2010 Update - Turbulent Teens Ahead?
What Might The Next Decade Bring For The Economy And The Financial Markets?

Executive Summary
On the last day of 2009, we published a piece called “Turbulent Teens Ahead? What Might the Next Decade Bring for the Economy and Financial Markets?” Obviously, trying to predict events 10 years into the future is a fool’s errand, and sure enough, our look ahead did not anticipate the European sovereign debt crisis that would break a few months after publication and roil markets in 2010. Nevertheless, we had no illusions about our ability to predict specific events. We were attempting to anticipate the financial and economic environment that might lie ahead, and forecast how this might influence financial market returns. On that score, we did a bit better, expecting “surprisingly strong growth in 2010”, creating an environment that we thought “might actually be fairly rewarding for investors”. Indeed, the U.S. equity market has performed even better than we anticipated so far, delivering nearly double our decade-average expected return of high single digits in the first year.

So what’s next? Is the momentum likely to carry us to better-than-expected gains over the next 10 years, or will mean reversion kick in and lead to the slump we originally forecast for the middle of the decade? What did we discover in 2010 that might change our expectations for the future?

To address these questions, this year’s edition of Turbulent Teens (dubbed TT II) will consider:

✈ The U.S. is both the world’s largest economy and biggest debtor. Will the U.S. eventually go the way of Greece and face a painful period of austerity, or might we regain traction, address long-term issues and lead an economic and financial recovery?

✈ The European sovereign debt crisis surprised markets in 2010. Will it be an even bigger story in 2011 and beyond, or has the worst already passed?

✈ In some countries, inflation is already a significant concern; in others, officials are worried about deflation. What’s the outlook for prices, and what factors should we focus on to determine which way the wind might blow?

✈ Emerging markets had another strong performance in 2010 and what had historically been discount valuations are now about the same as or even a bit of a premium relative to established markets. Does this mean that emerging equity market outperformance has played out, or might strong growth continue to deliver outsized gains?

✈ Over the past 30 years, innovations in information technology created great investment opportunities (as well as pitfalls) and powered economic and productivity growth. It feels as though the pace of innovation has stalled in the past several years. Are there new ideas under development that might drive future opportunities on a similar magnitude as the PC, the Internet, etc.?
We don’t want to give away the plot, but we end 2010 a bit more optimistic than we started it. Perhaps the biggest news of 2010 is that we lived to tell the tale; after a near-death experience in 2008 and a halting recovery in 2009, we end 2010 on the right track, even if we are moving slowly, and still far from where we want to be. Household balance sheets have improved, and the financial obligations ratio is back below its 30-year average (Figure 1). The labor market remains terribly weak, but unemployment claims are falling (Figure 2) and jobs available (Figure 3) are rising. Global growth looks to be better than originally expected, and economists are scrambling to raise their 2011 GDP forecasts. Equity markets have generally fared well, as investors have so far focused more on future opportunities than the current turmoil. While we still expect this decade to become known as the “Turbulent Teens,” today we are a bit more focused on the excitement of the rollercoaster ride than on its terror. We shall see.

Figure 1
Financial Obligations Back Below 30-Yr. Avg.

Figure 2
Unemployment Claims Are Falling

Figure 3
Jobs Available Are Rising

Source: Bureau of Labor Statistics
Will Greece Now = U.S. Later?:

2011 Outlook in Brief

As of late December, the Wall Street consensus appears to be bullish on financial markets for 2011. We would not disagree. Valuation among risk assets such as global stocks and high-yield bonds remain reasonable, in our view. Meanwhile, U.S. and global economic growth appears to be gaining traction in the context of considerable slack capacity. Therefore, the inflation environment remains non-threatening in the developed world, allowing major central banks to continue with supportive policy measures. The recently struck deal to extend the Bush tax cuts and reduce payroll taxes means that fiscal policy will be much less of a drag than initially expected. This combination of faster non-inflationary growth and supportive policy should be bullish for risk assets. Yet the events of 2010 raised some troubling long-term issues, which we address below.

Certainly, 2010 Was A Turbulent Year

In 2010, Congress passed and President Obama signed major healthcare legislation into law, though opponents promised legal and legislative action to weaken or repeal it. An accident in the Gulf spilled millions of gallons of oil; though the environmental damage seems to have been less than feared, the spill seemed to captivate and paralyze the nation for months. Democrats lost control of the House of Representatives in an epic defeat. The Tea Party became a political force, sweeping out some incumbents, bringing new faces to Washington and influencing policy positions of surviving politicians. The leaders of the President’s bipartisan commission offered a plan to reduce the U.S. federal budget deficit that met with polite applause in some public policy circles, drowned out by furious boos from the left and right. As the year ended, President Obama and Republican leaders agreed to a new tax bill to preserve the Bush tax cuts for two years, cut payroll and other taxes, and reinstitute the estate tax at a rate lower than it would have been under prior law. Much as politicians like to talk generally about cutting spending, it is a lot easier to simply hand out tax cuts.

Will the political events of 2010 substantially alter the outlook for the economy and financial markets for the rest of the decade? Despite much hand-wringing over the course of the year, Mr. Market seems to have eventually concluded that the answer is NO, based on the gains in the S&P 500 in 2010. But Mr. Market can be quite wrong, as we have witnessed over the past decade. Might debt and reckless spending eventually lead to a Greece-like crisis and retrenchment in the U.S.?

How Does The Federal Government Raise And Spend Money?

To address this issue, it might be useful to review how much the federal government taxes and spends, and what it does with the money. In our opinion, most of the general public and even many sophisticated investors don’t know basic facts about the federal government that we think are essential for intelligent debate, regardless of whether one believes that taxes/spending are too high, too low or about right.
In fiscal 2010, the U.S. government spent $3.5 trillion (Figure 4) and raised $2.2 trillion in taxes (Figure 5), leaving a record deficit of $1.3 trillion (Figure 6). Others have tried to assess how much of the deficit was due to the policies of Presidents Obama or Bush, how much was due to the recession or other factors; we will not address these issues, but focus on the current and potential future of spending and taxes. Spending in 2010 had three huge items, each accounting for about 20% of the total: Social Security, Medicare/Medicaid and Defense. Interest on the national debt accounted for another 7% or so, and that number will rise as interest rates rise and as the Treasury rolls existing short-term debt into new instruments. Everything else combined, including agricultural supports, the FDA, EPA, SEC, FBI, and all other acronyms and departments accounted for a bit more than $1.2 trillion. That is, if we could have eliminated all federal spending in 2010 except Defense, entitlements and interest on the debt, we would still have had a deficit.

On the tax side, both the individual income tax and payroll tax raised a bit less than $900 billion each, with income taxes just modestly exceeding payroll taxes (employee and employer Social Security taxes plus the Medicare tax). The corporate income tax brought in just under $200 billion, and all other federal taxes and fees accounted for $200 billion.
President Obama recently announced a pay freeze for government workers. Since some have been recently claiming that federal employees are substantially overpaid versus the private sector, this might seem like a huge money saver, but it turns out to save only a few billion dollars. Of course, every dollar counts, but the bottom line is that the federal civilian payroll is about $200 billion, less than 6% of federal spending. Various studies over the years have tended to find that lower-level federal employees do indeed make more than their private-sector counterparts, but senior officials make less, sometimes much less. The janitors in the Supreme Court might make more and have better benefits than janitors in private buildings, but the Justices make much less than they would as lawyers in private practice. Whatever one thinks of Robert Rubin or Hank Paulson, they clearly made much less working for the government than they did in the private sector. In a typical company, payroll accounts for more than half of spending, but for the government, it is less than 10%.

So Where Does The Rest Of The Money Go Beyond Defense?

The rest of the money is paid directly to citizens or other government entities (e.g. Social Security, farm price supports, unemployment insurance and aid to state and local governments). Or it is used to pay for goods and services, usually performed by some citizens and delivered to other citizens (most prominently Medicare and Medicaid). Many people harbor visions of federal spending as paying bureaucrats to invent rules to boss us around or paying scientists for questionable research or for foreign aid. No one would dispute that some of this is true. But politicians of both parties have been promising to eliminate waste, fraud and abuse for as long as we can remember. Whatever remains should be stopped, but looking at the numbers, it strains credulity to think that this will make a huge dent in the deficit. The bottom line is that much of federal spending represents income and delivery of services to citizens that they will fight hard to keep. Rallies to cut spending might be much more impactful if large numbers of participants burned their own Social Security, unemployment, farm support or other federal government checks rather than argue in vague terms that someone else’s checks should be reduced.

The first step in addressing the long-term fiscal stability of the U.S. is to admit that the problem is not just earmarks and pork. As the Deficit Commission and other analysis have shown (e.g. Rep. Paul Ryan’s Roadmap), it is not impossible to narrow the deficit, but it does involve either significant cuts in important programs or higher tax collections or both. Just to put it in perspective, personal income taxes just covered defense spending and interest on the debt in 2010 with almost nothing left over for any other government activities. Tax revenue can be increased by broadening the base rather than increasing tax rates, but more tax money is likely to be needed unless a majority of citizens accept substantially less in government benefits than they receive today.


While speaking at investment conferences over the past year, the financial historian Niall Ferguson has been somewhat apocalyptic. There is very little that separates the U.S. or the U.K. from the peripheral European economies in terms of current deficits or base case public debt-to-GDP projections. Sovereign debt crisis is nothing new, he points out; it is as old as the bond market itself. With few exceptions historically, countries that run into debt problems have not grown their way out of them. They ultimately face three realistic options: fiscal pain, debt monetization, or default. Reinhart and Rogoff have also reminded us that yesterday's banking crisis all too often morphs into tomorrow's fiscal crisis. So are we doomed to repeat history?

As difficult as it will be to reduce the federal deficit and restore a more sustainable fiscal path, we are more optimistic about the nation’s ability to accomplish this than we were a year ago. First of all, the suffering and social unrest in Greece and Ireland provide a painful lesson in what might lie ahead for the U.S. if action is
not taken. The U.K. is not yet in as dire straits as some European neighbors, yet the country has embarked on a tough austerity program. Perhaps we can learn from that experience. And a majority of thoughtful members of both parties voted for the recommendations of the deficit commission; even if a supermajority was not achieved, there was progress. In the rancor of the past several years, bipartisan efforts to solve the nation’s problems might have seemed impossible. But as we noted in last year’s “Turbulent Teens” white paper, historically, both parties have come together to solve critical problems despite genuine philosophical differences, including during the financial crisis and the Great Recession. During the recent lame-duck session, important and controversial legislation passed with bipartisan support.

Call us naïve if you wish, but we believe that the events of 2010 increased the odds that the U.S. will take substantive steps to address looming debt and deficit problems in the next few years. The problems will not be easier to solve than they looked last year, but the will to address them, almost totally lacking in 2009, looks to us to be much more palpable today.

**Sovereign Debt Crisis in Peripheral Europe:**

**Beginning of the End or End of the Beginning?**

As referenced in the preceding section, in the first several months of 2010, the big financial story was the sharp rise in the spreads versus German bonds of the sovereign debt of Greece, Portugal, Ireland, Italy, and Spain (Figure 7). The problems hit first in Greece, and images of riots there flashed across TV screens worldwide. Most economists had forecast a bleak future for the Greek people as they dealt with austerity, longer work lives and less generous pensions, due in no small part to prior excessive spending, poor tax collection and an uncompetitive economy. As 2010 drew to a close, Ireland and other European nations also faced difficult prospects, in part of their own making. How did this happen? Will it be a big story in 2011 and the rest of the decade or is the worst over?

**Figure 7**

*Spreads In Several European Bond Markets Soared In 2010*

![Spreads In Several European Bond Markets Soared In 2010](source: FactSet)

**Institutional Aspects Of The Sovereign Debt Crisis In The Euro Zone**

A country entering the euro zone, having satisfied requisite convergence conditions (currency stability, inflation rates, interest rates, budget deficits as dictated by the Maastricht Treaty) commits itself to fiscal discipline and gives up the right to inflate its debt away, through currency devaluation. These two factors effectively transformed the sovereign debt of countries such as Greece, Portugal, Ireland and Italy into AAA debt on par with German sovereign debt, a country that actually enjoyed a AAA sovereign rating.
One should ask, however, why investors took a promise of future fiscal discipline at face value and demanded virtually the same risk premia for German, Greek or Spanish government bonds. After all, facts were fairly clear: the economic and fiscal positions of individual countries were quite different, sovereign bailouts were not allowed, and the institutional arrangements of the EU did not provide a credible enforcement mechanism for member countries violating fiscal discipline. It seems that creditors assumed that countries would act in their own self interest and take advantage of the benefits of EU membership (e.g. stable currency and lower sovereign borrowing cost) to put their fiscal houses in order. And if that failed, there would be a bailout.

If the EU is expected to bail out sovereign countries, it must have some power over them: at minimum, it must be able to regulate and monitor them and, when appropriate, it must have in place some enforcement/coercion mechanism (similar to the Fed as a lender of last resort to U.S. banks). Today the EU lacks these powers. In the past, not only Greece but also France and Germany violated provisions of the Stability Pact with impunity.

So What Are The Choices Facing EU Going Forward?

1) The EU is just a monetary union with the euro as its currency representing a standard of value, independent of government finances. Government bonds of sovereign member countries are subject to market discipline and may default.
2) The EU will seek to establish some form of a fiscal union.
3) The EU will pursue some combination of the first two alternatives.

Option #1 in its pure form has not been embraced by the EU, perhaps because of the circumstances surrounding the current crisis (fear of havoc in financial markets, contagion risk in case of default of a euro zone country).

Option #2 may be a long-term goal, but it is not clear at this point whether any country is willing to give up its sovereignty to Brussels.

Option #3 is clearly the likely road to be pursued, with some defaults (restructuring) and some limited bailouts.

At the EU summit in October, Germany gained acceptance for the notion that any future euro zone rescue mechanism should include provisions for an orderly sovereign default.

Political Aspect Of The EU

The EU represents, first and foremost, a political arrangement. Europeans have been quite creative in an attempt to find a solution to the crisis. The proposed solutions are probably bounded by two guideposts: 1) they should not require major constitutional changes (the kind that would call for a full ratification process of all member countries), at least not at this time; and 2) the German Constitutional Court is a key arbiter of the legality of proposed “creative” solutions and their compliance with existing euro treaties.

Is there a political will and a popular support to continue the euro zone experiment? In Germany, considered the ultimate paymaster of the EU, the Allensbach Institute conducts an annual opinion poll to gauge the popularity of the euro currency; the proportion of respondents wanting the D-mark back had dropped from 61 percent in 2002 to 47 percent this year. Also noteworthy is the fact that the 85 billion-euro rescue plan for
Ireland was approved by the Bundestag with “barely an objection,” according to the *Financial Times* reporter.

Germany is clearly the key to resolving the problems in the less solvent European nations. In the aggregate, the fiscal position of Europe is quite sound due in large part to Germany. It is possible, of course, that German citizens will simply not tolerate their tax money going to “bail out” other nations. But these national “bailouts” are a misnomer; Ireland is not being bailed out; in fact it is facing severe economic hardship. The creditors of Ireland and its banks are being bailed out. These creditors own $509 billion of the $731 billion of Irish bank liabilities. Europe is not so much bailing out Ireland as bailing out European (especially German and French) banks.

Germany is also one of the three major global economies (along with China and Japan) who have an export-driven economic model. Without strong exports, Germans will lose jobs and income. And Europe accounts for more than half of German exports. That is, just as the EU depends on Germany, Germany depends on the rest of the EU to buy its products and maintain its own robust good health.

The fiscal situation for the euro zone as an aggregate is quite sound. The problem, therefore, is not with the euro zone as an entity but with some individual members of this entity. The ECB and the leaders of major EU countries reacted with delay/ hesitation to market developments. The responses were characterized by sloppy communication with inconsistent messages. In the end, though, they managed to finesse a solution, albeit temporarily, in the form of a SFSF (European Financial Stability Facility). The SFSF is a structured vehicle with a AAA credit rating even though most of guarantors have a sovereign rating lower than AAA. It will expire in 2013. A more permanent solution is being negotiated and will include some form of sovereign defaults.

What will happen to Greece and Ireland? Will they ever be able to repay the debt? Will they be able to negotiate debt restructuring within the euro zone or will they leave? The answer is unclear and it will depend on cost-benefit analysis to all the parties: for the EU, it would be a precedent not even contemplated in the current legal framework: the actual cost and willingness of other members to aid a bankrupt country; and to Greece, a future cost resulting from debt restructuring and the benefits of reintroduction of a much-devalued currency.

We cannot say that we know how this will end. It is not impossible that the EU and the euro will collapse. But we suspect that is unlikely. There are powerful reasons why Germany and the other stronger European nations want the EU to hold together and prosper. Although we should brace ourselves for more European debt scares in 2011 and this issue might linger for years, the global economic recovery will make it easier to deal with this issue. Our best guess is that we will muddle through.

**Inflation Or Deflation:**

**The Debate Continues…**

In many respects, we are in a two-speed world: the IMF forecasts the emerging economies to grow more than 6% in 2011, with 5% inflation, but the advanced economies are forecast to meander along at barely over 2% growth (even with record stimulus being applied in many countries), with an inflation rate slightly above 1%. Looking forward, on a global basis, what does the future hold for these divergent growth and inflationary paths?

In the advanced economies, powerful deflationary forces are at work, as they slowly recover from the biggest downturn in the post-WWII period. For example, in the U.S., even though the recession officially ended in July 2009, the labor market recovery remains fragile, with the unemployment rate stuck close to 10% and private-sector job creation well under levels needed just to keep up with the growth in the labor force. This
obvious slack on the employment front has kept unit labor costs in negative territory year over year. In previous work, we have shown that overall inflation levels are highly correlated to movements in unit labor costs, since labor represents the largest cost for companies. It is tough to have runaway inflation with the labor market stuck in neutral.

Furthermore, compelling research from Reinhart and Reinhart, in *After the Fall*, shows that even in a 10-year window following a severe financial crisis, unemployment rates are significantly higher than before the crisis and real house prices are usually below their levels in the year before the crisis. Essentially, severe financial crises are usually marked by an earlier period of rapidly rising credit and leverage levels. When the crisis hits, a long, drawn-out retrenchment ensues, which, in itself, is very deflationary in nature.

Other research, by Andre Meier in *Still Minding the Gap: Inflation Dynamics During Episodes of Persistent Large Output Gaps*, attempts to review 25 historical episodes in advanced economies where output remained well below potential for extended periods, similar to the current situation. The conclusion from this study is that large output gaps matter, and that significant disinflation was prevalent during these episodes. Another important finding was that there was no close link between inflation dynamics and developments in broad money, which has been a concern as the Federal Reserve has rapidly expanded its balance sheet. Meier also pointed out that disinflationary pressure within episodes tended to taper off at very low inflation rates.

Furthermore, weak labor markets, rising and/or high unemployment, and falling wage growth were other common factors in these periods. This study, along with the Reinharts’ work in *After the Fall*, suggests little upside inflationary risk in countries where abundant spare capacity is expected to persist for the foreseeable future, which is the case with most advanced economies (Figure 8).

*Figure 8*

**The Output Gap For Developed Markets Remains Large**

![Graph showing the output gap for developed markets]

While advanced economies are contending with disinflationary pressure from the financial crisis, emerging markets are fighting the opposite problem, as they continue to balance high growth rates and rising overall price levels. We are already seeing food prices, which constitute a large portion of CPI in these economies, rapidly rise in many countries, most notably in China. In addition, higher growth rates are attracting capital from around the world, which helps fuel this high-growth and high-inflation cycle. A related development is that many of these countries are looking to stabilize their exchange rates with the dollar, instead of allowing them to rise, which would help cool inflation. And as Bill Gross and his colleagues have pointed out, this forces these countries to import our low level of interest rates into their much higher-growth economies. This is often stimulative, which creates additional inflationary pressure. Instead of using exchange rates as a tool to combat inflationary pressure, many countries are employing other measures, such as hiking rates and/or reserve requirements or putting price controls into place for specific industries.
We believe that, over all, these economies will successfully navigate the inflationary landscape, without dramatically altering their growth paths; however, the possibility of a policy mistake is definitely not a trivial one.

So Where Does This Leave Us on Inflation?

Over the next several years, we do not see inflation as a major risk for the advanced economies, as the overall path of sluggish growth and low inflation, as outlined by Reinhart, Rogoff, and others, seems to be playing out according to their script. High unemployment rates, and a housing market bumping along the bottom, likely will continue to exert considerable disflationary pressure in the near future. However, the emerging markets will still contend with price pressure building up, as their rapid growth is being fueled by policy rates well below nominal GDP levels, exchange rates that are too low generally, and a high level of capital that continues to flow into these economies. Some of these increases in emerging markets prices might drive up prices of individual commodities in established markets (e.g. oil), but we do not believe that this will drive up the overall level of prices in the U.S., Europe and Japan. How successful the emerging markets are in navigating these developments is something that we will closely follow.

If we look out to the second half of this decade, the inflationary environment in the advanced economies may not be as benign as it is today. Even though the low interest rates and large monetary stimulus are currently not inflationary, this may change as the economy continues to heal and the normal several-year lag between expansionary policy and inflation begins to develop. The risk of a policy mistake will remain high. Other longer-term issues, such as rising commodity prices and a secular depreciation of the dollar, are factors that will contribute to overall inflationary pressure over time. Another long-term inflation trend, pointed out by Bill Gross and his colleagues, is the rapid rise of foreign wages, as emerging market economies face tighter domestic labor markets. In the past, cheap foreign labor was a powerful disinflationary force; however, this is rapidly changing, as the emerging markets continue to become a larger, more important force in the global economy.

An Emerging Markets Bubble?:
Maybe Not.

Although U.S. investors have consistently sold their individual stock holdings and reduced domestic equity mutual funds over the past several years, at the same time they have been pouring cash into emerging market stock funds. Emerging markets used to sell at a significant discount to established markets; but in part due to those big inflows, they now sell for about the same or, in some cases, a premium valuation. Almost all investors recognize both the higher current growth and greater future growth prospects of emerging markets. But at some point, those better growth prospects become fully embedded in prices, setting the stage for a significant correction or even a prolonged bear market. Are we at that point for emerging markets? Is this another bubble?

After the bursting of the tech and real estate bubbles of the past decade, there are folks seeing bubbles in every price rise. Bubbles are often hard to spot until after they have burst. Right up until the end and even after the burst has begun, there are always cheerleaders explaining why the high prices make perfect sense and predicting that even higher prices lie ahead. It’s possible that the argument below will, in retrospect, turn out to be one of those bubble enablers. But we fervently hope it won’t, because we are going to argue that the rise in emerging market equities, though it is certain to be volatile, could have several years to run. Emerging markets are a strategic overweight in our asset allocation portfolios, and though we acknowledge that this entails risk, we are happy to embrace this particular risk in search of greater returns.
Some of our reasons for embracing emerging markets stocks are based on classic investment ideas. As depicted in Figure 9, emerging markets are growing faster than developed markets, they are now more profitable than developed markets (as evidenced in Figure 10), and they sell for about the same valuation (Figure 11). If we stripped away the labels and simply asked investors, if two companies had the same valuation, but one offered superior growth and higher profitability, which one would you choose, the answer is clear.

Of course there is the issue of systemic risk. Historically, emerging markets have had greater political instability, with one faction gaining power only to be displaced soon thereafter with a competing faction with different priorities. Emerging markets often have had unstable financial systems, with undercapitalized banks making excessively risky loans to satisfy political ends. Emerging markets have had unstable fiscal and monetary policies, with excessive foreign debt, sizable budget deficits and inadequate financial reserves. Emerging markets often have weak currencies, and investors have had to figure the risk of substantial foreign exchange losses.

But as we consider the risks listed above, they seem to describe to U.S. these days better than China, India or Brazil. This is not to say that emerging markets are rocks of stability while the U.S. has become the weakening...
of the western world, but it does suggest that automatic assumption of greater macro risks in emerging markets might need updating.

Yet we offer another reason to favor emerging markets that is a bit more esoteric and controversial. We start with a startling idea: the notion of scarcity of labor and capital (one in which economics is based) might be incorrect in 2011. The world seems to have a surplus of capital and labor. In the past few years we have seen major bubbles form in the U.S. equity market and real estate markets worldwide. There have been revolving bubbles or potential bubbles in other asset classes (perhaps TIPS with a negative real yield?). U.S. corporations are sitting on about a trillion dollars of cash earning nearly zero interest. One might plausibly argue that that cash represents fear of failure rather than surplus capital, but the surplus capital story (or, if you will, savings glut) might explain both the pre- and post-bubble investor behavior. When investors were (over?) confident, they used their surplus capital to drive prices to irrational levels; now that they are gloomy they stick their excess cash in the equivalent of a mattress.

At the same time, labor has gone from a scarce resource to an abundant one. For most of recorded history, most products were produced and consumed locally. The industrial revolution and the advent of advanced land, sea and air transportation started to change that. But further advances in transportation have combined with astounding technological progress to dramatically expand the supply of labor. Tasks that could only be done locally, such as fielding customer service calls, analyzing financial statements or interpreting X-rays, can now be done almost anywhere thanks to very cheap communications and information technology. Whereas new labor supplies used to require 20 years or more to develop, in the last decade established markets workers have faced millions of new competitors ready and eager to work.

If capital and labor are abundant rather than scarce, this changes the economic balance. From an investment perspective, it dramatically increases the value of the third component of economic value, IDEAS. For the past several decades, the U.S. has been the world’s best source for new ideas, and we believe that the U.S. could continue to be the best source for major innovations in information technology, genomics and other critical areas. Yet we will have competition, as China, India and other countries ramp up their own efforts to innovate.

Emerging markets have a huge advantage over established markets when it comes to ideas. They don’t have to come up with entirely new, dramatic breakthroughs to create new investment ideas; they can simply apply established concepts to their own growing markets. In technology, retailing, energy and many other fields, there are already great ideas proven in the U.S., Europe or Japan. Savvy entrepreneurs in emerging markets can use these ideas (and improve and adapt them) in their own country to create and grow businesses.

Consider Microsoft. The company did not invent the PC operating system, the graphical user interface, spreadsheet, word processing or presentation software, but it adapted, improved and cleverly marketed the creations of others to create great value for shareholders and customers. Creating major scientific breakthroughs is hard and highly uncertain. Taking a proven idea and running with it to create a big success is by no means easy, but it is not as difficult as starting from scratch.

Bill Gross and his colleagues have cogently presented the world with the concept of the “new normal,” where investment returns are lower than they have been historically. Looked at in another way, this is an implicit endorsement of the concept of a capital surplus. A November 23, 2010, article by Andrew Ross Sorkin in the New York Times began with a quote from entrepreneur and venture capitalist Sean Parker: “There’s too much money chasing too few deals.” Rather than accept these lower average returns, we suggest that investors have an alternative: invest in areas where new ideas are plentiful, and get there before they become fully priced. We have no doubt that the U.S. will soon recover its place as the world leader in innovation. But we think
emerging markets offer a relatively less risky way of increasing exposure to new ideas, because they do not have to be brand spanking new ideas, but innovative adoptions of established ideas.

Technological Innovation:

Manna from Heaven?

If our scenario for mid-decade turbulence dominated by sovereign debt problems proves to be too pessimistic, it could be due to better-than-expected progress on the technology front. Perhaps there are major technological innovations that we cannot even imagine today that will create a tsunami of growth and tax revenues similar to the late 1990s. While we certainly don’t consider this a base case scenario, it is worth examining as an upside risk.

The Bank Credit Analyst first began writing about a technology-driven “Long Wave” expansion in the U.S. economy in the mid 1990s and has revisited this topic multiple times over the years. “The benefits of information technology have not been fully exploited,” Martin Barnes wrote in a 2005 paper Revisiting The Long-Wave, “and biotechnology and nanotechnology hold promise for major new advances in the years ahead.”

A look at the non-farm productivity data bears out that something important happened in the mid-1990s. The trend growth rate in productivity doubled, and this trend appears to have persisted to this day (Figures 12 and 13). Further, the accompanying chart from a Journal of Economic Perspectives paper by former White House CEA director Martin Bailey also supports the notion that productivity growth spurts tend to move in long waves.

Productivity isn't everything, but in the long run it is almost everything," said Paul Krugman the Nobel Prize-winning economist in a 1992 book. "A country's ability to improve its standard of living over time depends almost entirely on its ability to raise its output per worker." Ironically, at the time, Krugman was arguing that the U.S. would be resigned to distressingly slow productivity growth just as it was about to pick up substantially in a way few could have foreseen.

Compared with the heady days of the internet bubble, it may feel like the pace of technological innovation has stalled over the past decade. But perhaps we are underestimating the pace of change under the radar screen. The growth of increasingly powerful mobile internet devices may have significant implications for future productivity growth that we currently fail to appreciate.
Morgan Stanley’s internet analyst Mary Meeker thinks so: “Mobile Internet is and will be bigger than most think.” She considers this to be the fifth great tech cycle of the last half century (the others include the mainframe, the mini-computer, the PC, and the desktop internet). We are just two years into this cycle and the previous cycles have lasted about a decade. Mobile internet technology is ramping up far faster than the original internet in terms of adoption (Figure 14). By 2015 more users will access the internet via mobile devices than desktops, according to Morgan Stanley.

Information technology falls into a unique class of technologies known as general-purpose technologies (GPTs), which are those that affect an entire economy and have the potential to drastically alter societies by upsetting existing economic and social structures. “A unique feature of IT compared with previous major new technologies is that the ability to process information more rapidly actually speeds up the development of other innovations. In other words, there is a self-feeding dynamic where powerful computers are the key to creating even more powerful computers. This enables new breakthrough developments such as mapping the human genome, something that will lead to waves of advances in biotechnology,” wrote Barnes of the Bank Credit Analyst in the aforementioned paper.

In “The Rational Optimist,” author Matt Ridley bemoans our species’ tendency toward apocalyptic pessimism. Trade, he argues, was the most momentous innovation of the human species as it led to the invention of invention. It’s what transformed our species from just another ape with a rather large brain, to a planet dominator. Once human beings began swapping things and thoughts, they stumbled upon division of labor, in which specialization led to mutually beneficial collective knowledge. Nearly all technologies are combinations of other technologies and new ideas come from swapping things and thoughts.

Collective intelligence is driven by the amount of interaction among individuals (“ideas having sex”), he argues. If true, globalization, the search engine, smart mobile devices, etc. will ensure furious economic progress in the coming decades, as ideas are becoming more promiscuous than ever, despite the usual setbacks from recessions, wars, and recurring financial crises.
Inventor, artificial intelligence expert, and author Ray Kurzweil takes things just a few steps further. His law of accelerating returns expands on Moore’s law and shows, based on empirical data, that not only the return, but the rate of return of technological progress is increasing exponentially. Based on this idea, he forecasts that, in the not too distant future (2045), we will be able to create forms of artificial intelligence that will surpass human intelligence. That is, we will cease to be the smartest and most capable life forms on earth. Some of Kurweil’s predictions may sound like freakish science fiction and he has his fair share of critics. Perhaps highly advanced medical nanobots won’t be able to perform live brain scans on patients by 2020. Perhaps mind uploading won’t be possible by 2030. But even if Kurzweil’s predictions fall far short of the mark, it would still portend a prosperous future.

Final Thoughts…

In this update to last year’s “Turbulent Teens” piece, we have argued that the outlook is a bit better today than it was a year ago. Yet we haven’t changed our moniker to the Tranquil Teens. We still expect that the conflicts inherent in aging populations in many countries, fiscal deficits and debt, imbalances in growth/trade between developed and developing markets and the normal to and fro of human activity will lead to a difficult decade. The relative calm of the mid-1980s through 1999 will seem like the outlier in retrospect, the calm before the storm. The Great Moderation now seems more like the great complacency. Hyman Minsky was right; stability did lead to instability. We had not tamed the business cycle or conquered fear and greed with superior policies and risk control tools, though we might have fooled ourselves into thinking so. Manias, panics and crashes have long been a part of the human experience (as documented in Reinhart and Rogoff’s “This Time Is Different”), and now we know that they will likely continue to bedevil us for decades to come.

So what should investors do now? What should we learn from the trauma of the past several years? Some might be fearful of ever taking financial risks again, knowing that careful savings compiled over many years can vanish quickly. Others might think that we can forget all that unpleasantness now, that it is back to business as usual and the next crisis will be someone else’s headache five decades from now. Not surprisingly, we reject either extreme and propose the following:

Beta Is Back

In last year’s “Turbulent Teens,” we argued that higher-single-digit annual returns were a reasonable expected U.S. equity return in this decade after zero last decade. We still think that is true, though the first year was a bit better than we expected. We think that the public might rediscover stocks in 2011, and be glad they did so. We think that equity inflows will not just help reward investors, but help finance entrepreneurs. We will need cash to help make the innovations we hope will emerge into viable businesses, and flows into stocks will help make that a reality, improving growth and job prospects.

But True Diversification Is Essential

We don’t think that inflation will be a problem for a couple of years as ample slack capacity (especially in the labor market) keeps price increases muted. But we do expect inflation to become an issue before the decade is over. We don’t expect a double-dip recession soon, but we would be surprised if we escaped this decade without another one. We think that stocks are headed higher and that bonds will trail stocks in 2011, but we think that bonds will be an important part of investors’ portfolios in the future as they have been in the past. We don’t know when the next shock will hit investors, but we do expect to face future shocks, like or perhaps even more intense than the ones we just survived. We know now that assets that appeared to provide diversification in the past failed under duress.
The focus of our research and new product efforts is based on what we believe investors should focus on: providing adequate returns while minimizing downside risks that could dash hopes and dreams. We seek true diversifiers and financial products such as variable annuities that provide upside opportunity but limit downside exposure. We are researching portfolio options that guard against lifestyle killers such as unexpectedly high inflation or a prolonged economic slump. This is not a trivial process, and no portfolio can be entirely risk-free. But we think investors should be cautious but not frightened, taking sensible risks with adequate hedges rather than foolish risks or chimeraical safety.

**It’s Both A Small And A Mad Mad Mad Mad World**

The days when investors could focus on just one country are over. Even if we choose to invest locally, our results will be influenced by global events. Markets for products, capital and even labor are becoming more global every year. A shock in China quickly reverberates in Chicago, and vice versa. At the height on the recent crisis, the failure of a mid-sized U.S. investment bank infected markets, institutions and citizens worldwide. A global perspective will be essential for investors who want to be successful this decade. In our view, that means not only evaluating opportunities globally and diversifying investments globally; it means bringing a global perspective to every investment decision.

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December 31, 2010

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Carmen M. Reinhart & Kenneth S. Rogoff, “This Time Is Different, Eight Centuries of Financial Folly

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