2012: A Year of Choices

The Consequences of Path Dependency
There's No Going Back
The End of the Debt Supercycle
The Time for Hard Choices
Hong Kong, Singapore, Bloomberg, and a Personal Note

John Mauldin

Once to every man and nation, comes the moment to decide,
In the strife of truth with falsehood, for the good or evil side;
Some great cause, some great decision, offering each the bloom or blight,
And the choice goes by forever, 'twixt that darkness and that light.

— James Lowell, 1845

God grant me the serenity to accept the things I cannot change, the courage to change the things I can, and the wisdom to know the difference.

- Reinhold Niehbuhr

"Happy New Year. We enter 2012 with a great deal of hope, but our hopes are not for more bailouts, or money printing, or any of the myriad policies that investors seem to hope will save bad investments and sustain elevated valuations. Instead, our hope is that in 2012, the market will finally "clear," in the sense that bad debt around the world will be recognized as bad and restructured; that overleveraged financials will be taken into receivership instead of forcing austerity on every corner of the global economy in order to make them flush again; that rates of return will rise enough to compensate and encourage saving — and high enough to encourage borrowers and other users of capital to allocate the funds productively. Of course, in order to restructure bad debt, someone has to accept a loss. In order for rates of return to rise, valuations must decline. In short, our hope is for events that will unchain the global economy from an irresponsible past and open the gates toward a prosperous future. Maybe that is too hopeful, but we are not entirely convinced that bailouts and 'big bazooka' will be as easily procured in the year ahead as a confused public has allowed in recent years."

- John P. Hussman, Ph.D. (hussmanfunds.com)

2012 will the year that the consequences of the choices made by nations of the so-called developed world will begin to truly manifest themselves in the economic realm. We are in the closing chapters of the current Debt Supercycle, with different countries strewn out along the path, some at more advanced stages than others but all headed for a destination that will force major decisions if politically painful actions are not taken. The longer that process takes, the fewer options that are available and the more painful the outcomes. Some countries (think Greece, et al.) have a choice between dire economic circumstances and disastrous. The option for merely difficult choices was passed long ago, and the rules are such that there is no going back to where you started without a different but equally painful outcome.

This is the time of year I think about the future, and foolishly opt to make predictions. This year I have decided to be especially foolish and to think about the next five years, especially for the US. Why five? Because I think by then the consequences of our past and immediate future choices will have been realized, the "reset button" as it were will have been pushed, and the economies of the developed world will be ready to move on to a brighter future. The question is, from what level will that new upward journey begin? It will be very different for different countries, depending on the paths they choose.

Let me presage my thoughts. Most countries are being faced with dual choices, which differ according to their own particulars, but all deal with what to do about the need to deleverage, both in the public and private sectors. The end of the Debt Supercycle is a tectonic plate shift of massive global economic proportions, unlike anything the world has seen for 70-80 years. It will cause all sorts of economic earthquakes, tsunamis, and volcanoes. While the choices each country makes are their own, the consequences of their choices will have a much larger effect upon the world, as global interconnectedness has landed us in a world where isolating the impact of a problematic country is no longer possible. The need for global cooperation is most paramount at a time when politicians will be more and more restrained by the exigencies of their local problems and voter angst.

Jumping ahead and, by way of example, taking a peek at the Greek newspapers, one would not think that the current Greek crisis is at root a problem of their own making. The culprits are those nasty Germans. Political cartoons depict Germans as saying they have finally won WW2. Not exactly the climate in which Greek politicians are able to make calm decisions or explain the need to accept a great deal of pain. And the German editorials and columns are awash with the question of why Germans should work longer and harder to pay for Greek retirements and "lavish" benefits while Greeks don't pay their own taxes.

But choices must be made to proactively deal with the problems, or have the market force a severe solution. It is not a choice between pain or no pain, but exactly which pain do we prefer and how much? And anesthetics are not available on the pain menu. This is pain that will be felt from head to toe of the various national economic bodies, worldwide.

The US, Europe (including most of Eastern Europe), Japan (a bug which will soon find that windshield!), and even (especially) China must all deal with the problems that come with deleveraging. To fully understand the nature of the choices and their consequences, we are going to start somewhat far afield with some thoughts about choices and path dependence, then look back at history to see if we can get some clues about what deleveraging looks like (warning: it is not pretty), then examine the choices faced by specific countries and make some guesses as to outcomes, where possible.

I should note that in spite of the rather dark tone of this introduction, I remain an unabashed long-term optimist. History shows that these periods end and new periods of growth and prosperity emerge. While for the moment the situation is stressful, the trick for individuals is to make the best possible choices, given the circumstances, with a view to that moment in the future when risk will once again be something to be wooed and willingly accepted, rather than avoided as much as possible. For nations, it is preferable to make the choices that will bring

about a new equilibrium, even if doing so requires some pain. The longer that difficult choices are avoided, the greater the pain will be when the choices are either taken or forced upon us.

That being said, so many choices are made by people and nations who happily blunder forward into what proves to be a disaster, swept along by the tides of emotion and rationalization, thinking that by avoiding the consequences of the real problems, things will somehow turn out OK. I am reminded of the times when I told my children to clean their rooms before they went out to play, and was cheerfully told, "I did," as they poured out the door, only to have Dad find that they'd stuffed all the detritus that was on their floors into the closets, drawers, and under the bed. The appearance is that there is order and calm, while in the shadows and cubbyholes lurks the sad reality.

To be able to make wise choices means understanding and dealing with the real problems and not just the symptoms. In the US, the old joke was that doctors routinely told their patients to "Take two aspirin and see me in the morning" (which simply shows that I am old enough to remember an era when everyone had their doctor's home phone). And that was often the best advice, as most things do eventually take care of themselves, one way or another.

But if you are lying in a ditch bleeding on the side of the road, you need more than aspirin. The European interbank credit markets are screaming that the system is at risk of a cataclysmic failure. Think Bear Stearns and Lehman. On steroids. We are rapidly coming to the point where we can no longer stuff the dirty clothes and toys under the bed. There is no more room. We are going to be forced to actually deal with the mess. That means that we will have to put "playtime" off for a little bit, but Mr. Market is going to stand over us and force us to clean the room. Better to get on with it.

The Consequences of Path Dependency

Breathes there a parent who has not lectured his teenage children on the consequences of making good and bad choices? Who has not tried to help them learn to figure out their own path in life?

We make choices every day. What do we eat? What color shirt today? Do we take a new job, or ask for a raise? Almost everything is a choice or the result of a previous choice. There are whole genres of academic literature on choices and what drives us human beings to choose and do the things we do. Behavioral psychology and in particular behavioral economics is a topic oft discussed in this letter. But today I want to briefly focus on what might be thought of as the opposite of behavioral studies, and that is path dependency. These are not the choices that we think we make or that we would like to make, but the limited choices we have because of past choices and circumstances.

The classic studies of path dependence try to explain how the set of decisions one faces for any given circumstance is limited by the decisions one has made in the past, even though past circumstances may no longer be relevant. (I would encourage those interested to Google "path dependence" and spend an afternoon [or night] reading some of the research.) But now, let me dismay the academics among my readers and resort to anecdotes and analogies to set the stage

for our analysis of the end of the Debt Supercycle and to open a view on what awaits us as we journey down that path.

There are several different types of path dependency. The simplest analogy is that we go down a path, come to a fork in the road, choose one direction, and go down that path until we are presented with another fork. If we decide we don't like that path we can always go back to some previous fork and take another path. Our only loss is the time we took and the energy (or money) we spent on that path, while we did gain some knowledge of the path we left, even if we ultimately decided not to go on.

How many of us went to school to study one topic and perhaps even got a degree that we now don't use? Or started all over again in a different course of study? How often do voters elect a different group of politicians, hoping for change or a new direction, only for a majority to become disenchanted with the changes and opt for yet another change, or go back to the old political party? We fall in love with a stock or investment and then lose that love over time, and either stick it out or find a newer, more interesting investment.

We can't change the past, but we often tell ourselves that we can change things back if we want to – we can always turn around and try again, we assure ourselves.

Often there are things that are somewhat in our control. We can change. We can decide to eat healthy and exercise, or to change careers if we are unhappy. Sometimes those changes are positive and sometimes we act, even though the new path is not an easy one or one that makes everyone else happy.

There's No Going Back

The problem is that there is another type of path, one that we cannot retrace. After we choose that sort of path, the way back is blocked, and we must go on dealing with the consequences of our chosen path. We may come to forks in the road and vary our directions on the path, but we can't turn back, no matter how much we would like to. We can choose other paths into the future, but the past will always be there.

If we make a bad investment, we will lose money. I can't ask the market to give me back my money if the stock I picked goes down. If I own a business that is dependent on one customer and I lose that customer, I am out of business. If a bank lends money to someone who can't pay the money back, it is going to take a loss (unless it is a subprime mortgage and they can find some pension fund in Europe to buy it because Moody's say a whole bunch of bad loans are now suddenly AAA).

If you are eight months pregnant, you can't go back to being just four months pregnant. It is better to make the wise, if harder, choice as soon as you can.

And then there is yet another category of paths, the ones that are chosen for us, whether by family, circumstances, or fate; and once on them we don't know what we may have missed on alternative ones. Parents move to a different town and take the kids with them. A "chance"

meeting becomes a new business endeavor. A torn muscle forces a promising athlete into another career. War erupts and changes the plans of young men. Accidents happen.

Let's look at an example of a seemingly small choice that had large consequences much later. In 1953 some CIA types, with the blessing of senior US and British administrators, decided it would be a good idea to replace the elected prime minister of Iran with the Shah, who would more or less do what we asked and keep Iran from turning communist, which was a big deal in Western government circles at the time. And who really cared? We were focused on the Korean War and Russia and China, nuclear threats, and all sorts of other "distractions." It was a different time and culture. We trusted our government to do what was right to keep us safe. There was barely a mention of Iran in the papers.

And eventually (1979) we got the Iranian revolution and the rise of the Islamist parties, with Iranian support, throughout the Mideast. Fearing that an Islamist revolution might develop in some of its republics, Russia panicked and invaded Afghanistan. An otherwise low-profile Democratic Congressman from Texas named Charlie "Good Time" Wilson (he did like to party) decided to make the Afghanistan rebels his personal cause, and "traded" all sorts of favors to get what became massive secret funding for the Afghanis, who not only succeeded but turned into the Taliban and helped train and arm a young Saudi named Osama bin Laden. And then along came 9/11 and the wars in Afghanistan and Iraq. Could any of that have been foreseen in 1953? Is there a path-dependent link? You be the judge. What would have happened if we had not meddled? Perhaps things would have been better, or they might have been worse. We will never know. All we know is what did happen (or at least what we have been told).

We all have a lot of stories about the paths that we chose or the limits of our choices. The good choices we take credit for and the bad choices we blame on circumstances or find some way to rationalize them.

The "invisible hand" of the market is millions of people making their own individual choices. Do we choose to rent or buy a house because one choice is better for the national economy? Why do some companies or unions support trade barriers and tariffs? Because they know that given a free choice individuals will buy the products of companies from "foreign" sources, and they persuade politicians to limit the choices of consumers to protect their own incomes, either by forcing them to pay more for foreign products or to buy inferior, locally made products. "We need to protect our jobs, don't we?" Even if it means we all pay more for products.

And our choices add up. They become cumulative and create an economic tide. Policies and practices that initially seem small in the grand scheme of things can become much more significant when taken together and given a little time.

The End of the Debt Supercycle

And that brings us to the Debt Supercycle. Let me quote a few paragraphs from my book *Endgame*:

"When we mention The Endgame, you'll immediately want to know what is ending. What we think is ending for a significant number of countries in the "developed" world is the Debt Supercycle. The concept of the Debt Supercycle was originally developed by the *Bank Credit Analyst*. It was Hamilton Bolton, the BCA founder, who used the word *Supercycle*, and he was referring generally to a lot of things, including money velocity, bank liquidity, and interest rates. Tony Boeckh changed the concept to the simpler "Debt Supercycle" back in the early 1970s, as he believed the problem was spiraling private-sector debt. The current editor of the BCA, Martin Barnes, has greatly expanded on the concept. (And of course Irving Fisher talked about the long debt cycle in his famous 1933 article.)

"Essentially, the Debt Supercycle is the decades-long growth of debt from small and manageable levels, to a point where bond markets rebel and the debt has to be restructured or reduced. A program of austerity must be undertaken in order to bring the debt back to acceptable levels. While the focus of BCA has primarily been on the Debt Supercycle in the US, many of the countries in the developed world are at various stages in their own Debt Supercycle."

A Debt Supercycle is not some new thing. Rogoff and Reinhart write about 266 such events in the past few centuries in their epic work *This Time Is Different*. It seems to be part of the human condition. We increase the amount of debt in a system until there is too much debt. Each and every time, the people and leaders in a country convince themselves that "this time is different" and the debt is not a problem to worry about. And that is true until some moment in time when the markets lose confidence in the ability of governments or businesses to service the debt.

Professor John Cochrane of the University of Chicago has written a series of brilliant papers and articles on this problem, forcefully demonstrating the math that interest rates are partially a reflection of the risk that investors perceive concerning the potential for returns on their money. When they begin to lose confidence that a government (or business) will be able to raise enough revenue to pay off the debt at some point in the future, interest rates begin to rise. At first, there are all sorts of reasons given. Then there is a moment when the bond market simply walks away. Rogoff and Reinhart call it the "Bang Moment."

Once that confidence has been lost, it is not easily regained. "A program of austerity must be undertaken in order to bring the debt back to acceptable levels." Governments or businesses have to demonstrate that they can get their budgets under control in order to get renewed access to the bond market. And make no mistake, austerity is a path for slow growth and/or recessions.

We are used to countries like Argentina having their problems. But in the 1990s we saw what happened to both Canada and Sweden as they had to deal with that lack of confidence. While they had different answers, they came through their respective crises, although there were clearly economic costs, higher unemployment, losses, and very difficult decisions made. It is not just "banana republics" that have debt problems.

Only a few years ago, European regulators were allowing European banks to leverage as much as 40 to 1, gorging themselves on sovereign debt, because everyone "knew" that sovereign nations in a modern world would not – indeed could not! – default; so why worry about leverage

on government debt? Until Greece and then Ireland and then Portugal and now Italy, etc. I was writing early last year that Greek bonds would lose 90% of their value. This week we read that Greece indeed wants private investors to agree to a 90% write-off. Soon it will be public bond holders like the ECB that will take haircuts.

No country starts borrowing money with the thought that they will keep on borrowing until there is an economic collapse. It all starts with good intentions. No bank lends money not expecting to have it returned. Then things change over time. Since there seemed to be no problem with the current level of debt (and spending), why can't we increase it a little more?

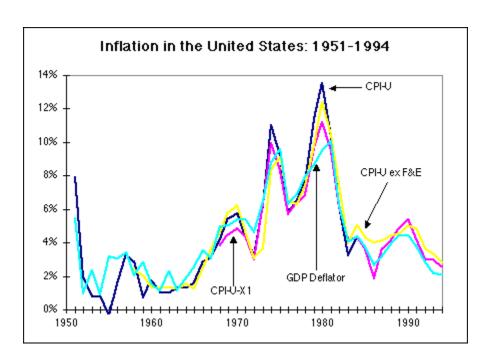
There are countries that can keep their budgets and debt under control (like Switzerland and others). But politicians like to promise benefits today and pay for them with debt that future generations must incur (like the US and countries all over Europe). Or they try to spend their way to prosperity and growth (like Japan).

And of course they promise that "in the very near future" they will get the deficits under control. "We will grow our way out of the problem. We will limit the growth of spending next year, when the economy is better. We can always raise taxes on the rich. Or increase consumption taxes. Or create some taxes somewhere." Whatever it takes to convince the bond market to keep on funding their spending.

And so the choices to provide this benefit and that program, each justified by some reason and desired by some group of voters, add up over time. Everything goes well until there is a recession. Then revenues go down and costs go up, because unemployment benefits rise. But because the natural business cycle leads to recovery and growth, things soon get better and the game continues.

But then the accumulated debt becomes too much to handle when the next recession comes along. And bond investors lose confidence and the Bang Moment has arrived. Cochrane shows that there is no magic number or formula, no way to know in advance when that moment will be. Unless a country chooses to deal with the pain of cutting spending and raising revenues, eventually there is a true crisis, resulting in massive dislocations and losses. Bond holders lose a large percentage (if not all) of their investments. That moment is often precipitated by a credit or banking crisis. And when the banking system freezes up, businesses lose access to capital, and the recession can turn into a depression if not dealt with aggressively. But that means pain.

Let's jump ahead to an illustration we will refer to again later. In the late '70s, inflation in the US rose to over 14%. I remember borrowing money at 18%. The stock market lost about 40% in just 18 months. Unemployment was high and rising.



It was the single largest failure of US monetary policy since 1950. While some blamed it on high oil prices, or speculators, or greedy businesses or unions, the fact was that the Fed printed money to allow the government to run large deficits. And US politicians supported the policy because it allowed them to spend money.

And then came Paul Volcker. He is now credited with almost singlehandedly forcing the inflation genie back in the bottle. He is everyone's hero. But back then there were plenty of people who did not like what he was doing, because he precipitated two major, back-to-back recessions, in 1980 and 1982 (as bad or worse than what we just went through). Unemployment climbed above 10%. The stock market got hammered even further. We look back now and say "It had to be done." That is great with hindsight, when we are long past the recessions. But it was tough in the middle of the recessions to explain just why we needed a tighter monetary policy in the face of 10% unemployment.

What if there had been no Volcker? No one to stand at the door of the Fed and say "No more!" What if the Fed had continued to print? Then inflation would have risen even more. 25%? Bank loans of 35%? Higher? Who knows?

At some point, the math, even for the US, does not work. There is a limit to what a government can borrow and a central bank can print without a total collapse of the economy. There would have been another depression at some point. There would have been no Reagan Revolution, because to cut taxes when inflation was 25% and deficits were higher would have been unthinkable. We would have stumbled from crisis to crisis, cutting spending and programs only to have revenues fall and costs rise. It becomes a debt spiral that always ends badly. Would Reagan have tried, anyway? I think so, as that was part and parcel of his philosophy. But he would have been blamed for the recessions, and not Volcker. And in the midst of a crisis, how do you get Congress (or any politician) to make the right decisions?

Volcker chose a hard path. But it was a better path than the one we'd been going down. He hit the reset button. But did it seem like a better path at the time to anyone who could not find a job? To those on a fixed income? To the business owners who lost everything? To investors who gave up faith in the stock market?

The Time for Hard Choices

Most nations in the "developed world" are coming to, or are already at, the end of their Debt Supercycle. They will soon lose their ability to borrow money at low rates, absent a demonstrated ability to control their budgets. An abilitythat almost none has shown. And when you look at the cost of the promises made to an aging population for healthcare and retirement benefits, the future costs are staggering. There is no way such promises can be kept. And one by one, with increasing frequency, countries will find their interest rates, the cost of servicing their debt, of getting people to buy their bonds, will rise to the point where, **absent a central bank willing to print money in massive quantities**, their budget and economy will collapse. Banks that have "invested" in huge amounts of sovereign debt will see their capital wiped out, seemingly overnight.

In Europe in the past few weeks, almost €500 billion has been deposited at the ECB for a return of 0.25%. The interbank market, when it functions, will pay 0.40%. Why would a bank take less money from the ECB? Because they can't get other banks to lend them the money. Banks no longer trust the ability of other banks to pay them back. UniCredit in Italy is raising money at a 40% discount to their already depressed stock price. They will not be the last to be forced into such choices. The credit markets are telling us there is a crisis in the making, on the scale of Bear Stearns or Lehman in 2008, except that now governments have less ability to step in and salvage the banks. Now, government debt is the problem.

Just as you can't solve the problem of being drunk with more whiskey, you can't solve a debt problem with more debt.

But that means hard choices. And the choice right now, is how long should this letter be? I think we are at a good breaking point, so next week we will look at why the choice in Europe is between recession now or depression later. We will take a look at periods of deleveraging in the US in the 19th century, and see what happened. While there were indeed massive dislocations of the economy and huge investor losses, a few good lessons were learned and applied, until recently. We will look at what choices countries can make. Some, like the US, still have a viable path to control their bond markets and avoid a depression or major recession; but there will be pain. Think Volcker. Others simply will get to choose between what type of depression they want: short and deep or long and exhausting.

Will the Greeks become debt slaves, working for an entire generation at reduced wages to pay their debt and remain in the eurozone, or will they leave and suffer very large currency losses and the loss of access to the credit markets? Not a very good set of choices, but that's all they have, unless they can convince German taxpayers to fund their deficits and rising costs ad infinitum. Good luck on that one.

We will find that the European crisis will create serious problems for the rest of the world. Global growth is set to slow rapidly. By the end of this year, we may be happy that there was any growth.

And next week we must address Japan, China, and the US. So much for the quick, easy forecast. But those you can get anywhere. Google "economic forecast 2012." There are 2.8 million hits. I'm sure you can find several that fit whatever mood you're in.

We will take the longer path, but when we finish we will have some idea of where we're going. Stay with me.

Hong Kong, Singapore, Bloomberg, and a Personal Note

First, let me wish you a very personal Happy New Year! It looks to be a busy one for me. Next Tuesday I am off to Hong Kong to speak at a conference for the *Hong Kong Economic Journal*. I am told there will be a simultaneous translations into Chinese. Then Singapore the following Sunday, and back on the 20th. I will again be writing on the road, but I expect you will get your letter next weekend at the usual time.

I am very pleased to announce a special new publication called *Mauldin Research Trades*. It will be launching on the Bloomberg terminal platform in two weeks. This is a really exciting publication that will be a collaborative effort of half a dozen of the best technical analysts in the world (they literally have written a couple of dozen books on technical trading), who will contribute trading ideas to a select, very limited group of Bloomberg client subscribers (mainly institutional and trading funds), based on my macroeconomic views. In addition to the exclusive new publication, my *Thoughts from the Front Line* and *Outside the Box* letters will also soon be available to Bloomberg terminal users all over the world.

I am launching the publication with my good friend Barry Habib (whom you know from his writing on mortgages and frequent appearance on CNBC). He is an essential part of the project (and the source of some of the best trades so far!). And Peter Mauthe is heading up our effort in my office. This new publication has been developed specifically and exclusively for distribution to Bloomberg terminal users. You can contact your Bloomberg representative for details. I will provide more information in a few weeks, after the official launch.

On a personal note, long-time readers know that I have written about the joys of wine and other adult beverages. They have been a source of pleasure. But for health reasons, my doctor, Mike Roizen, made it very clear I had to quit drinking, which I did about five months ago. Yes, cold turkey; and yes, it was not easy, especially on airplanes on international flights. But you do what you have to do. As some of you know, I intend to live a very long time. Hopefully long enough for Mike West of Biotime to figure out how to reverse the aging process, so I can live a very long time indeed! And since I want to give Mike (and others who are also working on the problems of aging) as much time as I can, I have had to make some very hard personal choices. Even chardonnays are off the menu.

So until someone can come up with a genetic treatment that will allow me to metabolize alcohol with no side effects (talk about a killer business model – I will invest!), I am "on the wagon."

It is quite late and time to hit the send button. Enjoy your week. In the coming year, let's focus on what we need to do to get through this rough patch we see coming. We can do it, you and I.

Your looking for the wisdom to know the difference analyst,

John Mauldin

The End of Europe?

Solving the Mayan Code
To Solve the Crisis You Must Solve Three Problems
Getting Simple About Europe
How Much Risk Do You Want in a Government Bond?
Do You Have a Spare €1.5 Trillion?
Singapore, Cape Town, and Thoughts on Hong Kong

By John Mauldin | January 14, 2012

One of the interesting things about being in Hong Kong is that I get to see the weekend edition of the *Financial Times* 12 hours early. And the headlines were not all that pleasant. As I promised last week, we will cast our eyes to Europe and ponder what is in store for Europe for the year and the next five years. And what do we read on page 2? The "ECB raps revisions to draft a fiscal pact." Seems they feel there are too many loopholes, which will make the document meaningless ... somewhat like the treaty they have now. And we further learn that "Greek default threat grows as talks falter." Seems there is a lack of agreement on how much of a haircut the investors ought to take, and the Greeks don't want to guarantee any future debt, just in case they need to default some more in the future. But they do want the €15 billion they need to keep the debt machine running for a few more months.

And on page 1, in big type, we are surprised (but not very) by the headline, "France and Austria face debt blow." Seems those sharp-eyed accountants over at S&P have decided to downgrade French debt from AAA. Which of course leads to another headline on page 2, suggesting "Firepower of bail-out fund cast into doubt." The currency markets were shocked – shocked I tell you – that S&P would do such a thing and promptly took back the euro rally and cast the euro down to recent cycle lows. Who knew, other than the entire free world not watching reality TV, that S&P was planning to do such a thing? And we read elsewhere that the European Commission is dismayed that S&P would do something so clearly not right, at least according to the way they keep their own books.

Even here in amazing Hong Kong, with the growth of China driving a wave of prosperity, eyes are fixed on Europe. How will they deal with the crisis? We read that US exports to Europe were down 7% last quarter, and Europe has not yet really entered into recession, which is almost guaranteed this year. And if US exports are down, then so are Asian and Latin American exports. Global growth appears to be threatened.

Solving the Mayan Code

There are so many pieces of data to go through in order to augur Europe's future – I want readers to know I have left no stone unturned! In fact, I went to some very old stones to get help with this week's letter. I began to scrutinize the Mayan Code from ancient Central America, which so many feel predicts the end of the world on December 21 of this year, bringing my fresh eyes to an old mystery.

After much deliberation, I have come to this astounding insight: The Mayan academics who created the code were not in fact astronomers or even astrologers. No, it is clear they were another breed of even more dubious forecasters, called economists. Once you approach the glyphs with that understanding, it becomes clear they are not predicting the end of the world, merely the end of Europe. One symbol clearly shows the Greek flag dipping to the ground. Another depicts the Italian flag with its wheels coming off. Oh, and you don't even want to know what they have prognosticated for the French. This is a family e-letter and I can't squeeze such language past the censors. But now that I have provided the basic insight, I leave it to you, fellow scholars, to decipher the rest of code.

And we will spend our time together here this week trying to discern what it means, in fact, for Europe to come to the place in its journey where it must make extremely difficult and often painful choices. As I wrote last week, as I started this voyage of discovery with you, the choices the various countries in the developed world are now making will put us on a path that does not allow us to turn back without severe consequences. (If you missed last week's letter, here it is.) We are left with debt that must be dealt with, with imbalances that must be balanced, and with deficits that must be brought under control. No matter what we choose, there will be pain for all of us. You cannot make debt go away without paying it back or defaulting, one way or the other, which means someone loses. And as we will see, paying it back can be very difficult, indeed, once it has grown this large.

To Solve the Crisis You Must Solve Three Problems

There are three main problems in Europe. The first is that most of the banks are massively insolvent, because they have 30 times their capital invested in the second problem, which is the sovereign debt of countries that are going to have trouble paying that debt. If the banks have to mark down the debt to what its real value is – or to what it will soon be – they will be bankrupt on a scale that makes 2008 look like a waltz in the park.

Countries simply cannot function in a manner that can be called normal without viable banking systems, which is why the authorities spend so much time worrying about them. If banks can't make loans, then businesses must cut back, which means fewer jobs, products, and services, which quickly becomes an ugly spiral. Losses in the private sector mount up. This obliges the treasury secretary to get on one knee and beg some elected official who has no understanding of how business and economics work to save the world as he knows it.

But if countries must step in and save their banks, then they have to assume some of the losses. (I am assuming that this time shareholders get completely wiped out, as do most bondholders. Taxpayers – read voters –are actually paying attention this time. They are in no mood to bail out bankers.) But most of the countries in Europe with the worst banks simply do not have the money to invest. They already have too much debt. Where do they get the capital? (More on that later.)

For most of the past two years, European leaders have tried to deal with the problems as though they were short-term liquidity problems: "If we just find the money to buy some more

Greek bonds, then Greece can figure out how to solve its problems and then pay us back. Given enough time, the problem can get solved."

They have now arrived at the understanding that it this not a short-term problem. Rather, it's a solvency problem of the various governments, which of course creates a solvency problem for their banks. They are now addressing the problem of solvency and providing capital until such time as certain countries can get their budgets under control and the bond market sees fit to provide the capital they need.

But they are completely ignoring the third and largest problem, and that is massive trade imbalances. Germany exports products to the peripheral European countries, which run trade deficits. As I have shown in several letters, a country cannot reduce private-sector leverage, reduce public-sector leverage and deficits (balance its budget), and run a trade deficit all at the same time. That is simple, unavoidable math, based on 400 years of accounting understanding. Ultimately, there must be a trade surplus if leverage and debt are to be reduced.

Greece runs a trade deficit of about 10% of GDP. Until they can stop that bleeding, they cannot get their government and private budgets under control. It is not simply a matter of cutting budgets or raising taxes. Indeed, their economy will continue to shrink, making it more difficult buy foreign goods without increasing their own production of goods and services. It is a vicious spiral. And that same spiral will spin up to take in all of Europe. Again, more on that later, as we consider what their choices are.

But for now, let's start with my contention that if you do not solve all three problems you do not solve the real problem. Greece cannot "stand on its own" without a change in its cost of production relative to Northern Europe. Neither can Portugal, et al., unless Germany either changes how it exports and consumes more, or Germany is willing to fund Greek (and Portuguese and Italian and...) debt, so those countries can continue to run large deficits.

Let's resort to something I have done in the past, and that is to create a simple model to help us understand the issues involved. As always, when we make simple assumptions we are ignoring the real complexities. I know things are vastly more complicated than the following simple analogies, but the underlying truths are basically the same.

Getting Simple About Europe

Let's assume a country that has a gross domestic product (GDP) of \$1,000. In the beginning it taxes its citizens about 25% of GDP and spends the money for the public's benefit. But alas, it spends about 30% of GDP, so it must borrow the overage (about \$50) from its citizens or from the citizens of other countries. Because the country starts out with relatively little debt, interest rates on this loan are low, because those who buy the debt can easily see that the the country can pay them back. If the debt of the country is only 5% of GDP (\$50) and the interest rate is 4%, then the amount that must be paid as interest is only about \$2 per year. Not a whole lot, about 0.2% of GDP.

But this goes on year after year. Sometimes the deficits get smaller and sometimes they get larger, depending on the economy; but government expenditures grow at the same rate as the country grows, and the debt keeps growing at an average of 5% of GDP per year. Now, if the country is growing at 3% a year, after 24 years the economy will have doubled to \$2,000 GDP. That means the debt has grown (roughly) to a total of \$1,800, which is now a debt-to-GDP ratio of 90%. Debt has grown faster than the country's economy. Note that if the country had held its budget down to where it grew slower than GDP, thus reducing its need for debt, that ratio would be lower, even if the debt had grown. You can indeed grow your way out of a debt problem if the growth of government spending is less than the growth of the economy.

But what if the size of government grows to about 50% of GDP, rather than 25% or 30%, over the 24 years, as politicians decide to spend more money and voters decide they want more benefits? (Think France.) Then the private sector must pay about 50% of its production to the state – plus, the debt is now growing unwieldly. The private sector has less to invest in new businesses and tools, and the growth of the economy slows.

And then along comes a very nasty recession. The revenues of the government fall as the economy shrinks. If the economy shrinks by 3% and total taxes are 50%, then tax revenue falls to \$970. But the government does not cut back; and indeed, because it must pay unemployment benefits and welfare (because unemployment rises in a recession), its expenses actually rise by 5%! So it now needs \$1,050 to pay all its budgeted expenses. And it must now borrow \$80 to pay everyone it has promised to pay, in addition to the \$100 it was already borrowing every year to cover its deficit, or a total of \$180 a year, which is 9% of GDP.

(Yes, I know that debt must change as a percentage over time and nothing is stagnant, but work with me here.)

Now debt-to-GDP is rising by about 5% a year. Not a large number in the grand scheme of things, and everyone knows that the recession will soon be over and the deficits will come down. Sovereign governments never default on their debts – our government leaders assure us of that. They can always raise taxes or cut spending, can't they?

And things rock along just fine, and the bond market continues to buy the debt, until one day you look up and the debt is 120% of GDP. Then the bond market gets nervous and says that instead of 4% it wants 7%. Now the interest payments are over 8% of GDP and 16% of government spending, which means the government must either cut back on services or salaries or benefits, or raise taxes, or borrow more money. But cutting spending and raising taxes have consequences. They reduce GDP growth over the following 4-5 quarters as the economy adjusts.

What if that interest rate cost rose to 10%? Then the interest cost to the government would become 20% of its expenses and be rising faster than the country could grow, even in the best of times. And if they continued to borrow at 7% and the country did not grow, those interest expenses would rise at least 7% a year – as long as interest rates didn't go up.

And what if the other countries who had been buying the government's debt looked at the basic math and realized that, another step or two down the current path of government spending, there was no way they would be able to get their money back?

How Much Risk Do You Want in a Government Bond?

Now, government bond investors are a curious breed. They invest in government bonds because they actually think there is not supposed to be any risk. They want their money to be safe. If they wanted risk, there are lots of opportunities to invest with the potential for more reward.

The moment that government bond investors begin to think they might be at risk, they leave. And history suggests they tend to leave seemingly all at once. It is the Bang! moment. Someone fires the starting gun, and they all head for the exits. They start selling their bonds to speculators at discounts, which makes the effective interest rates in the market rise, sometimes by a lot. That means that if a country wants to borrow more money, it will have to pay the effective price in the market, or maybe as much as 15-20% IF – a big IF – it can even get someone to buy the bonds, which of course makes it even more difficult to pay their debt as interest costs rise.

Now, let's add a twist. The other countries that have bought those bonds are not actually countries, but banks in other countries. And because the regulators of those banks knew it was impossible – inconceivable – that a sovereign country might default, they allowed their banks to buy 30 times as much sovereign debt as they had capital in their banks. They did not have to reserve against any losses, so these were "free" profits for the banks. You pay 2% on deposits or short term commercial paper and buy bonds paying at 4%. You make a 2% spread, which you then do 30 times. Now you are making 60% profits on your capital and deposits. It is a *very* nice business – as long as everyone pays the interest. And because it is such a good business, you just roll over the debt every time the bond comes due, because you want more easy profits.

Let's say that banks bought up to 10% of their total government sovereign-debt holdings in our problem country. If the country gets into trouble and says, we will only pay 50% of our debt (we will discuss why below), then that means the banks lose 5% of their total assets. But they only have about 3% capital, because they were allowed to leverage. That means they are functionally bankrupt.

Without a functioning banking system, other countries now have to step in and take the losses (and perhaps wipe out the shareholders and owners of their banks). That would be bad for the other countries, as that much spare cash is not just lying around in government coffers. They are ALL borrowing money already and have their own deficits to worry about.

So everyone gets together and they tell the bankrupt country (because that is what it really is), we will lend you more money to keep you alive, but you must agree to balance your budget. And since that is the only way the problem country can get more money, they initially say, "Sure. We can do that. Just give us some money now so we can get it figured out and get everything under control."

In the world of government, living within your means is called austerity. And it's an uphill slog. Let's say your deficit started out at 15% of GDP (somewhat like Greece's). If you agree to cut that deficit by 4% a year for four years running, if everything stays the same, you could be back in balance. But the other counties would have to agree to lend you the difference between what you budgeted to spend and what you took in as tax revenues. Just to keep things going. Otherwise you'd have to default on your debt. If the countries simply have to guarantee the loans and not actually spend the money, it is a lot easier than having to find real money to save their banks, so they agree.

But the cuts you have to make are not as easy as everyone hoped. It seems that employees don't like having their pay cut, and unions don't want pensions cut, and retirees certainly expect the government to fulfill its promises; and don't even get started on cutting healthcare, which is a God-given right.

So you raise taxes and cut spending by about 4% the first year. But a funny thing happens. That reduces the private economy by about 4%, so the base on which taxes are collected is reduced, which means less revenue is raised, which means that the deficit is much worse than projected. And then the following year you have to make another 4% in cuts, plus the last shortfall, just to make your plan and get to the agreed-upon deficit, in order to get more loan money. It becomes a very vicious circle.

And let's look at the endgame. That debt-to-GDP ratio will rise to at least 150%, while the economy is actually shrinking. If interest rates settle to a mere 7% (hardly likely), it means the people of the country are going to have to pay over 10% of their total production to foreign banks each and every year for decades, never mind paying down the principle.

Let's throw in one more twist. The country has been buying about 10% of GDP more from other countries than it sells to them. That is because the relative wages in the problem country are about 30% higher than in the "good" countries. The good countries get the money from what they sell and have a nice surplus. The problem country soon runs through its savings, trying to buy the goods and service it wants; and the private sector, as well as the government, must cut back.

What happens is that you are locking in what feels like a depression initially, and then you have a slow- or no-growth economy for many years, as so much of your work goes just to pay back that debt to the banks of other countries.

Understand, your government has freely obligated itself to pay that debt. But it means that its citizens in effect become debt slaves for a generation or two to foreign banks. Not a very popular platform for a politician to run on for re-election.

Long-time readers know I think the neo-Keynesians do not have a proper view of the world. They live in a theoretical world divorced from what really happens. But in this respect they are deadly right. Austerity on the scale needed by many countries will only reduce potential GDP. The Keynesian prescription is to therefore run deficits and borrow money until you get

growth again; but when you have already exhausted your ability to borrow money, it just doesn't work.

More debt makes if far more difficult to grow your way out of the problem. If you are already drunk, you can't get sober by drinking more whiskey. If Greece cuts its deficit by 15% of GDP, the reality is that GDP over time will be reduced by about 20%, and the debt will grow, both in real terms and as a percentage of GDP. A 20% decline in GDP is by any standard a depression and makes it even harder to grow, as so much of what you do make has to go to basic expenses and not productive capital. And if you have the burden of massive debt it becomes damn near impossible.

That is why individuals can file for personal bankruptcy. We no longer force people into slavery or debtor's prison to pay their debts, at least in most places.

So our problem country goes to its lenders and says, "We think you should share our pain. We are only going to pay you back 50% of what we owe you, and you must let us pay a 4% interest rate and pay you over a longer period. We think we can do that. Oh, and give us some more money in the meantime. And if you refuse, we won't pay you anything and you will all have a banking crisis. Thanks for everything."

The difficult is that if our problem country A gets to cut its debt by 50%, what about problem countries B, C, and D? Do they get the same deal? Why would voters in one country expect any less, if you agree to such terms for the first country?

So now let's return to the real world of Europe. Greece cannot pay its debt without a major depression. So its wants to pay only 50%, but it doesn't even want to guarantee that in any meaningful way; so bondholders scream, "We get nothing in return for agreeing to take a 50% haircut?!" Which is today's headline.

Greece cannot print its own money, so unless it leaves the Eurozone, it's stuck. They can default on their debt, but that means they are shut out of the bond market for some period of time. That would force them to make the spending cuts they are now resisting, as they would simply not have enough money to pay their bills. Even with a 100% haircut they're looking at a shorter but very real depression. And because no one will sell them products they need, like energy and food and medicine, unless they can sell or trade something in return (that trade-deficit problem), they will be forced to change their lifestyles. Wages must drop or productivity rise to be competitive with northern Europe. And that differential is about 30%. I am not certain, as I have not been to Greece in a long time, but my bet is, you won't find many Greeks who think they are overpaid by 30%.

But that is what the market is going to say. And that is the third problem, which Europe is not addressing. Germany and the northern tier are simply more productive than the Southern periphery. (With the possible exception of Northern Italy, but Italy all gets lumped together, which is why many Northern Italians want to be their own country and not have to pay taxes that go to Southern Italy. I am not taking sides, just observing what we read in the papers.) Until

Germany consumes more from the peripheral countries or the peripheral countries become more productive, the imbalance will not allow a positive solution.

Prior to the euro, the imbalances would be handled by currency exchange rates. The value of the drachma would go down relative to the value of the deutschmark. Things would balance over time. Now, all of the eurozone countries are effectively on a gold standard, with the euro standing in for gold this time. Britain, the US, and Japan print their own currencies. Their currencies can rise or fall over long periods of time, based on national accounts and the desires of foreigners to buy goods or invest in their countries.

Greece and the other peripheral countries face a difficult choice. Do we stay in the euro and pay as much as we can, and watch our economy drop; pay nothing and watch our economy drop (as we get shut out of the bond market); or leave the euro and go back to our own currency and watch our economy drop?

They have no choices that allow them to grow and prosper without first suffering (for perhaps a long time) some very real economic pain. As I have written in previous letters, leaving the eurozone has severe consequences; but the economic pain of leaving would go away sooner and allow for quicker adjustments, than if they stayed. However, the initial pain would be worse than the slow pain they'd suffer by staying in the euro. Their choice is, simply, which pain do they want – or maybe, which pain do they think they want? Because whatever they choose, they are not going to like it.

And just as I was finishing this section, this note came from Naked Capitalism:

"The three Troika inspectors—Poul Thomsen from the IMF, Mathias Morse from the EU, and Klaus Mazouch from the ECB—are supposed to head to Greece next week to inspect its books; the budget deficit is once again higher than the revised limit that Greece had vowed to abide by. And they're supposed to negotiate additional 'structural reforms.' But there probably won't be three inspectors, according to senior IMF sources. Missing: Poul Thomsen. The IMF has had enough.

"Already, according to more leaks, IMF Managing Director Christine Lagarde had warned German Chancellor Angela Merkel and French President Nicolas Sarkozy that the fiscal and economic situation in Greece had deteriorated. Hence, the 'voluntary' haircut on Greek bonds held by private sector investors should be increased to more than 50% to maintain the goal of bringing Greece's debt load down to 120% of GDP. And the second €130 billion bailout package, agreed upon on October 26, should be enlarged by 'tens of billions of euros.'

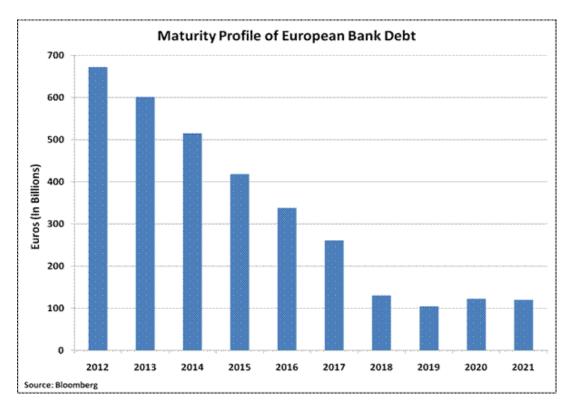
"The German reaction was immediate. 'There has to be a line somewhere,' said Michael Fuchs, deputy leader of Merkel's party, the CDU. 'This cannot be a bottomless barrel.' Even if Merkel were amenable to committing more taxpayer money to bail out Greece, she'd face a wall of opposition in her own party. And he wasn't brimming with optimism: 'I don't think that Greece, in its current condition, can be saved,' he said."

The article goes on with a description of the chaos in Greece. It is worse than I have described. Really. And so terribly sad.

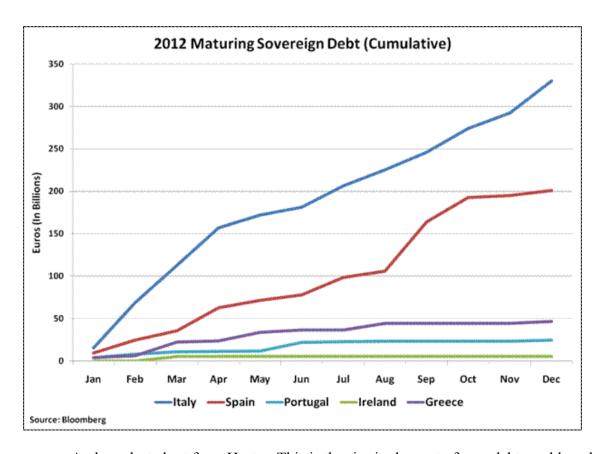
Do You Have a Spare €1.5 Trillion?

Before I hit the send button this week, let's look at a few charts that can help us judge the current scope of the problem. These are from the very astute Bill Hester of the Hussman Funds. He wrote a very solid piece entitled "Five Global Risks to Monitor," at http://hussmanfunds.com/rsi/fiveglobalrisks2012.htm. It is very good, if sobering, reading.

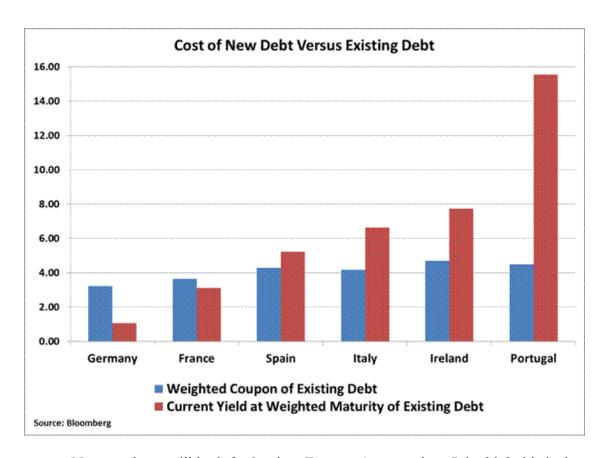
This first chart shows how much bank debt is maturing in Europe over time. You have to add in how much new debt must be sold, as they will need to raise capital to balance the sovereign debt losses. Do you have a spare €1.5 trillion? Yes, some of that is rollover debt, but banks are trying to reduce their exposure to each other and may not want to roll over that debt, unless they can turn around and get capital from the European Central Bank to buy it, which is a back door to debt monetization.



The next chart shows how much debt must be rolled over by governments in the coming year. Notice how much Italy must raise in the first three months!



And one last chart from Hester. This is the rise in the cost of new debt as older, cheaper debt comes due. My simple example is not at all extreme.



Next week we will look further into Europe. As a preview, I do think this is the year they will be forced to the very hard decisions. We will examine what a fiscal union would look like and how likely it is to happen, and what the prospects are for a break-up of the eurozone, and compare several scenarios for what Europe may look like in five years.

Singapore, Cape Town, and Thoughts on Hong Kong

I am finishing this letter on a Saturday night in Hong Kong, after spending the day speaking at a conference sponsored by the *Hong Kong Economic Journal*, which will celebrate its 40th birthday next year. It is the #1 Chinese language economics paper, and I am honored that they would translate my letters each week into Chinese and take a full page of their paper to publish them. They note that I write their longest column by far!

Last summer I met with the head of research of the *Journal*, Lewis Chong, over pizza in the little village of Trequanda in Tuscany, Italy, where we struck up a friendship and decided to work together. It now looks like a very good decision, at least on my part. They have actually made quite an effort to promote our new relationship, and I was surprised to see fairly large pictures of me in their paper and as I stepped out of baggage claim at the airport. Go figure. And when you get out of a taxi on a random street in Hong Kong and someone comes up and asks if you are John, then the world has changed.

Last night Louis Gave took me on a tour in his old-style Hong Kong junk, a rather large boat that is made to tour the islands. He took me on a harbor cruise at sunset, and as the sun

melted into the sea we left the harbor and began to motor south down the island. Of course, the downtown and across the harbor is wall-to-wall skyscrapers. But as we went further, as we rounded the corner of each bay, we were met by even more skyscraper apartment buildings. And more and more. I had no idea of the scope of the building they have done in the last 20 years. Truly amazing. Almost as amazing are the prices people pay for the apartments and office rents. It makes New York look cheap. The city and its people seemingly never sleep. And the optimism about China is quite contagious. At points it is close to giddy. But when you look around you can understand that optimism.

I must confess I am not a good sailor. And our boat in the harbor rolled and heaved quite a lot, at least for this Texas boy. I was quite happy when we got to smoother waters as we left the harbor on the way to the yacht club.

Tomorrow morning I leave for Singapore, meanwhile continuing work on an overdue manuscript as I travel. I will meet up with my old friend Tony Sagami, who is coming down from Bangkok to spend a few days with me, and as readers and new friends show me their town. I get to drop by and see Jim Rogers at his home after a gig at CNBC Singapore Wednesday morning (guest hosting their *Squawk Box*). I am really looking forward to my first time in Singapore.

I am not certain of the schedule for next week's letter, as I am on very long flights back home at the times I normally write. But I will write, regardless.

It really is time to hit the send button. Have a great week!

Your not yet in the right time zone analyst,

John Mauldin

Staring into the Abyss

Choices, Debt, and the Endgame
Staring into the Abyss
An Unintended (and Very Negative) Consequence
A Preview of Coming Attractions
Hallucinogenic Data and Other Fun Activities
Gentlemen, Choose Your Disaster
What Europe Should Do
South Africa and Sweden

By John Mauldin | January 21, 2012

"If we want everything to stay as it is, everything will have to change."

— from *The Leopard* by Giuseppe Tomasi di Lamedusa

"The crisis takes a much longer time coming than you think, and then it happens much faster than you would have thought, and that's sort of exactly the Mexican story. It took forever and then it took a night."

- Rudiger Dornbusch

Europe's leaders are committed to keeping both the euro and the eurozone as it is. But for it to do so, everything must change, as the wonderful quote from the 1958 Italian novel suggests. This is no easy task, as no one wants a change that will impact them negatively; and there is no change that will allow things to stay the same that does not impact all severely, as we will see. In the third part of a continuing series, we look at the actual options that are available on the menu of choices, or as one group called it, the menu of pain. I offer some guideposts that we should watch for along the way, and end by offering a suggestion as to what Europe should do. As has been the case in this series, I do my best to offend everyone at some point. If by some small, unintended oversight I do not, then wait another week, I will get to you. What else are friends for?

But before we take on Europe, let me quickly tell you to save the date for my annual Strategic Investment Conference, co-sponsored with my partners, Altegris Investments. And what a lineup we have this year. Already scheduled are my friends Dr. Woody Brock, Mohamed El-Erian, Marc Faber, Niall Ferguson, bond-fund star Jeff Gundlach, Dr. Lacy Hunt, David Rosenberg, as well as your humble analyst. And there are a few more blockbuster names we are close to finalizing. Most people who attend think this is simply the best investment conference of the year, and I think this one looks better than ever. It will be May 2-4 in the San Diego area. I will soon give you details about where you can go to register, but for now put it in your calendar. What better way to think about how to invest in these times than to hear some of the best minds in the world, all in one place?

As this letter will suggest, I don't think this is the year you want your portfolio in typical long-only funds. There is a lot of tail risk this year coming from Europe. For those who are accredited investors and interested in alternative investments like hedge funds and commodity

funds, which can help you navigate through these volatile times, let me suggest you go to <u>The Mauldin Circle</u> and register, and my friends at Altegris Investments will give you a call. I am finishing up a new Accredited Investor Letter, and they will send it to you for free as our way of saying thanks for talking with us. Now, let's jump right in.

Choices, Debt, and the Endgame

We started off this New Year's series by pointing out that the choices we make today are constrained by the choices we made in the past, and the choices we make in the future will be limited by the choices we make today. Europe chose to create a free trade zone, and then some of the countries proceeded to lock themselves into the gold standard of a single currency, relinquishing the ability to adjust any imbalances in their economies by changes in the prices of their own currencies.

Interest rates for the southern tier of Europe dropped to levels never available to them before, and those countries responded by borrowing ever-increasing amounts of money to finance current spending. Then came the credit crisis, and budgets simply ballooned out of control, and debts began to get to levels that made the bond markets ask for ever-higher rates, as concerns about sovereign defaults began to rise.

This problem was compounded by the fact that European banking institutions were allowed to leverage their purchases of sovereign debt by 30 or 40 to 1 their actual capital. That means even a default by a small country has potentially big ramifications. As it became clear that Greece was in trouble, European leaders at first thought that if Greece was given some time, it could get its budget deficit under control and then once again gain access to the bond market.

In the summer of last year, after dithering through some 40-odd summits, it began to dawn on European leaders that it was not a short-term liquidity crisis they had on their hands but a solvency crisis. A fact that numerous commentators had been pointing out to them for quite some time. And as Greece began shake and bake its way to "austerity," the very act of cutting deficits pushed the country into recession, which lowered tax revenues and increased expenses, putting the elusive goal of a balanced budget even further off. We should quickly note that this is not just a Greek problem. Spain's "draconian" cuts have meant that its 6% deficit target for the year has this week been raised to a more likely 8%, making it harder to get back to even.

For country after country, this is the Endgame. It is the end of the Debt Supercycle. Debt has grown to the size that it cannot be sustained. The market will not lend any more money on terms that can be afforded, and any efforts to cut spending and raise taxes will result in an even worse economy, in various degrees of recession, with falling revenues and rising costs.

Europe has three main problems.

1. A growing number of its countries are insolvent or close to it. It is increasingly likely that the only way forward is for defaults of some type, to lessen the burden of debt to a level where it can be dealt with and that will allow the countries the possibility of growth, which is the only real answer to the problems they face.

- 2. Because of growing fears of multiple defaults (just Greece would be bad enough!) most of the banks in Europe are seen to be insolvent and in need of hundreds of billions of euros of new capital. The interbank market in Europe is in a shambles, and banks park their cash with the ECB, at a lower rate of return, as that is the only institution they trust. They clearly do not trust each other. As an aside, I heard from many sources while I was Hong Kong and Singapore, meeting with readers and friends, that European banks (especially French) are cutting back on their trade lending, which is making normal commerce more difficult. Didn't we just go through that in 2008?
- 3. The real problem in Europe is the massive trade imbalances between the peripheral countries and the so-called core countries. Without the ability to adjust currencies, those trade imbalances will render any debt solution moot, as a country cannot balance its budget while it runs a trade deficit and its citizens and businesses also deleverage. I have written about this arithmetic problem on numerous occasions. There must be balance or there must be a mechanism to achieve balance.

One cannot solve one problem without solving all three. Either they all get done or none truly get done. You can kick the can down the road by solving problems 1 and 2, but problem 3 will put you shortly back to square one.

Europe is now trying to address problems 1 and 2. They are talking about a "new treaty" that will require austerity of a real kind, although I understand that Germany has put in a clause that gives it some extra time to achieve its own balanced budget. And the ECB is dispensing euros through the back door to banks, in exchange for anything resembling collateral. Not directly of course, as that is prohibited, but the same thing is being accomplished, despite objections in some quarters, mostly German.

Staring into the Abyss

It was late in September of 1998. I was flying from New York to Bermuda to speak at a hedge fund conference, and found myself upgraded at the last minute, back in the day when I did not fly that much, so I was feeling rather happy. As the door closed, a patrician-looking gentleman stepped in and came and sat next to me, immediately picking up a file and burrowing into it. I had a book and the *Wall Street Journal*, so I was content to read.

As soon as we took off, he asked for a scotch. He proceeded, over the next hour, to wage a very aggressive war on the diminishing cache of scotch bottles stored on board. (No, it was not Art Cashin. He doesn't fly.) It was an arduous campaign, but he was fully committed to winning.

He glanced over to my *Journal* and noted some headline about the crisis that had occurred the previous week. I had been following the extreme market volatility with interest, but this was in the first decade of the internet, so most of what you came by you still read in print or heard on the phone.

"They don't really know how close we came," he shuddered, his eyes showing the first signs of emotion – and fear – I had seen from him. That piqued my interest, and I engaged him, though without touching his precious hoard of scotch. I settled for a nice chardonnay. It turned

out he was the second-ranking executive at one of the three largest banks in the country. He had been at the table in the NY Fed boardroom when 14 banks were forced to put in \$3.625 billion to keep Long Term Capital from collapsing, with only Bear Stearns declining (one of the reasons they had no friends ten years later). The NY Fed president had essentially called all the heads of the banks, told them to be in the room, not to send proxies, and to bring their checkbooks. There was subsequently a lot of criticism of the Fed, but they did what a central bank is supposed to do in times like that: they made the children play nice in the sandbox. They were the only entity that could force the various monster-ego players to even sit in the same room with each other.

"No one will ever really know," he said again. But of course, soon everyone did, as Roger Lowenstein wrote the must-read real-life thriller *When Genius Failed*.

"We walked to the edge of the abyss, and we looked over." He proceeded to regale me with the stories of the negotiations, as the immensity of what would happen if they allowed the collapse dawned on the group one by one. They all had exposure to LTCM but did not realize the extent of it until it was too late. Looking back, it might have looked something like the credit crisis of 2008 if they had not acted, except it would have happened much faster.

I can tell you that no one in that room wanted to write a \$300-million check. It was not good for their careers. Interestingly, after two years the fund was liquidated and the banks got back their capital plus a small profit.

Now, the bankers and leaders of Europe are getting ready to walk to the edge of the Abyss. It will be a long way down, and look like the 7th level of Dante's Inferno.

Their first real look will come in the next few weeks, as Greece is negotiating aggressively with its lenders as to how much of a haircut they will receive and what sort of guarantees Greece will provide on the remaining debt (they are balking at putting the new bonds in a legal jurisdiction that will have some real bite if they default again, which they will). They are also negotiating with Europe about how much additional real austerity they will have to endure in order to be allowed to take on more debt. If they walk away and there is an uncoordinated default, it will guarantee chaos. Bank collateral will collapse and credit default swaps will be triggered, including many sold by European banks that are already essentially insolvent.

The legal euphemism here is that if debtors "voluntarily" accept a 50% haircut, then no credit default swap protections will be triggered on those positions. But not all parties want to voluntarily take that loss (or an even greater one). If they are forced to do so, then the credit default swaps they bought come into effect. Greece can legislatively force them to take the haircut, but CDS contracts are written in such a way that that action would be seen as a loss, triggering the CDS insurance. The governments involved want everyone to accept, so there is no crisis. The funds simply want as much money as they can get back, and many are playing a very hard-nosed game.

Can the holdouts be enticed with sweeteners that not all may get? Maybe different collateral? Or shorter terms, or ...?

The sad thing is that a 50% cut of the private lenders only gets Greece back to what will soon be 120% debt-to-GDP, from the current 170% and rising. 120% (which I consider optimistic) is just another, lesser form of insolvency, as Italy now understands. And if Italy is under pressure at 120%, then it is almost a given that the market would see Greece as still insolvent.

An Unintended (and Very Negative) Consequence

There is at least one unintended consequence arising from the Greek settlement negotiations. Private investors thought they were buying a bond that was "pari passu," or equal with all other Greek sovereign debt. It now turns out they were buying junior, second-tier, subordinated debt. Something like a second mortgage on a home. You will take the first loss, so you then charge accordingly. But it now seems that the ECB, the IMF, and European public institutions are "more equal" than the private parties and will not have to share in the losses. The private lenders have found out they were taking subordinated risks while only getting senior-rate returns.

It the public lenders were involved in the haircuts, then maybe it would only have to be a 30% haircut, or if it was 50% it would be enough to maybe get Greece to the point where it might have a chance; and the remainder of the debt would be in better shape, rather than this just being the negotiations for the first haircut, with more to follow.

Every private lender in Europe now recognizes they are taking more risk when they invest in a sovereign debt instrument. This will have the effect of pushing rates up in the private market, like they have very recently climbed for Portugal (more on Portugal later).

Europe faces a set of choices. They can lend Greece more money on promises to turn things around, which can't happen because of (1) the very austerity being imposed and (2) the 10% of GDP trade imbalance with the rest of Europe. But if they don't lend the money and there is an uncontrolled default, they will get to inspect that Abyss more closely than they would like. It will mean hundreds of billions of euros in losses at their banks, which will have to be bailed out eventually by taxpayers.

Europe is worried about "contagion." If Greece gets a 50% reduction on its debt, will not Portugal point out that they deserve it more? There have been deep fiscal cuts by the free-market government of Pedro Passos Coelho in an attempt to reduce the deficits, but estimates are that, even with those cuts, the deficit will still be 6%, falling only to 4% in 2013. And that is if things go well.

The market is not acting as if it expects things to go well. Yields on Portugal's 10-year bonds climbed to 14.39% on Thursday. Credit default swaps measuring bond risk have reached 1270 points, pricing a two-thirds chance of default over the next five years.

While Portugal's public debt of 113pc of GDP is lower than Greece's, the private sector has much larger debts and the country's total debt load is higher, at 360pc of GDP – much of it

external debt. Jürgen Michels, Europe economist at Citigroup, says, "Without a sizeable haircut to its debt stock, Portugal will not be able to move into a viable fiscal path. We expect a haircut of 35pc at the end of 2012 or in 2013."

Ambrose Evans-Pritchard, writing in the London *Telegraph* (I really like his work), notes:

"Portugal is a troubling case for EU officials, who insist that Greece is a 'one-off' case rather than the first of a string of countries trapped in a deeper North-South structural rift. The official line is that Portugal will pull through because it has grasped the nettle of retrenchment and reform

"Europe's leaders have vowed that there will be no forced 'haircuts' for holders of Portuguese bonds. If the country now spirals into a Grecian vortex as well they will have to repudiate that promise or accept that EU taxpayers will have to shoulder the burden of debt restructuring. While all eyes are on Greece, it is the slower drama in Portugal that will ultimately determine the fate of the eurozone."

A Preview of Coming Attractions

Let's turn to some charts from a well-written report called "The European Crisis Deepens," from the Petersen Institute, by Peter Boone and Simon Johnson. Both authors have a long list of credentials.

The first one is a chart of the cost of five-year credit default swaps. Notice they all are rising. (This is a log chart, so the scale rises by a factor of ten for each level.) Now, notice that Portugal is where Greece was last year. Then pay attention to the fact that Italy is likewise where Portugal was last year. Just thought I would give you a preview of coming attractions, horrormovie edition.

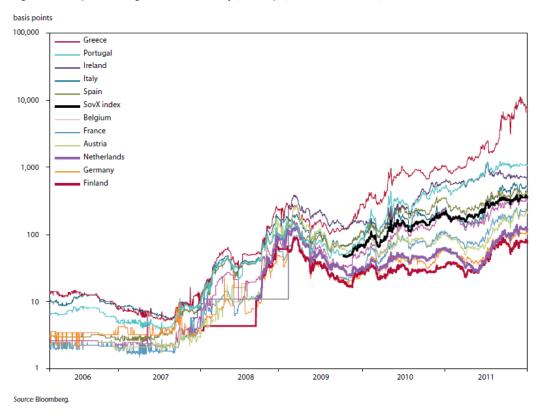


Figure 1 Five-year sovereign credit default swaps, January 2, 2006 to December 9, 2011

Then they offer us this chart, which compares the labor-unit costs of six countries in Europe. Only Ireland has seen their costs drop, as their labor has accepted pay cuts and productivity has increased. And pay attention to the ever-rising costs of France vs. Germany. This trend suggests France is on a path that Greece took. There are dragons down that path.

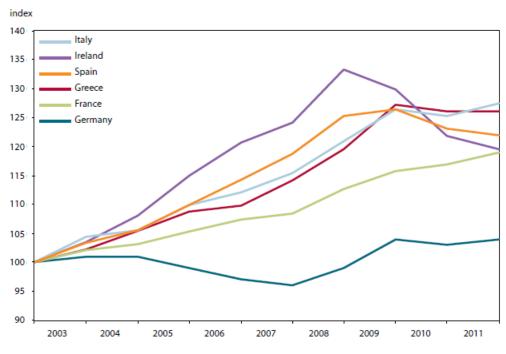


Figure 3 OECD nominal unit labor costs in total economy, 2003-11

Sources: Organization for Economic Cooperation and Development; Bloomberg.

And it also illustrates the problem of why it will be so hard for Greece to turn around without being able to resort to a currency devaluation. They have to endure a 30% pay cut relative to core Europe if they want to compete. There will be no volunteers in Greece for such cuts. After two years of IMF and European institutional involvement (meddling?) in Greece, there has been hardly any movement in Greek labor costs.

Greece is not alone. Are you reading of any general pay cuts in the proposed solutions for Italy, where labor costs are now above those of Greece? Likewise, no move in Portugal (not shown in graph). The entire eurozone is out of balance, and no one is making any moves to deal with it or even acknowledge the basic problem.

Hallucinogenic Data and Other Fun Activities

Much of establishment Europe was predicting a positive GDP for the region only a month ago. The recent trend suggests the data they were smoking was hallucinogenic. And given the seriousness of the problem, it must have been primo stuff. Germany was in recession for the 4th quarter of last year and is likely to be there this quarter, which is the technical definition of recession. Clearly, peripheral Europe is in recession, some countries in what looks like it could be called a depression. Below is the Purchasing Manager's Index for six major countries in Europe. I have added a thick red line at the 50 mark, below which there is negative growth.

index

65

60

45

40

35

Germany

Spain

France

Italy

United Kingdom

United Kingdom

Locate India 200 India 200

Figure 4 Manufacturing Purchasing Managers' Index, 2006-11

Gentlemen, Choose Your Disaster

With all of the above as a backdrop, let's now see if I can outline the choices Europe faces. First, let's take Greece, because it is instructive. Greece has two choices. They can choose Disaster A, which is to stay in the euro, cutting spending and raising taxes so they can qualify for yet another bailout; negotiating more defaults; getting further behind on their balance of payments; and suffering along with a lack of medicine, energy, and other goods they need. They will be mired in a depression for a generation. Demonstrations will get ever larger and uglier, as the government has to make even more cuts to deal with decreasing revenues, as 2.5% of their GDP in euros leaves the country each month. There is a run on their banks. Any Greek who can is getting his money out.

Greek voters will then blame whichever political group was responsible for choosing Disaster A and vote them out, as the opposition calls for Greece to exit the euro. Which is of course Disaster B.

Leaving the euro is a nightmare of biblical proportions, equivalent to about 7 of the 10 plagues that visited Egypt. First there is a banking holiday, then all accounts are converted to drachmas and all pensions and government pay is now in drachmas. What about private contracts made in euros with non-Greek businesses? And it is one thing to convert all the electronic money and cash in the banks; but how do you get Greeks to turn in their euros for drachmas, when they can cross the border and buy goods at lower prices, as inflation and/or outright devaluation will follow any change of currency. It has to. That is the whole point.

So how do you get Zorba and Deimos to willingly turn in their remaining cash euros? You can close the borders, but that creates a black market for euros – and the Greeks have been

smuggling through their hills for centuries. And how do you close the fishing villages, where their cousin from Italy meets them in the Mediterranean for a little currency exchange? What about non-Greek businesses that built apartments or condos and sold them? They now get paid in depreciating drachmas, while having to cover their euro costs back home? Not to mention, how do you get "hard" currency to buy medicine, energy, food, military supplies, etc.? The list goes on and on. It is a lawyer's dream.

There is a third choice, Disaster C, which is worse than both of the above. Greece can stay in the euro and default on all debt, which cuts them off completely from the bond market for some time to come. This forces them to make drastic cuts in all government services and payments (salaries, pensions etc.), and suffer a capital D Depression, as they must balance their trade payments overnight, or do without. Then they choose Disaster B anyway.

The only real options are Disaster A or Disaster B. Whether they opt to go straight to the drachma (Disaster B) is only a matter of timing. They will get there soon enough.

Why then do they wait? What's the point of going through all these motions? Because Europe fears a disorderly Disaster B. For the rest of Europe, it is the Abyss. The Greek hope is that Europe (read Germany) keeps funding them in order to keep back from the edge of the Abyss.

As one European diplomat noted, "There is a growing sense that despite the valiant efforts of Papademos ... the reluctant Greek establishment is biding its time to the next elections, banking on the assumption that the world will continue to bail them out, no matter what."

Europe is getting closer to the point where it must make a decision about what to do with Greece. In theory, the deadline is March 29 for the next round of funding. It is a game with very high stakes and deadly serious players. Can Sarkozy be seen as weak and giving in to Greece, with elections coming up in April? Can Merkel appear to give in and keep her troops in line? There are elections not long after that in Greece. Can Papademos cave in to further cuts and promises on future debt that will be hard to keep and intensely unpopular?

The markets are getting exhausted. There will be no private market for Greek debt at any number close to what is sustainable. Greece will be on European life support for a very long time if they stay in and there is no disorderly default. It will mean hundreds of billions of euros over the decade, debt forgiveness, etc. There are no good choices.

And Europe will all too soon face what to do with Portugal, which will want to dispense some haircuts of its own. Don't forget Ireland, which is very serious about not paying the debt the previous government took on for its banks in order to pay British, German, and French banks. That is a default that is in the cards. I think "polite" Ireland is just waiting until its \$60-billion default is seen as small potatoes, which will not be too long, as Italy must raise almost €350 billion just to roll over current debt. Italy projects that its deficit will be down to 2%, but if Europe goes into recession that projection goes out the window.

The bottom line is that Italy (and most likely Spain at some point) cannot raise the debt it needs at rates it can afford without massive European Central Bank involvement. Rates are already approaching 7% again. That is unsustainable from an Italian point of view. Germany must be willing to allow the ECB to take on massive balance-sheet debt, or Italy will not make it without haircuts. And a mere 10% haircut for Italy dwarfs what is happening in Greece – and doesn't do much for Italy. If they go for a haircut, it will be much larger. French banks holds 45% of Italian debt. Italy is too big for France to save. They cannot even backstop their banks if Italy becomes a solvency risk. They simply cannot get their hands on that much money without destroying their balance sheet. The most recent downgrade of their debt was just the first of many.

Speaking of downgrades, Egan Jones downgraded Germany from AA to AA- and put the country on negative watch. This is important, as this is what I believe to be the most credible rating agency; and over 95% of the time the other "Big 3" agencies generally follow their lead, after a period of time. Part of the reason for the downgrade is all the debt that Germany is guaranteeing. Sean Egan was one of the first serious analysts to suggest that Greece would default. He was talking a 95% eventual default a long time ago. (Very nice gentleman, by the way. Or maybe he just left his Darth Vader mask at home when I met him.)

Europe will have to make its choice this year. Either a much tighter, more constrictive fiscal union with a central bank that can aggressively print euros in this crisis, or a break-up, either controlled or not. I don't think they can kick the can until 2013, as the market will not allow it. Either the ECB takes off its gloves and gets down to real monetization when Italy and Spain need it, or the wheels come off.

The quote at the beginning returns to mind: "If we want everything to stay as it is, everything will have to change."

Like any long trip, the drive (or flight) seems to take forever, particularly if you are very young or you are an investor. But then suddenly you are there. The LTCM crisis mentioned above took a long time to develop, but then it ended with a bang. One day Lehman or Bear is a big player and the next they are gone. I think this is the year the crisis moment for the euro arrives. Let's hope they are ready.

What Europe Should Do

When Europe approaches the edge of the Abyss and looks over, the rest of the world gets to take a look, too. We can all be taken to the edge and over. I was reminded while in Singapore and Hong Kong how much we all need Europe to come through this.

Europe has problems that are structural and can't be fixed with just another treaty or more ECB liquidity. With that in mind, here are my thoughts.

1. The European Union works, mostly much more than less. Keep the free trade zone. There are countries that work just fine that are not in the euro. We live in the world of computers. Currency exchange is a computer operation and relatively easy. And keep

- working on coordinating with the rest of the world. Take advantage of what you can do together. We are all better off with a united Europe. Until such time as there are stable labor and productivity markets across Europe, don't press for a single currency. Single currencies don't insure there will be no conflict. Really integrated free trade and open borders do.
- 2. Admit the euro just doesn't work for some countries, and let them leave the eurozone (but stay in the free trade zone, like Denmark and Sweden are now). Establish as orderly as possible a path for a country to revert to its old currency. Yes, there are going to be some very large losses. If you control it, they will be far less than if you don't. You can set up a two-tier system, just as you did when you created the euro. And pass some laws so everyone isn't spending the next two decades suing everyone else. Deal with it like adults who want to be friends after the divorce rather than enemies for life. If you have to make up some rules, then make them up. But do it quick. The longer you take, the more it will cost you (and the world).
- 3. Greece has to be told no. No more loans. No more threats. If they want to stay, then let the market deal with them. I doubt it will be kind, but they have to take responsibility for themselves. Nobody forced them to borrow too much. Cut your losses now. Use the money to salvage your own banks. When (not if) Greece decides to go, help them with some humanitarian aid (medicines and emergency supplies) but stop piling on debt they can't pay. Work out the terms so they can get on their feet and go on with their lives. Allow them to stay in the free trade zone. And learn your lessons. Be careful whom you lend money to!
- 4. Sadly, the same goes for Portugal, although with a reasonable and very healthy haircut they may be able to stay.
- 5. Ireland is not going to pay that bank debt. Get over it. Just let the ECB swallow it. Then Ireland will pay the rest of its government debt and can grow its way out of its problems. They have a positive trade balance. Besides, who doesn't love the Irish?
- 6. Italy and Spain are problems. If they stay they are going to need some major ECB help on rates while they get their deficits under control. Either do it or don't, but don't keep the world in limbo. Germany needs to make a decision and make it very publicly.
- 7. I don't know what to suggest to France. That is the toughest question. They are losing labor competitiveness with Germany and others, and already have taxes that cannot go much higher, large fiscal deficits, poor demographics, and huge future unfunded liabilities in the form of health-care and pension benefits. They have time to get things sorted out if they will use it (like the US). The world surely hopes they do. The concern about the problems of French banks was voiced everywhere in Hong Kong and Singapore. They are integral to world trade in ways that US banks (or others) can't come close to. They just have the experience and infrastructure in making those trade loans. You can't build that up in a short time. A problem with French banks would be a problem for world growth, which is already slowing down.

I know the markets are discounting a happy ending to the euro crisis. I just see the substantial "tail risk" and suggest you manage accordingly. Large pensions and foundations may be happy if they end the year where they started. Smaller investors should assess their risk tolerance from the perspective that Europe does not work through its problems.

Next week, we get to the US. If you think Europe has problems...

South Africa and Sweden

I came back to Dallas by way of Tokyo. As I walked to my gate, I noticed a crowd and then lots of cameras. Clearly a celebrity of some import was getting on the plane. I boarded and went to my seat in first class (you've got to love system-wide upgrades!). I asked the steward (who I knew from previous flights, which says I have been on too many) who was getting on. It turned out it was Yu Darvish, the best baseball pitcher in Japan, who Nolan Ryan had just signed to pitch for my Texas Rangers. He is young (25), good looking, and quite tall at 6'5". And he seemed the perfect gentleman, smiling and quite willing to sign autographs. Yes, I got one, but it was for my kids. I'll just save it for them for a while. The Texas fans are going to love him. He just has that charisma. Let's hope he can keep his sub-2 ERA when he pitches in The Ballpark. Then they'll go crazy.

The letter is already too long to write much this time about Hong Kong and Singapore, but I would be hard-pressed to say which city impressed me more. I was blown away. I thought I was prepared, but you really do have to see it for yourself. I am going to spend more time in Asia. And soon, thanks to the team at the *Hong Kong Economic Journal*. What an honor to work with such a venerable and prestigious paper. (They translate my letters into Chinese and give them a full page each Monday and Thursday, as well as post them online.)

Next week is busy with meetings, writing, and deadlines. Barry Habib comes to Dallas to help launch our new institutional research publication with Bloomberg. Then Wednesday a week I will be with Rich Yamarone (Bloomberg Chief Economist), Dr. Woody Brock, and Mark Yusko at the Annual Dallas CFA Forecast Dinner. We hope to be able to get together the previous night for some fun and maybe a little discussion of the markets (d'ya think?). The panel should be quite entertaining. Then I'm off to Cape Town, South Africa for two days to speak for Rand Merchant Bank at their fixed-income conference. (I will try and stay on Texas time if I can!)

It is time to hit the send button. It is the wee hours of Saturday morning and I am still on Asia time, it seems; but I need to get to bed and try to adjust. Have a great week!

Your hoping Europe works it out analyst,

John Mauldin

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