1.3%
6/19/2020	-5%	-33%	20%	8%	-5.2%	4.3%	\$120	\$153	10%	7%	1.0%	1.4%
6/12/2020	-5%	-37%	20%	10%	-5.0%	4.7%	\$125	\$153	10%	8%	1.1%	1.2%
6/5/2020	-5%	-39%	22%	11%	-5.4%	4.7%	\$125	\$150	11%	8%	1.3%	1.3%
5/29/2020	-5%	-39%	22%	11%	-6.0%	4.8%	\$125	\$150	11%	8%	1.3%	1.3%
5/22/2020	-5%	-38%	21%	10%	-6.4%	5.0%	\$125	\$153	11%	8%	1.3%	1.3%
5/15/2020	-5%	-37%	21%	10%	-6.0%	5.3%	\$125	\$153	11%	8%	1.3%	1.4%
5/8/2020	-5%	-36%	20%	11%	-6.2%	5.3%	\$125	\$153	9%	7%	1.4%	1.5%
5/1/2020	-5%	-34%	21%	11%	-5.7%	5.3%	\$125	\$153	9%	7%	1.4%	1.5%
4/24/2020	-4%	-34%	20%	11%	-5.9%	5.5%	\$125	\$153	9%	7%	1.4%	1.5%
4/17/2020	-4%	-34%	20%	11%	-5.9%	5.5%	\$125	\$153	8%	6%	1.4%	1.5%
4/10/2020	-4%	-32%	17%	8%	-4.9%	5.3%	\$125	\$155	8%	6%	1.5%	1.7%
4/5/2020	-5%	-30%	15%	9%	-5.3%	5.3%	\$125	\$150	4%	4%	1.7%	1.9%
3/23/2020	-1%	-12%	4%	4%	-1.0%	2.7%	\$148	\$168	4%	4%	1.7%	1.9%



# US Bear Market Indicators

July 2020

## Bear Market Indicators: July 2020



Type	Indicator	Indicator Level		Last 36 Months	% On Last 36 Months
		On/Off	Current Threshold		
Inflation	1yr Breakeven Inflation < 1.25%	Off	1.4% 1.3%		11%
	10yr Breakeven Inflation > 3%	Off	1.6% 3.0%		0%
	YoY Inflation > 12m Moving Avg	Off	1.6% 2.0%		53%
	YoY CPI Energy > 20%	Off	-13.1% 20.0%		0%
	YoY PCE Deflator > 3%	Off	0.8% 3.0%		0%
Employment	Employment Growth < 0%	On	-6.4% 0.0%		11%
	YoY Avg. Hourly Earnings > 3%	On	-4.8% 3.0%		58%
	YoY Non-Finc Labor Costs > 3.5%	Off	2.5% 3.5%		8%
	Consumer Confidence Spread < -20%	Off	-19.8% -20.0%		6%
	Unemployment 3mo MA > .3% off lows	On	11.5% 3.9%		11%
Growth	Inventory/Sales > Long term Avg.	On	1.37 1.3%		100%
	YoY Leading Economic Indicator < 0%	On	-8.6% 0.0%		14%
	Leading/Coincident Ratio Drawdown > 26 months	Off	22.0 26.0		0%
	Fed Recession Probability > 30%	On	20.0% 30.0%		92%
	Residential Construction (% of GDP) > 3%	Off	2.8% 5.0%		0%
Total Investment (% of GDP) > 18.5%	Off	17.4% 18.5%		0%	

Type	Indicator	Indicator Level		Last 36 Months	% On Last 36 Months
		On/Off	Current Threshold		
Credit	US HY Yield > Long term Avg.	Off	5.4% 9.9%		0%
	Non-Mortgage Delinquency Rate > 3.5%	Off	2.5% 3.5%		0%
	Real Rates < 0%	On	-0.9% 0.0%		67%
Market	YoY Equity Markets < -5%	Off	10.9% -5.0%		6%
	Investment Banks < 12m Moving Avg. - 1 SD	Off	4.9% 0.0%		19%
	Cons. Discretionary < 12m Moving Avg. - 1 SD	Off	26.3% 0.0%		6%
	US Dollar 24m Change > 10%	Off	-1.9% 10.0%		0%

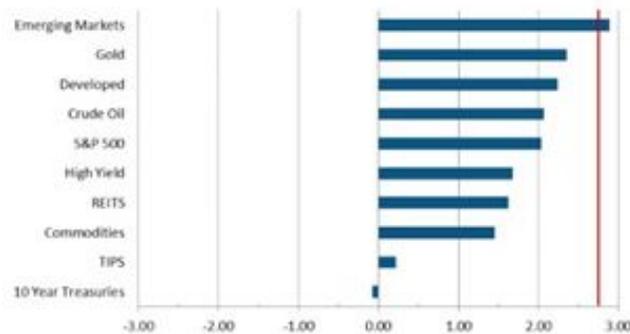
7/23 Indicators "On"



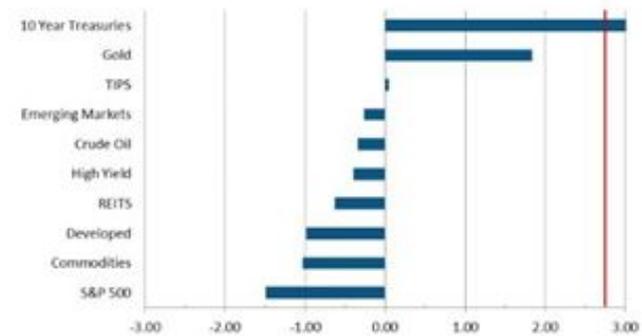
# Bubble Monitor Z-Score

- Two criteria in the bubble monitor – over a 7y period:
  1. Z-score > 2.75 (shown below)
  2. 2x price appreciation

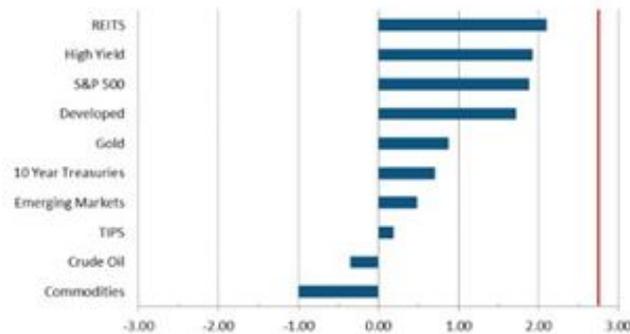
Bubble Monitor Z-Scores: September 2007



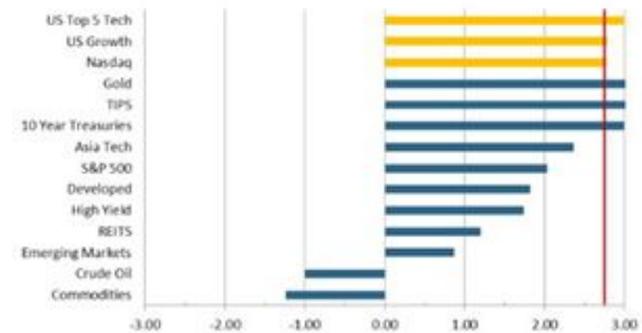
Bubble Monitor Z-Scores: December 2008



Bubble Monitor Z-Scores: July 2019



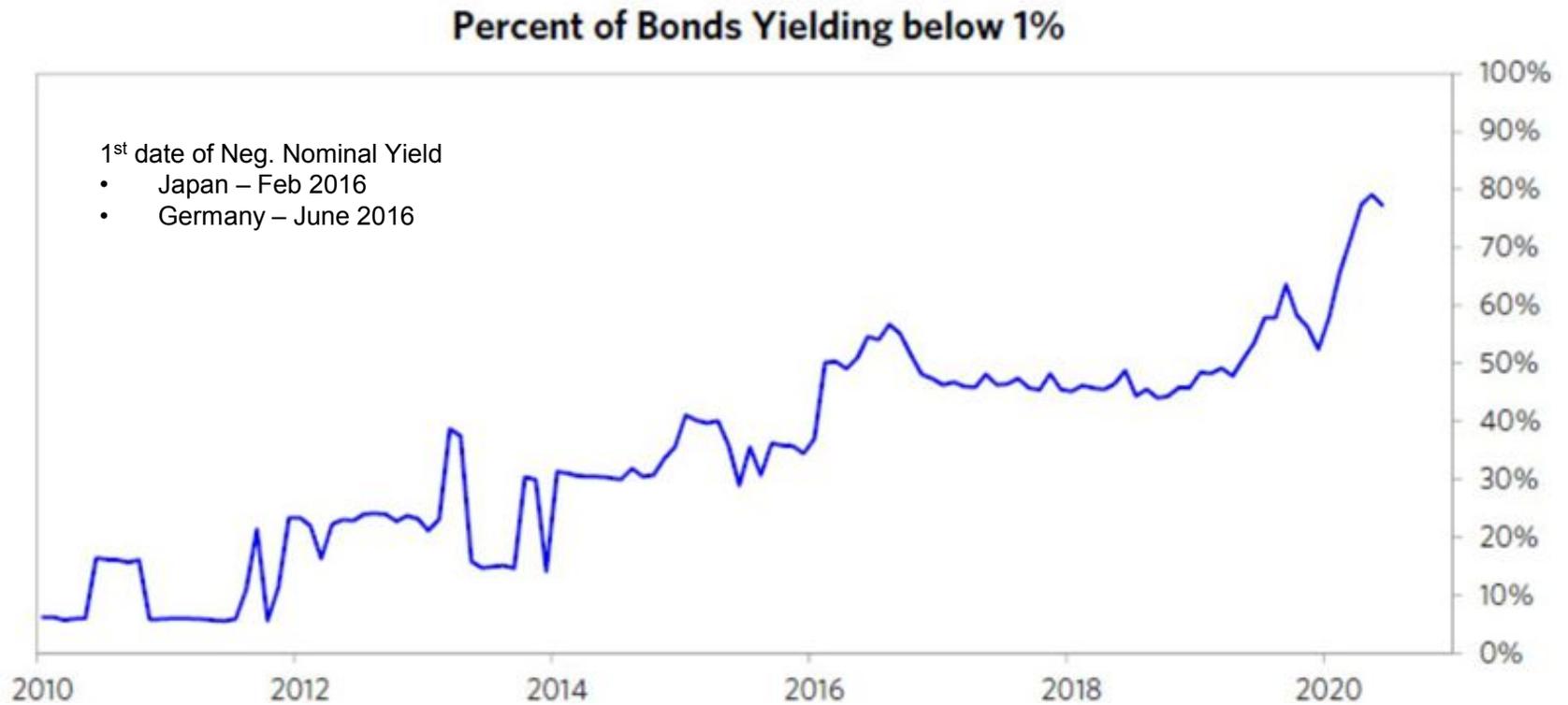
Bubble Monitor Z-Scores: July 2020



\*To satisfy the second bubble criteria (2x price in last 7 years):  
 - Gold would need to reach a price level of \$2,600  
 - TIPS Index would need to appreciate 59.6%  
 - 10y Treasuries Index would need to appreciate 55%



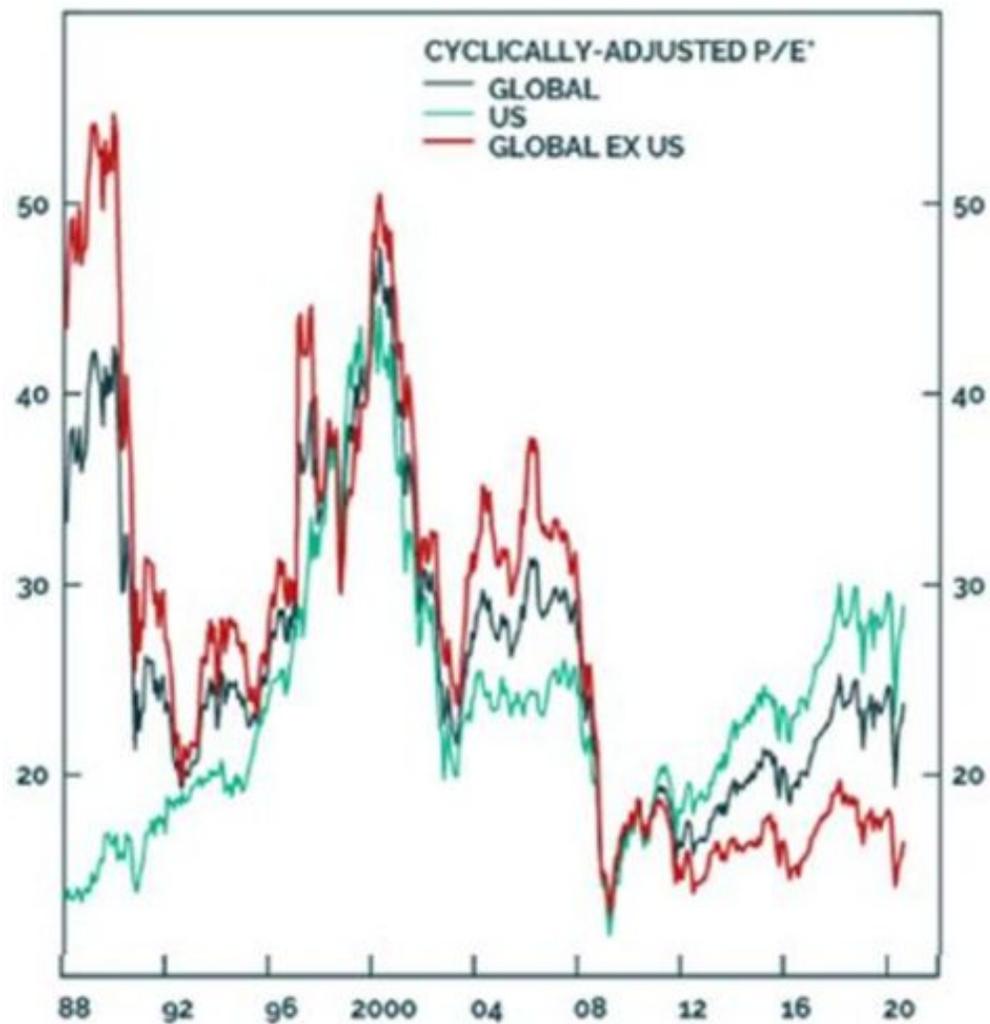
# Percent of Bonds Yielding Below 1%



Source: Bridgewater Associates



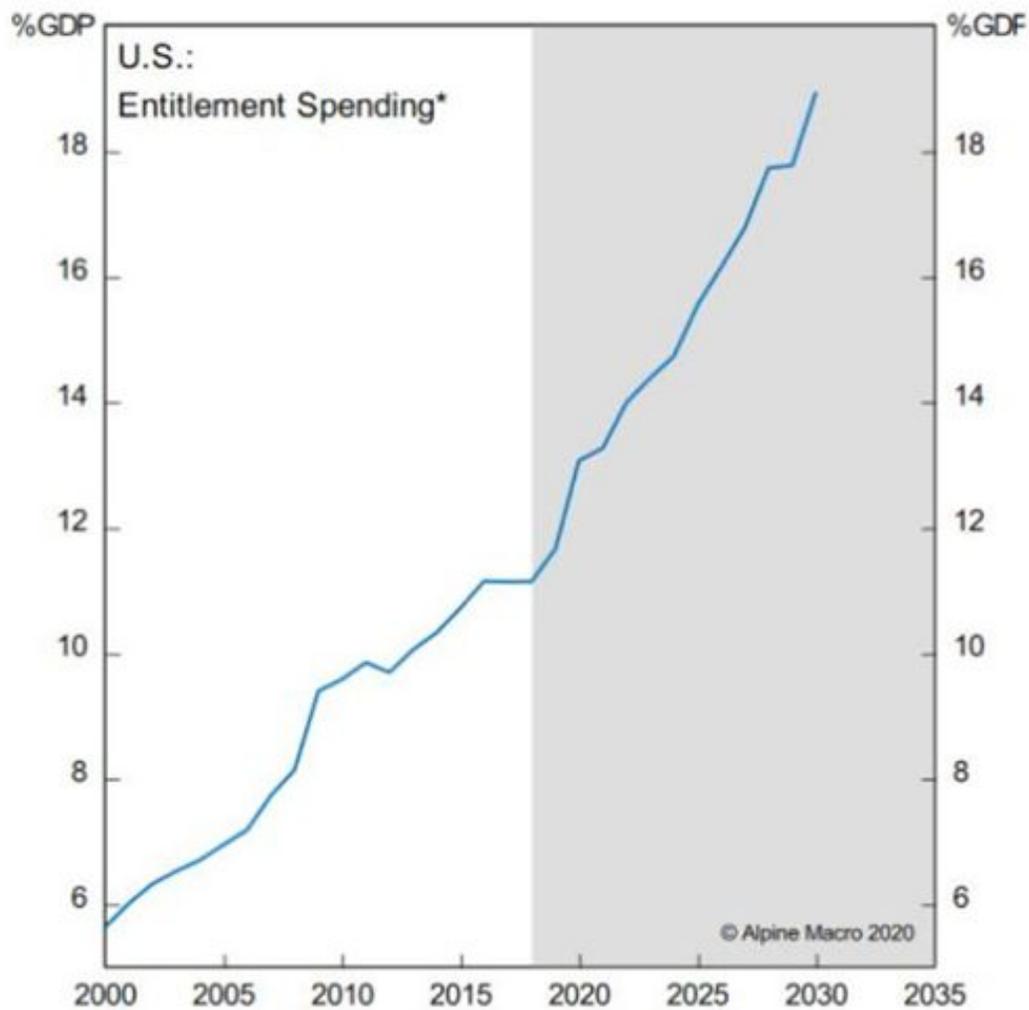
# Cyclically-Adjusted P/E



Source: BCA



# US Entitlement Spending



\*Includes social security, medicare and medicaid;  
source: Congressional Budget Office  
Note: Shading denotes forecast period

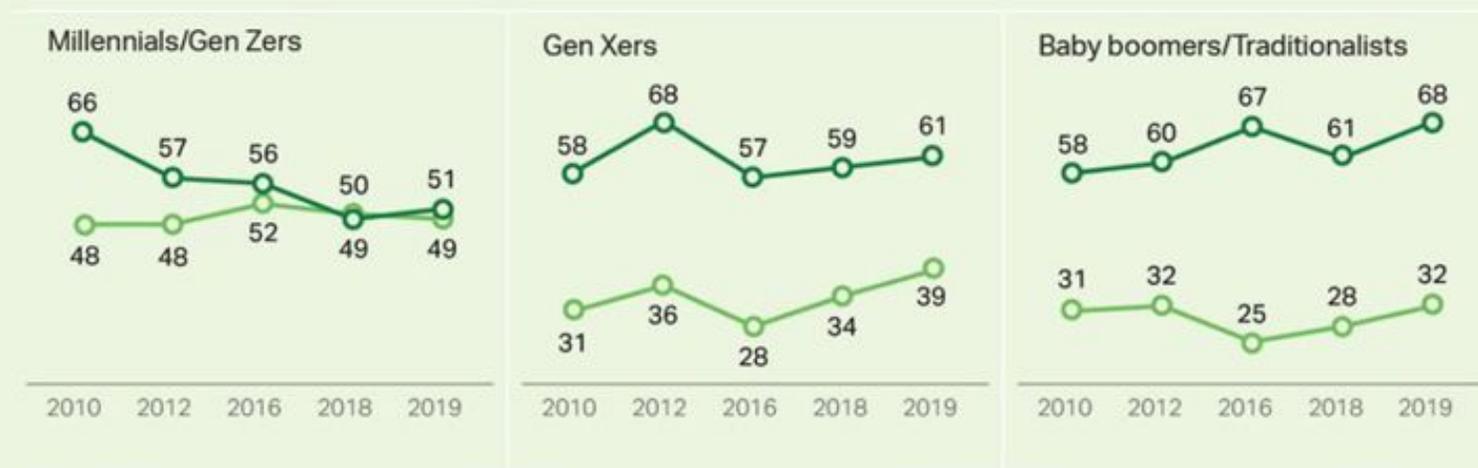
Source: Alpine Macro



# Millennials

## Trend in Positive Views Toward Capitalism and Socialism, by Generation

○ Capitalism (% Positive)    ○ Socialism (% Positive)



Millennials/Gen Zers: Ages 18 to 39 in 2019

Gen Xers: Ages 40 to 54 in 2019

Baby boomers/Traditionalists: Ages 55 and older in 2019

GALLUP

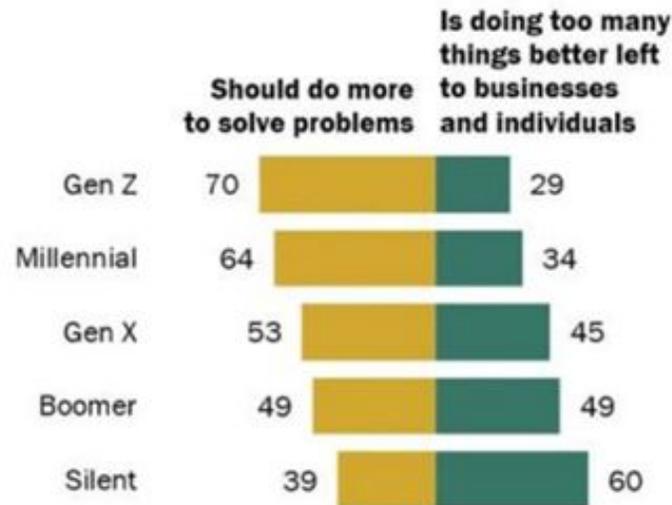
Source: Pew Research Center



# Millennials

## Gen Z and Millennials see bigger role for government

% saying government ...



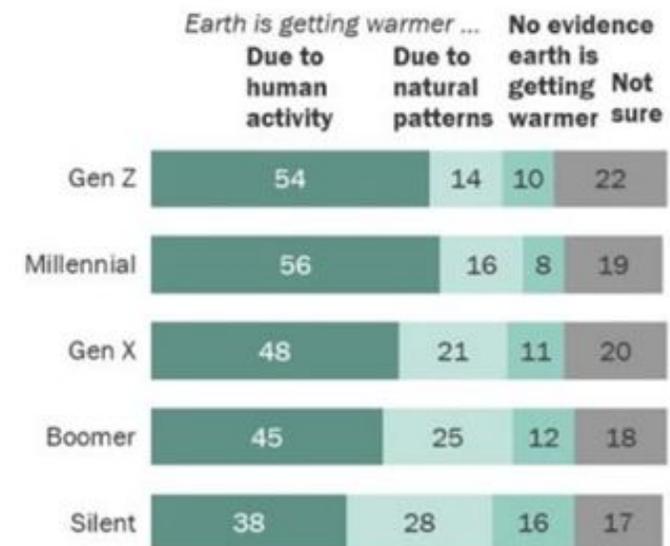
Note: Share of respondents who didn't offer an answer not shown.  
 Source: Surveys of U.S. adults ages 18 and older conducted Sept. 24-Oct. 7, 2018, and U.S. teens ages 13 to 17 conducted Sept. 17-Nov. 25, 2018.

"Generation Z Looks a Lot Like Millennials on Key Social and Political Issues"

PEW RESEARCH CENTER

## Gen Z, Millennials most likely to see link between human activity, climate change

% saying ...



Note: Share of respondents who didn't offer an answer not shown.  
 Source: Surveys of U.S. adults ages 18 and older conducted Sept. 24-Oct. 7, 2018, and U.S. teens ages 13 to 17 conducted Sept. 17-Nov. 25, 2018.

"Generation Z Looks a Lot Like Millennials on Key Social and Political Issues"

PEW RESEARCH CENTER

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Tactical Asset Allocation Presentation

**Developed By:** Slayton

**Presented By:** Slayton

**Type of Item:** Information Item

**Description:** Mr. Slayton will provide an update on UTIMCO's Tactical Asset Allocation activities and progress in 2020.

**Recommendation:** None

**Reference:** *Tactical Asset Allocation* presentation



# Tactical Asset Allocation

---

Scott Slayton, Managing Director – Asset Allocation

September 10, 2020



# Agenda

---

- Introduction
- Tactical Asset Allocation
- Research Priorities
- Market Outlook



# Introduction to UTIMCO's TAA Effort

---

- TAA takes tactical positions to modify SAA
- Goal is to add 1/10<sup>th</sup> of UTIMCO alpha
- Market nerve center and trusted source of market intelligence for CEO office
- Monitors the perimeter for economic, market, and geopolitical risks
- Works on special projects for CEO office
- Joins forces with UTIMCO's SPN team
- Works closely to support UTIMCO's Risk team
- When we need to move fast, TAA gets the call
- Current authority: \$700m notional



# TAA Organization

## Internal Resources:

CEO Office  
Advisory Team  
Risk and SPN Teams



### **Scott T. Slayton, CFA** **Managing Director**

32 years experience  
2 years with UTIMCO  
UT Austin  
Prior: MS, Tudor



### **Patrick Zerda, CFA** **Associate Director**

7 years experience  
2 years with UTIMCO  
UT Austin  
Prior: TRS

## External Resources:

Strategic Partners  
External Research Partners  
Applied Global Macro Research



# Global Tactical Asset Allocation Framework & Development

## Model Specifications

- Systematic
- Data informed
- Understandable/Common sense
- Broad based
- Repeatable
- Can be continually improved
- Transparent

## Signal Framework

- Multiple models
- Multiple time frames
- Long term and slow
- Intermediate term
- Shorter term
- Advisor informed



# TAA Models

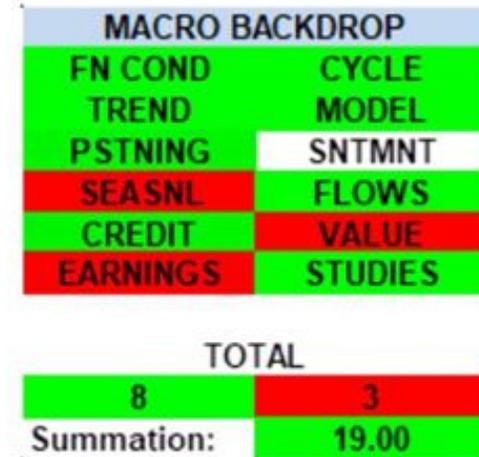
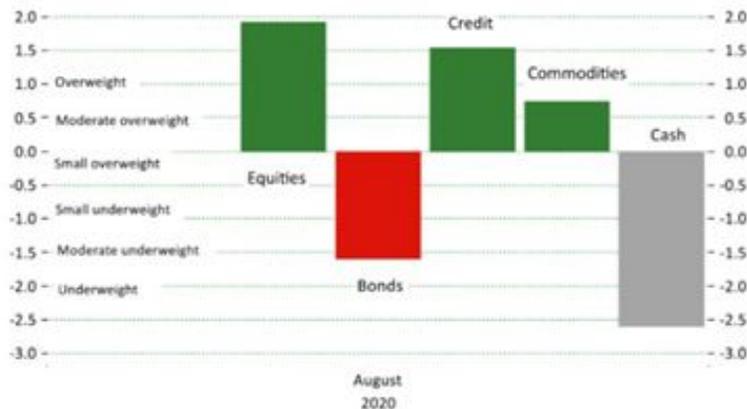
## Initial Models:

Environmental Model	
Now: Box 4	Discounting: Box 6

Bear Market Model	
US: Off	Global: On

Bubble Model
<ul style="list-style-type: none"> <li>• Tech Sector</li> <li>• Top 5 Tech</li> <li>• US Growth</li> </ul>

## New Models:



Ned Davis	BCA	Alpine Macro	JP Morgan	Blackrock
Stocks	Stocks	Stocks	Stocks	Stocks
Bonds	Bonds	Bonds	Bonds	Bonds
Cash	Cash	Cash	Credit	Credit
US	US	US	US	US
EAFE	EAFE	EAFE	EAFE	EAFE
EM	EM	EM	EM	EM



# TAA Results

---

- TAA has added \$23M or 5bps on total endowment so far in 2020
- TAA will remain in “small boats” until year end.
- TAA’s risk taking is expected to gradually increase
- Goal is to add 10bps of alpha
- Current Portfolio Positions:
  - Long Equities
  - Long Credit
  - Long Gold
  - Short USD
  - Short US Treasury Bonds



## What's Next

---

- Finalization of TAA Systemization
- Conclusion of China Task Force
- Continued macro research - search for new ideas



# US Market Outlook

---

- Global risk assets are early in a new bull market
- Central Bank liquidity is the dominant factor in market pricing
- US 10-year real interest rates have fallen to historically negative levels
- Monetary and fiscal policy are expected to remain extremely easy for a prolonged period
- US and the global economy are in the early stages of a new economic expansion
- A clean sweep by the Democrats is a key near-term risk
- TAA is bullish on equities, credit, and gold
- TAA is bearish on the US Dollar and US Treasury Bonds

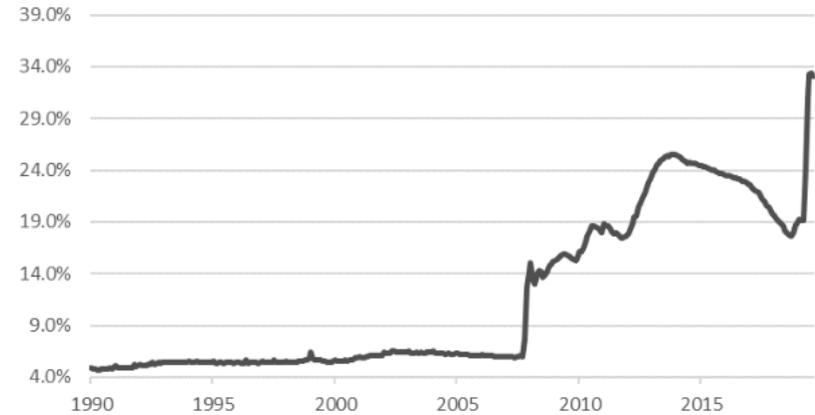
# Liquidity is Exploding Higher and Flowing into Risk Assets



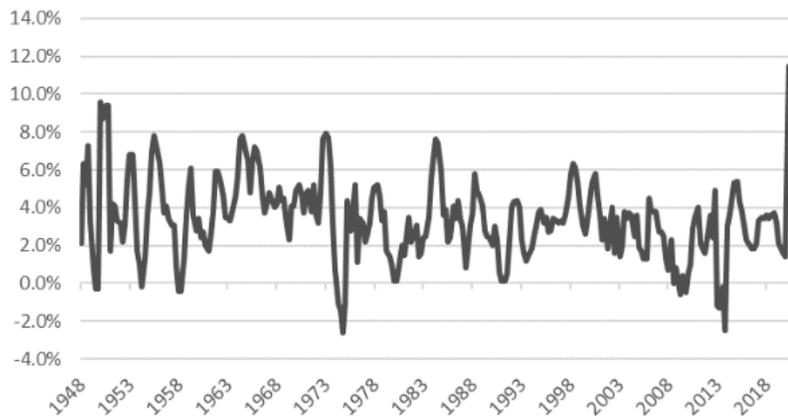
U.S. M2 YoY Growth



Fed B/S (% of GDP)



US Real Disposable Personal Income YoY



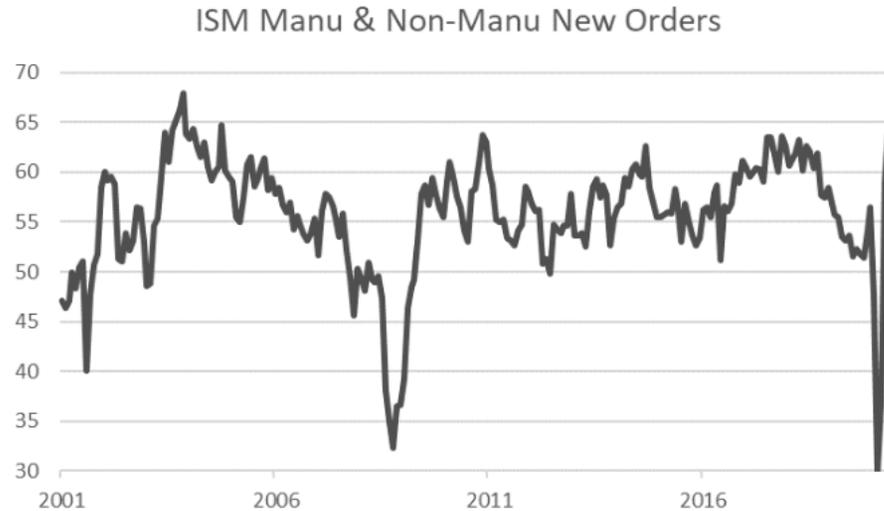
US PCE Durable Goods SAAR \$b



Source: Bloomberg



# Leading Indicators are Sending a Powerfully Bullish Message



Source: Bloomberg, ECRI

---

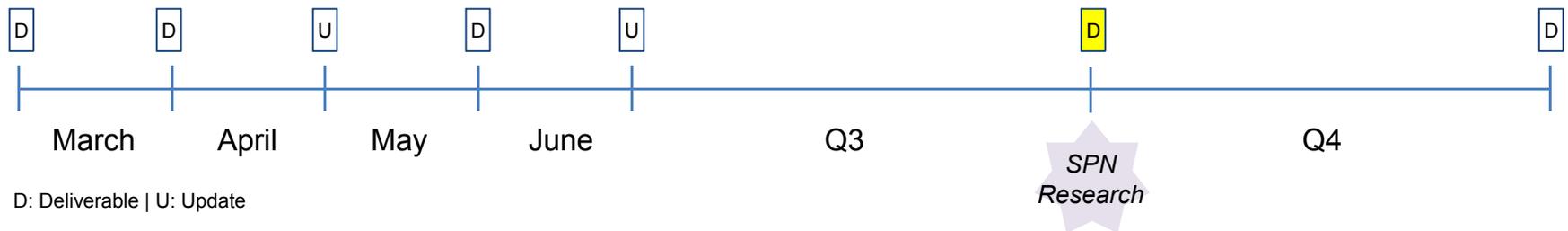
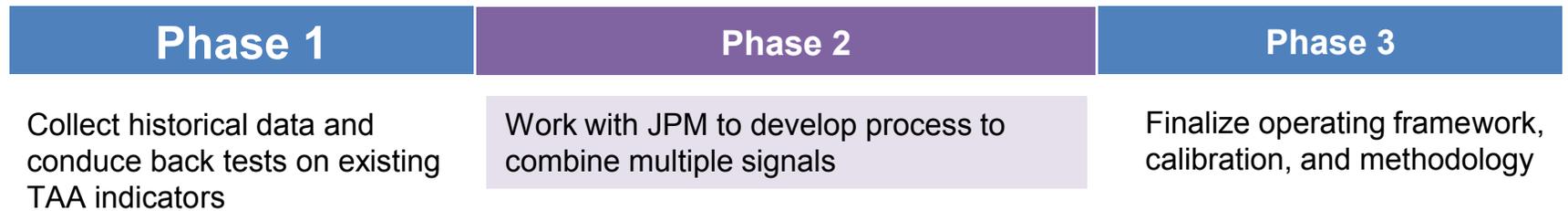
# Appendix

---





# TAA 2020 Systemization & Development





# Building Out UTIMCO's TAA Program

---

- TAA started with one person in April of 2018.
- Collectively we had a suite of disparate models and indicators, but needed something more targeted for the unique needs of UTIMCO.
- Patrick Zerda joined UTIMCO as an Associate in July of 2018.
- TAA is close to completing the systemization of our approach to risk taking. We are combining our quantitative and qualitative methods to achieve a more flexible, stable, repeatable, and scientifically oriented process.
- Nearing the end of Phase II of our roadmap. Working closely with JPM on how to formulate the process. The entire project will be wrapped up by calendar year-end.
- By the end of the year, we plan to have a clear quantitative/qualitative mix that will flow into a strength of signal calibration that ultimately flows into position sizing.



# What We Needed to Build Systematic TAA

---

- We needed a robust TAA model covering the 6 major macro asset classes (equity, US Treasuries, credit, commodities, US dollar, cash).
- We partnered with a highly respected outside firm in March of 2018 to begin the modeling process.
- Tim Jones (Risk Group), a systematic modeling expert joins UTIMCO in the fall of 2018. We needed his expertise and guidance to have confidence in the validity of the model and to learn how to use it optimally.
- By the fall of 2018, we were beta testing the model and reviewing the guts and the back tested results.
- This model has formed the backbone of our systematic approach to markets since the spring of 2019.
- The in-sample results have been robust, and the model has been a guiding light for our risk taking over the last 18 months.
- TAA's risk taking has become more consistently profitable since using the model.

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Fixed Income Presentation

**Developed By:** Kampfe, Doak

**Presented By:** Kampfe

**Type of Item:** Information Item

**Description:** Mr. Kampfe will present on the Fixed Income portfolio.

**Recommendation:** None

**Reference:** *Fixed Income Review* presentation



# Fixed Income Review

---

Russ Kampfe, Managing Director- Fixed Income

September 10, 2020



# Executive Summary

- **Objectives**

- Serve as a deflation hedge that preserves capital during equity bear markets
- Serve as a source of immediate liquidity (which has a higher expected return than cash) when needed for rebalancing, capital calls, and distributions

- **Philosophy**

- Add value through active management by generating above benchmark returns while taking similar volatility risk over cycles
- Balance complimentary investment styles and diversify exposures across managers

- **Experience**

- Two Senior Portfolio Managers with 30+ years of experience apiece

- **Performance**

As of 6/30/2020	1 YR	5 YR	10 YR	15 YR
Returns (ann.)	6.8%	4.1%	4.0%	4.4%
Alpha	0.7%	-0.1%	0.8%	0.9%
Tracking Error	2.5%	1.8%	1.7%	1.9%
Information Ratio	0.3	-0.1	0.5	0.5

- **Exposure**

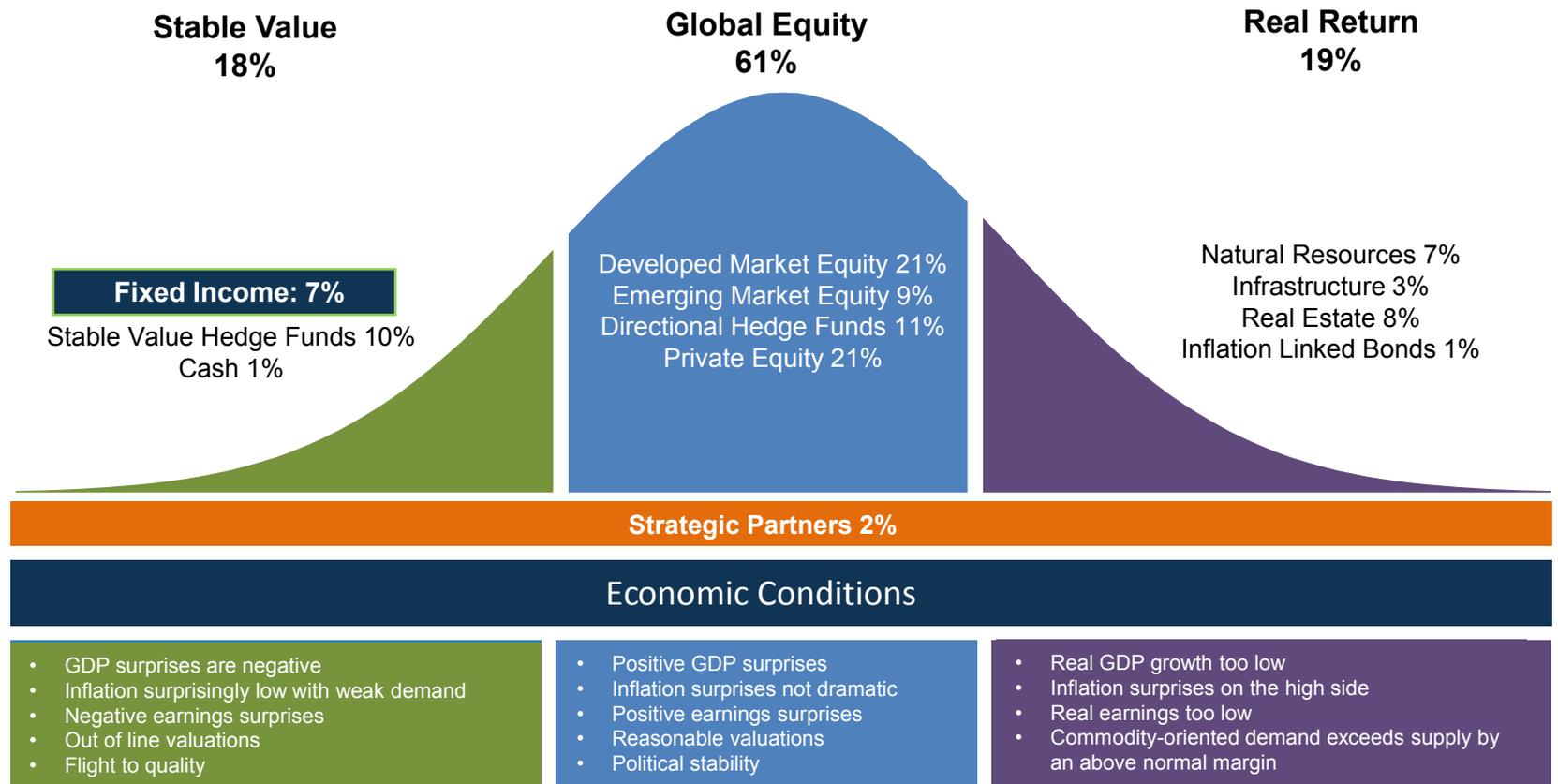
In \$millions	PUF	GEF	ITF	Total
Investment Grade Fixed Income	1,598	996	2,998	5,592
UTIMCO	22,907	14,304	8,914	49,155
% of Total Fund	7.0%	7.0%	33.6%	11.4%
2020 Policy Target	7.0%	7.0%	35.0%	n.a.

- **Priorities**

- 2020 Action Plan remains on track
- Portfolio Construction & Optimization exercise
- Support pending Strategic Asset Allocation



# Role in the Endowments



FY 2020 Policy weights for the Endowments are 61% Global Equity, 19% Real Return, 18% Stable Value, and 2% Strategic Partners.  
 FY 2020 Policy weights for ITF are 56% Global Equity and 44% Stable Value.

# Team



**Russ Kampfe**  
**Managing Director**  
MBA, UT Austin  
*Joined UTIMCO in 1988*



**Harland Doak, CFA**  
**Senior Director**  
MBA, St. Edwards University  
*Joined UTIMCO Feb. 2001*  
*Prior: TRS*



**Russ Brown, CFA, CPA**  
**Associate Director<sup>1</sup>**  
MS, UT Austin  
*Joined UTIMCO Nov. 2012*  
*Prior: Holtzman Partners*



**David Huang, CFA**  
**Associate Director<sup>1</sup>**  
MS, NYU  
*Joined UTIMCO Aug. 2020*  
*Prior: Helmsley Charitable Trust*



**Andres Delgado, CFA, FRM**  
**Senior Analyst<sup>1</sup>**  
BBA, Texas State University  
*Joined UTIMCO Jan. 2017*  
*Prior: Goldman Sachs*



**RJ Dymke, CFA**  
**Analyst<sup>1</sup>**  
BBA, Texas State University  
*Joined UTIMCO Nov. 2018*  
*Prior: Sage Advisory*



**Kayla Young,**  
**Analyst<sup>1</sup>**  
BA, Cornell  
*Joined UTIMCO June 2020*  
*Prior: Novus Partners*



**Kathy Simons**  
**Team Coordinator<sup>1</sup>**  
Texas A&M  
*Joined UTIMCO May 2018*

**Experience Summary:**  
5 CFA Charter Holders  
4 Master Degrees  
1 CPA

<sup>1</sup> Works on both Public Equity and Fixed Income. Workload is split approximately 85% Public Equity and 15% Fixed Income, based on the number of investment relationships



# Market Performance<sup>1</sup>

Performance as of June 30, 2020

Bond Market Performance					
Annualized Returns in USD					
	1-Year	3-Year	5-Year	7-Year	10-Year
<b>Geographic</b>					
United States	8.7%	5.3%	4.3%	4.0%	3.8%
Canada	3.4%	5.8%	4.5%	4.5%	4.3%
Europe	1.3%	5.7%	5.2%	5.3%	5.0%
Asian-Pac Aggregate	-0.4%	3.7%	3.6%	3.4%	3.0%
Emerging Markets <sup>2</sup>	-0.1%	5.2%	4.3%	3.6%	3.7%
<b>Sector</b>					
Treasuries & Sovereign	3.8%	5.2%	4.5%	4.4%	4.0%
Government Related	3.6%	5.2%	4.4%	4.3%	3.9%
Corporates	5.8%	5.7%	5.4%	5.1%	5.2%
Securitized	4.7%	4.1%	3.3%	3.4%	3.4%
<b>Tenor</b>					
1-3 Years	1.4%	2.8%	2.2%	1.9%	1.8%
5-7 Years	4.3%	4.6%	3.9%	3.9%	3.8%
10+ Years	8.0%	8.7%	8.0%	8.0%	7.3%
<b>Risk Premia</b>					
Credit	2.0%	0.5%	0.9%	0.8%	1.2%
Duration	6.7%	5.9%	5.8%	6.1%	5.5%

Currency Performance					
Annualized Returns vs. USD					
	1-Year	3-Year	5-Year	7-Year	10-Year
<b>Developed</b>					
Euro	-1.1%	-0.5%	0.2%	-2.1%	-0.9%
Japan	0.1%	1.4%	2.5%	-1.2%	-1.9%
Britain	-2.5%	-1.7%	-4.7%	-2.9%	-1.9%
Canada	-3.8%	-1.6%	-1.7%	-3.6%	-2.5%
Australia	-1.9%	-3.6%	-2.2%	-4.0%	-2.0%
Switzerland	3.1%	0.4%	-0.3%	0.0%	1.3%
Hong Kong	0.8%	0.2%	0.0%	0.0%	0.0%
Singapore	-2.9%	-0.4%	-0.7%	-1.3%	0.0%
<b>Emerging</b>					
China	-2.8%	-1.4%	-2.6%	-2.0%	-0.4%
South Korea	-3.7%	-1.6%	-1.4%	-0.7%	0.2%
Taiwan	4.7%	0.9%	0.9%	0.2%	0.8%
Brazil	-29.6%	-15.4%	-10.7%	-12.0%	-10.5%
South Africa	-19.0%	-9.0%	-6.9%	-7.8%	-7.9%
India	-8.7%	-5.1%	-3.4%	-3.3%	-4.7%
Russia	-11.1%	-6.4%	-4.9%	-10.5%	-7.9%
Mexico	-16.6%	-7.7%	-7.4%	-7.9%	-5.7%
Indonesia	-2.3%	-2.7%	-1.6%	-5.2%	-4.6%

- <sup>1</sup> Total returns utilize Bloomberg Barclays Global Aggregate Indices, hedged in (USD)
- <sup>2</sup> EM hedged Return is for a country-constrained, more liquid version of the flagship EM Local Currency Government Index



# Performance & Attribution

---

## INVESTMENT GRADE FIXED INCOME

### What has worked

- The Fixed Income portfolio generated **+0.7% alpha** over the 1-year period ended June 30, 2020.
- Managers that outperformed their manager-specific benchmark for the year comprised 80% of the total portfolio average NAV.
- The portfolio allocations to US Government, Sovereigns, and Investment Grade Corporate bonds contributed to alpha over the period.

### What hasn't worked

- The portfolio allocation to Currencies detracted from alpha over the period, primarily from countries like Mexico, Brazil, Norway, and the UK.



# 2020 Priorities

Deliver Results			Professional Development			Firmwide Collaboration			Portfolio Initiatives		
Action	Metric	Timing	Action	Metric	Timing	Action	Metric	Timing	Action	Metric	Timing
Improve portfolio performance and deliver positive alpha over FI benchmark for rolling 3yr period	0 to 80 bps of alpha	Dec-20	Enhance leadership and depth of managerial talent	Complete Executive Training Modules	Aug-20	Work with Risk to implement new UTIMCO U.S. economic cycle model	Apply to major asset classes and review	Dec-20	Design and implement internally managed TIPS portfolio	Start portfolio in March 2020 and add appropriate amount of alpha	Jun-20
Obtain approval for at least one manager to Premier List	# of managers	Sep-20	100% success rate on training and talent management plans	50 hours complete per professional	Dec-20	Collaborate with Scott and TAA group with specialized fixed income knowledge and trading consultation	Improvement in TAA alpha	Dec-20	Complete Semiannual reviews with buy-in from Leadership Team	Semiannual / Business Plan	June-20 / Dec-20
Continuous improvement of critical processes	15% increased productivity	Dec-20	Assist Public Equities in hiring an analyst	Successfully bring on an analyst	Dec-20	Transition seamlessly from current bond analytic system to new risk system	Smooth usage of new system and apply to bond portfolios	Sep-20	Examine manager composition with current and prospective partners	Increased returns and efficiency of portfolio	Jun-20
Achieve full compliance with firmwide OFAC regulations	100% reporting compliance	Mar-20	Actively identify and develop junior talent that has longer term interest in Fixed Income	Hold macro and fixed income discussions that ferret out interest	Dec-20	Build robust UTIMCO culture and brand with peers, stakeholders, and industry	Give exposure to UTIMCO on external boards, peer orgs., teaching and conferences	Dec-20			
Generate attractive risk-adjusted returns while meeting allocation and regime targets			Hire the best candidates and invest in UTIMCO through leadership and development			Share best ideas and expertise across and outside the organization			Provide clarity on investment strategies throughout the organization		



Completed Initiatives



Continuing in 2020



Initiatives with Mixed Results



# Portfolio Optimization Project

## Objectives

1. Diversification
2. Positive, low volatility return stream
3. Liquidity
4. Alpha

## All objectives were achieved over the past 15 years

1. Positive returns during, or 3-6 months after, recession-driven equity bear markets end
2. 4.4% annualized absolute return with 5.1% volatility
3. IGFI has never failed to provide liquidity at any time requested and has had ample spare liquidity as designed
4. 0.9% annualized alpha while having risk (volatility) within 7 basis points of the benchmark, so no unbudgeted or reckless risk undertaken vs the remaining SAA

## ***BUT, any program can and should be reviewed and, hopefully, improved***

### Goal:

- Determine the optimal portfolio composition that would produce the highest expected return with the lowest expected volatility from a roster of top tier managers with diversifying global styles.

### Process

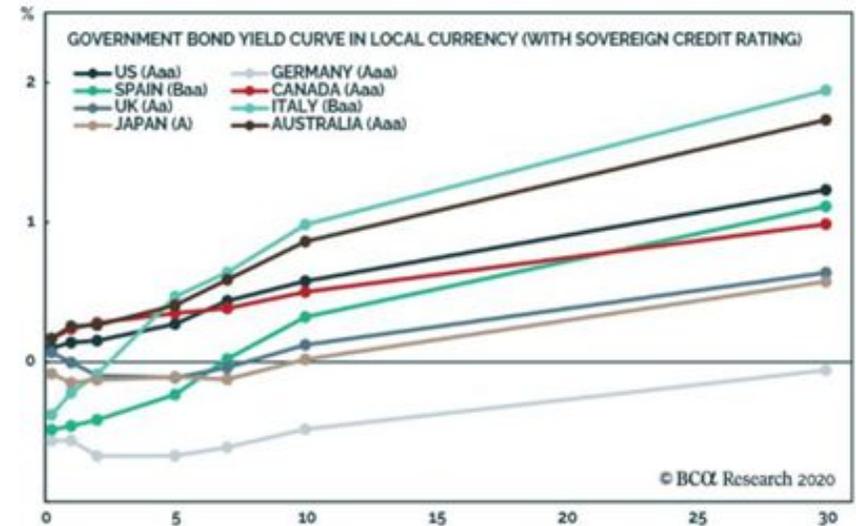
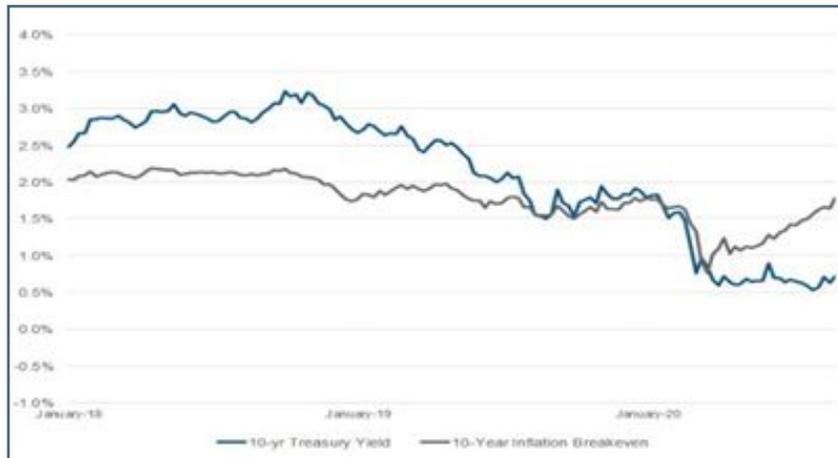
- The Team evaluated existing managers using mean-variance optimization over more than one economic cycle (15 years) to determine the portfolio mix with the highest Sharpe ratio within the constraints that no manager should exceed 30% of the portfolio or represent less than 10%. Therefore, UTIMCO has no overreliance on any one manager, while remaining a key partner to all managers.

### Results

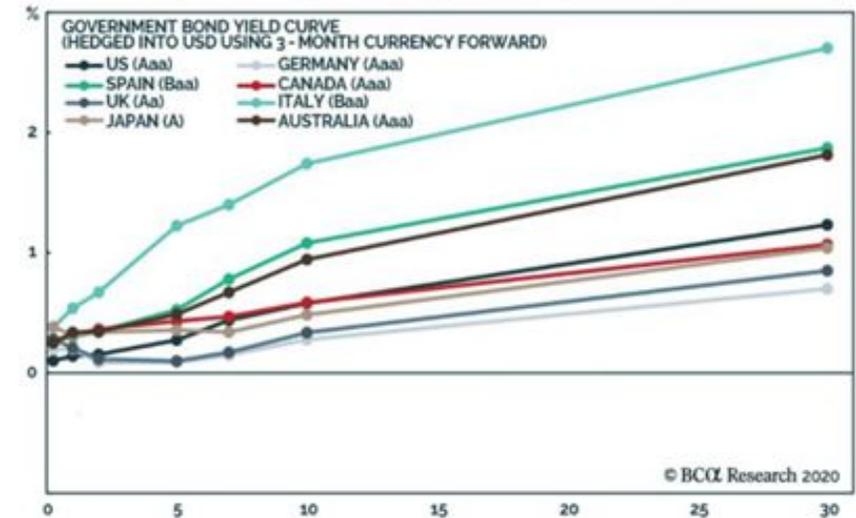
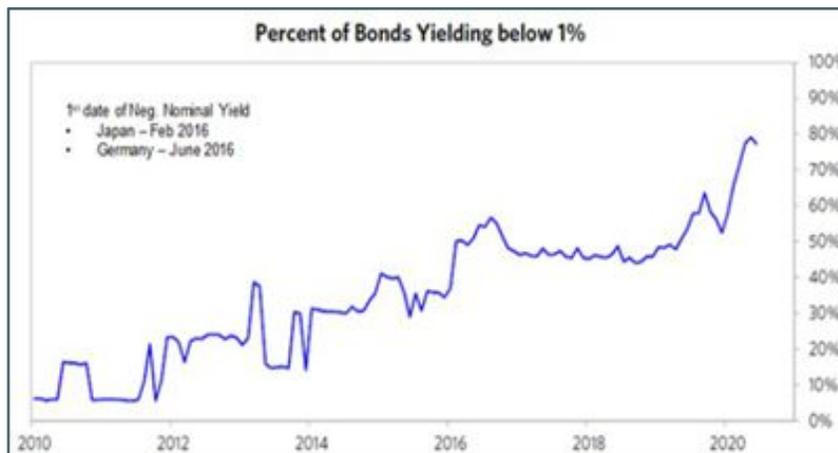
- The optimized portfolio presented slight changes to the existing allocations of +/- 2.5% to 5% per manager, exhibited similar volatility as the benchmark (BB Global Agg USD Hedged), and produced a 0.8 information ratio and a 2% tracking error.

# New World Order in the Bond Market

## 1) New Fed Policies



## 2) Impact of Negative Yielding Bonds in the World





## Conclusion

---

- UTIMCO's Fixed Income portfolio is ~\$5.6 billion and represents ~12% of Total Assets
- The portfolio had a good year, producing strong returns in an absolute and relative basis
- Despite a once-in-a-century economic black swan, the portfolio fulfilled its objectives with diversification, liquidity, absolute return and alpha
- Completed a portfolio construction exercise that will lead to a more optimal portfolio mix for the future
- Support pending Strategic Asset Allocation

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Risk Management Presentation

**Developed By:** Risk Management Team

**Presented By:** Yoeli & Jones

**Type of Item:** Information Item

**Description:** Dr. Yoeli and Dr. Jones will lead the presentation on Risk Management, discussing the first half of 2020 – risk management when the risks are high, and then discussing key projects and initiatives of Risk Management at UTIMCO.

**Reference:** *Risk Management* presentation



# Risk Management Presentation

---

Uzi Yoeli, Managing Director – Risk Management

Tim Jones, Director – Risk Management

September 10, 2020



# Agenda

---

- Team Structure and Purpose
- Key Models
- 2020: Risk Management when the Risks are High
- UTIMCO's Risk Management in 2<sup>nd</sup> half of 2020 and Beyond



# Risk Team Structure

## Team Members



**Uzi Yoeli**  
**Managing Director**  
 16 years at UTIMCO  
 PhD, UT Austin



**AliEmme Binns**  
**Analyst**  
 3 months at UTIMCO  
 MSF, Univ of Utah



**Tim Jones**  
**Director**  
 2 years at UTIMCO  
 PhD, UT Austin



**Anson Chuah**  
**Associate**  
 4 years at UTIMCO  
 BBA, UT Austin



**Lori Shaver**  
**Executive Assistant**  
 4 years at UTIMCO  
 BS, Sam Houston State

## Team Purpose

Lead UTIMCO in maintaining a sound risk culture, by providing services and information in the following areas:

**Rebalancing**

**Models**

- Bear and Bubble Indicators
- Economic environment
- CUSUMs

**Capital Planning**

**SAA/ Long Term Issues**

**Barra**

- Common Risk Language
- Best in class risk modeling of Private Markets and Hedge Funds

**Individual Deals**

**Risk Results**

- Risk Summary
- Risk Dashboard

**Research**



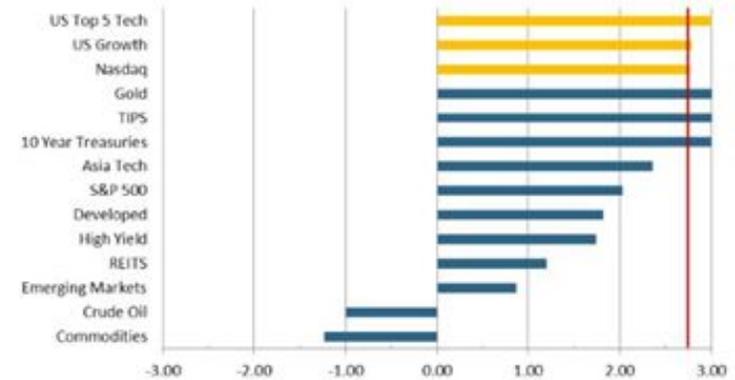
# Key Models

Bear Market Indicators: June 2020



8/23 Indicators "On"

Bubble Monitor Z-Scores: July 2020



US Policy Signal Chart



CUSUM Information Ratio Risk Signal

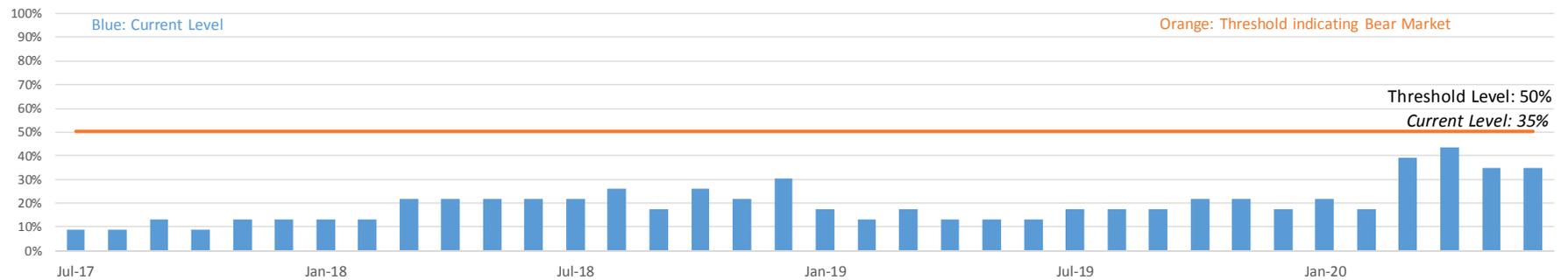




# Bear Market Indicator Did Not Turn On

## June 2020

### Bear Market Indicators: June 2020

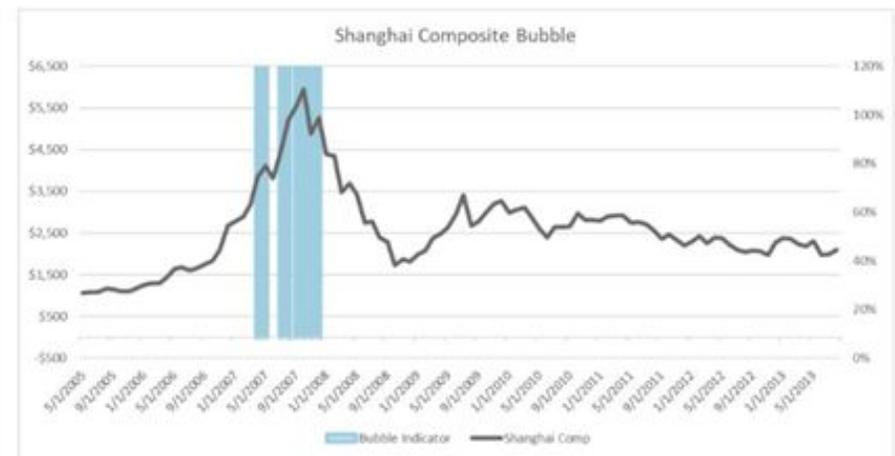
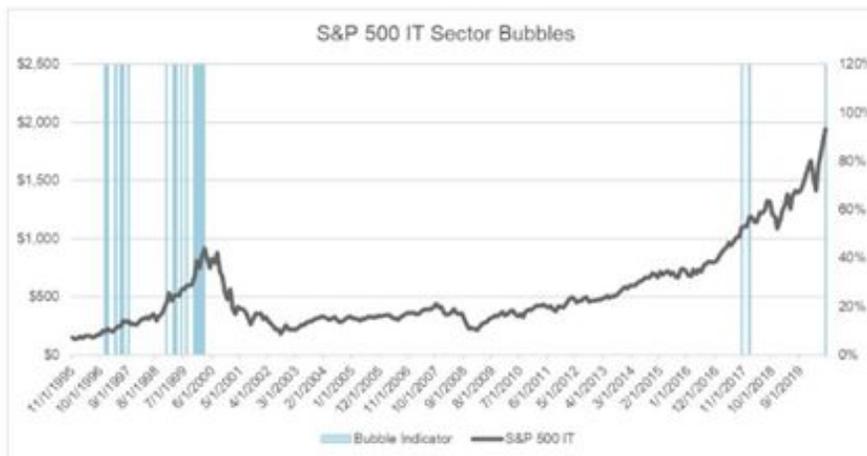
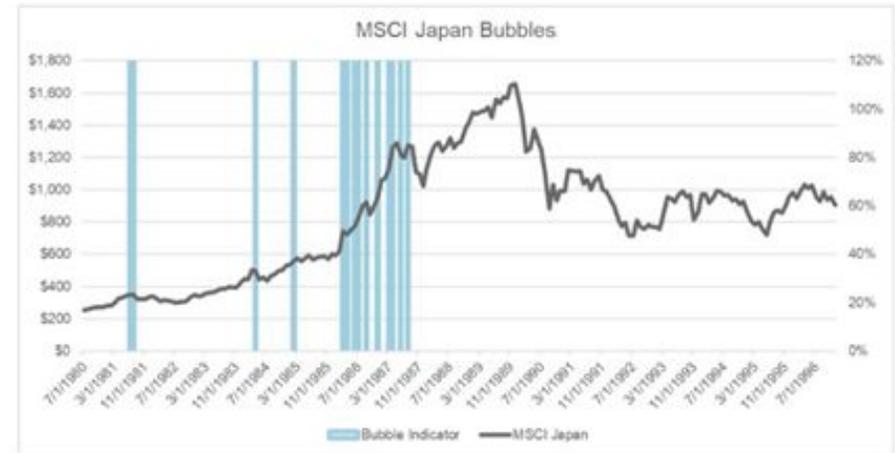
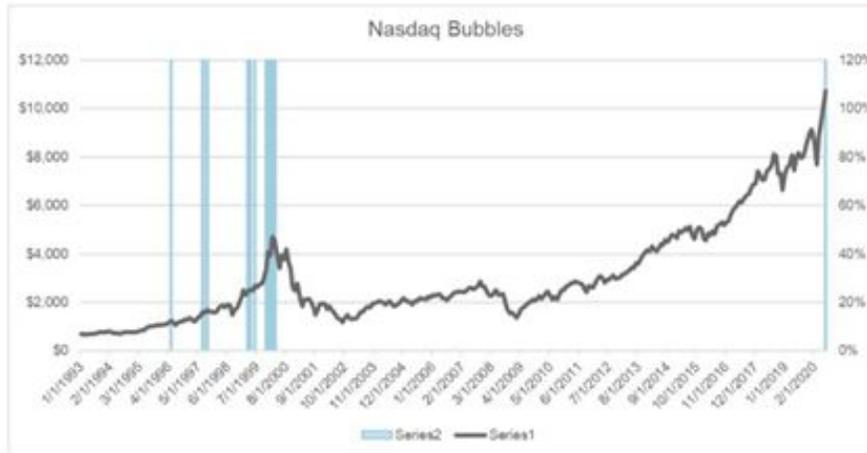


	Total (23)	Inflation (5)	Employment (5)	Growth (6)	Credit (3)	Market (4)
July-19	4	1	1	2	0	0
August-19	4	1	1	2	0	0
September-19	4	1	1	2	0	0
October-19	5	1	1	2	1	0
November-19	5	1	1	2	1	0
December-19	4	1	0	2	1	0
January-20	5	1	1	2	1	0
February-20	4	1	0	2	1	0
March-20	9	1	1	3	1	3
April-20	10	1	4	3	1	1
May-20	8	1	4	3	0	0
June-20	8	1	3	3	1	0



# Bubble Indicator History

While having the bubbles signal on for one or two months might not mean much, we do see a pattern of bubble signals increasing in consistency as the bubble strengthens.



---

# 2020: Risk Management when the Risks are High

---





# Value of Having a Pre-Determined Plan

- “The next bear market” plan presented last November to the Risk Committee
- Happened much faster than we thought, but pretty much as planned

## Funding Requirements - Endowments



- **Projected requirements for funding are from two general sources:**
  - Funding projected capital calls: \$2.5bn total, or roughly \$140mm per month
  - Rebalancing to Neutral (beyond capital calls): close to zero in total, but expecting large variability: a few months as high as +250mm, other months as low as -100mm
- **From Peak through the steepest part of the decline:**
  - The required funding will be \$1,000mm to fund projected capital calls, and another \$600mm to rebalance to neutral (add to public equities)
    - o We assume Private Investment mark-downs are delayed, and will occur only in later months
    - o With 5% expected to happen in the worst three months, we will need up to \$400mm of liquidity per month (~1.2% of assets) in these worst three months
    - o If we assumed a GFC-type scenario, the liquidity need would be ~\$500mm per month (~1.5% of assets) in the worst months
  - The sources of funds will likely be from the following asset classes (all of which are designed to have the required liquidity, and therefore will not be disruptive to their strategy):
    - o \$900mm from Fixed Income
    - o \$500mm from Gold and/or TIPS
    - o \$200mm from Hedge Funds
- **In the 12 months following the decline:**
  - The required funding will be \$1,500mm to fund projected capital calls; rebalance to neutral will actually be a source of funds in this phase (i.e., we will be selling some equities as we get capital calls)
    - o \$125mm per month
  - The sources of funds will likely be:
    - o \$500mm from each of Public Equities, Fixed Income, and Hedge Funds

Capital calls, in excess of distributions, averaged \$180mm/month in March and April

Planned for a need of \$1.6bn, actual need was \$1.3bn

Actual sources were \$1.1bn from Fixed Income and \$200mm from Gold and TIPS

Recovery was extremely fast, and never needed the “phase II” funding



# Liquidity Management and Rebalancing

- Rebalancing to neutral (i.e., to policy weights) implies, without any view on the markets, buying more equities when markets fall, and selling equities when markets rise
- Bought ~\$1bn of equities as markets fell, and sold the majority as markets recovered
  - Considered estimated markdowns of privates before the markdowns were official
  - Public equities in the Endowments went up from \$9.9bn on 3/31 to \$12.2bn on 7/31, even though we were sellers of equities in that timeframe
- **Rebalance to Neutral resulted in ~\$150mm of incremental value**

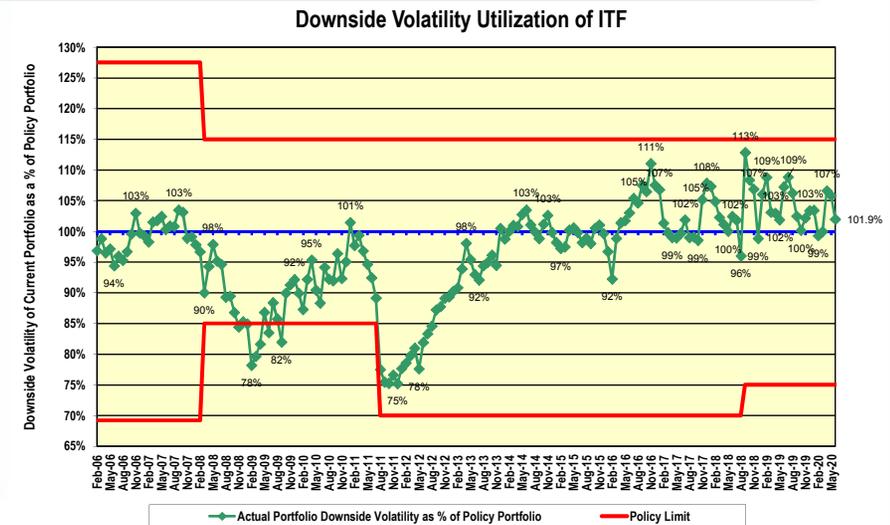
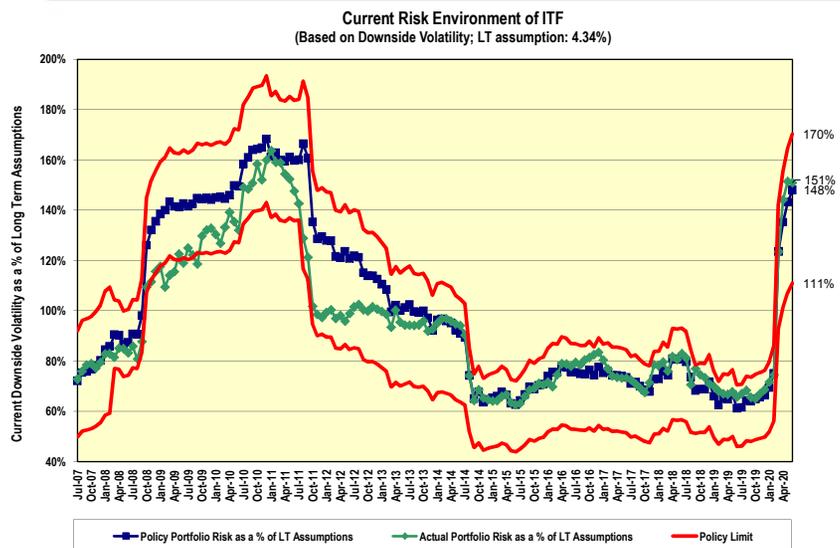
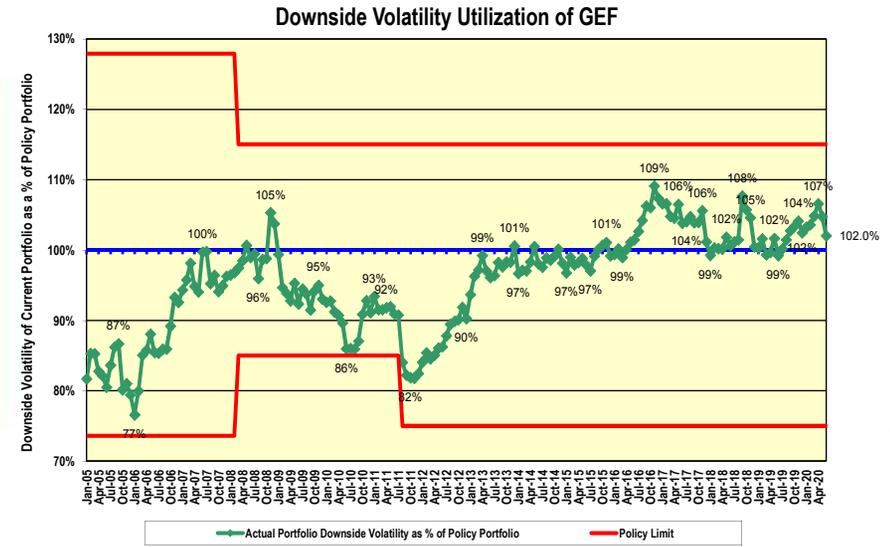
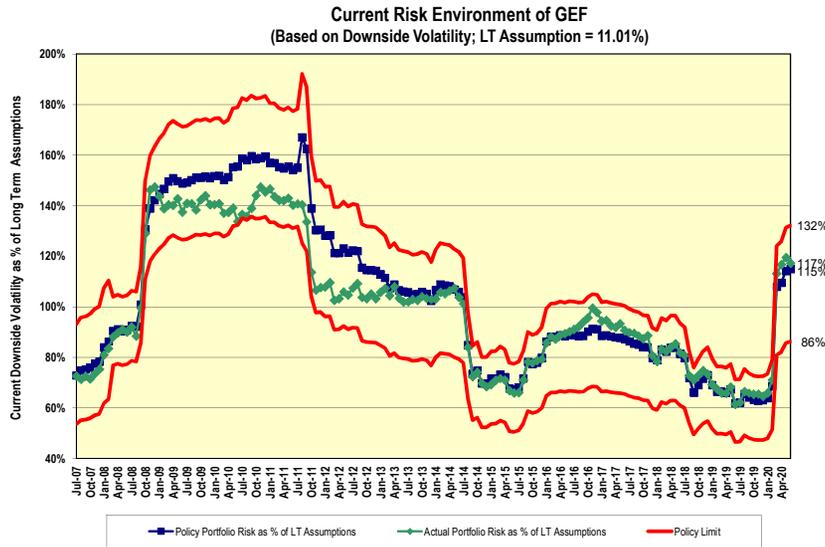
## Major Rebalance Trades





# Steady Hand on the Tiller

## Absolute Risk vs Risk Utilization (the Latter Not Changing Much in the Crisis)





# Steady Hand on the Tiller

Commitment Model (Small Changes)

	Commitment targets (\$mm)		
	2020	2021	2022
Original plan (12/2019):	\$3,800	\$4,925	\$5,000
Revised after March trough:	\$3,640	\$3,840	\$3,960
<i>Reduction in plan:</i>	<i>(\$160)</i>	<i>(\$1,085)</i>	<i>(\$1,040)</i>

## Call and Distributions

- As this is a growing portfolio, our base case prior to 2020 was that calls should exceed distributions by ~ \$100mm per quarter
- We now expect calls to exceed distributions by \$250mm per quarter for the next year or so
  - This is consistent with what we projected in “the next bear market” scenario, presented to the Risk Committee last November



# Internal Risk Committee

## Committee Members



AliEmme Binns - Risk



Uzi Yoeli - Chair



Tim Jones - Vice Chair



Lori Shaver - Executive Assistant



Britt Harris - Fund



Rich Hall - Investment Teams



Scott Slayton - Market Views

## Meetings

One-hour meetings once a month; Meeting topics include, but are not limited to:

### Rebalancing

### Models

- Bear and Bubble Indicators
- Economic environment
- CUSUMs

### Capital Planning

### SAA/ Long Term Issues

### Barra

- Common Risk Language
- Best in class risk modeling of Private Markets and Hedge Funds

### Individual Deals

### Risk Results

- Risk Summary
- Risk Dashboard

### Research

---

# UTIMCO's Risk Management in 2<sup>nd</sup> half of 2020 and Beyond

---





# Wanted: New Risk System



## **UTIMCO has no analytical integrated investment risk, monitoring, and optimization System**

- Current system combines top-down IFS/Truview+ system for policy monitoring and board reporting with individual risk systems for each public markets group
- IFS/Truview+ primarily utilizes proxy series unless holdings data is available
- Bespoke systems have more detail and granular analytics, but these don't flow into a broader risk picture of the endowment



## **Current public market systems were developed within units, and are generally only average at best**

- Models of these systems are sound, but the processes to feed data and use the output are bespoke, labor intensive, and duplicative in some cases
- RiskMetrics software will provide UTIMCO greater Hedge Fund holdings transparency



## **Current private market systems are weak**

- Risk management efforts are limited to exposure accounting



## **UTIMCO is not current, and the lack of current systems is producing:**

- Significant manual labor
- Potential for errors
- Prevents both cross-unit integration and scalability
- Total Fund oversight and management is both difficult and unduly complex



# Risk System Objectives

- Risk System Objectives:
  1. Create a common risk language across the entire firm
  2. Provide best in class private markets risk modeling
  3. Deliver a unified factor model
- Completed review of exactly what each group will get from the new system, and what it will take to support

	Public Equity	Fixed Income	Hedge Funds	SPN	Private Equity	Real Return	Total Plan
Replace Existing Systems	-Exposures -Ex-Ante Risk -Ex-Post Performance -Stress Test/What If	-Exposures -Ex-Ante Risk -Ex-Post Performance -Stress Test	-Exposures	N/A	N/A	N/A	-Exposures -Ex-Ante Risk -Multi-Asset Factors
New Standard Barra Capabilities	N/A	-Whole Portfolio View -Archiving Risk Output	-Ex-Ante Risk (Holdings Based) -Ex-Post Performance -Stress Test	-Exposures -Ex-ante Risk -Ex-post Performance -Stress Test/What If	-Exposures -Ex-ante Risk -Ex-post Performance -Stress Test/What If	-Exposures -Ex-ante Risk -Ex-post Performance -Stress Test/What If	-Broader Holdings based Risk -Stress Test/What If
New Custom Barra Capabilities	-Historical Loadings Based Portfolio Attribution	-Loading History	-"Leverage, Liquidity and Concentration" -Returns Based Historical Attribution	-Develop a Process to Attribute Holdings Back to SP Strategies	N/A	-Exploring Performance Attribution Approaches	-Pole and Flag Report -Downside Deviation -4-way Decomposed
Current Capabilities That Will be Lost	-Single Security Analysis (Batched Reports)	N/A	-Name level holdings (Investor Letter, 13F) -Returns based Tracking Error	N/A	N/A	N/A	N/A
Plan and Internal/External Technology Requirements	-Loading History -Sending Monthly Metadata	-Loading History -Sending Monthly Metadata	-Archiving Risk Output in Separate Database -Send Monthly Metadata	N/A	Sending Quarterly eFront Data	-Sending Quarterly eFront Data	N/A



# Barra Implementation Timeline\*

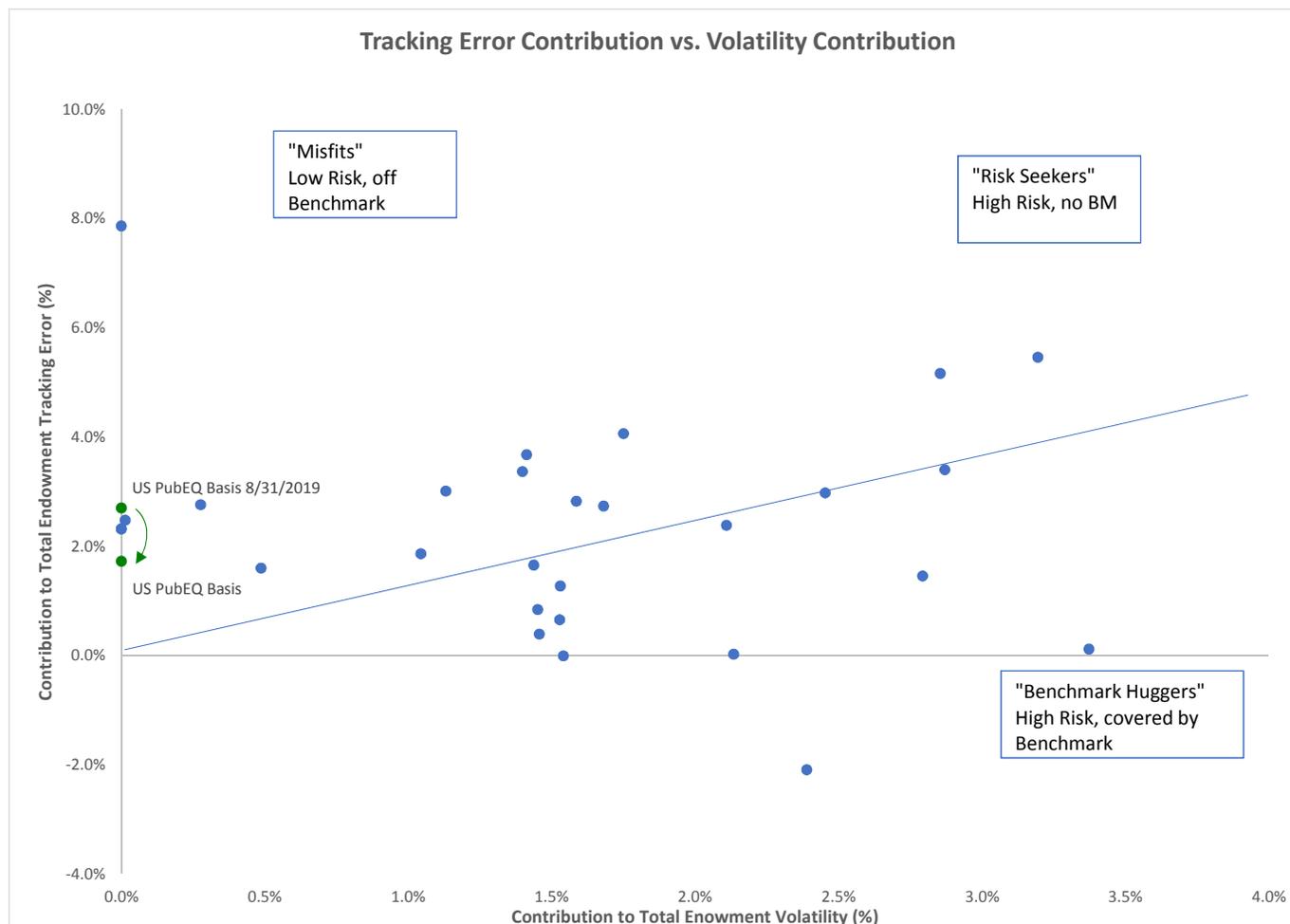


\* Preliminary – will be confirmed with MSCI after Statement Of Work is final



# Risk Dashboard

- A bottom up view of active risk taking across the endowment
- Focusing attention on the most impactful decisions and largest risks
- Example: US Biotech Manager: Portable Alpha Hedge





## Increased Collaboration with the Investment Teams

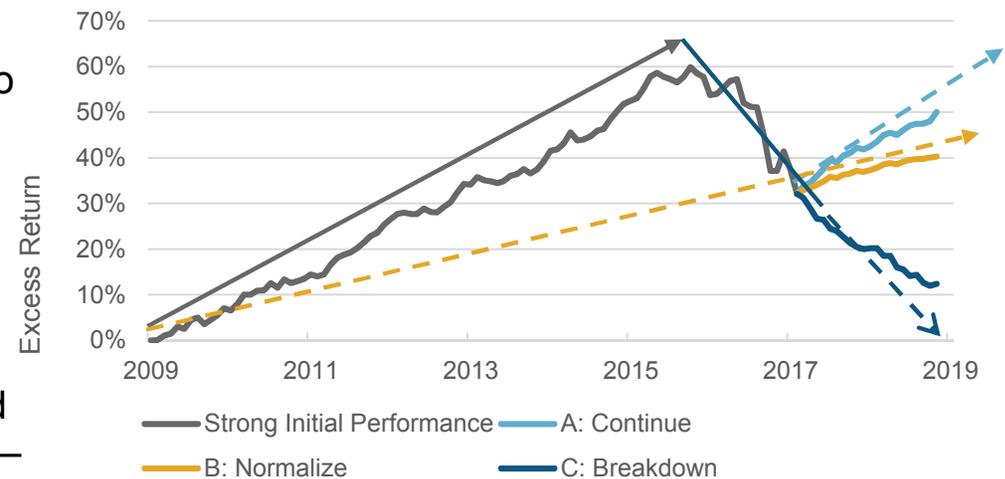
---

- Investment Committee
- CUSUMs
- Endowment-level active risks
- Risk interaction across asset classes



## CUSUMs in 2020

- The idea behind CUSUM: When a long period of outperformance is followed by a shorter period of underperformance, it could be that:
  - A. Underperformance is driven by bad luck – future performance will revert to the strong initial performance
  - B. We over-estimated how good the manager is – future performance will be similar to the average so far
  - C. While the manager was initially good, something has changed and hindered the manager’s ability to perform well – future performance is likely to be similar to recent performance
- On average, CUSUM flags one manager per month for further review
  - In all of 2019, 11 managers were flagged
- In just the three months period between March 2020 and May 2020, 14 managers were flagged for further review





## Summary and Conclusions

---

- The new Risk System project is very much needed and very ambitious
  - Key goals are having best in class risk modeling of Private Markets and Hedge Funds and having a common risk language for all UTIMCO
  - Budget has been approved, system selected, and implementation is expected to be between now and 12/2021
- A new Internal Risk Committee is being formed to better address the multitude of Risk Management topics
- Our plan for “the next bear market”, presented to the Risk Committee in November 2019, proved extremely accurate and valuable, even though what transpired in March 2020 was completely unprecedented
- The Bear Market Indicator did not turn on at any point. This was very unintuitive, but helped us stay the course
- The monthly rebalance process, while “mechanical” in many senses, was very difficult to execute, and resulted in \$150mm of incremental value

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Report from Audit and Ethics Committee

**Developed By:** Team

**Presented By:** Handley

**Type of Item:** Information item

**Description:** The Audit and Ethics Committee (the “Committee”) met on September 3, 2020. The Committee’s agenda included (1) discussion and appropriate action related to the Committee minutes; (2) an update on UTIMCO’s compliance, reporting, and audit matters; and (3) a presentation of the unaudited financial statements for the Investment Funds and the Corporation.

**Discussion:** The Committee reviewed the unaudited financial statements for the Funds for the nine months ended May 31, 2020, and the Corporation for the ten months ended June 30, 2020. Ms. Gonzalez reported on quarterly compliance and the Contracts Report. In accordance with the Delegation of Authority Policy, UTIMCO reports any new contracts, leases or other commercial arrangements of \$250,000 or more to the UTIMCO Board at its next regularly scheduled meeting, and annually, all existing contracts, leases, or other commercial arrangements of \$250,000 or more.

**Recommendation:** None

**Reference:** Quarterly Compliance Reports  
Contracts Report

**The University of Texas/Texas A&M Investment Management Company  
Institutional Compliance Program Report  
for the Quarter Ended  
May 31, 2020**

**Section I – Organizational Matters**

- One meeting of the Ethics and Compliance Committee was held during the quarter: April 21, 2020.

**Section II - Risk Assessment, Monitoring Activities and Specialized Training (Performed by Responsible Party)**

**High-Risk Area #1: Investment Due Diligence**

**Responsible Party:** Managing Director – Public Equity; Managing Director – Fixed Income; Managing Director – Hedge Funds; Managing Director – Real Return; Managing Director – Private Equity

**Key “A” risk(s) identified:**

- *Organization could fail to adequately conduct due diligence on prospective managers.*
- *Organization could fail to adequately conduct continual review and evaluation of external managers hired to manage UT System investment funds.*

**Key Monitoring Activities:**

**Public Equity:** The Public Equity Team participated in 13 meetings/calls with potential managers. Serious due diligence was not initiated on any new mandate. No new mandates were completed. Ongoing review of active external managers included 47 meetings/calls. Additional efforts included monthly performance tracking, reviews and analyses by the team and participation in four annual meetings.

**Fixed Income:** The Fixed Income Team participated in 1 meetings/call with a potential manager. Ongoing review of active external managers included 17 meetings/calls. No serious due diligence was initiated on any mandates. No new mandate was completed. There were no additions to existing mandates.

**Hedge Funds:** The Hedge Funds Team participated in 28 meetings/calls with potential managers. Serious due diligence was initiated on two new mandates. No new mandate was completed. Ongoing review of active external managers was conducted in the form of 81 meetings/calls/site visits. Additional efforts included monthly performance tracking, reviews and analyses by the team.

**Real Return:** The Real Return Team participated in 64 meetings/calls with potential managers. Serious due diligence was initiated on two new mandates and one existing mandate. Two new mandates were completed. One addition to an existing mandate was completed. Ongoing review of active external managers included 148 meetings/calls. Additional efforts included participation in six annual meetings.

**Private Equity:** The Private Equity Team participated in 34 meetings/calls with potential managers. Serious due diligence was initiated on six new mandates and two existing mandates. Fourteen new mandates were completed. There were two additions to existing mandates. Ongoing review of active external managers included 86 meetings/calls. Additional efforts included participation in 20 annual meetings.

**Strategic Partners:** The Strategic Partners Team participated in five meetings/calls with potential managers. Two new mandates were completed. Ongoing review of active external managers included meetings/calls.

**Specialized Training:** The Investment Team attended four industry-related conferences/functions and meetings.

**High-Risk Area #2:** Investment Risk Management

**Responsible Party:** Managing Director - Risk Management

**Key “A” risk(s) identified:**

- *Organization could fail to accurately perform its assessment of risk due to data and investment instrument modeling error.*
- *Organization could fail to respond to risk levels (manage risk budget).*

**Key Monitoring Activities:**

- Risk Team battle-tested the plan presented to the Risk Committee in November 2019, on how to manage liquidity in the next bear market. Risk Team designed several contingency plans during March 2020 as markets fell precipitously, and ended leading a rebalance that involved selling \$1.1 billion of Fixed Income at the end of March in order to purchase public equities and hedge funds, as well as fund an elevated level of capital calls. As markets recovered, rebalancing allowed us to put back \$400mm into Fixed Income and TIPS at the end of April, and another \$400mm at the end of May.
- Risk Team updated the long-term capital commitment plan following the sharp market decline. The resulting change for 2020 commitment targets is quite small (around 5%), with a larger change (up to 20%) being tentatively proposed for 2021. As markets recover, the 2021 tentative proposal is being reevaluated.
- Risk Team studied key asset-allocation detractors in 2019, most of which are very relevant in the current volatile environment. In particular, the Risk Team identified the lack of floating weights for Private Assets as a significant detractor in both rising markets and falling markets – it is estimated to account for ~30bps of annual underperformance.
- Risk Team made an initial recommendation on the supplier of a unified risk system, and is working on a detailed specification with the vendor.
- Risk Team continued to enhance its understanding and reporting of macro risks and market risks. This currently includes tracking and reporting a bubble monitor, a US bear market monitor, a non-US bear market monitor, an environment monitor, and factor data.
- Risk Team reviewed thirteen Risk Scorecards for consistency and accuracy as well as one due diligence questionnaire during the quarter.
- The Risk Team continued development of a bottom-up Risk Dashboard to estimate the absolute and relative risks across the Endowments.
- Fifteen managers triggered CUSUM this quarter. This is several times more than in normal times, but these were not normal times.
- Risk Team is working with the Tactical Asset Allocation (TAA) team on the more systematic and quantitative aspects of the TAA decision making process.
- Risk Team continued to support the ITF→LTF transfers.

- During the quarter, Risk Team reconciled accounting records' market value with market values modeled by IFS; reconciled month end values from IFS to accounting records and identified reasons for all discrepancies. Risk Team compared each month's downside volatility with both prior month results and with market activity to determine consistency, and identified reasons for all changes; performed analysis of managers' portfolio-level risks and performance.
- Risk Team continued to monitor sources and uses of cash and the sources and uses of illiquid capital; prepared projections on portfolio downside volatility utilization, country exposure, liquidity, and asset allocations; updated projections on a weekly basis.
- All internal derivatives were reviewed and analyzed in detail prior to initiation.
- External managers that may use derivatives are monitored daily for spikes in returns or in volatility. Effects of derivatives on the overall portfolio are monitored monthly. Fixed income duration and tracking error is being monitored on an ongoing basis. Managers' use of margin and leverage is monitored on an ongoing basis. Risk Team confirmed each month downside volatility and VaR calculations.

**Organizational Update:** AliEmme Binns joins the Risk Team as an Analyst on June 1, 2020.

**Specialized Training:** None

**High-Risk Area #3:** Information Technology and Security

**Responsible Party:** Chief Information Security Officer (CISO)

**Key "A" risk(s) identified:**

- *Organization could fail to adequately secure networks and data to prevent abuse, destruction, and/or theft.*

**Key Monitoring Activities:**

- Increased monitoring alerts for compromised accounts, leaked credentials, and other attack vectors given the continued work from home/remote working environment.
- The ISO team completed eighty security reviews during quarter.
- Fifteen open security items remain at end of this reporting period; all from from prior periods.
- Spear-phishing attacks continue. Fake payroll, HR, tax and other information are being sent in an attempt to lure users to click.
- Multiple alerts were sent to the firm covering various topics including viruses, malware, phishing scams, securely sending credit card and social security numbers and updates for mobile devices.
- One user fell for a phishing email. Login credentials were stolen but MFA protected the account and blocked access.
- Use of unapproved software continues to be occur infrequently; one to two times per quarter.
- Security Exception for Duo Policies authorized through October 30 due to a limitation in Duo's technology. Duo is scheduled to be retired by November 2020.
- Travel has been put on hold due to COVID-19.
- All Windows 2008 servers have been remediated and removed from service.
- Hardware inventory is still an open item, but mostly complete. Software inventory is complete.
- Patching continues to be a concern as timely installation of patches for all systems is not completed with regularity. Reporting of patch status is also in question. Work from home has

presented a new hurdle for patching machines remotely. IT is working to implement a remote patching solution and are very close to completion of this new functionality.

- The ISO team identified several personal employee accounts that were leaked or compromised. Alerts were sent to the affected employees as a courtesy.
- Five security assessments were completed during the period.
- The ISO met with several vendors and teams to review new software or systems including DocuSign, KnowBe4, ODD, Legal/Compliance, Accounting and Risk.

**Specialized Training:** Security team members are attended a variety of in person training, web training sessions, podcasts, and books.

**Responsible Party:** Chief Technology Officer

**Key “A” risk(s) identified:**

- *Organization could fail to manage computer software and hardware resulting in internal and external users unable to perform necessary job duties.*

**Key Monitoring Activities:**

- User workstation patching and updates is ongoing. Updates have been transitioned to Manage Engine. The team continues to fine tune and adjust the update process to optimize the new tool and meet patching SLAs. Windows 10 workstations will need to be updated to the current version prior to October 2020. The current version was released September 2017 and will be at the end of support after October 13, 2020.
- The team has refined the patching update process.
- Firewall rules audit, modifications and patching work is ongoing. Infrastructure Services continues working with the Information Security team to continue tightening up firewall rules to address findings from previous reporting periods. Changes must be deliberate and tightly controlled to prevent breaking systems or inadvertently blocking access.
- Network documentation work continues and the team is 50% complete with the documentation of all network infrastructure.
- Helpdesk process documentation continues. The team is 25% complete with helpdesk documentation project. Helpdesk was expanded to include change management, and software/hardware inventory. The complete aggregation of inventory into the helpdesk is complete.
- The one windows 2008 server remaining in use was retired on April 30, 2020.
- The team remediated three additional open security items from the Denim security assessment and the Information Security open items list. There were five open security items remaining at the end of the reporting period.
- File consolidation is in progress and ongoing to enhance anytime/anywhere access to UTIMCO data. Migration to Share Point is ongoing and the development work to enable IDM securely from “anywhere” will be complete this year.

**Specialized Training:** None

**High-Risk Area #4: Investment Compliance**

**Responsible Party:** Senior Director - Accounting and Chief Compliance Officer

**Key “A” risk(s) identified:**

- *Organization could fail to comply with investment policies, applicable laws and regulations, and other policies.*
- *Organization could fail to detect non-compliance with applicable policies, etc.*

**Key Monitoring Activities:**

- Verified that investments are in compliance with rules and guidelines in policies, rules and regulations utilizing custodian’s software and in-house developed databases and reports.
- Review of monthly and quarterly investment compliance reports prepared by employees continues.
- Information regarding the categorization of mandates is included in the Certificates of Compliance mailouts and Monthly Transparency report sent to UTIMCO Directors and the investment memos reviewed by the Internal Investment Committee.
- Participation by the Accounting and Operations employees in prospective and active external manager investment due diligence continues.
- Derivative Investment Controls and Processes are being followed and work continues to improve them.
- Testing was performed on all new commitments and funding made to ensure compliance with the Delegation of Authority.

**Specialized Training:** None

**High-Risk Area #5: Conflicts of Interest**

**Responsible Party:** Chief Compliance Officer

**Key “A” risk(s) identified:**

- *Organization could fail to comply with conflicts of interest provisions in Code of Ethics and Texas Education Code section 66.08.*

**Key Monitoring Activities:**

- All Certificates of Compliance were received timely from all Directors and Key Employees for all investment managers hired and funded. No conflicts of interests were noted, i.e. no pecuniary interests were identified.
- All but two Directors submitted their compliance statements this quarter. The two Directors received extensions of time to submit their compliance statements.
- All current employees submitted their compliance statements by the deadline.
- Four full time employees were hired during the quarter. Compliance statements for the new employees will not be due until the fourth quarter.
- The annual Employee Ethics and Compliance Training Session was held during the quarter. All employees were required to attend the training session or receive a makeup session at a later date. A makeup session is scheduled for July 15, 2020.
- Effective April 1, 2013, a new procedure regarding the periodic review of public resources for comparison with financial disclosure statement information provided by Directors and Key Employees was adopted, which requires review of these statements within 90 days after the

deadline for filing the statements. The review of these statements will be completed in the fourth quarter.

- List of publicly traded securities of all publicly traded companies in which a Director or employee has a pecuniary interest (the "restricted list") was maintained. Internal managers and external managers operating under agency agreements are provided the restricted list to prevent the violation of UTIMCO Code of Ethics and Texas Education Code Section 66.08. No new securities were added to the list.
- Daily, the Chief Compliance Officer designee reviewed security holdings of internal and external managers operating under agency agreements for compliance with the restricted list. No exceptions were noted.
- Of 379 employee securities transactions during the quarter, two required preclearance. Only one of the two received preclearance as necessary, and one failed to request preclearance. Twenty seven securities transactions were filed late during the quarter. The Chief Compliance Officer spoke with the employees who violated the trade policy.
- No employees requested CEO approval for outside employment during the quarter.
- Beginning with the fourth quarter 2015, the Finance and Administration travel review process was modified to require testing of a sample of expense reports only and no longer provide a review of all reimbursement requests. As a result, compliance reporting is now limited to information obtained from the sample tested during each quarter. Of the three expense reports tested during the quarter, none included third party paid expenses. None of the expense reports tested included a sponsored entertainment event.
- Effective September 1, 2017, employees must submit sponsored entertainment requests for approval to the CCO. During the quarter, no employees requested and received approval for sponsored entertainment events.
- No employee requested approval to fly by charter or private air travel during the quarter.

**Specialized Training:** None

### **Section III – Monitoring and Assurance Activities (Performed by Compliance Office)**

**High-Risk Area #1:** Investment Due Diligence

**Assessment of Control Structure:** *Well controlled*

**Assurance Activities Conducted:** CCO reviewed results of quarterly due diligence monitoring plans for each Investment Team. Ongoing due diligence efforts on multiple managers continue.

**Significant Findings:** None.

**High-Risk Area #2:** Investment Risk Management

**Assessment of Control Structure:** *Well controlled*

**Assurance Activities Conducted:** CCO continues to review documentation maintained by the Risk Team evidencing risk monitoring performed by the Risk Team. The Risk Team underwent a review by the UT System Audit Office related to the Risk Team's monitoring plan and activities used to monitor key risks identified for Investment Risk Management as part of the Institutional Compliance Program. Review identified some areas for improvement, including enhancements to procedures and increased documentation of risk scorecard review process. Risk Team is updating its procedures and risk scorecard review process documentation.

**Significant Findings:** None

**High-Risk Area #3: Information Technology & Security**

**Assessment of Control Structure:** *Opportunity for enhancement*

**Assurance Activities Conducted:** CCO continues to meet with CISO regarding information technology and security practices. The Security Team continued to report to the Chief Operating Officer during the quarter; however, effective June 15, 2020, organizational reporting for the Security team will be moved back to the Chief Technology Officer. This is contrary to the requirements of UTS 165, which requires the CISO to report to the institution's president or senior executive, other than the institution's chief information officer. The CEO had direct discussions with the UT System Chancellor related to this change in reporting. The CEO has advised the CCO he told the Chancellor the separation of the CISO from Information Technology was hindering UTIMCO's operations, reporting and productivity; the CISO's office was next to the CTO; the Information Technology team is around 20 people, not hundreds; and the UTIMCO security score was the highest in the UT System. Also discussed was the direct reporting of the CISO to the CEO. No written documentation is available regarding a waiver of application of UTS 165 from the Chancellor. The Chief Technology Officer continues to review the operations of the information services team to determine whether any restructuring and additional resources are needed. The COVID-19 pandemic accelerated the provision of laptops and other equipment to enable employees to work from home. It also impacted the operation of board and committee meetings. Information Services provided the necessary technology for employees and meetings to continue to operate effectively. Bi-weekly cross team meetings to track and monitor the status of identified areas of vulnerability and required improvement in UTIMCO's information resources continue. Ernst & Young, LLP completed its assessment of UTIMCO's cybersecurity posture, the assessment was reviewed with the Cyber Risk Committee, and selected findings will be addressed in the coming fiscal years.

**Significant Findings:** None

**High-Risk Area #4: Investment Compliance**

**Assessment of Control Structure:** *Well controlled*

**Assurance Activities Conducted:** CCO continues to review investment and fund compliance reports to determine that policy requirements have been maintained based on the activity performed by employees. CCO reviewed the documentation and workpapers supporting the various compliance reports prepared by the Responsible Parties.

**Significant Findings:** None

**High-Risk Area #5: Conflicts of Interest**

**Assessment of Control Structure:** *Well controlled*

**Assurance Activities Conducted:** CCO reviewed the completed sign-offs for completeness for all certificates of compliance received. Monitoring for potential conflicts of interest in the areas of personal securities transactions, outside employment and business activities, and manager/third party-paid travel, entertainment and gifts is ongoing.

**Significant Findings:** None

**Section IV – General Compliance Training Activities**

One annual training session was held during the quarter.

**Section V – Action Plan Activities**

See updated Institutional Compliance Action Plan Fiscal Year 2020.

**Section VI – Confidential Reporting**

UTIMCO maintains a Compliance Hotline to receive and process complaints. UTIMCO has contracted with an outside vendor to provide the service. The chart below summarizes the calls received during the **FISCAL YEAR:**

<b>Type</b>	<b>FYTD Number</b>	<b>% of Total</b>
Employment Related	1	100.00%
Policy Issues	0	0.00%
Hang ups or wrong numbers	0	0.00%
Total	1	100.00%

All calls are accepted by the hotline and reported to the UTIMCO Compliance Office. All reports are handled by a 5-person team comprised of the Corporate Counsel and Chief Compliance Officer, the Senior Managing Director & COO, the Deputy Chief Investment Officer, the Chief Information Security Officer, and David Givens from The University of Texas Systemwide Compliance Office.

**The University of Texas Investment Management Company  
Institutional Compliance Action Plan  
Fiscal Year 2020**

#	ACTION ITEM	TARGET COMPLETION DATE	STATUS
<b><i>A. RISK ASSESSMENT</i></b>			
1.	Complete detailed review of Enterprise Risk Management Framework; update risk assessments, including mapping of controls	11/30/19	<i>First draft of ERM completed and reviewed by Sr. MD and COO; second draft in progress; draft risk assessments prepared; refinement of risk assessment continues</i>
<b><i>B. MONITORING ACTIVITIES / ASSURANCE</i></b>			
2.	Complete revision of Responsible Party Monitoring Plans for high risk areas	11/30/19	<i>Monitoring plans for investment teams and Strategic Partners Network (SPN) completed; monitoring plan for Tactical Asset Allocation (TAA) in progress</i>
3.	Continual enhancement of compliance monitoring and reporting	Ongoing	<i>Ongoing</i>
<b><i>C. COMPLIANCE TRAINING / AWARENESS</i></b>			
4.	Increase personal training and awareness related to cybersecurity risks	Ongoing	<i>Ongoing</i>
5.	Provide new employee and annual Code of Ethics training and information to improve employee awareness of compliance program	04/30/2020	<i>New hire training sessions held on 10/09/19, 01/07/20, 02/07/20, 02/10/20, and 02/18/20; Annual training session held on 05/15/20; Makeup and new hire training session held on 07/15/20</i>
6.	Identify and network with similarly situated compliance professionals	Ongoing	<i>Council of Compliance Officers quarterly calls on 11/21/19, 03/03/20, and 06/02/20</i>
<b><i>D. REPORTING</i></b>			
7.	Conduct quarterly meetings with the internal ethics and compliance committee	Ongoing	<i>Quarterly meetings held 10/31/19, 01/29/20, and 04/21/20</i>
8.	Provide quarterly/annual reports to the Audit and Ethics Committee and System-wide compliance office	Ongoing	<i>Quarterly report for 05/31/19, annual report for 08/31/19, and</i>

Updated 07/21/2020

#	ACTION ITEM	TARGET COMPLETION DATE	STATUS
			<i>quarterly reports for 11/30/19 and 02/29/20 presented to A&amp;E Committee on 09/19/19, 11/21/19, 03/05/20, and 06/04/20 respectively; 08/31/19, 11/30/19, and 02/29/20 quarterly reports sent to UTS on 01/27/20, 02/10/20, and 05/04/20 respectively</i>
<b><i>E. OTHER / GENERAL COMPLIANCE</i></b>			
9.	Continual update of compilation of all laws and regulations applicable to UTIMCO and to the extent necessary, modify compliance processes and reporting	Ongoing	<i>Updates ongoing</i>
10.	Information Technology update to Business Continuity Plan	03/31/20	<i>Chief Technology Officer has a RFP in progress for determining a consultation partner company to assess and update the current BCP, BIA's and Disaster Recovery Plans. Responses to the RFP are expected at the end of August. Revisions expected to be completed by 05/31/21.</i>
11.	Work with Information Technology Team to automate Code of Ethics forms	08/31/20	<i>No activity</i>
12.	Supervise and manage work of Compliance team; onboard new team members	Ongoing	<i>Ongoing</i>
13.	UT Systemwide Compliance Office activities participation: annual compliance officers' forum and other activities	Ongoing	<i>Quarterly meeting with UTS Compliance Officer on 10/23/19, 01/22/20, and 04/22/20; Fall ICAC meeting held 09/25/19</i>
14.	Hotline reporting	Ongoing	<i>One call received on 12/05/19; caller withdrew complaint</i>

Updated 07/21/2020

**New Contracts, Leases, and Other Commercial Arrangements**  
 (Total Obligation per Agreement greater than \$250,000)  
 May 21, 2020 through August 14, 2020

<b>Agreement</b>	<b>Purpose</b>	<b>Contract Term</b>	<b>Annual Amount</b>
Risk Metrics Solution (Barra)	Risk Monitoring System & manager oversight in the Hedge Fund LP community	4/1/2020 - 3/31/2022	\$361,000

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Report from Cyber Risk Committee

**Developed By:** Moeller, Gonzalez

**Presented By:** Rothrock

**Type of Item:** Information Item

**Description:** The Cyber Risk Committee (the “Committee”) met on September 3, 2020. The Committee’s agenda included discussion and appropriate action related to the approval of minutes of June 4, 2020 meeting. The Committee also met in Executive Session to receive an update on computer security assessments related to information resources technology, including security assessments.

**Recommendation:** None

**Reference:** None

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Report from Risk Committee

**Developed By:** Gonzalez, Moeller

**Presented By:** Gauntt

**Type of Item:** Information item

**Description:** The Risk Committee (“Committee”) met on September 3, 2020. The Committee’s agenda included (1) discussion and appropriate action related to the approval of minutes of its June 4, 2020 meeting and June 4, 2020 joint meeting with the Policy Committee; (2) review and discussion of compliance reporting; and (3) a market and portfolio risk update.

**Discussion** Ms. Gonzalez reviewed the quarterly compliance reporting with the Committee and Dr. Yoeli presented an update on the market and portfolio risk.

**Recommendation:** None

**Reference:** None

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Report from Compensation Committee

**Developed By:** Moeller, Gonzalez

**Presented By:** Rothrock

**Type of Item:** Information Item

**Description:** The Compensation Committee (“Committee”) met on September 3, 2020. The Committee’s agenda included discussion and appropriate action related to the approval of minutes of June 4, 2020 meeting. The Committee also met in Executive Session for the purpose of deliberating individual personnel compensation and evaluation matters.

**Recommendation:** None

**Reference:** None

**Agenda Item**  
UTIMCO Board of Directors Meeting  
September 10, 2020

**Agenda Item:** Report on 2021 Meeting Dates

**Developed By:** Harris

**Presented By:** Harris

**Type of Item:** Information item

**Description:** This agenda item presents the 2021 UTIMCO Board Meeting schedule and the Committee meetings schedule.

**Recommendation:** None

**Reference:** UTIMCO 2021 Meeting Dates



## UTIMCO Meeting Dates

Meetings are held at the Corporate Offices:  
 210 W. Seventh Street, Suite 1700  
 Austin, TX 78701

Draft 2021								
	Audit & Ethics Committee	Compensation Committee	Policy Committee	Risk Committee	Cyber Risk Committee	UTIMCO Board of Directors	UT System Board of Regents	TAMU System Board of Regents
January								
February							2/24-25	2/3-5
March	3/4	3/4	3/4	3/4	3/4	3/11		
April								
May							5/5-6	5/19-21
June (Annual)	6/17	6/17	6/17	6/17	6/17	6/29		
July								
August							8/19-20	8/25-27
September	9/9	9/9	9/9	9/9	9/9	9/16		
October								
November							11/17-18	11/17-19
December	12/2	12/2 & 12/9	12/2	12/2	12/2	12/9		

draft 8.24.20