

## Ray Dalio-John Mauldin Discussion, Part 4

By John Mauldin | June 28, 2019



Comparative National Emergencies  
What Happens if There Is a Recession?  
On-Budget Versus Off-Budget Deficits  
Forget Turning Japanese, We Are Turning Greek  
Where Will the Money Come From?  
Boston, New York, Puerto Rico, New York, Maine, and Montana

This week is the fourth in a series of five open letters responding to a series of essays by Ray Dalio, the founder of Bridgewater Associates. His original letters are [Why and How Capitalism Needs to Be Reformed, Parts 1 and 2](#) and [It's Time to Look More Carefully at 'Monetary Policy 3 \(MP3\)'](#) and ['Modern Monetary Theory \(MMT\)'](#). My replies are [here](#), [here](#), and [here](#). Today I continue my response.

I was quite pleasantly surprised to read a very generous and gentlemanly [reply from Ray](#) in *Forbes* last week, in which he clarified some of my understanding of what he wrote. I encourage you to read it after this letter for more context. I'll continue responding to his original material but first a short piece responding to his letter in *Forbes*.

Dear Ray,

I want to thank you for your thoughtful and courteous reply to my first three essays. It was remarkably civil and I learned a great deal. Clearly you and I agree more than we disagree. Many of our differences are an emphasis on a different syllable in a word rather than the word itself. Much like tomato and to-mah-toe. I will continue my series in the spirit in which you replied, noting that my misunderstandings would have been cleared up in a few minutes in a normal conversation rather than a public internet back-and-forth. Part of the times we live in...

I will encourage my readers who are following this discourse to read your response, as there is much to be learned in your explanations of the nuances of MP3 and MMT. I somewhat conflated them in my first few readings of your letter, and your clarification helps immensely. I believe my fifth and hopefully last letter in this series next week will offer an alternative to this path we both agree would be perilous. These paragraphs from your response are at the crux of the matter:

Having studied these dilemmas in the past and thought a lot about the cause/effect relationships that determine how they work, it is my conclusion that central banks will have to turn to what I call Monetary Policy 3 (MP3) in the next downturn. MP3 follows Monetary Policy 1 (which is interest-rate-driven monetary policy), which continues until interest rate cuts can't be big enough to do the trick. That's when Monetary Policy 2 (which is central bank printing of money and buying financial assets) happens and continues until that doesn't work anymore either. MP3 is fiscal and monetary policy working together with fiscal policy producing deficits that are monetized by the central bank. Modern Monetary Theory as it's described is simply one version of many types of MP3. What I'm saying is that I believe that in the next downturn you will either see some form of MP3 from central banks or you will have terrible economic and social conditions.

To be clear, I'm not saying that such policies don't have some undesirable consequences, and I don't think that MMT is the best form of MP3. What I'm saying is that MP3 is the best of the bad alternatives and some form of it will likely happen, so one had better know how it works and how to deal with it. I welcome alternative descriptions of what will happen when both interest rate cuts and QE don't work to stimulate the economy in the next significant downturn.

I quite agree that unless something is done there will be terrible economic and social conditions. As you say, we will have to choose between bad and perhaps even worse choices, none of which will be easy. The longer we wait, the more difficult and limited the choices will be.

I'm looking forward to hearing what form of MP3 will be best (or least bad). I quite agree that more QE will have its own attendant complications, creating the same problems as last time. The image of Christopher Walken demanding [More Cowbell](#) comes to mind. More QE may be far more annoying, if not destructive.

I look forward to continued conversation...

John

## Comparative National Emergencies

(continuing from last week...)

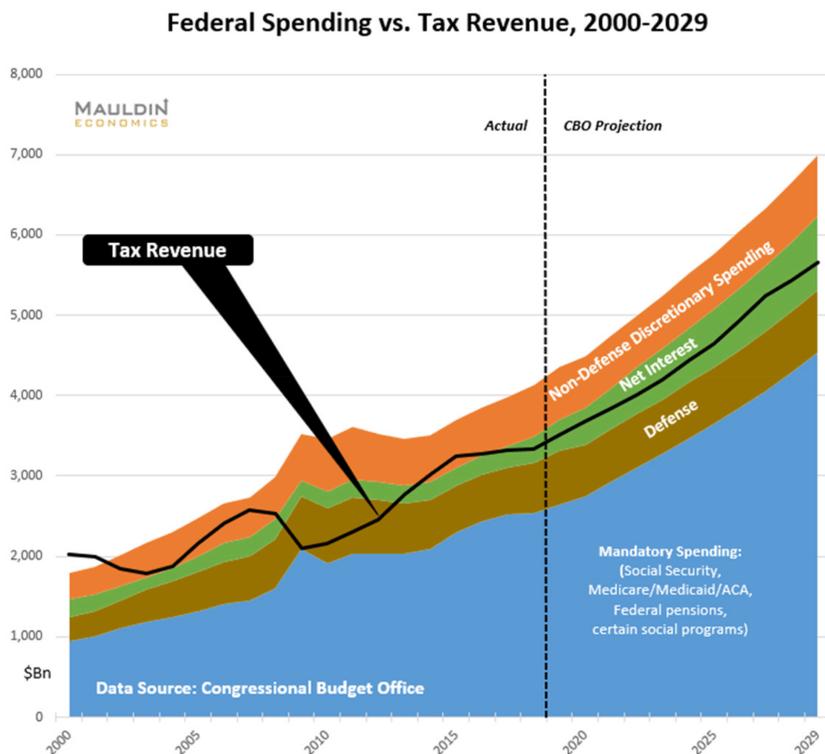
While I am unsure wealth and income disparities, as obvious and politically charged as they are, rise to the level of a national emergency, I wholeheartedly agree that when 53-54% of America votes as if they are, politicians will agree it is a national emergency and *do something*, at a not insignificant cost. The resulting new debt could indeed spark a national emergency.

Let's first look at this using historical data and Congressional Budget Office projections, which presume steady (though mild) growth and no recessions. Then we'll tweak that data to see what happens if there is a recession at some point.

As noted above, the one seemingly bipartisan point of agreement is to never, ever discuss deficits in any serious manner. By "serious," I mean actually suggesting specific solutions that would bring either higher taxes, lower spending, or both. Simply noting the debt exists, while important, isn't serious discussion.

My associate Patrick Watson spent much of this week searching government websites to produce the charts and tables below. Let's run through these to set up later discussions.

This first chart simply aggregates CBO spending and revenue figures. The CBO, of course, can't predict a recession in the future and uses what it thinks are "best practice" projections. Note that tax revenue (the black line) is not enough to pay for mandatory spending, defense, and all of the net interest. Again, this is pretty much a best-case scenario. (Also notice how tax revenue dropped in the Great Recession. That will become important later.)



By the way, for this chart we treat Social Security and Medicare as if they were not separately funded. Payroll taxes are included in the revenue line and benefit payments are in the blue mandatory spending area. I think that is closer to reality, since taxpayers are liable for them regardless.

Under these projections, total federal debt will rise to \$25 trillion sometime in 2021. If there is a new president, he or she will not have enough time to change that. Total debt by the end of the decade will rise to the mid-\$30-trillion range. Note that these projections do not include off-budget spending (more on that later) which is significant.

The CBO also assumes the bond market can and will absorb almost \$35 trillion worth of US government debt. When combined with state and local debt it will easily exceed \$35 trillion. (State and local debt is already over \$3 trillion. It will certainly rise in the next 10 years.)

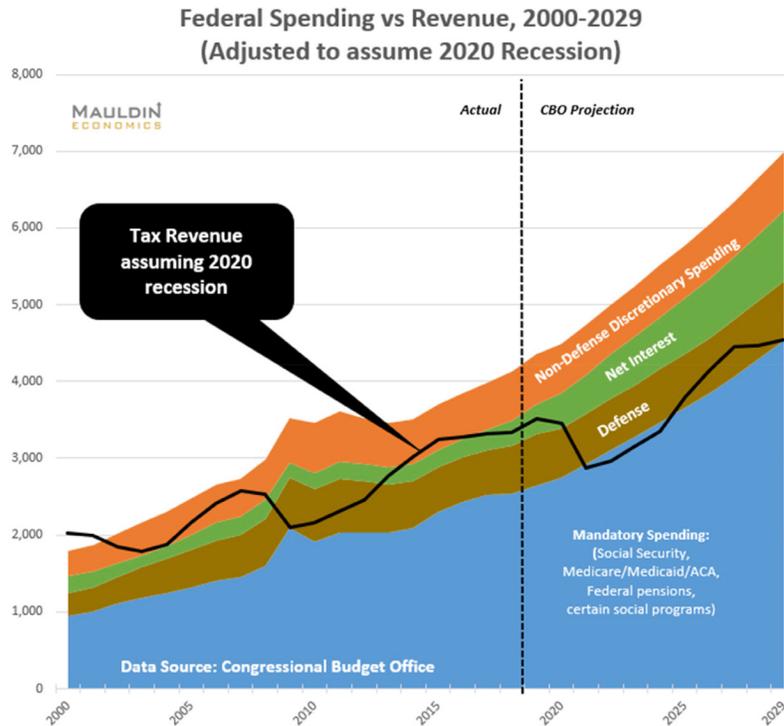
## What Happens if There Is a Recession?

Ray, I think you would agree that at some point there will be another recession in the US. I think we would also agree it is somewhat of a mug's game to predict the timing of a recession more than a few months in advance.

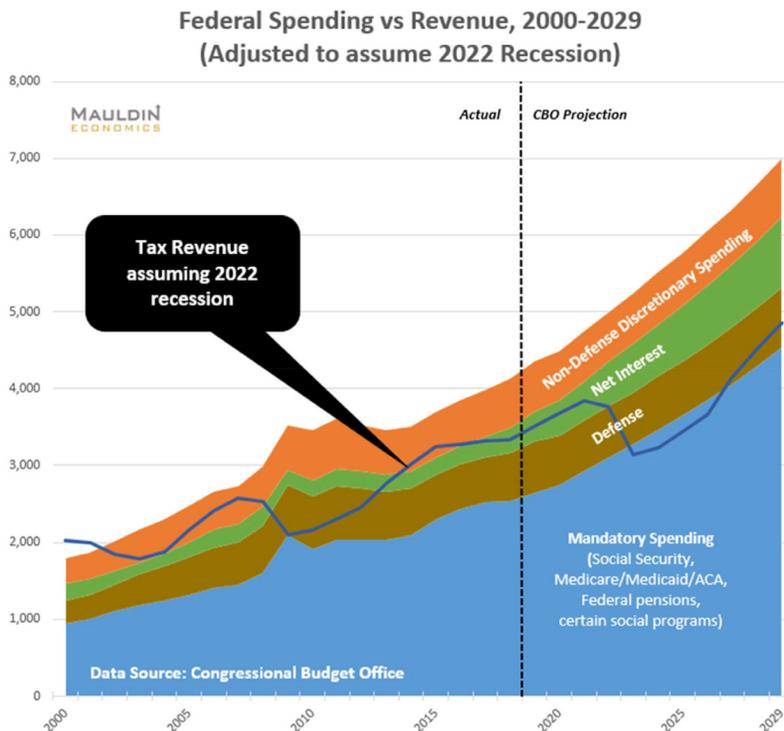
That being said, we should still ask what would happen to the deficits and debt if there were a recession. I asked Patrick to find the percentage change in tax revenues in the last recession (2008 and following) and the recovery thereafter. Using that historical data, the revenue line in the chart below assumes the same percentage revenue change following a hypothetical 2020 recession. (Note, recessions also raise spending due to increased unemployment insurance, welfare, and other economic backstops, but we ignore that in this chart.)

Possibly the next recession will not see revenues fall as much as the last one. Then again, it is also unrealistic not to expect an increase in expenses, so in my statistical dreamworld they will hopefully balance out. I'm sure we can look back in 2025 and see how close to the pin we actually were.

This first graph assumes a recession in 2020. Note that revenues fall below mandatory spending by the middle of the decade, then never get back above mandatory spending plus defense spending. Then by the end of the 2020s mandatory spending will again have risen to consume all tax revenue. And again, these deficits don't include significant off-budget deficits.



This next graph assumes recession in 2022 instead of 2020. The pattern is basically the same, except that the \$2-trillion deficits don't begin until 2023. Again, this uses actual CBO projections and reduces revenues by the same percentage they fell in 2008–2009, and recovered thereafter.



## On-Budget Versus Off-Budget Deficits

Finding a simple projection for off-budget deficits is extraordinarily difficult. When you begin to look at the actual numbers over the last 20 years, you can understand why. There can be a difference of as much as \$950 billion from one year to the next. A lot of it has to do with accounting vagaries and statistical timing, which of course are hard to forecast years in advance.

That being said, there is a remarkable consistency about the **average** annual off-budget deficit. It has averaged around \$269 billion a year since 2000. Since 2009 the average is \$271 billion.

The following table looks at the actual growth of the US debt since 2000 and uses CBO projections for both on- and off-budget deficits through 2021. After 2021 we conservatively assume that the off-budget deficit will average \$269 billion for the next eight years. We also assume, for the sake of mathematical interest, a recession in 2022. We did not project a tax increase at any point in the future, which would of course have an impact on future revenues and deficits. For those curious, a recession in 2020 would increase the total debt by more than \$2 trillion in 2029.

Debt Growth Assuming 2022 Recession				
Year	Official Deficit	Total Debt	Debt Growth	Off-Budget Spending
2000	(236)	5,674	18	254
2001	(128)	5,807	133	261
2002	158	6,228	421	263
2003	378	6,783	555	177
2004	413	7,379	596	183
2005	318	7,933	554	236
2006	248	8,507	574	326
2007	161	9,008	501	340
2008	459	10,025	1,017	558
2009	1,413	11,910	1,632	219
2010	1,294	13,562	1,905	611
2011	1,300	14,790	1,229	(71)
2012	1,087	16,066	1,276	189
2013	679	16,738	672	(7)
2014	485	17,824	1,086	601
2015	438	18,151	327	(111)
2016	585	19,573	1,423	838
2017	665	20,245	672	7
2018	779	21,516	1,217	438
2019	1,091	22,776	1,314	223
2020	1,101	24,057	1,281	180
2021	1,068	25,333	1,276	208
2022	1,232	26,834	1,501	269
2023	2,111	29,214	2,380	269
2024	2,286	31,769	2,555	269
2025	2,335	34,373	2,604	269
2026	2,387	37,029	2,656	269
2027	2,195	39,493	2,464	269
2028	2,155	41,917	2,424	269
2029	2,144	44,330	2,413	269

Notes: Actual data to 2018, CBO estimates 2019-2021, then 2022-2029 data modified to assume post-recession lower tax revenue at same percentages as 2008-2015.

Off-budget spending is the difference between official deficit and the yearly change in total debt. 2022-2029 projected at post-2000 average.

Under these assumptions, annual deficits rise to over \$2.5 trillion by 2024 assuming a 2022 recession. It will be hard for any administration to raise taxes after recession for at least a few years. And as we saw last week, even a 25% tax increase on the highest tenth of income earners in America would only produce about \$250 billion. And that is not net and does not assume any behavioral change that reduces total taxable income of that top 10%.

**Under our assumptions total federal debt will rise to over \$44 trillion by 2029.** The CBO forecast that does not include a recession has total debt rising to over \$33 trillion. There is one line on page 16 of the report mentioned below which discloses that factoid. The rest of the report talks about government debt held by the public, as if debt held in the Social Security “lockbox” and other similar inter-government debt won’t be paid by the public as well.

Explaining off-budget deficits can be exhausting. Literally. But essentially, it is Congress appropriating funds from government agencies that are theoretically used for future expenses like pensions and healthcare, spending the money this year and replacing it with government bonds. Social Security obviously, but the US Post Office, all kinds of government pension funds, and all sorts of funds go into this budget legerdemain.

## Forget Turning Japanese, We Are Turning Greek

The CBO produces a remarkably detailed [report](#) on the budget and economic outlook through 2029. It is very clear in its assumptions. Let’s look at its GDP projections for the next 10 years: slightly under 2% average growth with 2% inflation and modestly increasing interest rates. (Page 147 at the link above)

Table E-1.

### CBO’s Economic Projections, by Calendar Year

	Estimated, 2018 <sup>a</sup>	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029
	<b>Percentage Change From Year to Year</b>											
Gross Domestic Product												
Real <sup>b</sup>	2.9	2.7	1.9	1.6	1.6	1.7	1.8	1.8	1.7	1.8	1.8	1.8
Nominal	5.2	4.8	3.9	3.7	3.7	3.8	4.0	3.9	3.8	3.9	3.9	3.8
Inflation												
PCE price index	2.1	1.9	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
Core PCE price index <sup>c</sup>	1.9	2.0	2.2	2.2	2.1	2.1	2.0	2.0	2.0	2.0	2.0	2.0
Consumer price index <sup>d</sup>	2.5 <sup>e</sup>	2.1	2.6	2.6	2.5	2.5	2.4	2.3	2.3	2.3	2.3	2.4
Core consumer price index <sup>c</sup>	2.1 <sup>e</sup>	2.4	2.6	2.6	2.5	2.4	2.3	2.3	2.3	2.3	2.3	2.4
GDP price index	2.2	2.1	2.0	2.0	2.0	2.1	2.1	2.1	2.0	2.0	2.0	2.0
Employment Cost Index <sup>f</sup>	3.0	3.4	3.6	3.6	3.4	3.3	3.2	3.1	3.1	3.1	3.1	3.1
	<b>Calendar Year Average</b>											
Unemployment Rate (Percent)	3.9 <sup>e</sup>	3.5	3.7	4.2	4.6	4.8	4.8	4.8	4.8	4.8	4.7	4.7
Payroll Employment (Monthly change, in thousands) <sup>g</sup>	203 <sup>e</sup>	148	68	21	17	48	62	57	49	64	65	66
Interest Rates (Percent)												
Three-month Treasury bills	1.9 <sup>e</sup>	2.8	3.2	3.2	3.2	3.0	2.8	2.7	2.7	2.8	2.8	2.8
Ten-year Treasury notes	2.9 <sup>e</sup>	3.4	3.6	3.7	3.7	3.8	3.7	3.7	3.7	3.7	3.7	3.8

Source: [Congressional Budget Office](#)

On page 126 you find that a 1/10 of 1% decrease in productivity could increase federal deficit spending by \$307 billion over the next 10 years. Clearly productivity matters. Labor force growth has about half the effect of productivity growth. But both are significant.

The CBO projects US GDP will be in the \$30-trillion range by 2029, again without a recession, which would no doubt shave a few trillion dollars off that number, but let's go with it. Without a recession debt is projected to be about 105% (give or take) of GDP and with a recession it is closer to 150%. Shades of Italy or Greece.

Paul Krugman and many others would say I'm being unduly bearish and foolish to worry about deficits and national debt. "We" just want to wear our hair shirts and force austerity on everyone. The Italians are vocally resisting such austerity, as they saw what happened to Greece when the EU forced it to live within a budget. It could only be called a six-year+ depression. "Brutal" hardly describes it. Why would I wish such a turn of affairs on the US?

Maybe I'm just afraid of finding out the answer to "How much debt is too much debt?" We will know the answer only when the bond market rebels, and then it will be too late. Much too late.

Can the Fed intervene? Surely. But at what cost?

The problem is the data and research, by Lacy Hunt and others, shows a clear correlation between higher debt, lower GDP growth, and lower productivity. This will increase the deficit and debt in a vicious spiraling downward cycle.

It also increases the likelihood of QE4, 5, and  $\infty$  into the future after the next recession, which will produce outcomes you (and I) are clearly unhappy with. With reasonable justification.

As for raising taxes to make up the difference, total income taxes in 2018 were less than \$1.7 trillion. If you literally doubled taxes on the top 10%, you would only get an extra trillion dollars and still not come close to balancing the budget. Not to mention the recession such a tax increase would cause.

After a recession? It wouldn't even close half the deficit gap with a 100% increase. And that's before any increased spending. Some of the ideas run into the trillions of dollars over the next 10 years. Maybe that's just a rounding error given the actual deficits, but these things do matter.

## Where Will the Money Come From?

The cash government spends in excess of its tax revenue has to come from somewhere. If somehow it comes from the bond market (read US investors, as non-US investors in government bonds are increasingly scarce), that reduces the amount available for more productive endeavors, and thus reduces growth. If it comes from QE it increases distortions and misallocations in the market and, as you pointed out, increases wealth disparity. I am not exactly certain what MP3 would mean, but I look forward to learning.

Or...

Or we could completely (and somewhat radically) restructure the entire tax code along with getting expenditures under control (and maybe even reduced in some areas) and over three or four years come to a balanced budget. Let's speculate about what that might look like...

(To be continued next week...)

## **Boston, New York, Puerto Rico, New York, Maine, and Montana**

As you read this, Shane and I are in Boston for Steve Cucchiaro and his beautiful bride Jama's wedding Saturday night. The next day I meet with my business partners in Mauldin Economics (Olivier Garret and Ed D'Agostino). Monday morning I fly to New York where I am with CMG partner Steve Blumenthal, visit with Art Cashin, attend more meetings, have a CNBC shoot Tuesday afternoon for the Closing Bell, have dinner with accredited investor clients and prospects on Tuesday, and more meetings Wednesday before flying back to Puerto Rico on Thursday, July 4.

Early August sees me in New York for a few days before the annual economic fishing event, Camp Kotok. Then maybe another day in New York before I meet Shane in Montana and spend a few days with my close friend Darrell Cain on Flathead Lake.

Shane and I celebrated her birthday and our wedding anniversary yesterday. It was quite glorious. We are really enjoying living in Puerto Rico, much more than I expected. I don't think I can get Shane to move with dynamite. And if she's not moving, I'm certainly not.

On a final thought, my editor Patrick Watson and I spent hours this week going back and forth over these deficit and spending numbers, along with my other thoughts you will read next week. As we talked, I asked him what he thought about my outlines. "John, you are being way too optimistic!" If \$44 trillion is optimistic...

And with that I will hit the send button. You have a great week and I hope you get to be with some friends and family. All the best!

Your worried about deficits and debt analyst,



John Mauldin

[subscribers@mauldineconomics.com](mailto:subscribers@mauldineconomics.com)

<http://www.mauldineconomics.com/members>

© 2019 Mauldin Economics. All Rights Reserved.

Thoughts from the Frontline is a free weekly economic e-letter by best-selling author and renowned financial expert, John Mauldin. You can learn more and get your free subscription by visiting [www.MauldinEconomics.com](http://www.MauldinEconomics.com).

Any full reproduction of Thoughts from the Frontline is prohibited without express written permission. If you would like to quote brief portions only, please reference [www.MauldinEconomics.com](http://www.MauldinEconomics.com), keep all links within the portion being used fully active and intact, and include a link to [www.mauldineconomics.com/important-disclosures](http://www.mauldineconomics.com/important-disclosures). You can contact [affiliates@mauldineconomics.com](mailto:affiliates@mauldineconomics.com) for more information about our content use policy.

To subscribe to John Mauldin's Mauldin Economics e-letter, please click here: <http://www.mauldineconomics.com/subscribe>

To change your email address, please click here: <http://www.mauldineconomics.com/change-address>

Thoughts From the Frontline and MauldinEconomics.com is not an offering for any investment. It represents only the opinions of John Mauldin and those that he interviews. Any views expressed are provided for information purposes only and should not be construed in any way as an offer, an endorsement, or inducement to invest and is not in any way a testimony of, or associated with, Mauldin's other firms. John Mauldin is the Chairman of Mauldin Economics, LLC. He also is the President and investment advisory representative of Mauldin Solutions, LLC, which is an investment advisory firm registered with multiple states, President and registered Principle of Mauldin Securities, LLC, a FINRA and SIPC, registered broker-dealer. Mauldin Securities LLC is registered with the NFA/CFTC, as an Introducing Broker (IB) and Commodity Trading Advisor (CTA).

This message may contain information that is confidential or privileged and is intended only for the individual or entity named above and does not constitute an offer for or advice about any alternative investment product. Such advice can only be made when accompanied by a prospectus or similar offering document. Past performance is not indicative of future performance. Please make sure to review important disclosures at the end of each article. Mauldin companies may have a marketing relationship with products and services mentioned in this letter for a fee.

PAST RESULTS ARE NOT INDICATIVE OF FUTURE RESULTS. THERE IS RISK OF LOSS AS WELL AS THE OPPORTUNITY FOR GAIN WHEN INVESTING IN MANAGED FUNDS. WHEN CONSIDERING ALTERNATIVE INVESTMENTS, INCLUDING HEDGE FUNDS, YOU SHOULD CONSIDER VARIOUS RISKS INCLUDING THE FACT THAT SOME PRODUCTS: OFTEN ENGAGE IN LEVERAGING AND OTHER SPECULATIVE INVESTMENT PRACTICES THAT MAY INCREASE THE RISK OF INVESTMENT LOSS, CAN BE ILLIQUID, ARE NOT REQUIRED TO PROVIDE PERIODIC PRICING OR VALUATION INFORMATION TO INVESTORS, MAY INVOLVE COMPLEX TAX STRUCTURES AND DELAYS IN DISTRIBUTING IMPORTANT TAX INFORMATION, ARE NOT SUBJECT TO THE SAME REGULATORY REQUIREMENTS AS MUTUAL FUNDS, OFTEN CHARGE HIGH FEES, AND IN MANY CASES THE UNDERLYING INVESTMENTS ARE NOT TRANSPARENT AND ARE KNOWN ONLY TO THE INVESTMENT MANAGER. Alternative investment performance can be volatile. An investor could lose all or a substantial amount of his or her investment. Often, alternative investment fund and account managers have total trading authority over their funds or accounts; the use of a single advisor applying generally similar trading programs could mean lack of diversification and, consequently, higher risk. There is often no secondary market for an investor's interest in alternative investments, and none is expected to develop. You are advised to discuss with your financial advisers your investment options and whether any investment is suitable for your specific needs prior to making any investments.

All material presented herein is believed to be reliable but we cannot attest to its accuracy. Opinions expressed in these reports may change without prior notice. John Mauldin and/or the staffs may or may not have investments in any funds cited above as well as economic interest. John Mauldin can be reached at 800-829-7273.