

Economists in Glass Houses

By John Mauldin | April 7, 2015

Economists in Glass Houses The Purpose of a Central Bank The Keynesian Conundrum What Drives Growth? The Last Warrior San Diego, Raleigh, and Atlanta

For many economists, the chicken and egg question is, which came first, consumption or production? What drives growth? Let's continue with our series on debt, in which I have been contrasting my views with those of Paul Krugman.

Our differences aside, what Paul and I readily agree on is that the solution to our current economic dilemma is more and higher-quality growth. There is nothing like 5–7% nominal growth to tackle a problem of too much debt. And if the real growth is 3–4%, then so much better, as employment and wages will rise as well. But what drives growth? That's actually a complex question with multiple answers. There is simply no one magic policy that you can pursue that is sufficient in and of itself to create growth. I would think Krugman and I also would agree that the stimulation of growth requires a whole bunch of smart policies, and we would likely agree on what some of those policies should be. Our policy disagreement stems from our differing views on fundamental economic questions as opposed to any simplistic analysis of today's numbers.

Economists in Glass Houses

Last week we looked at some of the differences between Paul's presuppositions and mine, presuppositions that most people might think of as being more philosophical than analytical in nature. <u>That letter</u> generated more response than any other letter I've written in a very long time. Most of the comments were really very thoughtful, and I appreciate them. We're going to look at one reply in particular, because the writer offers legitimate criticisms and asks a number of questions that I believe deserve answers – and these are questions I get everywhere I go. Let's look at the comment from Thomas Willisch:

Hi John: There is a saying: let those who live in glass houses not throw the first stone. Does either Paul Krugman or you live in a glass house? First, it is important to understand why Paul, and others of his economic point of view, believe that taking on additional debt in the form of fiscal stimulus is desirable when the private sector is in severe economic

contraction. Then we will be in position to determine whether the argument in favor of such is compelling or weak. You look to answer this question but I don't believe really so. Pointing to Paul's supposed presuppositional preference for government or contentions about the significance of owing money to ourselves does not really answer the question.

Among others, Paul's arguments – semi mock him as "Homo neo-keynesianis" if you wish, but please interact with the substance of his central arguments – are that the accumulation of additional debt in fiscal stimulus is an effective temporary tool to stave off a much deeper economic collapse when widespread private consumption and investment have fallen off a cliff and unemployment is skyrocketing. In times of recovery, when stimulus should be reigned in (and Paul does believe stimulus should be reigned in in these circumstances), the burden of the debt stabilizes and eventually shrinks relative to the resulting higher GDP, potentially more so than would have been the case with less aggregate debt absent the stimulus but debt measured against collapsed tax receipts and collapsed GDP. Paul lays out his arguments in chapter and verse, in books and in peer reviewed economic papers, with much greater depth and expertise than I can pretend to do in a paragraph quickly written here. In important respects your and Paul's views overlap, for example in your mention of the value of government infrastructure spending and scientific research, both of which Paul strongly supports, yet which your Republican party constantly undermines.

On the other side of the coin, my second point is that, in order to fairly weigh whether you live in more or less of a glass house than Paul, we first must know what your policy response would have been as opposed to Paul's in response to the collapse of the Great Recession. While criticizing Paul, you continue to not clearly articulate his own policy recommendation, here or in prior newsletters. Saying that "too much" debt is undesirable and countries tend to eventually default when debt becomes too high, while true with the caveat of properly nuanced context, is hardly explicatory enough. Nor does it weigh against the alternatives from which some course of action had to be selected. Do you believe there should have been no fiscal stimulus? What should have taken its place? For how long? Do you believe in "expansionary austerity"? Should the economy have been allowed to completely implode and unemployment skyrocket much higher than it actually did, in the name of letting the private sector have its just dessert?

Paul's argument is that there is a time when government intervention is necessary in order to stave off an economic collapse brought on by the private sector, because such collapse would be enormously deeper and impoverish many more people in its wake without the government intervention the nature of which he has detailed. John, what was your prescription, so that it can be set beside Paul's? Once your own solution to how the 2008 downturn should have been met is cogently presented, readers should study Paul for themselves, not just encounter him through the eyes of an opponent (never a good approach in any intellectual debate), and also study Richard Koo's books on balance sheet recessions

for one, then decide whose house is made of what.

The Purpose of a Central Bank

Thomas, thanks for your comments, and I appreciate you outlining Krugman's basic views so succinctly. Let me answer your second point first, as I think doing so will lead naturally into a response to your first point. (Readers please note that this is a short answer laying out principles that I would adhere to, rather than a full treatise.)

I've been quite clear over the years that I believe the primary purpose of a central bank, other than its mundane purpose as a clearing house, is to provide liquidity in times of a liquidity crisis. Central banks should follow Bagehot's rule, which can be summarized as: *"Lend without limit, to solvent firms, against good collateral, at 'high rates'."*

A little history lesson is in order, from Kurt Schuler, writing at Alt-M:

Walter Bagehot (1826-1877) was the most famous editor of *The Economist*. (His last name, by the way, is pronounced "BADGE-it.") For his wisdom on financial matters, he was dubbed "the spare chancellor," a reference to the Chancellor of the Exchequer, the British minister of finance. His book *Lombard Street* (1873), named after the English equivalent of Wall Street, criticized the Bank of England for not using its powers to alleviate financial crises. Bagehot argued that the Bank's monopoly position gave it both the responsibility and the ability to do so, and that the Bank should not conduct itself as if it were an ordinary commercial bank. For its explanation of how the Bank of England should act, *Lombard Street* became the foundation document of modern central banking. (Schuler)

The causes of the Great Recession were many, and there were numerous culprits. Many, but by no means all, of the problems can be laid at the feet of government. However, that does not answer your question as to what we should do when we find ourselves in a crisis. I believe it was entirely appropriate for the Federal Reserve to step in and provide liquidity. As odious as it was, the Fed had to bail out the banks; or, as you say, the system would have collapsed. I would have wiped out shareholders of the major insolvent banks along with investors in junior debt, rather than bail them out. Because of the peculiar situation of senior debt in US banking, it would probably have cost as much or more to wipe out those who held it as it would to simply guarantee it, and failure to cover it would have potentially posed even greater systemic risk. Still, I would have had to hold my nose while covering it. The four or five banks that would have been taken over took on 30:1 leverage with the permission of the government. Clearly that was unwise, and to bail out management and investors, let alone reward them for imprudent decisions, is not proper.

That said, a complete guarantee of bank deposits had to be made. Otherwise we would have fallen into the abyss. The insolvent banks should have been recapitalized and sold by the FDIC,

just as every insolvent bank has been for the last 50 years. It is likely that the FDIC would have been forced to break up the banks into smaller pieces in order for them to be absorbed and sold. If we had done that, we would probably not now have five even larger banks posing systemic risk.

On a side note, I had a lengthy conversation a few years ago with current Speaker of the House John Boehner. It was his forcefully argued view that his big mistake was to bail out the banks and their shareholders. When asked what he would do next time, he very graphically (in his colorful style) stated that shareholders and bank management operated at their own risk.

As to whether I would favor stimulus, that is a more nuanced question. Of course we maintain a safety net for individuals and families who fall on hard times, and that commitment certainly increases the deficit significantly. Much of the other stimulus that we did provide was generally a waste. It financed current consumption but provided no longer-term value.

As you noted, I would be in favor, if it were necessary, of providing stimulus for the funding of infrastructure projects during a recession. A couple of thoughts on that process. Even though we are some two to three trillion dollars behind in maintaining our nation's core infrastructure, there were distressingly few "shovel-ready" projects available at the time of the Great Recession. Let me think outside my conservative box for a moment and offer the following possibilities.

There is always another recession in our future; we just don't know when it will hit. When it does, it will in fact reduce GDP and increase unemployment. Further, we know that we need to spend several trillion dollars on infrastructure upgrades in the coming decades. The reigning economic paradigm suggests that we need to "lean against" a recession by spending money. If that is the case, then let's at least spend the money to get something that will be useful to our kids, since, when they grow up to be taxpayers, they will be paying part of that money back.

I would suggest that Congress today allocate \$250 million (or whatever makes sense) of matching funds for infrastructure planning projects. Cities, counties, and states could access these funds for the planning required to refurbish their infrastructure: water systems, power grids, bridges, roads, etc. Then, when we do in fact hit the next recession, there will be an adequate number of shovel-ready projects. Congress can decide how much to allocate to implement those projects and determine what projects should take priority. Congress can even authorize the Federal Reserve to use quantitative easing if it so desires to help fund the projects.

Any such projects could be financed at low rates for 40 years and would require the borrowing entities to pay off the bonds during those 40 years. Congressional approval for such bonds should require a 60% supermajority. (For the record, Thomas, I'm in favor of a balanced-budget amendment that would require 60% supermajority approval to run a deficit. I would also like to see an amendment that would require a 60% supermajority to raise taxes.)

The Keynesian Conundrum

And that brings us to what I call the "Keynesian Conundrum," which is at the heart of your first question. John Keynes suggested running deficits in times of recession but also advocated paying down that debt after a recession is over. I could get my head around that if I could ever get someone on the Keynesian side to say when exactly it is time to pay the debt back. Mr. Krugman, while giving lip service to paying the debt back, never actually articulates what that process would look like. To pay the debt back, you have to run surpluses or, at a very minimum, run deficits that are less than nominal GDP, so that the debt relative to the size of GDP is reduced.

I want to express a large quibble. People are constantly writing me and talking about "your Republicans" doing this or that as if somehow or another I approve of all things done by Republican officeholders. Let me state once again that I believe that what the second Bush administration did was categorically, unequivocally, emphatically wrong. We wasted the budget compromise of the Clinton/Gingrich years, which was actually paying down the debt. If we had continued to hold the line on spending, we would have gone into the Great Recession with very little debt, and a stimulus of a few trillion dollars here or there would not have done much damage. We have now run up a truly massive debt; and if we were to run into another recession, the felt need would be to run up even more debt, well past the 100% of GDP range.

We are not now in recession, yet Krugman argues that to hold the line on spending is somehow a resumption of what he calls austerity. I call it living with a budget. Running a surplus certainly did not hurt the economy during the late '90s. We had a recession in the 2000s because of a stock market bubble collapsing. That collapse was compounded by 9/11. That recession had nothing to do with budget surpluses or "austerity." If the United States were now to freeze spending for a few years, we would once again be back in balance. There is nothing austere about the size of our federal government.

Yes, the deficits have been coming down, and that is a good thing. But that misses the point. We could have easily afforded the deficit spending we incurred during the Great Recession if we had gone into the recession with little or no debt. There has to be some type of disciplined process to keep a country from accumulating too much debt. Generally, the process is the market itself, which begins to ask for higher interest rates for perceived risk. Of course the United States could run more debt than any other country, because we are not perceived as being a risk. But just because we can run up a large debt doesn't mean we should.

As the McKinsey report I cited <u>last week</u> demonstrates and a large body of other research confirms, outsized debt at some point becomes a drag on growth. Just because we aren't there yet doesn't mean it's okay to pile up debt until we stop growing.

At a certain size relative to the ability to pay, debt is like a black hole. If it gets too big, it sucks in everything around it.

What Drives Growth?

"High debt levels, whether in the public or private sector, have historically placed a drag on growth and raised the risk of financial crises that spark deep economic recessions."

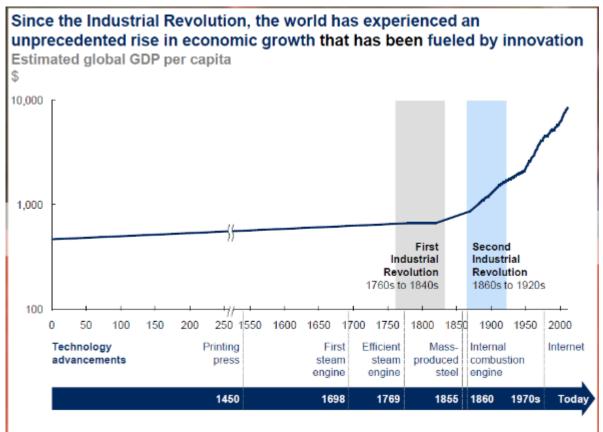
- The McKinsey Institute, "Debt and (not much) deleveraging"

In very simplistic terms, Keynesians today assume that consumption is the driver of the economy. For them, it is all about empowering the consumer, even if consumption is driven by debt, whether the debt is absorbed by individuals or created (more preferably in their view) by the government.

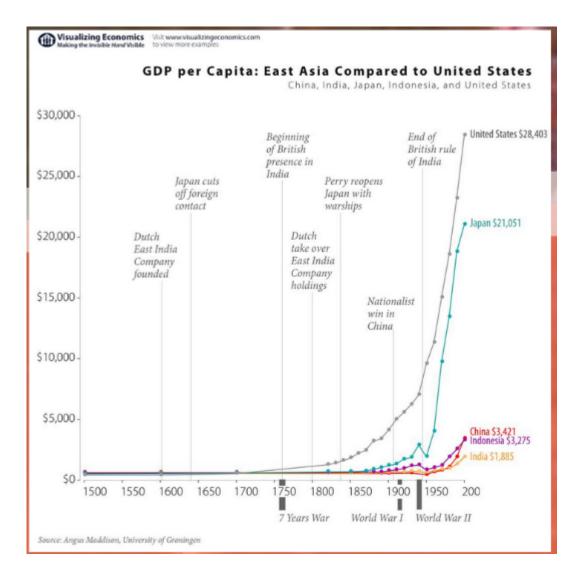
Thus, they perceive that the remedy to a recession is to run deficits in order to increase consumption, which will stimulate production, which will create jobs.

On the other side of the economic fence, "Austrian" economist Friedrich Hayek asserted that it is actually production that stimulates the economy and drives consumption. An entrepreneur sees a need and figures out a way to fulfill that need. It may even be a need that no one realizes they have until they see the product that addresses it. For Hayek it is production that sets the wheels of the economy spinning, and increased production comes about because of innovation and free capital markets. Economic cause and effect become far more complicated than that very quickly as you drill down into actual history and real data. Schumpeter took our understanding further with his research on creative destruction and the process of competition.

The next graph shows the rise of global economic growth in recent centuries, and the following one depicts per capita GDP in certain Asian countries compared to the US. I don't think there's any dispute that it was not an increase in government spending or consumption but rather it was innovation and enhanced production that drove the remarkable growth of GDP that we've seen in the last 250 years.



SOURCE: Angus Maddison, "Statistics on world population, GDP and per capita GDP, 1–2008 AD," the Maddison Project database; McKinsey Global Institute analysis



Niall Ferguson ascribes that growth to what he calls the "six killer apps of prosperity":

- 1. competition
- 2. the scientific revolution
- 3. property rights
- 4. modern medicine
- 5. the consumer society
- 6. the work ethic

(You can see his quite revolutionary and unsettling Ted talk here.)

Ferguson's first app is competition. You asked me if I believe in "expansionary austerity." I guess we have to lay out definitions. I've already said that we do not need budget deficits in order to create an expansion in GDP. What is being tried in Europe (and is ridiculed as expansionary

austerity), has nothing to do with expansion and everything to do with dealing with debt.

Austerity didn't work in Greece not because they didn't spend enough money but because the country itself is riddled with impediments to competition. Government has locked in numerous duopolies and erects all kinds of impediments in the way of launching new businesses. Greece is the ultimate in crony capitalism. Further, government direct participation is a huge drag on the economy. Greece has one of the most inefficient governments in the developed world. When I was there a few years ago, literally half of the country's workers simply did no work; they just took checks as cogs in a system where politicians procured jobs for friends and relatives as favors for their votes and financial support. Taxes aren't collected, books aren't balanced – I could go on and on, but the incompetence of Greek government is legendary. Borrowing more money to spend on such inefficiency does nothing to increase GDP.

There will be no economic renaissance in Greece (or in any part of peripheral Europe for that matter) unless there are true labor reforms, a radical reorganization of the government, a complete overhaul of the regulatory environment, and an end to allowing government to favor certain businesses. Growth comes in very great part from innovative, competitive private production, but government can inhibit the environment for the growing of new businesses, which are the wellspring of growth. Eurozone rules and regulations stifle growth at every turn.

I could go on and on about Greece, but running large budget deficits will not solve their problems. The irony is that the majority of Greeks believe in the need for reform (a common belief in Europe). The Greeks are an inherently entrepreneurial people; it's just that their entrepreneurs have migrated to other countries (to the great benefit of America and the rest of the world). Now, the Greeks want the rest of Europe to continue to lend them money that cannot be paid back so they can maintain their lifestyles without having to reform their economy. Yes, they offer token reforms but nothing that gets to the real issues. And the rest of Europe doesn't want to press them too much on the real issues because they have the same problems in their own countries.

It does no good to balance a budget when competition and productivity are not allowed to flourish. For that matter it does no good to run a deficit under the same conditions, because eventually you will pile up an unsustainable amount of debt.

Sad to say, but much of Europe is well and truly hosed (a technical economics term) until they reform their labor markets and regulatory environment. The Greek crisis is just the opening act in what will be a long-running and intensifying drama.

Since you want to know what policies I would like to see enacted, Thomas, I can tell you that I am working on a short op-ed-type essay with Steve Moore (formerly of the *Wall Street Journal* and now with the Heritage Foundation), outlining a specific set of guidelines for serious reform of the regulatory process (across all industries and services), a radical restructuring of the tax code, and an overhaul of the bureaucracy. We have allowed our economy to be overwhelmed

by a mishmash of bureaucratic policies, almost every one of which some interest group will push hard to keep. There will be something in our essay that is guaranteed to upset nearly everyone.

When GDP figures come out in a month, we're going to learn that the first quarter was weak. I wrote last year, as oil prices were collapsing, that they would have a significant impact on the growth of the US economy. Without the growth that has comes from the revolution in US oil production, our GDP in the first half of this decade would have looked more like that of Europe. Now, with oil prices in the dumps, we're about to find out how true that is.

This last chart is one of the most alarming I've seen in years. It's from a May 2014 <u>study</u> by the Brookings Institution. The authors found declining business dynamism across all regions and states. It is difficult to imagine sustained economic growth if this trend is not reversed.



Firm Entry and Exit Rates in the United States, 1978-2011

It's time to close out this week's look at debt, but before I hit the send button I want to talk about a very special friend and a powerful new book I'm reading.

The Last Warrior

Remember those picture problems we had to solve when we were in elementary school? They would give us six pictures and ask us, which one doesn't belong? I often feel like that odd picture, out of place but still on the page. There are moments when I feel like I'm really living in a dream, that I will wake up and find myself back in some mundane existence. Lately (in the past few years) I have often found myself in the company of truly extraordinary people and later wondered why I have been privileged to be there.

A few weeks ago I was invited to a small reception in Washington DC for <u>Andrew</u> <u>Marshall</u>. Andy Marshall, 93¹/₂ years old, was director of the United States Department of Defense's <u>Office of Net Assessment</u>, the Pentagon's internal think tank, under 12 defense secretaries and 8 administrations. Appointed to the position in 1973 by President Richard Nixon, Marshall was reappointed by every president that followed. He is the longest-serving and oldest federal employee in history.

The reception was to honor him on his recent retirement. To say that he has been the most influential person in US defense and intelligence thinking in the last 50 years is no exaggeration. It is almost impossible to overstate his influence. He was at the heart of US nuclear strategy in the '50s and '60s and was the first to recognize that the CIA assessment of Russia was incorrect in the mid-'70s. He developed the concept of "net assessment," and Nixon created an office in the Pentagon just for him to pursue that work. In the late '80s, as we were still faced off with Russia (which is the stance he had urged in the '70s), he began to beat the drum that China would be our chief preoccupation in the next decade.

In the '80s he was beginning to talk about the need to shift to precision warfare. He saw that need before any of the generals did, as he has almost every other shift in weaponry. He was on top of everything. His sources were legendary. He is one of the most amazing futurists on the planet. He truly seems to possess the ability to tease out significant insights regarding the future direction not just of defense systems but also of markets and national trends from seemingly unrelated data. The Russians were obsessed with his thinking. Even the Chinese have officially recognized that he was "one of the most important and influential figures" in changing their thinking about defense in the 1990s and 2000s.

He has served both Republican and Democratic administrations, quietly and in the background. The strong odds are that you have never heard of him. But, no matter where you live in the world, you have been influenced by his thinking. And you have heard of the names of those who went to school at what is called "St. Andrews Prep." As recently as 2012, Foreign Policy named Marshall among its "Top 100 Global Thinkers," "for thinking way, way outside the Pentagon box." Try being named a top global thinker at any time in your life, let alone at age 90 years.

I looked around the room at the reception and saw a lot of faces I recognized. Some were from the two weeklong summer events I participated in at the Naval War College, where we debated and theorized with Andy Marshall about possible contingent events that might happen to the United States in the future and how the country should prepare for the occurrence of nonconsensus events.

As people were later introduced, though, I realized that I recognized only those associated with Republican administrations. Talk about a personal bias – there were probably as many people

in attendance from Democratic administrations.

I recognized Vice-President Cheney, Paul Wolfowitz, and various secretaries, deputy secretaries, assistant secretaries, and deputy assistant secretaries of the Defense Department. As I was talking with Mr. Wolfowitz, he introduced me to Scooter Libby, whom I did not recognize, I'm embarrassed to say. Libby is a man who was as unjustly persecuted as any man in the history of this country, in my humble opinion. They couldn't get to Cheney, so they went after Scooter for very obscure and who-gives-a-damn reasons. Collateral damage and all that. I hate that partisan bullshit, no matter which side shovels it on.

Andy Marshall, however, didn't care what your politics were; he just wanted you to think about what was best for the country.

I've often been somewhat puzzled as to why Mr. Marshall invited me into his coterie. We initially met at two three-hour-long discussion groups where he listened to a number of economists and well-known money managers talk about the future of the world. Most were names you would recognize. I'm certainly not a name-brand economist, nor can I even rightly be called an economist – I'm more of a dilettante – but I got invited back for private meetings and then to additional meetings and to the weeks at the War College.

At the reception, one of the secretaries of defense, in noting the rather odd nature of the gathered group, said that Andy's unique talent was in pulling together people with eclectic, if not downright eccentric, thinking. There was a rather knowing laugh as everyone looked around and realized that the word *eccentric* defined those people in attendance they knew and maybe even themselves. Some of us were the people who helped Andy uncover obscure and counterintuitive facts and trends, and others were those he trained to use them in making assessments and charting strategy.

The next morning, Andy invited me to come by his apartment in Alexandria for a chat. Honored, I adjusted travel times and showed up on time. He started the conversation by reminding me that I had at one time asked him how he came to question the consensus thinking about the Soviet Union in the '70s. He then proceeded to give me a tutorial on how to question orthodox thinking. His own investigation gave him facts that didn't square with CIA thinking. "How did you know that?" I would ask. He would explain, and then like some five-year-old kid I would ask that question again and again, trying to understand how he came to the next insight. We kept deep diving until it became apparent that he was looking at some of the most obscure references and piecing together bits and pieces of information to complete a picture that nobody else saw. He referenced obscure German publications, interviews with the sons of Russian diplomats, and conversations with major and minor Russian leaders. He would commission studies of what it actually cost the Russians to build particular pieces of gear. For instance, Russian ferries were also designed as troop transport and military ships, with EMP-protected controls. That configuration drove the cost up and was not part of the CIA assessment. As it turned out, there was a lot the CIA

missed. The actual cost of Soviet defense was double what the CIA thought. And the consensus Soviet GDP that not only the CIA but everybody else was operating by was actually 30 to 40% too high. Thus, in the mid-'70s Andy and then Secretary of Defense James Schlesinger began to realize that the Russians could not afford to keep up their massive defense spending.

"Aaah," I said, "then you passed that information on to Reagan." "No," he said, "Reagan came to that conclusion on his own." "Really?" I questioned. We went back and forth on how a Republican governor and former actor could arrive at such a non-consensus conclusion that was absolutely, totally correct. I kept insisting that somebody had to have given him an inside view. Andy confessed that he didn't know how Reagan came to his conclusion, other than that he came into the White House with it. Remember, Andy served under every president from Truman onward and I assume was personally acquainted with every president after Nixon. Andy then told me that Scooter Libby was doing research and developing a paper on how Reagan came to that conclusion. It is truly one of the defining moments in American history and one that has remained a complete mystery, at least to me. Maybe the answer is as simple as that it was a presupposition: communists can't win. I really want to get an early copy of Libby's paper.

As we were wrapping up our talk, I looked over to Andy's desk and saw a book titled <u>*The Last Warrior: Andrew Marshall and the Shaping of Modern American Defense Strategy.* "When did this come out?" I asked him. "Last month," he said.</u>

It was his biography, which he had finally allowed to be published after he retired. He was gracious enough to autograph a copy for me, which I will proudly display in my library; but I immediately downloaded a copy to my Surface Pro on the subway ride back to Reagan Airport and began to read it on the plane. It is not a simple biography but rather an analysis of the intellectual journey of a man who came of age in the '40s and who learned to question orthodox thinking in a manner that nobody had done before. He literally invented new forms of analysis. The book is causing me to rethink my approach to analyzing data and how it impacts our view of the future. It is a total mental reset. I'm going to have to make another trip to Washington DC for a few follow-up questions.

For the record, the title *The Last Warrior* is not a description of Andy's personality, which is as decidedly low-key and non-combative as that of any person I've met. He is truly an analytical thinker with a quiet, thoughtful demeanor. I don't think of the word *warrior* when I think of Andy. But he was part of what Tom Brokaw called "the Greatest Generation," and at almost 94 he is truly one of the Last Warriors. Even today, he still goes in to the office a few days a week. I am honored to call him friend.

San Diego, Raleigh, and Atlanta

I am home for the next few weeks, except for some short personal one-day trips, getting a new speech ready for the <u>Strategic Investment Conference</u> at the end of the month. Then later in

May I will do a speech at the Investors Institute in Raleigh before going to a Galectin Therapeutics board meeting in Atlanta. Right now there is a potential for a few days in New York City before I head up to Maine in early June for another presentation.

I was greatly saddened to get the news last night that my friend Kiron Sarkar passed away while he was visiting his home in India. I have used his work frequently in this letter and *Over My Shoulder* and have been corresponding with him several times a week for the past few years on various aspects of markets and investments. He was wise counsel and always a source of great insights. He will be missed.

It is time to hit the send button. I hope your week is going well.

Your wondering if I can work till I'm 93 analyst,

dif Marki

John Mauldin

Share Your Thoughts on This Article

Post a Comment

Send to a Friend | Print Article | View as PDF | Permissions/Reprints | Previous Article

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

Please write to <u>subscribers@mauldineconomics.com</u> to inform us of any reproductions, including when and where copy will be reproduced. You must keep the letter intact, from introduction to disclaimers. If you would like to quote brief portions only, please reference <u>http://www.mauldineconomics.com</u>.

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

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

If you would ALSO like changes applied to the Mauldin Circle e-letter, please include your old and new email address along with a note requesting the change for both e-letters and send your request to <u>compliance@2000wave.com</u>.

To unsubscribe, please refer to the bottom of the email.

Thoughts From the Frontline and JohnMauldin.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 of Millennium Wave Advisors, LLC (MWA) which is an investment advisory firm registered with multiple states, President and registered representative of Millennium Wave Securities, LLC, (MWS) member FINRA, SIPC. MWS is also a Commodity Pool Operator (CPO) and a Commodity Trading Advisor (CTA) registered with the CFTC, as well as an Introducing Broker (IB) and NFA Member. Millennium Wave Investments is a

dba of MWA LLC and MWS LLC. 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.

Note: Joining the Mauldin Circle is not an offering for any investment. It represents only the opinions of John Mauldin and Millennium Wave Investments. It is intended solely for investors who have registered with Millennium Wave Investments and its partners at www.MauldinCircle.com or directly related websites. The Mauldin Circle may send out material that is provided on a confidential basis, and subscribers to the Mauldin Circle are not to send this letter to anyone other than their professional investment counselors. Investors should discuss any investment with their personal investment counsel. John Mauldin is the President of Millennium Wave Advisors, LLC (MWA), which is an investment advisory firm registered with multiple states. John Mauldin is a registered representative of Millennium Wave Securities, LLC, (MWS), an FINRA registered broker-dealer. MWS is also a Commodity Pool Operator (CPO) and a Commodity Trading Advisor (CTA) registered with the CFTC, as well as an Introducing Broker (IB). Millennium Wave Investments is a dba of MWA LLC and MWS LLC. Millennium Wave Investments cooperates in the consulting on and marketing of private and non-private investment offerings with other independent firms such as Altegris Investments; Capital Management Group; Absolute Return Partners, LLP; Fynn Capital; Nicola Wealth Management; and Plexus Asset Management. Investment offerings recommended by Mauldin may pay a portion of their fees to these independent firms, who will share 1/3 of those fees with MWS and thus with Mauldin. Any views expressed herein are provided for information purposes only and should not be construed in any way as an offer, an endorsement, or inducement to invest with any CTA, fund, or program mentioned here or elsewhere. Before seeking any advisor's services or making an investment in a fund, investors must read and examine thoroughly the respective disclosure document or offering memorandum. Since these firms and Mauldin receive fees from the funds they recommend/market, they only recommend/market products with which they have been able to negotiate fee arrangements.

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 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.

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.