Outlook

Investment Management Division

Over the Horizon

In search of investment peaks in a low-return environment.

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Overview

OVER THE LAST FOUR YEARS, we have been making the case that US preeminence relative to other economies is the single most important factor underlying our core allocation to US assets. As we began thinking about our *2013 Outlook*, we decided to revisit that call in light of the remarkable performance of US assets since the trough of the financial crisis in early 2009. The question now is: have the factors that led to this performance changed?

The short answer is: yes, but for the better. US preeminence is not only still intact, it rests on a stronger foundation and is likely to be sustained for the foreseeable future. The past four years helped crystallize awareness of the key economic, institutional, human capital and geopolitical advantages the US enjoys over other economies. Meanwhile, persistent structural fault lines have put key developed and emerging market countries at a further disadvantage to the US.

Of course, the US faces its own fault line: its still-problematic fiscal profile. In this report, we evaluate the likelihood of a resolution.

We also affirm that there are intriguing investment opportunities outside the US. Fault lines in other countries are not fatal flaws. We point them out so that investors are aware of them, and can use them to allocate assets on a prudent and selective basis.

Importantly, we encourage investors to lower their return expectations across all asset classes over the next several years. We have, for the first time in our *Outlook* series, issued our return expectations for major asset classes for the next five years. It is our hope that comparing expected returns for these assets over the short and intermediate term will help our clients better balance their return objectives with their risk tolerances and investment horizons.

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Over the Horizon

SINCE THE DEPTHS OF THE FINANCIAL CRISIS in 2008–09, our investment recommendations have been based on our belief in the unparalleled strengths and resilience of the US economy and US institutions. At the time, our view stood in stark contrast to the consensus view. Plenty of headlines sounded the death knell of US economic and military hegemony with phrases such as *The End of the American Era,*[1] *The Decline and Fall of the American Empire*[2] and *The Decade the World Tilted East*.[3]

Others questioned the reserve currency status of the US dollar, touting the euro as a better alternative. *The Dollar Adrift*[4] and *The Message of Dollar Disdain*[5] captured the prevailing view.

Furthermore, many market observers recommended portfolio allocations away from US assets towards emerging market equities. Burton Malkiel, author of *A Random Walk Down Wall Street*, recommended 30% of equity assets allocated to emerging markets,[6] while some went so far as to push that figure as high as 50%.[7]

We disagreed with this view. In our *2010 Outlook: Take Stock of America*, we stated that the financial crisis had not dealt a fatal blow to the US as the preeminent economic and geopolitical power. We advised maintaining core assets in the US and recommended overweighting US equities and high yield bonds.

Now, nearly four years later, US assets have outperformed. Since March 2009, US equities have returned a total of 129%, outperforming European equities by 24%, Japanese equities by 97%, emerging market equities by 22% and more specifically the BRIC component of emerging market equities by 31% (BRIC countries include China, Brazil, Russia and India). US high yield bonds provided similarly strong returns at 125% compared to 86% for both emerging market local currency and dollar-denominated debt. In higher quality government bond markets, US Treasuries also performed well, with a total return of 18%. This compared favorably with a maturity-adjusted total return of 14% for global developed bond markets.

Such strong outperformance of US assets, combined with the US shale oil and gas boom, the Eurozone sovereign debt crisis and the recent slowdown in several key emerging market countries, has led to a notable shift in sentiment towards the US. Headlines herald the wisdom of investing in the US: *Why We're Investing in America*,[8] *Forget the Fiscal Cliff: It's Time to Buy America*,[9] *How the American Economy Could Surprise Us All*,[10] and *American Bull*.[11] Even the latest *Global Trends* report, released by the National Intelligence Council in December of 2012, has struck a more positive tone than their 2008 report.

As we looked over the horizon to formulate our investment recommendation for 2013 and beyond we were faced with two critical questions.

First, is our premise of US preeminence relative to the Eurozone, Japan and the key emerging markets still intact today and is a significant core allocation to US assets still appropriate? Importantly, how does the prospect for ongoing political gridlock in addressing fiscal challenges affect our outlook and this allocation?

The second key question is whether such strong equity and bond market outperformance over the last four years has lowered future expected returns. Interest rates are at historical lows in the US and in many other countries. In fact, on a global basis, 10-year government bond yields are at their lowest levels since the 13th century. Investors, therefore, are justifiably concerned about whether they will face muted returns across asset classes for the foreseeable future.

To shed some light on this issue, we will provide our return expectations for major asset classes for 2013 and for the next five years. This is the first time that the Investment Strategy Group is providing projected returns across asset classes for a five-year period.

Our rationale for doing so is three-fold. First and most importantly, we think investors will be well-served if they lower their return expectations across all asset classes to what we view as a more likely range over the next several years. Second, we will show that interest rates can stay low and remain below historical averages for a very long time. This is an important point to make, as many investors are very concerned about a sharp rise in interest rates over the next five years, despite the Federal Reserve Chairman's newly stated policy of keeping rates on hold until unemployment and projected inflation reach 6.5% and 2.5% respectively. Third, by comparing returns across asset classes over the short and intermediate term, we hope our clients will be able to allocate their assets more effectively given their risk tolerance and investment horizon. Merely focusing on the short term would not sufficiently address our clients' recent questions about the value of investing in equities and even hedge funds given the various economic and geopolitical risks.

In this introductory section of our *2013 Outlook*, we will begin by revisiting the key structural advantages of the US and its one key fault line – its fiscal profile – in search of any meaningful changes since the crisis. We will endeavor to answer the basic question: is the US as preeminent, less preeminent, or more preeminent than four years ago? This will be followed by an overview of the structural fault lines of the Eurozone, Japan and the key emerging market countries in search of progress over the last several years. We will then turn to our expected returns for 2013 and beyond, and highlight changes to our strategic and tactical investment recommendations.

In the second section of our *Outlook*, we will present our economic views for the key regions of the world. The third section will conclude with a more detailed investment outlook for the major marketable asset classes.

US Preeminence: Intact and Sustainable

We believe that US preeminence relative to the Eurozone, Japan and the key emerging markets is very much intact and sustainable for the foreseeable future. In fact, in some cases, the US has forged further ahead. True, the politics and market volatility surrounding the fiscal cliff are very disappointing, and the partisanship among Democrats and Republicans can shake one's view of US strengths. Even so, we believe investors should look beyond these concerns and instead focus on the key structural advantages of the US in order to invest assets appropriately.

The key structural advantages of the US fall into four categories: economic, institutional, human capital and geopolitical. While any one of these strengths is significant on its own, it is even more notable that the US is the only major country to enjoy all four. This unique positioning allows the US to benefit even further as each single advantage reinforces the others.

Stronger economic resources support the development of human capital, stronger human capital supports innovation, stronger innovation leads to technology that unleashes greater economic resources, stronger institutions protect the innovation, and so on. It becomes a virtuous cycle. There is no major country in the world that can boast this exceptional combination. While many economists may be right about extrapolating high growth rates for a handful of emerging market countries, even if they attain large absolute levels of GDP that does not necessarily equate to wealth and prosperity, and, in turn, to sustainable and attractive investment returns.

Economic Advantages

At $15.7 trillion of GDP and $49,802 of GDP per capita, the US is still the largest economy and the *wealthiest large economy in the world*. Its GDP is nearly double the second-largest (China), 2.5 times the third-largest (Japan) and nearly 4.5 times the fourth-largest (Germany). The US's GDP per capita is surpassed by 10 countries but they all have small populations; Luxembourg, for example, has the highest GDP per capita in the world but it only has half a million people.

The US is also endowed with abundant natural resources. As shown in Exhibit 1, the US dominates most of the world with respect to natural resources per capita, with the exception of Russia. This includes everything from energy resources to metals and mining, and importantly to agricultural commodities, arable land and water. We should not underestimate the impact of this comparative advantage across most natural resources. Looking at the most basic of needs, the US has 5.3 times more arable land than China and 4.6 times more water resources. The US is a net exporter of agricultural products while China is a net importer.

The US enjoys a lead in agriculture.

The International Energy Agency now predicts that the US could become the world's largest oil producer by 2020, ahead of Russia and Saudi Arabia.

Over the last several years, the US has maintained its dominance in natural resources and widened its lead over other major countries in one key respect: oil and natural gas resources. Since reaching their trough in 2008, US proven oil reserves have increased by 8.7% (or 2.5 billion barrels). Over the same period, US proven natural gas reserves have increased by 23% (or 1.6 trillion cubic meters). The International Energy Agency now predicts that the US could become the world's largest oil producer by 2020, ahead of Russia and Saudi Arabia.[12]

Technological advances in the decades-old practices of hydraulic fracturing – or "fracking" – and horizontal drilling are behind the boost in reserves and production. These advances were driven by increases in oil and natural gas prices since the late 1990s. Our colleagues in Goldman Sachs

Exhibit 1: Resources Per Capita

The US is endowed with abundant natural resources.

PROVEN RESERVES PER CAPITA (LATEST DATA AVAILABLE)

	Unit	US	EU	Japan	China	Brazil	India	Russia	World
Energy									
Oil	Barrels	98	26	na	11	76	5	619	235
Natural Gas	Thousand cubic meters	27	8	na	2	2	1	313	30
Coal	Tonnes	756	110	3	85	23	50	1,102	123
Uranium	Kilograms	2	0	0	0	1	0	1	1
Metals and Minerals									
Copper	Kilograms	112	54	na	22	na	na	211	98
Zinc	Kilograms	38	4	na	32	na	10	na	36
Nickel	Kilograms	na	na	na	2	44	na	42	11
Gold	Grams	10	na	na	1	12	na	35	7
Potash	Kilograms	414	398	na	156	1,505	na	23,155	1,353
Rare Earths	Kilograms	41	na	na	41	0	3	na	16
Agriculture									
Total Renewable Water Resources	Cubic meters	9,779	3,950	3,769	2,107	41,305	1,583	31,561	na
Irrigated Land	Square meters	733	348	198	478	226	517	305	462
Arable Land	Square meters	5,639	2,186	333	1,062	2,960	1,332	8,602	2,242

Data as of December 2012

Source: Investment Strategy Group, BP, World Energy Council, USGS, CIA

US energy production has surged.

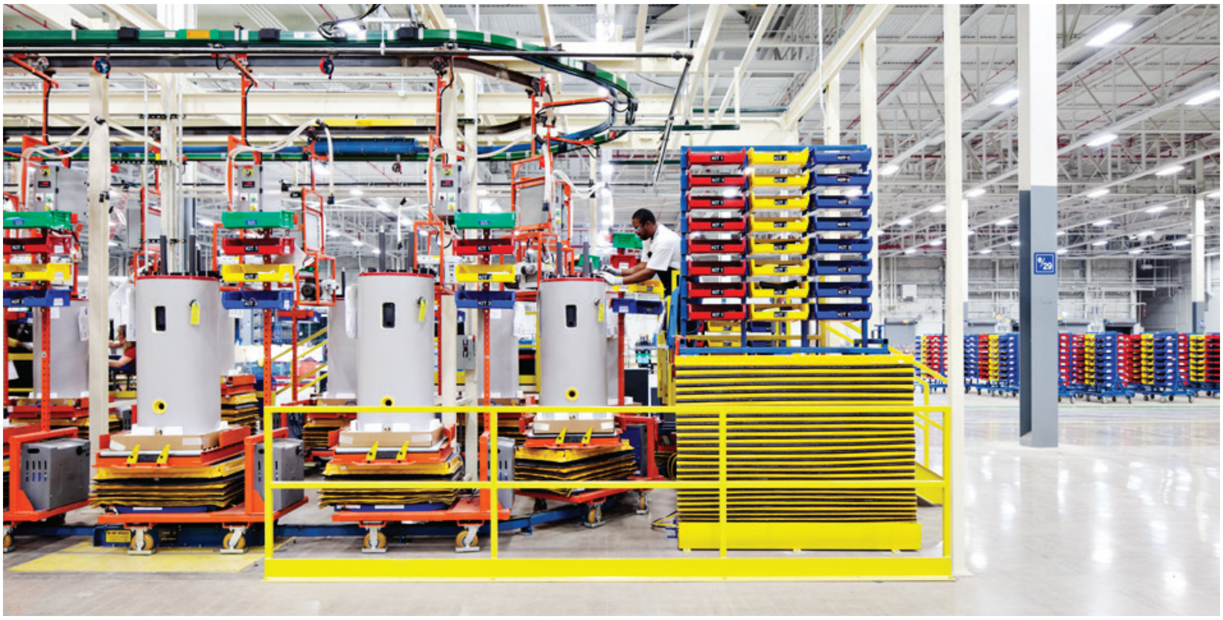
Global Investment Research estimate that US shale production is viable at about $70/barrel and we expect prices to stay above this level, on average, through this decade.[13]

This energy resurgence bodes well for a reduction in the US trade deficit, gains in energy-related employment and lower carbon emissions as natural gas replaces coal for electricity generation. Importantly, it also increases the momentum behind the nascent shift of manufacturing back to the US.

Throughout 2011, some of the largest US companies, including Caterpillar, Ford Motor Co., General Electric and General Motors, announced plans to "reshore" their manufacturing from emerging market countries – primarily but not exclusively from China (as highlighted in our *2012 Outlook: Up Periscope*). Today, many more companies, including some non-US firms, are following suit: Michelin, the giant European tire company, is expanding production in South Carolina; Honda, the Japanese auto company, will produce its new 2013 Civic models in Indiana; Lenovo, the Chinese electronics company, will open a small facility in North Carolina.

This shift in manufacturing is best exemplified by General Electric's revamp of Appliance Park in Kentucky, described in great detail in an aptly titled article, *The Insourcing Boom*.[14] Appliance Park was an industrial park in steady decline since the 1970s, and in 2008 it was for sale along with the rest of GE's appliance business. Four years later, Appliance Park has undergone a complete turnaround. In February of 2012, GE opened a new assembly line in Appliance Park to manufacture low-energy water heaters previously manufactured in China. A

This energy resurgence bodes well for a reduction in the US trade deficit, gains in energy-related employment and lower carbon emissions.



General Electric's Appliance Park is emblematic of the return of US manufacturing.

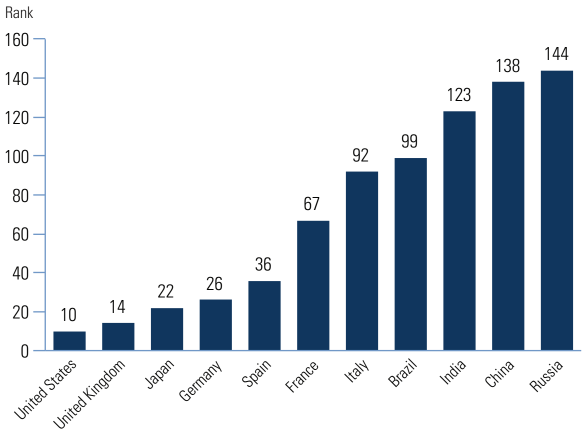
month later, it opened a second assembly line to manufacture high-end refrigerators. And in early 2013, stainless-steel dishwashers are expected to roll off a third assembly line. Remarkably, the retail price of the low-energy water heater manufactured in the US is 20% lower than the same heater manufactured in China.

The Boston Consulting Group (BCG) has been at the forefront of analyzing the insourcing trend and has begun publishing a series of related reports entitled *Made in America, Again*. Its first report published in August 2011 focused on the key factors that have made the US more attractive and China less attractive for manufacturing. The US's competitive position has been enhanced by declining or moderately rising wages, a flexible work force, rising productivity, shorter lead times, local control, better quality control and fewer supply chain risks. Meanwhile, China's cost advantage has been eroded by annual double-digit wage increases, higher transportation and land costs, a stronger renminbi relative to the dollar and growing concerns about intellectual property theft.[15]

In an updated report, BCG identified seven industry groups in which it predicts 10% to 30% of the goods now imported from China will shift back to the US before the end of this decade, adding 2.5 million to 5 million jobs and as much as $55 billion in output to the domestic economy. In some industries, such as home appliances, it expects as much as 50% of manufacturing to return to the US. BCG estimates that by 2015, wages in the Yangtze River Delta will likely exceed 60% of the labor costs of those areas in the US with low manufacturing costs, after

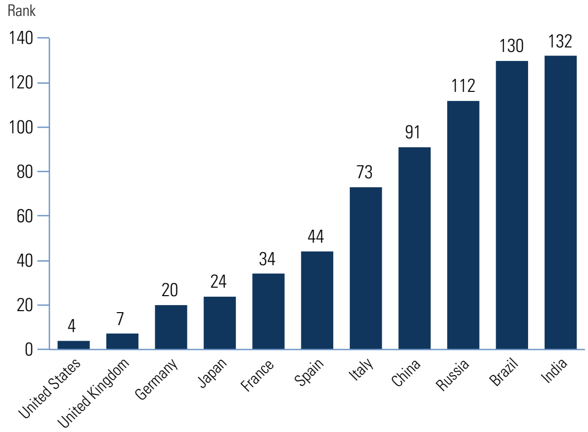
It was unfathomable five years ago to think that California would become a more attractive manufacturing location than China.

Exhibit 2: Economic Freedom Ranking
The US ranks the highest of any large country.



Data as of 2012
Source: Investment Strategy Group, Heritage Foundation, The Wall Street Journal

Exhibit 3: Ease of Doing Business Ranking
The US ranks in the top 5% of all countries ranked.



Data as of 2012
Source: Investment Strategy Group, World Bank

adjusting for the higher productivity of US workers. BCG corroborates the cost advantage experienced by GE with its water heaters but also cites several other benefits. ET Water Systems, for example, achieved improvements in quality and yield, faster innovation and product development and lower manufacturing costs after moving production of its irrigation controls from Dalian, China to San Jose, California. It was unfathomable five years ago to think that California would become a more attractive manufacturing location than China.[16]

Companies' future plans point to more of the same. In a related survey of more than 100 firms with annual sales of over $1 billion, BCG found that at least a third were either planning on or actively considering bringing manufacturing back to the US. While lower costs and proximity were among the key reasons cited, ease of doing business was also one of the key contributing factors, a trait we explore in fuller detail in the next section.

Institutional Advantages

Strong institutions are essential to the long-term prosperity of any country, and in this regard the US enjoys unrivaled abundance. Drawing on the thinking of 18th century economist Adam Smith, one Washington think tank explained the significance of this competitive advantage: "When institutions protect the liberty of individuals, greater prosperity results for all."[17] James Robinson, a Harvard University professor and author of *Why Nations Fail*, more recently pointed out that strong "inclusive institutions" contribute to a country's economic success. Importantly, he points out that these institutional advantages persist through "lots of feedback loops."[18]

According to rigorous and objective rankings, the US has the strongest institutional structure of any major country. These rankings are based on two indexes, the Economic Freedom Index and the Ease of Doing Business Index, which measure the extent to which a country's institutions enable and contribute to economic prosperity. On both counts, the US ranks the highest of any large country and in the top 5% of all countries that are ranked (see Exhibits 2 and 3).

Outlining the components of these measures clarifies why strong institutions are so vital to a country's economic success. The Economic Freedom Index, for instance, ranks 179 countries and focuses on 10 factors grouped into four broad categories:

> "If there is another industrial revolution, it's more likely that it will happen in the US than anywhere else."
> – James Robinson, Harvard University

- **Rule of Law** (property rights, freedom from corruption);
- **Limited** Government (fiscal freedom, government spending);
- **Regulatory Efficiency** (business freedom, labor freedom, monetary freedom); and
- **Open Markets** (trade freedom, investment freedom, financial freedom).

The World Bank's Ease of Doing Business Index captures the ability of the private sector to start and manage a business in any country and helps partly explain the US's recent manufacturing resurgence. The World Bank ranks 185 countries and focuses on 10 factors, including protecting investors, enforcing contracts and starting a business.

The US strengths captured in both indexes enable the country to self-correct with a resilience not seen elsewhere in any of the major countries. Witness Japan after two lost decades. Or examine what we have termed the "incremental, reactive and inconsistent" approach of Eurozone policymakers to resolving the Eurozone sovereign debt crisis. Harvard's Robinson suggests looking over the horizon and past the current cyclical slowdown to the strength of US institutions that foster great innovation: "If there is another industrial revolution, it's more likely that it will happen in the US than anywhere else."[19]

Human Capital Advantages

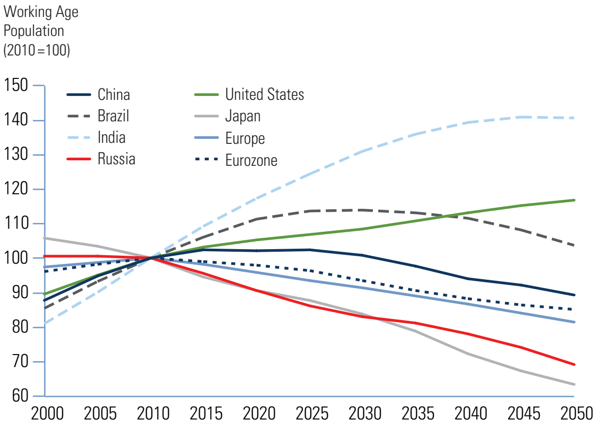
Let's now turn to the human capital that leverages these institutions. This is an area where the US is enjoying some very favorable trends. We focus on key components of human capital: the trend in growth rates of the working age population, the quality of education and the brain drain from the rest of the world to the US.

It is widely accepted that a country needs a growing working age population to generate economic growth, earnings growth and attractive returns on investments. As shown in Exhibit 4, the US and India are the only two major countries with a growing working age population. Japan, the Eurozone and broader Europe and Russia have already peaked in this respect. Japan has been on a steady decline since 1995. China peaked or will peak sometime between 2010 and 2015, according to the United Nations Population Division, and Brazil is expected to peak in the next 13 to 18 years.

The median age of the working population is equally important. In the US, the working age population is aging very slowly; it will increase by only two years by 2030. By comparison, the median age will increase between five and eight years in all other major countries and regions. In addition, the US is projected to have one of the youngest labor forces by 2050, with a median age of 40 years. By then, China and Japan will have the oldest working age populations at 49 and 52 years, respectively. Hence the oft-quoted expression, first used by Goldman Sachs Global Investment Research in 2006, that "China will get old before it gets rich." This phenomenon goes back to China's one-child policy, and stands in sharp contrast to the US, which enjoys much higher fertility rates and remains the destination of choice for most migrants.

This last point cannot be overstated. By all measures, the US is the strongest magnet for migrants. In a recent two-year survey conducted by Gallup in 151 countries, the polling organization found that 23% of those who wanted to migrate selected the US as their preferred country. Gallup said the findings give the US the "undisputed title as the world's most desired destination for potential

Exhibit 4: Working Age Population
Unlike those of many other major countries, the US workforce is projected to grow.



Data as of 2012
Source: Investment Strategy Group, United Nations Population Division

Exhibit 5: Top 50 Universities by Country
US dominance has increased.

	Number of Universities in the Top 50
United States	29
United Kingdom	7
Canada	3
Switzerland	2
Australia	2
Japan	1
Singapore	1
Hong Kong	1
Sweden	1
China	1
Germany	1
Republic of Korea	1

Data as of 2012
Source: Investment Strategy Group, Times of London

migrants." The next two destination countries were United Kingdom at 7% and Canada at 6%.[20]

The US is also a magnet for attracting and retaining highly educated talent. Immigrants comprise a significant portion of researchers in the US. Roughly 38% of US researchers migrated from other countries, according to a 2012 National Bureau of Economic Research working paper that examined mobility patterns for 16 countries. The US also retains a bigger share of its researchers. Unlike countries like India that lose 40% of their researchers to other countries, the US loses only 5%. The only other country with a lower number is Japan at 3%. The paper concludes that "for virtually all the core countries studied, the United States is the dominant destination country." China was not included in the study because, according to the authors, their "efforts to field the web-based survey proved unsuccessful."[21]

In past reports, we have touched upon the high quality of university education in the US, another important factor that explains its human capital advantage. Surprisingly, US dominance in academic excellence at the university level has increased in recent years. According to the UK-based organization Times Higher Education, 29 of the top 50 universities in the world are located in the US, nine more than in 2008. Only seven are located in the UK (one less than 2008), and only two in emerging market countries (the same as in 2008), as shown in Exhibit 5.

The US continues to dominate in research and development (R&D) as well. The US accounted for 31% of global R&D expenditures in 2012, with an estimated $436 billion in spending by government, industry and academia. To be sure, this contribution is down from a 34% share in 2008, and R&D growth rates in emerging market countries will likely outpace the US in the years ahead as federal R&D spending declines. However, given the US's lead in absolute terms, we do not see any meaningful impact on innovation. After all, the next country in line, China, only accounts for 14.2% of global R&D; Japan stands at 11.2%, and Germany at 6.5%. The Eurozone countries in aggregate are at 17% of global R&D. Based on this data, we conclude that the US will maintain its human capital advantages in both quality and quantity for decades to come.[22]

Geopolitical Advantages and Worries

US preeminence also extends to geopolitics, where it has three major advantages: system of government, military power and geographic location.

The country's strong and robust system of government – at the federal, state and local levels – may be its most important advantage in this respect. For over 150 years, it has embraced monetary and fiscal union and a centralized system of government with plenty of independence at the state and local level. Federal support for state and local budgets during the financial crisis of 2008–09 exemplifies the effectiveness of the federal system and stands in stark contrast to the difficulties observed in the Eurozone. The US also embraces a judicial system that allows all levels of government to be held accountable to common standards grounded in the Constitution. Last summer's Supreme Court ruling on the Affordable Care Act, along with its decision in 2000 in *Bush v. Gore*, shows how the country can achieve a peaceful resolution to a contentious issue.

Second, the US still has unparalleled military power. Based on the latest data available from the Stockholm International Peace Research Institute, the US currently spends $711 billion, or about 4.5% of its GDP, annually on its military. The US accounts for 41% of world military outlays and exceeds the total of the next 13 countries combined. China is second at $143 billion, even after increasing its military expenditures by nearly 70% since 2008.[23]

Finally, we are often reminded of the US's advantageous geographic location. As we observe heightened tensions between China and Japan over disputed islands in the East China Sea or read of North Korea's missile launch in December of 2012 in the general direction the Yellow Sea and the Philippine Sea, we note that the US has the good fortune of having the Atlantic and Pacific oceans on either side and a friendly and stable neighbor to the north in Canada. To the south, Mexico poses advantages and geopolitical risks; it has become an attractive hub for manufacturing but its various drug-torn enclaves may become a source of greater risk.

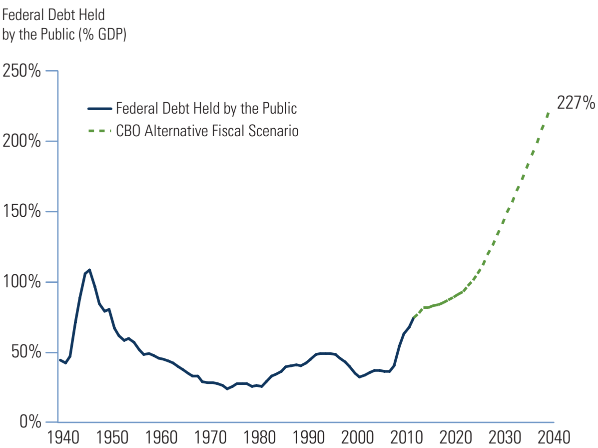
Of course, we should also add that the US is not completely safe from all geopolitical risks. As we look outside our windows and see the Freedom Tower[24] rising above the New York skyline, we are reminded that the US is not immune from terrorism. It is also not immune from hackers – from China, from Russia and from inside the US itself – who threaten its cybersecurity, communications network and even the nation's electricity grid, among other potential targets.

The US Structural Fault Line: Its Fiscal Profile

While the US has many advantages, its deteriorating fiscal profile is clearly a disadvantage and an important structural fault line. As a result of the financial and economic crisis, the US budget deficit ballooned to 10.1% of GDP in 2009 and has stayed at high levels ever since. It is estimated to be 7.7% in 2012 and is unlikely to revert to its long-term average in the next few years. These deficits have more than doubled the federal debt-to-GDP as measured by Debt Held by the Public from 36% in 2007 to an estimate of 73% in 2012. In the absence of any fiscal reform, the Congressional Budget Office (CBO) estimates that debt-to-GDP will exceed 200% by the year 2038 (see Exhibit 6). This deterioration stands in sharp contrast to the improving fiscal profile in emerging markets. On a gross basis – a measure

In the absence of any fiscal reform, the US debt-to-GDP ratio will exceed 200% by the year 2038. This deterioration stands in sharp contrast to the improving fiscal profile in emerging markets.

Exhibit 6: Federal Debt Held by the Public



Data as of 2012
Source: Investment Strategy Group, CBO, Office of Management and Budget

Exhibit 7: 10-Year US Treasury Yield
Low interest rates suggest a tipping point is nowhere near.

Data as of December 31, 2012
Source: Investment Strategy Group, Bloomberg

that is more commonly used by the International Monetary Fund (IMF) and is more appropriate for comparisons across countries – US debt as a percent of GDP stands at 107%, compared to 34% for emerging markets.

This is not sustainable. Too much debt will burden future generations, hamper growth and expose the US to the whims and pressures of foreign investors. Currently, non-US entities hold just under 50% of US Treasury securities and over 30% of all government securities.

The question, therefore, is whether the US can address this structural fault line in a timely manner. Given the "down-to-the-wire" tactics of both parties in Washington with the debt ceiling in 2011 and the fiscal cliff in 2012, many observers say there is little room for optimism. They contend that no meaningful progress on tax issues and entitlement reform will occur in the absence of a market-driven crisis. Such a crisis would include a significant rise in interest rates, further and more significant rating agency downgrades and equity market drops of 20% or more.

We see two reasons to be cautiously optimistic that fiscal reform will take place before a major crisis occurs.

First, the US has some time before it reaches the tipping point and this window allows policymakers to tackle the problem in an incremental fashion – the pattern they have already established. As pointed out in a June 2012 *Sunday Night Insight*, Macroeconomic Advisors Chairman Joel Prakken estimates that the tipping point is 15 to 20 years away. He defines the tipping point as a time when the volume of government debt crowds out the private sector and puts upward pressure on interest rates. If recent history is any guide (see Exhibit 7), we are not at such a point. The 10-year Treasury rate is about two percentage points lower than it was when the debt-to-GDP ratio was half of what it is today.

While we believe that the tipping point is many years away, there are some economists and policymakers who believe that the US may have already passed it. Economists Carmen Reinhart and Kenneth Rogoff have shown that once countries pass the 90% gross-debt-to-GDP threshold, as in the case of the US today, economic slowdown and even collapse often ensue.[25] We do not share this view because none of the countries they studied had the safe haven and reserve currency status or economic dominance of the US at the time they

Exhibit 8: Composition of Government During Previous Fiscal Adjustments

Split governments have historically not prevented major fiscal reform.

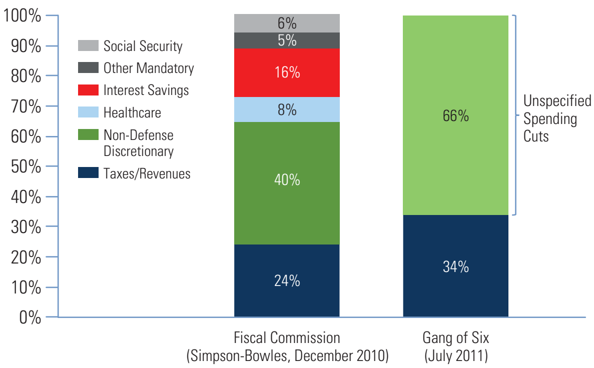
			HOUSE		SENATE	
Year	**President**	**Party**	**Democrats**	**Republicans**	**Democrats**	**Republicans**
1981	Ronald Reagan	R	243	192	46	53
1984	Ronald Reagan	R	268	166	46	54
1986	Ronald Reagan	R	252	182	47	53
1990	George H.W. Bush	R	259	174	55	45
1994	Bill Clinton	D	258	176	57	43
1997	Bill Clinton	D	207	227	45	55
2013	**Barack Obama**	**D**	**193**	**242**	**55**	**45**

Data as of 2012

Source: Investment Strategy Group, Senate.gov, House.gov

Exhibit 9: Fiscal Savings under Various Bipartisan Budget Proposals

Composition of Fiscal Savings under Various Bipartisan Budget Plans



Data as of 2012

Source: Investment Strategy Group, National Commission for Fiscal Responsibility and Reform, Committee for a Responsible Federal Budget, Goldman Sachs Global Investment Research

passed this threshold.

Second, we are also optimistic about the country's fiscal challenges because history tells us that once specific measures to reduce the debt trajectory have been identified, even divided governments have been able to achieve some, albeit incremental, progress. As shown in Exhibit 8, the composition of government during past fiscal adjustments was divided among parties in five of the last six episodes.

Many correctly point out that partisan media outlets, combined with the echo chamber effect of social media, make bipartisanship more difficult than in the 1990s. And yet those bipartisan efforts continue. Some have been instrumental in forging proposed fiscal solutions combining higher revenues through tax reform with lower entitlement and discretionary spending, as shown in Exhibit 9. And, more recently, it was a bipartisan effort that passed the Budget Control Act in 2011, which contained $900 billion of discretionary savings, as well as discretionary savings of $500 billion from continuing resolutions, and savings of $300 billion associated with lower interest expense. These all added up to a potential down payment toward fiscal reform of $1.7 trillion over 10 years.[26] There is certainly room for skepticism on whether the full $1.7 trillion in savings will be realized; the ultimate number – accounting for budgetary gimmicks and future legislative changes – may well be much lower. But even if the ultimate savings are closer to the CBO's projection of about $900 billion from the discretionary spending caps alone, we view these initial measures as one incremental step. The latest agreement, the American Taxpayer Relief Act of 2012 that averted the "fiscal cliff," was a second incremental step in addressing this structural fault line. The estimated savings are $650 billion over 10 years.

The biggest hurdle to fiscal reform is a reduction in healthcare costs. Unabated, healthcare costs including Medicare and Medicaid will grow from 5% of GDP to 11% by 2042. The higher debt burden will in turn also lead to higher interest payment expenses. Net interest expense is expected to grow from 1% of GDP in 2012 to 12% by 2042 in the absence of any fiscal reform. Suggested savings can come from a range of measures including raising the eligibility age, increasing premiums, or indexing cost adjustments. Some are intuitively obvious: Medicare was created in 1965 when life expectancy at birth was 70.2 years. It has risen to 78.0 today so a gradual increase in the eligibility age seems unavoidable. In this case, we have a precedent to follow. A Reagan-era Social

Security reform gradually increased the retirement eligibility age from 65 to 67 over 40 years.

We recognize that fiscal reform will be politically unpopular and difficult to enact. We also believe that politicians will inevitably deploy an incremental approach. Such an approach will be a source of uncertainty and market volatility for many years as every initiative will disappoint in both magnitude and process. We are certainly not expecting any "giant leap for mankind" on this front.[27] In fact, we expect 2013 to follow suit, with the upcoming debt ceiling and sequestration deadlines. Here, we are reminded of a particularly apt excerpt from Alexander Hamilton's report to Congress in 1795, forwarded to us by one of our clients: "To extinguish a Debt which exists and to avoid contracting more are ideas almost always favored by public feeling and opinion; but to pay Taxes for the one or the other purpose, which are the only means of avoiding the evil, is always more or less unpopular."[28]

So while the current fiscal debates are often disheartening, we should keep these debates in perspective and view them in the context of the economic, institutional, human capital and geopolitical strengths of the US. We should also keep the US structural fault line in perspective by comparing it to the structural faults lines of other major countries and regions of the world that are the available investable alternatives.

The Eurozone, Japan and the BRICs: Improvements in Their Structural Fault Lines?

When discussing the US's competitive advantages, we have compared them to those of the Eurozone and Japan among advanced economies and to those of China, Brazil, Russia and India among emerging market countries. Many of these regions and countries have distinct structural fault lines of their own that put them at a further disadvantage to the US beyond the comparative differences already enumerated above. We will briefly touch upon each of these, starting with the advanced economies.

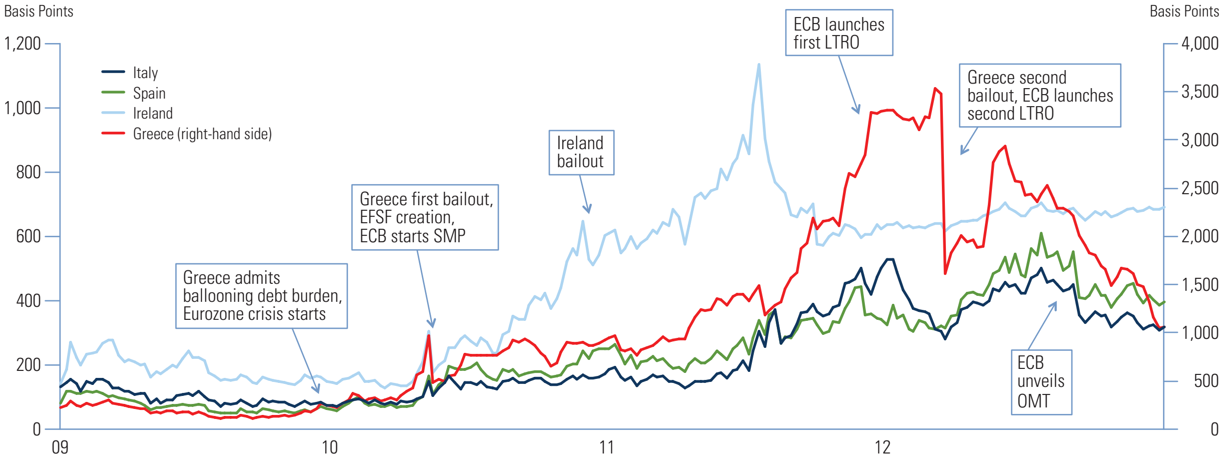
The Eurozone: Is the Worst of the Sovereign Debt Crisis Over?

Since the onset of the sovereign debt crisis, we have characterized Eurozone policy as "incremental, reactive and inconsistent." Policy measures have been introduced incrementally given the need to build consensus among the policymakers and electorates of 17 different countries. Policy has also been reactive in that the most important measures were introduced in response to market pressures, as shown in Exhibit 10. Policymakers have also been inconsistent, shifting their stance within a short period of time.

While this approach has led to significant volatility over the course of the last three or so years, it has also resulted in significant progress, as seen in the decline in spreads of most peripheral countries. The introduction of three-year Long Term Refinancing Operations in 2011 provided liquidity to the Eurozone banks. The European Stability Mechanism (ESM), approved by the German parliament in June of 2012, provides a backstop against default. The Outright Monetary Transactions, announced in September 2012, provide a soft cap on spreads.

> "To extinguish a Debt which exists and to avoid contracting more are ideas almost always favored by public feeling and opinion; but to pay Taxes for the one or the other purpose, which are the only means of avoiding the evil, is always more or less unpopular."
>
> Alexander Hamilton

Exhibit 10: Eurozone Countries' 10-Year Government Bond Spreads over German Bunds



Data as of December 31, 2012

Source: Investment Strategy Group, Bloomberg

And then there are the verbal pledges made by the region's leaders, which have conveyed the resolve of key policymakers to keep the Eurozone intact. Note German Chancellor Angela Merkel's comment in July 2012 regarding "more Europe."[29] In July 2012, European Central Bank (ECB) President Mario Draghi was quoted as saying, "the [ECB] will do whatever it takes…And believe me, it will be enough."[30]

Country-specific fiscal reforms are also bearing fruit as budget deficits have fallen from peak levels across the region. However, this progress does not mask the three underlying structural problems with the Eurozone: monetary union in the absence of fiscal and budgetary union with mutual liability for all Eurozone debt, resistance to labor reform and other economic reforms, and slow adjustments in the banking sector.

In the absence of fiscal union, the so-called "bond vigilantes"[31] will pressure the markets at every turn to test the limits of German support for the deficit-laden peripheral countries as well as for France. Since many Germans will not accept keeping the Eurozone intact at *any price*, we can expect further volatility *until* (or should we say *if*) the Eurozone moves towards greater union.

If the pace is too slow and key countries such as France resist structural reforms, volatility will be quite significant. As Peter Kenen, an international economist who passed away in 2012, theorized: "Fiscal transfers play an important role in most monetary unions in offsetting region-specific shocks."[32] In the absence of fiscal transfers from countries such as Germany, deficit countries may be less able to withstand any internal or external shocks to growth. Such shocks would include the loss of domestic confidence in a country's banking system or a loss of confidence by foreign investors in a country's solvency.

The risk of the Eurozone unraveling has decreased substantially but it is certainly not zero. This makes investing in the US much more attractive on a relative basis since the risk of a state ceding from the union is zero.

The second fault line, resistance to structural reforms, not only makes the Eurozone less competitive from an economic perspective but also serves as a hindrance towards greater European union. One of the key anchors of any ESM and ECB support will be conditions for structural reforms. As in the case of Spain today, many countries want to avoid the political repercussions of accepting any conditionality that comes with financial support. Such resistance becomes a Catch-22: insufficient reform results in less support and more market pressure, more market pressure results in tighter financial conditions, and poorer economic growth in turn leads to greater need for financial support.

Such reforms are even harder to attain than fiscal reform in the US. As shown in Exhibit 11, many of the Eurozone countries have extremely rigid labor markets as measured by the OECD.[33] According to the BCG report cited earlier, the average US worker is about 35% cheaper per hour on a productivity-adjusted basis than his average Western European counterpart. Labor rigidity, when combined with an expensive work force and unfavorable demographics, does not bode well for the trend growth rate in the Eurozone for the foreseeable future.

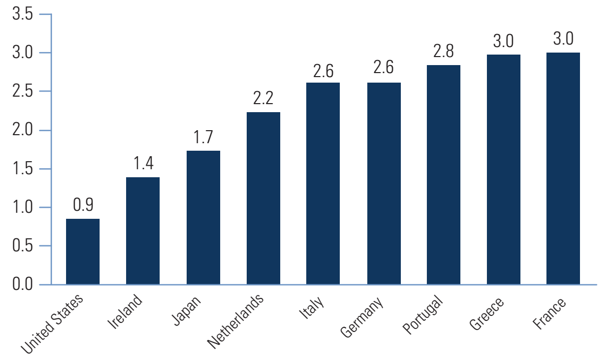
The Eurozone is also hampered by a weak banking sector. This is particularly important since bank lending plays a significantly greater role than the equity and debt capital markets when compared to the US, as shown in Exhibit 12. So any weakness in their lending ability will have a multiplier effect on the broader economy. Unlike US banks, Eurozone banks have been very slow to deleverage. Since the financial crisis, US financial sector debt has fallen from a peak of 120% of GDP down to 88%. In the Eurozone, financial sector debt actually rose from 146% to 149%. In this regard, the Eurozone is more like Japan, where financial sector leverage has remained quite high for over 20 years.

The Eurozone is being compared to Japan with greater frequency across other metrics as well. A recent article by Sebastian Mallaby, a senior fellow at the Council on Foreign Relations, titled *Japan Should Scare the Eurozone*, highlights other similarities between the two. Both have experienced slow progress on structural reforms, incremental fiscal and monetary policy and unfavorable demographics.[34] As shown earlier in Exhibit 4, demographics in the Eurozone are more akin to those of Japan than the US.

In the 2010 Global Aging Preparedness Index report from the Center for Strategic and International Studies, Germany, the Netherlands, France, Italy, and Spain all fared worse than Japan in a ranking of fiscal sustainability. The report cited a combination of unfavorable demographics, large pension and healthcare commitments, and limited room for fiscal maneuvering.

Exhibit 11: OECD Employment Protection Index*

A higher index implies greater labor rigidity.



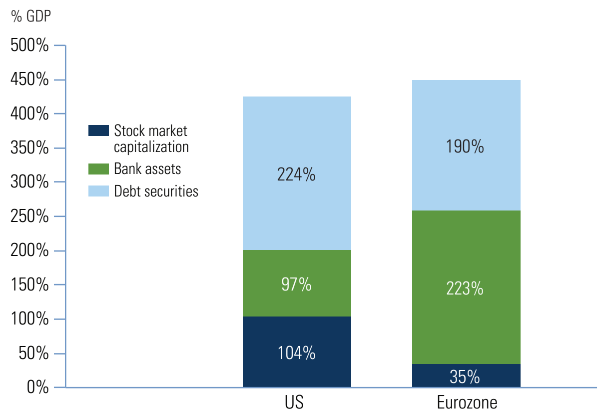
Data as of 2008

*Measures the procedures and costs involved in dismissing individuals or groups of workers and the procedures involved in hiring workers on fixed-term or temporary work contracts. France and Portugal data comes from 2009.

Source: Investment Strategy Group, OECD

Exhibit 12: Composition of Capital Markets

Bank lending plays a bigger role in the Eurozone than it does in the US.



Data as of 2011

Source: Investment Strategy Group, IMF

Labor and pension reform in the Eurozone has been met with popular resistance.

We see no smooth path through which the Eurozone addresses its structural fault lines. On the contrary, we expect further labor and social unrest, additional market pressures and continued volatility as some peripheral countries such as Spain struggle with high unemployment and further declines in GDP, and other countries like Italy and France resist reform. That is not to say that attractive investment opportunities will not present themselves at times. The Investment Strategy Group introduced a tactical allocation to high-quality, large-capitalization, multinational Eurozone companies through the Euro Stoxx 50 in December 2011 and has since added to the recommendation. This basket has outperformed the S&P 500 over time. However, we make the case again: the US remains, by far, the best repository of core assets.

Japan: Is It Really Different This Time?

Japan's near-term future depends on it breaking out of a pattern of deflationary stupor and anemic growth. Since the markets began pricing in a Liberal Democratic Party (LDP) victory with Prime Minister Shinzo Abe at the helm, Japanese equities have rallied 21% and the yen has cheapened by 11%. Investors are hopeful that Prime Minister Abe will follow through on his calls for aggressive monetary policy from the Bank of Japan (BoJ), including a higher inflation target of at least 2%, aggressive fiscal policy through infrastructure spending, and a build-up of the country's military capabilities in response to territorial disputes with China. He has even suggested revising the constitution in order to strengthen Japan's military authority.

We share the market's near-term enthusiasm but we are much more cautious about the long term because of the country's deep structural fault lines. First, this is not the first time that Japan's leaders have won elections on promises to be agents of change. In fact, Prime Minister Abe himself came to power as head of the LDP in 2006 with a 70% approval rating only to see it drop to 30% in less than a year.[35] He was in office for just under a full year.

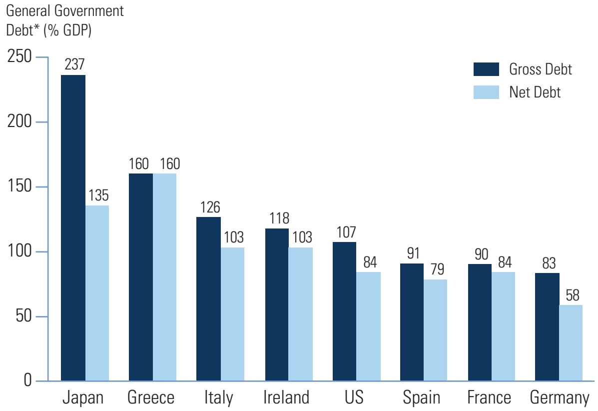
While the LDP has long dominated Japanese politics, intra-party factional rivalries have meant that Japan has had 35 governments since WWII, implying an average tenure per government of 1.9 years. That compares to 12 different presidents in the US with an average tenure of 5.6 years. In fact, the *Wall Street Journal* has referred to it as "carousel politics," resulting in political and policy instability.[36] It remains to be seen whether Japan's current leaders can break out of this pattern.

The second fault line is the nation's extremely unfavorable demographic trends. As shown earlier in Exhibit 4, Japan has some of the worst demographics among major countries. Its population has grown by only 0.2% annually since the bursting of the real estate and equity market bubbles in 1990. Employment has grown by 0.1% annually over this 22-year window. Such anemic population growth has been a drag on economic growth since 1990. The average age of Japan's working population, at about 45, is the oldest of the major countries, and it will reach 52 by 2050. The normal solutions to this problem – raising fertility rates and immigration – are not viable. In the Gallup migration survey we referenced earlier, only 2% of people who wanted to migrate chose Japan as their destination. By comparison, 23% chose the US.[37]

Japan's aging work force hampers economic growth.

Exhibit 13: General Government Debt

Japan's debt levels are high relative to those of most other countries.



Data as of 2012

*Includes debt at all levels of government.

Source: Investment Strategy Group, IMF, European Commission

The third fault line is Japan's heavy debt burden. Japan is a rich country with the third-largest economy in the world and a GDP per capita of $46,896. It is estimated to have spent about $157 billion on R&D in 2012, third only to the US and China. But Japan also has a heavily indebted government. Its general government debt is the highest of any developed country at 237% of GDP and its net public debt is the second only to Greece at 135% of GDP (see Exhibit 13). Japan's budget deficit for 2012 is 10% of GDP, also the worst of any developed country.

To date, this debt burden has not led to a widening of spreads similar to that of the peripheral Eurozone countries because of the domestic ownership of government bonds. About 93% of outstanding Japanese government bonds are owned by Japanese retail and institutional investors including banks, insurance companies, and corporate and public pension plans. Japanese investors will continue to support the domestic bond market for years to come given the country's current account surplus. However, "years to come" is not the same as forever. On a long-term basis, therefore, fiscal austerity in Japan will be a drag on growth. One example of such austerity – the pending increase in consumption tax scheduled to take effect in April 2014 followed by a further increase in October 2015 – has prompted considerable debate about whether the economy can absorb an increase in taxes without falling into recession.

In our view, it is hard to say that this time is different in Japan. The heavy debt burden and the demographics have only deteriorated further, and the established pattern of short tenures for most Prime Ministers and their respective governments since WWII gives us little confidence that policy goals will be met. So while a tactical allocation to Japanese equities is warranted at this time given cheap valuations and the momentum created by Prime Minister Abe, we do not believe that Japanese assets are appropriate for a significant core allocation in the long run.

Key Emerging Markets: Any Seismic Shifts in Their Structural Fault Lines?

Having reviewed the fault lines of the major developed economies, we now turn to the challenges faced by the key emerging markets of China, Brazil, Russia and India. In particular, investors should consider how the US compares to these countries. Here, we have seen a surprising shift in sentiment towards the US combined with a more negative view of emerging market countries. The reverent book and article titles of the mid-to late 2000s, such as *India Rising: Emergence of a New World Power*,[38] *When China Rules the World: The End of the Western World* and the *Birth of a New World Order*,[39] and more broadly, *The Emerging Markets Century: How a New Breed of World-Class Companies is Overtaking the World*,[40] have given way to more alarming titles such as *Broken BRICs: Why the Rest Stopped Rising*,[41] *How India Stumbled: Can New Delhi Get Its Groove Back?*,[42] and *The End of the Asian Miracle*.[43]

In some cases, this shift in sentiment has been seismic. Antoine van Agtmael coined the term "emerging markets" as an investment officer at the International Finance Corporation in 1981 and authored the aforementioned *The Emerging Markets Century*, published in 2007. His view that some emerging market companies will leap ahead of Western multinationals through "man-made factors" such as "an obsessive focus on quality and design" and not primarily through cost advantages has been replaced by a far different view. In a recent article, *The End of the Asian Miracle*, he writes that "the United States may be doing better than we thought, and China and other rising powers may not be doing quite as well as believed."[44] This change, by someone with more than three decades of investment experience in emerging markets, suggests a powerful shift in investor sentiment.

Why Do These Fault Lines Matter?

We review these fault lines for two reasons. First, we need to examine whether the key emerging market countries have made any significant progress in addressing their fault lines over the last few years. The resounding conclusion is they have not. In fact, in some cases, their condition has worsened, strengthening our view in US preeminence and suggesting that these countries will not be challenging the US for decades. This explains our core allocation to US assets. Second, while we believe that emerging markets provide investment opportunities both on a strategic and tactical basis, we think our clients should be aware of the deep fault lines in these countries in order to withstand their greater market volatility.

Before we delve into these structural fault lines in further detail, it is important to place them in context. First, relative to the US, the Eurozone and Japan, the key emerging market countries are largely underdeveloped, undereducated, and, to a certain degree, undernourished countries with inadequate infrastructure. This is in spite of over a decade of 6.6% annualized growth in emerging markets in aggregate, and 8.2% growth in the BRICs. To give a prominent example, China is the second-largest economy in the world and has lifted 400 million people out of poverty over the last 20 years. At the same time, its estimated 2012 GDP per capita is only $6,094 on a nominal basis, and $9,146 on a Purchasing Power Parity (PPP) basis, *below the US poverty threshold of $11,484*. Sixteen percent of the population earns below $1 per day (PPP) and 11% are undernourished. Even with a plausible range of assumptions for both US and Chinese growth through the end of this century, China's GDP per capita will still be below that of the US.

In India, the GDP per capita is a meager $1,592, which is about 3% that of the US and Japan, and 4% that of the Eurozone. A full 42% of the population earns below $1 per day and 19% are undernourished. To put things in perspective, China and India

"No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable."

Adam Smith

combined have more undernourished people than the entire population of the US.

Brazil, as a commodity-rich country, fares somewhat better with a GDP per capita of $12,340, with 4% of the population earning below $1 per day and 6% undernourished. Russia, with its vast energy resources, has the highest GDP per capita at $13,765, but 5% of its population is undernourished.

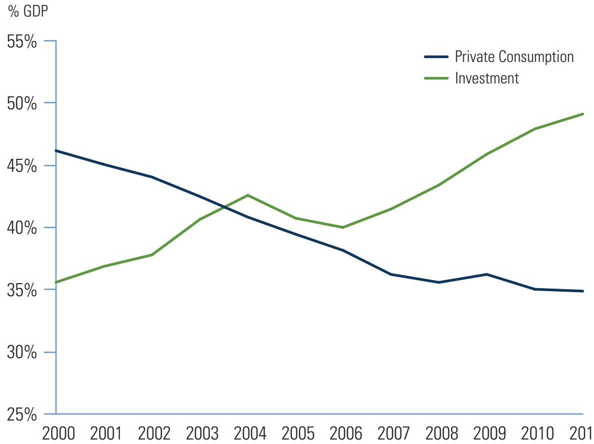
So as we turn to the specific fault lines of these countries, some of which we have highlighted in the past, we should keep in mind another Adam Smith insight: "No society can surely be flourishing and happy, of which the far greater part of the members are poor and miserable."[45]

Those metrics that describe key strengths of the US portray weaknesses in the key emerging market countries. While the US does particularly well in the Economic Freedom and Ease of Doing Business indexes, the BRIC countries do particularly poorly (as shown in Exhibits 2 and 3). All four countries do poorly with respect to freedom from corruption, with Russia ranked lowest among the four. China and Russia rank poorly on property rights and investment freedom. India does poorly on business freedom. All four countries have significant government involvement in many aspects of the economy, from ownership of banks and natural resource companies to directing investments in different parts of the economy.

What is even more striking is that in these measures, the BRIC nations have not improved meaningfully in spite of over a decade of 8.2% annual growth. China and Brazil have overall scores that are lower than their 2002 scores. Russia is marginally better because of an improvement in monetary and trade freedom. India's overall score has improved because of the improvement in trade freedom, but from an extremely low base. Relative to the US, these countries have not significantly improved the structure of their institutions.

Exhibit 14: Consumption vs. Investment in China

Imbalances have only worsened.



Data as of 2011

Source: Investment Strategy Group, Datastream

China's Specific Fault Lines

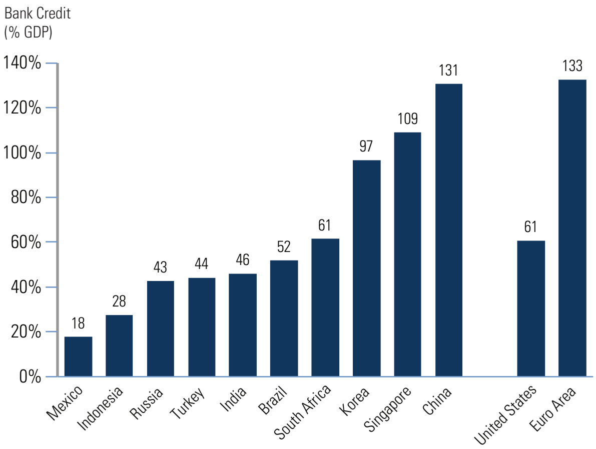
China faces three key fault lines: poor demographics that stand in sharp contrast to those of the US, imbalanced growth and financial repression. We considered China's poor demographics in the context of the US's human capital advantages. With respect to imbalanced growth, China's leaders have summarized it best: In 2007, Premier Wen Jiabao stated that China's economic growth is "unsteady, imbalanced, uncoordinated and unsustainable."[46] More recently in 2011, President Hu Jintao stated that "imbalanced, uncoordinated, and unsustainable problems" with China's development have emerged.[47]

While China's leadership has acknowledged the issues, these imbalances have actually worsened (see Exhibit 14). Private consumption as a percent of GDP steadily declined from 46% of GDP in 2000 to 35% by 2011. Investment, by comparison, increased from 36% to 49%. The IMF estimates that this overinvestment has raised the probability of a crisis from 8% to as high as 20%.[48]

Some of this overinvestment can be traced to two policies: financial repression in the form of artificially low interest rates, and capital controls that force savers to accumulate large deposits at banks because of limited investment opportunities. According to Nicholas Lardy of the Peterson Institute for International Economics, households have earned a –0.5% real return since 2004 due to artificially low rates.[49] Yet, despite such meager

Exhibit 15: Bank Credit as a Percent of GDP

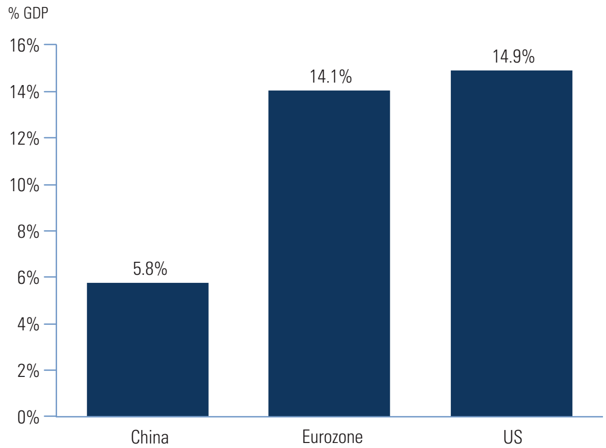
High savings and cheap credit have fueled overinvestment.



Data as of 2011
Source: Investment Strategy Group, IMF

Exhibit 16: Education and Healthcare Spending

China has underinvested in social benefits.



Data as of 2011
Source: Investment Strategy Group, Datastream

returns, deposits in the banking system are 1.6 times those of the US for an economy that is half the size.

These disproportionately large, low-interest-rate deposits have provided corporate borrowers such as property developers, commercial banks, exporters and state-owned enterprises with sizable cheap capital. As a result, credit provided by Chinese banks as a percent of GDP is the highest among key emerging markets and higher than the US as shown in Exhibit 15. Such availability of low-cost capital has led to overinvestment and misallocation of investment. The IMF estimates that a large burden of the financing of this overinvestment has been borne by the average Chinese household, to the tune of 4% of GDP per year, thereby hampering consumption.

However, given the vested interests of those who benefit from lower interest rates, any liberalization of the financial markets that may benefit the average Chinese saver will be slow and incremental.

There are other smaller fault lines unique to China. The antiquated "hukou" system limits mobility of the population by denying education and healthcare to families who move outside their designated residence without government permission. At a time when higher wages and a declining working age population threaten China's manufacturing cost advantage, liberalizing labor mobility seems particularly important. Again, vested interests will resist any rapid changes to the hukou system since wealthier cities do not want to bear the burden of supporting migrant workers. At the same time, the government has not yet developed enough of a social welfare system across major cities. As shown in Exhibit 16, the Chinese government spends 5.8% of its GDP on education and healthcare, compared to 14.1% in the Eurozone and 14.9% in the US.

Brazil's Specific Fault Lines

Brazil's most problematic fault line is the outsized role of government in the economy. Brazil's government spends the equivalent of 40% of its GDP, which is the highest among the BRICs and also high in the context of emerging market countries. Typically, such large government involvement crowds out private sector investment since companies have to compete with the government for the same pool of capital, resulting in very high real interest rates. As shown in Exhibit 17, Brazil has a low investment-to-GDP ratio compared to many other emerging market countries, along with exceptionally high – maybe even prohibitively high – interest rates.

The government also exerts direct influence on businesses, such as the energy and non-energy commodity sectors, utilities and banks. For example, the government provides cheap financing in the form of subsidized loans from the Brazilian Development Bank (BNDES). Currently, when the stated policy rate is 7.25% and corporations borrow at 22%, BNDES has provided rates as low as 2.5%. These subsidized loans go to companies such as Petrobras, Banco do Brasil and Vale. In total, BNDES accounts for about 40% of total corporate loans outstanding.[50] This is a high percentage and a very good example of the extensive role of government in industry.

In addition, the government has significant ownership of some of these businesses. The government owns 48% of Petrobras, nearly 70% of Banco do Brasil and 11% of Vale. Such direct ownership and subsidized lending enables the government to dictate business strategy to these companies. Petrobras has to meet "local content" requirements in exploration and production of the offshore Tupi fields, irrespective of cost, quality or impact on the company's profit margins. Similarly, Petrobras has to support the planned refinery business in the north of the country, regardless of expected profitability.[51]

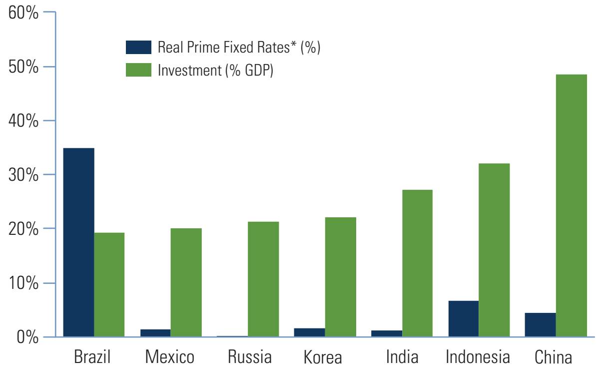
Another key fault line is Brazil's dependence on the commodity markets. Commodity companies represent over 40% of the Brazilian equity market; commodities and minimally processed commodities like plywood also account for over 60% of total goods exported. The role of commodities in the Brazilian economy can also be seen in Exhibit 18, which shows that Brazil's investment cycle has closely followed changes in commodity prices. Clearly, Brazil is particularly vulnerable to a decrease in the prices of or a slowdown in the demand for commodities.

Russia's Specific Fault Lines

Russia is even more dependent on commodities than Brazil. Energy alone represents just under 60% of the Russian equity market and other commodities account for another 10%. The energy sector contributes 20–25% of Russia's GDP, 65% of total exports, and 30% of total government revenues.[52] In fact, Russia is becoming increasingly dependent on oil and gas to manage its budget,

Exhibit 17: Real Prime Fixed Rates and Investment/GDP

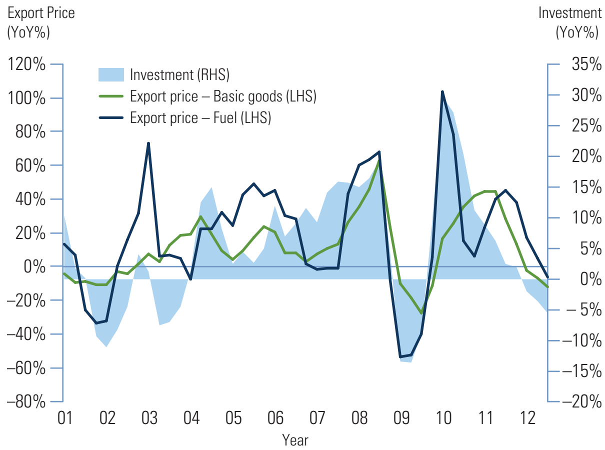
Brazil's extremely high interest rates are crowding out investment.



Data as of 2011
*Weighted average of the rates charged by banks on loans with fixed interest rates and with own funds to individuals and corporations.
Source: Investment Strategy Group, Datastream, IMF

Exhibit 18: Brazil Investment Cycle vs. Commodity Prices

As commodities go, so goes Brazil's investment cycle.



Data as of Q3 2012
Source: Investment Strategy Group, Datastream

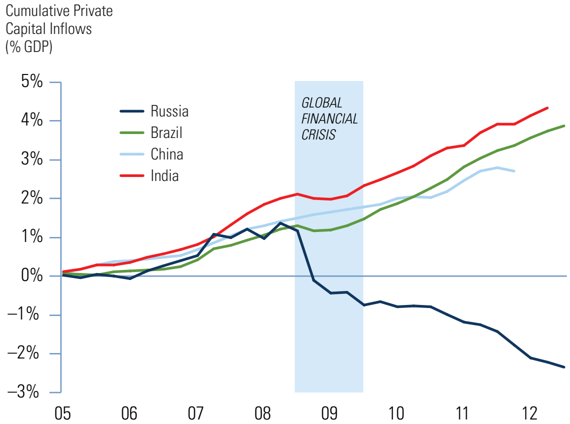
fund its non-oil trade deficit, and maintain its growth rate. Since 2000, we estimate that Russia's oil and gas revenues increased by about 15% per year, providing a strong tailwind to Russia's economic growth rate of 4.7%. During this period, oil and natural gas production increased annually by about 4% and 1% respectively, while oil and natural gas prices increased annually by about 12% and 11%. Most energy market observers do not expect this pace to continue, either in Russian production or global energy prices.[53]

Russia will also be hampered by poor demographics. As seen in Exhibit 4, Russia is facing the most rapid decline in its working age population relative to the US, the Eurozone, Japan and the other key emerging market countries. To provide some perspective on this decline, we compare Russia's population trend to that of Japan, considered among developed countries as having the worst demographic outlook. Japan's working age population is expected to decline by 11% over a 20-year window between 1995 and 2015.[54] By comparison, Russia's working age population is expected to drop by 17% over a 20-year window between 2010 and 2030. Such a decline, as in the case with Japan, will serve as a drag on growth.

Russia also faces the challenges caused by minimal rule of law. In the Economic Freedom Index, the rule of law category is comprised of property rights and freedom from corruption. On both these measures, Russia ranks very poorly at 137 and 156 respectively out of 179 countries. Russia ranks in the 13th percentile of corruption, and is lower than countries such as Tanzania, Syria and Zimbabwe. Anecdotally, critics say the difficulty of doing business in Russia is illustrated by the Yukos affair and the TNK-BP separation. Such data points and incidents partly explain the large-scale private capital outflows from Russia – $356 billion since the first quarter of 2008 – which stand in sharp contrast to those of other key emerging market countries, as shown in Exhibit 19.

Exhibit 19: BRIC Countries Cumulative Private Capital Inflows

Russia has seen massive outflows of private capital.



Data as of December 2012

Source: Investment Strategy Group, CEIC, Datastream

India's Specific Fault Lines

India, the poorest of the key emerging market countries, is also one of the most inefficient. Its political system has led to a burgeoning bureaucracy, lack of strong leadership at the state level and a decentralized government that has hindered much-needed structural reforms. It has the highest debt-to-GDP ratio and the highest budget deficit relative to the other key emerging market countries. India also has a current account deficit, thereby forcing it to rely on foreign flows to support its imports.

The loss of electric power in August 2012, which left over 600 million without electricity for several days, was a stark reminder of the inefficiencies in India's infrastructure. About 25% of India's power output is lost during transmission and distribution, compared to 5% in China and 6% in the US.[55]

Inefficiencies in the food supply chain are even worse. The government estimates that 40% of the fruit and vegetable production in India is wasted due to "lack of storage, cold chain, and transport infrastructure."[56] And what food does make it to market is priced up to 50% higher than what the farmer earns because of the Agriculture Produce

Marketing Committee Act, which forces farmers to use licensed middlemen.[57] Inefficiencies of this magnitude certainly constitute an unfathomable economic weakness, especially considering that over 200 million Indians are undernourished. Yet they persist because the politically powerful agricultural middlemen resist attempts at reform.

India has been slow to embrace many structural reforms. These reforms range from allowing foreign direct investment in various sectors of the economy – such as the multi-brand retail sector – to tax reform, social security reform, reform with respect to the cost of doing business in India, or education reform. Only 23% of Indians have received secondary education and primary education is inadequate. A 2011 survey of government schools revealed that half of the country's 5th graders, who are typically 10 years old, could not read text that was suitable for children three years younger.[58]

Improving upon these fault lines is a herculean task for any country, let alone a poor and populous one like India.

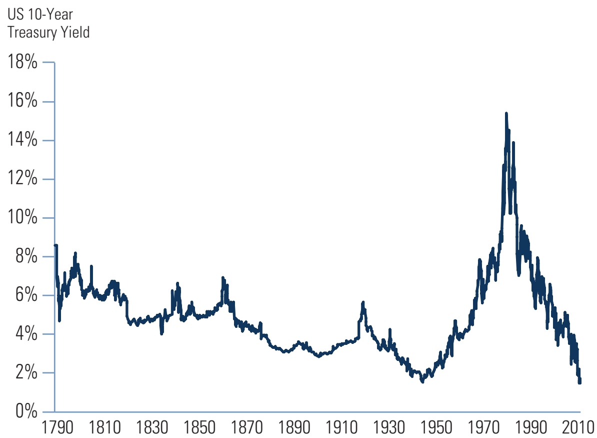
Impact of Long-Term Fault Lines

We have reviewed the fault lines across key emerging markets to assess any changes that might warrant a shift in our asset allocation, and to inform clients of the long-term risks associated with investing in emerging markets. For example, the improving debt-to-GDP ratios and faster growth rates of emerging market countries relative to developed economies favor emerging market local debt. Hence, we have added emerging market local debt strategically to our model portfolios. On the other hand, fault lines like commodity dependence and financial repression reduce the diversification benefits and increase the risks of emerging market equities so we have maintained a slight strategic underweight to emerging market public and private equity relative to market capitalization benchmarks. That is in line with our strategic underweight to European and Japanese equities, in favor of a strategic overweight to US assets—our core allocation.

As we enter a prolonged period of low interest rates and muted returns across most asset classes, the margin of safety of a portfolio is inevitably reduced. Therefore, it becomes even more imperative to incorporate the strengths and fault lines of each country into our asset allocation views.

Exhibit 20: 10-Year US Treasury Yield

Today's rates are the lowest on record.



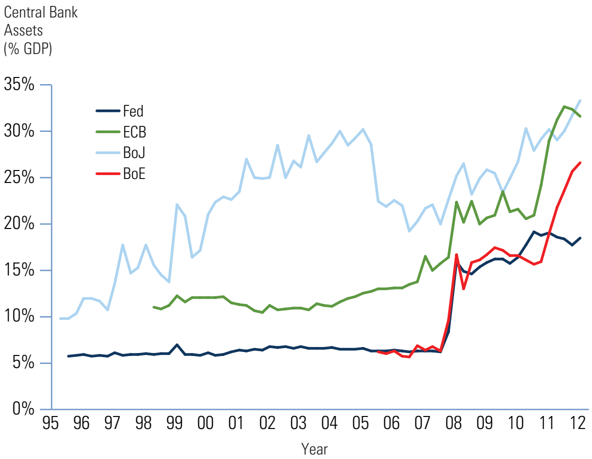
Data as of December 31, 2012
Source: Investment Strategy Group, Global Financial Data

Expected Returns in a Low-Rate and Low-Growth Environment

Interest rates are at historic lows in many regions of the world. In the US, nominal 10-year Treasury rates reached 1.4% in July 2012, the lowest they have ever been based on available data since 1790, as shown in Exhibit 20. The prior low was in July 1941 at 1.8%. On a global basis, interest rates are the lowest they have ever been on record, based on a series of data going back to 1285 that draws from Venice, Genoa, Spain, Italy, the Netherlands, the UK and the US and linked together by Global Financial Data. In most large developed economies, central banks are implementing zero or close to zero interest rate policies and deploying their buying power to lower interest rates through quantitative easing. Their balance sheets are at or close to record levels (see Exhibit 21) and 10-year government bonds are yielding 1.8% in the US

Exhibit 21: Central Bank Assets

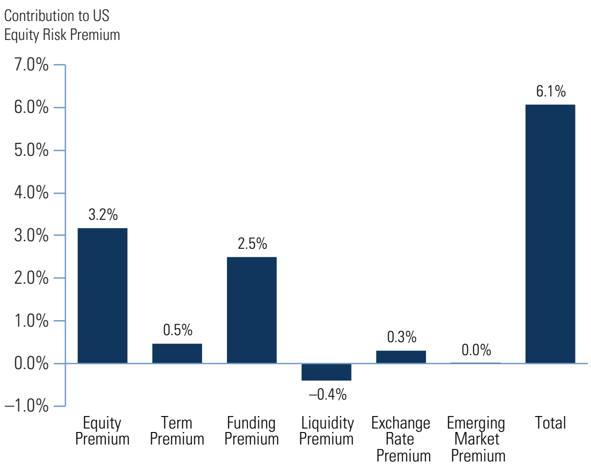
Central banks across economies are playing a much bigger role.



Data as of December 2012

Source: Investment Strategy Group, Datastream

Exhibit 22: Factor Decomposition of US Equity Risk Premium



Source: Investment Strategy Group

and 1.3% in Germany. Real rates are marginally negative.

In line with this interest rate backdrop, growth in both developed and emerging market countries is also expected to be lower in the next decade than it has been over the last decade. Deleveraging and austerity will take their toll on developed economies and key weaknesses will persist in emerging market economies.

In such an environment, we expect lower returns across all asset classes for the next several years, caused primarily by the near-zero level of risk-free rates. Asset classes provide exposure to various risk premiums and investors expect to be compensated for exposing their portfolios to such risks. These premiums are incremental to the risk-free rate so a lower risk-free rate implies a lower return for each asset class. For example, as shown in Exhibit 22, US equities provide exposure to the risk premiums from six factors but these premiums are incremental to the risk-free rate. When the risk-free rate is 4%, an investor can expect to earn about 10%. But when the risk-free rate is 0.25%, as is the case now, an investor can expect to earn only about 6%. Similarly, if investment grade bonds (including Treasuries, mortgage-backed securities, and corporate bonds) are expected to provide a return of 5.7% in more "normal" interest rate environments, their long-term expected returns drop to 2% in the current rate environment. So the mere fact that the risk-free rate in many countries is virtually zero implies that expected long-term returns will be lower across all asset classes that are priced off the risk-free rate.

A second driver of lower returns is the prospect of rising rates in the foreseeable future. While there is some chance of even lower interest rates given central bank asset purchase programs, rates are more likely to be broadly unchanged in the near term and higher in the longer term. Risk premiums of most asset classes tend to decline in rising rate environments. Using equities as an example, in a rising-rate environment we expect the US equity risk premium (i.e., the incremental return over the risk-free rate) to drop from about 6% to about 4%.

Let's examine the impact of these lower returns on a typical moderate-risk, tax-exempt Investment Strategy Group model portfolio. In a more normal interest rate environment, the estimated long-term pre-tax return of this model portfolio is 8.5%. But when the risk-free rate is at 0.25%, this return drops to 4.8%. More realistically, if we keep the risk-free rate unchanged for two years and then assume a steady rise in rates for the next three years, the model portfolio has an estimated pre-tax return of 5.6%.

We use the above quantitative analysis as the starting point from which to formulate our best estimate of expected returns across key asset classes for 2013 and the next five years. We use fundamental analysis based on a number of factors including our view of economic growth rates, inflation, default rates, current valuations, assumptions about earnings growth rates and currency shifts among countries. We typically present our central case with a range and provide probabilities for the central case, the good case and the bad case. Our 2013 views and probabilities are provided in greater detail in Section 3 of this *Outlook*.

At this point, it is important to discuss the role of mean reversion in our projected returns. We often hear about expected returns when a particular valuation factor reverts to its average (or mean). We also hear about the long-term mean and the mean for the last five or 10 years. As a case in point, some have suggested that with interest rates at such historic lows (see Exhibit 20), rates will inevitably (and in short order) revert to their long-term mean of 4.9%. However, if one examines the graphs in greater detail, one can see that interest rates have exhibited extended periods of rising and falling rates without any evidence of mean reversion. The 10-year Treasury rate was on a downward trend from 1790 through the lows in 1941. And then from 1941 to 1980, rates were on an upward trend. In fact, interest rates stayed below 2.5% for 11.5 years, between 1939 and 1951. So rates can stay low for a very long time before rising. Our statistical analysis also confirms the absence of significant mean reversion in 10-year Treasury rates.

Similarly, we have not found any mean reversion in valuation measures in most developed equity markets; we have focused on developed markets because of their substantially longer history relative to emerging markets. In US equities, we find mean reversion is only statistically significant for the Shiller price-to-earnings ratio for the entire 131 years of data since 1881. The average time for mean reversion for equities has been 6.5 years. Over this period, the time for mean reversion has been as short as seven months and as long as 13 years. Outside the entire 131-year window, mean reversion is no longer as evident. For example, since May 1995, there has been no statistically significant mean reversion in equities.

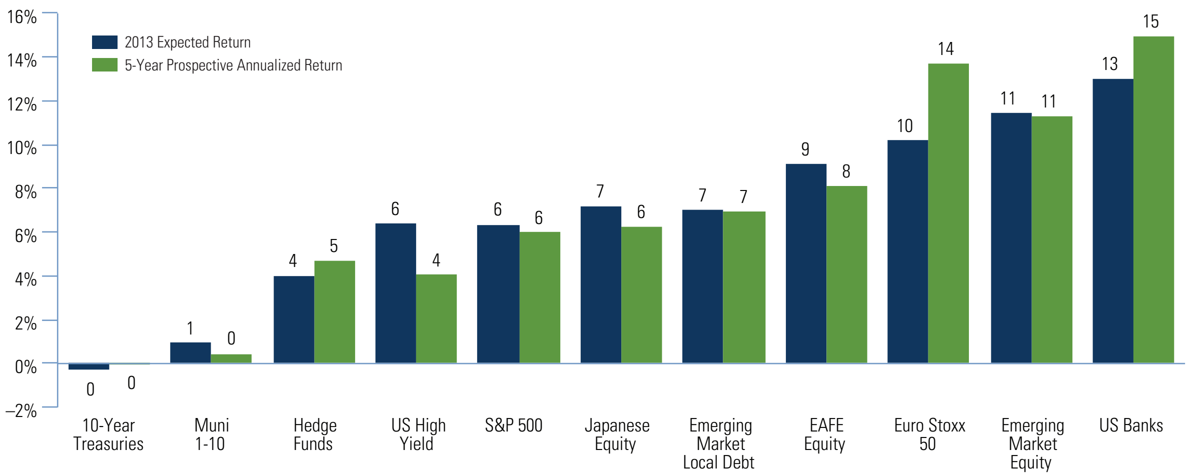
Why is all this relevant? We provide this background so that our clients can view any five-year forecast with some degree of caution; such forecasts are laden with assumptions and uncertainties. Our five-year forecasts are our best attempt to provide a general framework for expected returns across asset classes for the intermediate term. They are designed to provide a broad picture of the overall direction of returns so that our clients can make better informed decisions about allocating their assets in this historically low interest rate environment.

Portfolio Implications

Exhibit 23 provides a summary of our views for 2013 and the next five years. The specific returns for 2013 are based on the midpoint of our forecasted ranges for our central case. There are six key observations:

- Bonds will have virtually no nominal returns for the foreseeable future.
- High yield and emerging market local debt provide attractive absolute and volatility-adjusted returns.
- Hedge funds will have mid single-digit returns.
- US equities have both near-term and long-term attractive returns, especially relative to bonds.
- Euro Stoxx 50 and US banks have the most attractive near-term and long-term returns.
- Emerging market equities provide reasonable but not exceptional returns given the various risks.

Exhibit 23: 2013 and 5-Year Prospective Annualized Returns



Data as of December 31, 2012
Source: Investment Strategy Group

No Nominal Returns From Bonds: Given the near-zero returns from bonds for 2013 and the next five years, we recommend an underweight to bonds. This can be achieved by either owning fewer bonds or owning substantially short-maturity bonds. However, we would not recommend a complete allocation away from bonds. High quality bonds are the only reliable deflation hedge in a portfolio; in an era of heavy policy involvement in the economy and the financial markets, it is prudent to leave some form of deflation hedge in the portfolio. We are not assigning a high probability to significantly negative returns because we believe interest rates will stay well below their long-term average for the next five years. A careful review of US history shows that interest rates can indeed stay low for a very long time, certainly over 10 years. So returns are not likely to be significantly negative in our view over the next five years.

High Yield Bonds and Emerging Market Local Debt Are Still Attractive: In the near term, high yield bonds and emerging market local debt provide attractive mid-to-high single-digit returns and we have maintained our tactical tilts towards these two asset classes for several years. We note that some key emerging market countries such as China and India are not part of the local debt market benchmarks.

Mid Single-Digit Returns in Hedge Funds: In this environment, hedge funds are moderately attractive relative to bonds. However, they are not a perfect substitute for bonds in a deflationary environment so we would limit the allocation to hedge funds, especially in a rising tax rate environment.

US Equities Are Expected to Outperform Bonds: US equities are expected to outperform bonds by 6% in 2013 and by 6% annually over the next five years. Of course, these higher returns are associated with higher volatility and greater risk of loss over a short period. For example, the probability of a negative total return over any one year is 28% for the S&P 500. However, in this environment, the Sharpe ratio for equities is much more attractive than that of bonds, and such outperformance compounded over any meaningful horizon has significant impact on a portfolio.

Contributing to our outlook for US equities is the underlying strength of US companies, which constitute a large percentage of the world's "best in class" companies. As measured by Interbrand, one of the world's leading brand consulting firms, US companies account for a much larger share of the world's 100 "best in class" companies than the US share of global GDP or global market capitalization.[59] Given that we expect the structural advantages of the US to endure for decades and the faultlines of other major economies to persist, we conclude that a core portion of a portfolio's equity assets should be allocated to the US to capture better risk-adjusted returns. We also recommend that clients be at their full strategic allocation at this time.

Euro Stoxx 50 and US Banks Have Attractive One-Year and Particularly Attractive Five-Year Profiles: Euro Stoxx 50 and US banks provide particularly attractive investment returns, with 2013 expected returns of 10% and 13% and 5-year annualized returns of 14% and 15% respectively. Both sub-asset classes provide attractive returns on an absolute basis, on a relative basis and compared to other investments on a risk-adjusted basis. Euro Stoxx 50 and US banks, for example, have the highest expected risk-adjusted returns of any broad equity market over the next five years as measured by their Sharpe ratios. We have had a tactical allocation to the Euro Stoxx 50 and US banks since December 2011 and December 2010, respectively. A more detailed rationale for our tactical recommendations can be found in the third section of our *Outlook*.

Emerging Markets Adjusted for Various Risks: Based on our estimates, we believe that emerging market equities will provide competitive returns over the next one-year and five-year periods. In fact, we have added emerging market private equity to our strategic asset allocation model portfolios because we believe that private equity investments will allow investors to focus on the faster growing sectors of emerging market countries while also minimizing exposure to sectors that are more prone to government interference.

However, we also recommend clients base their decisions on more than estimates for expected returns and pay special attention to the potential risks from overall volatility and structural fault lines. Emerging market equities are 50% more volatile than US equities, and on a Sharpe ratio basis, emerging market equities rank below Euro Stoxx 50 and US banks. In addition, the structural fault lines highlighted earlier introduce some unanticipated risks that may lower realized returns. For example, a government directive can lower an energy company's profitability; alternatively a new tax withholding law directed at foreign investors may lower the expected returns from private equity. At the extreme, investors may face what Professor Damodaran of New York University calls "truncation risk,"[60] whereby investors' expected cash flows may be truncated as witnessed in the 2012 nationalization of Repsol's majority stake in YPF, the Argentine oil company.

Key Investment Takeaways in a Low-Return Environment

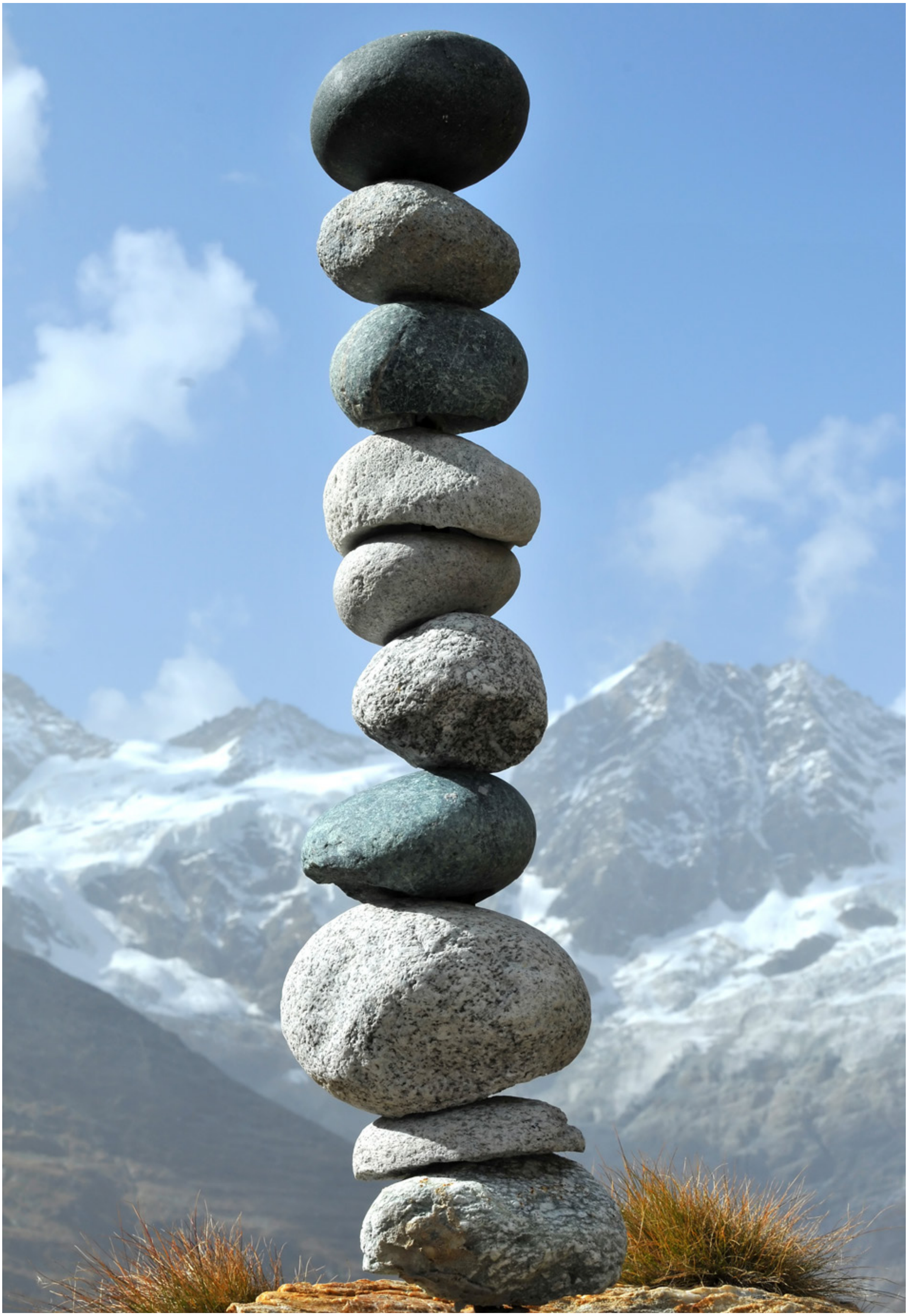
Lower returns will have significant implications for all types of investors. These include high net worth investors with very personalized return objectives, educational institutions that rely on their endowment returns for a portion of their budgets, foundations with a 5% spending requirement and hospitals that have to contend with lower levels of federal, state and local government support. The purpose of providing these returns and investment recommendations is to help clients understand the source of lower returns and enable them to make informed investment decisions with the appropriate investment horizon. While many investors aim to be long-term investors, their investment horizon often shifts in volatile and uncertain times.

We think this is an important time to look beyond the economic and political concerns of the moment to the long-term opportunity represented by the differential between the expected returns of stocks and bonds. Taking that opportunity into account, now is the time to gradually tilt portfolios away from the safety and comfort of bonds to the more attractive returns of stocks in the US and the Eurozone.

A Balancing Act

ACROSS THE GLOBE, policymakers face a difficult balancing act. In much of the developed world, the challenge is to institute enough fiscal austerity to limit current and future deficits, but not so much as to stifle growth. At the same time, the emerging markets face a dilemma between administering sufficient stimulus to sustain needed growth, but not so much as to stoke inflation. In the case of either austerity or stimulus, the outcome depends on the prescribed amount. As Paracelsus, the father of toxicology, stated nearly five centuries ago, "The right dose differentiates a poison and a remedy."

That we begin the year with less fiscal and monetary headroom compounds these challenges. In the five years following the start of the financial crisis, global central banks expanded their balance sheets by more than $10 trillion, while also cutting interest rates some 443 times.[61] As a result, nearly two-thirds of the world's central banks have a policy rate that stands in the bottom decile of its historical distribution. Meanwhile, countries representing almost half of the world's GDP now have annual budget deficits of at least 6% of GDP, limiting future fiscal stimulus. True, emerging markets' healthier balance sheets and higher policy rates provide more room for easing. Yet inflationary constraints limit their options, especially



now that unemployment has returned to pre-crisis levels.

The focus, then, is less on the possibility of additional stimulus and more on whether the real economy starts to benefit from existing liquidity. Already, there is some evidence it is. The Goldman Sachs Global Leading Indicator (GLI),[62] a proxy for future industrial production, bottomed in July and remains in expansionary territory. In parallel, Chinese export growth and economic indicators across many emerging markets improved through the end of last year, as did US housing. We expect this upturn in the cyclical components of the economy, coupled with easy financial conditions, to provide a partial offset to fiscal austerity in the US, while also helping the Eurozone, UK and Japan to emerge from recession this year.

That said, our forecast for 2013 calls for neither robust economic growth nor a rapid normalization in interest rates, as shown in Exhibit 24. Yet considering the difficult balancing act the world economy faces, we count even tepid expansion as successfully traversing the tightrope.

United States: The Tug-of-War Begins

After several delays and extensions, some combination of higher US taxes and reduced government spending appears inevitable in 2013, an unwelcome development for a private sector just finding its footing. Clearly, how this tug-of-war between public restraint and private sector expansion evolves will be a central feature of the US growth outlook for years to come. Already in 2013, it is worth noting that our 1.5–2.5% GDP growth forecast would be a full 1.5 percentage points *higher* in the absence of expected fiscal retrenchment.

The last observation is important, as there is growing concern that fiscal austerity applied to a tepid US recovery makes recession a mathematical certainty. We disagree. Keep in mind that the run rate of private sector growth is higher than today's headline figure suggests, considering that each of the last two years included about one percentage point of fiscal drag.[63] In turn, our expectations of roughly 1.5 percentage points of fiscal drag this year imply only about half a percentage point of *incremental* restraint. As a result, the rebound in growth arising from Hurricane Sandy and last year's protracted drought could partially offset this additional drag. Hence, we do not believe the

Exhibit 24: ISG Outlook for Developed Economies

Our forecast features tepid growth, still-accommodative monetary policy and a modest increase in interest rates.

		UNITED STATES		EUROZONE		UNITED KINGDOM		JAPAN	
		2012	2013 Forecast	2012	2013 Forecast	2012	2013 Forecast	2012	2013 Forecast
Real GDP Growth*	YoY%	2.3%	1.5–2.5%	–0.4%	(0.75)–0.25%	0.1%	0.0–1.0%	2.0%	0.0–1.0%
Policy Rate	End of Year	0.25%	0.0–0.25%	0.75%	0.25–0.75%	0.5%	0.5%	0.1%	0.1%
10-Year Bond Yield**	End of Year	1.8%	1.75–2.25%	1.3%	1.75–2.25%	1.8%	2.0–2.5%	0.8%	0.75–1.25%
Headline Inflation***	Average	1.8%	1.5–2.5%	2.2%	1.5–2.5%	2.7%	1.75–2.75%	–0.1%	(0.5)–0.5%
Core Inflation***	Average	1.9%	1.5–2.25%	1.4%	1.5–2.25%	2.6%	1.5–2.25%	-	-

Data as of December 31, 2012

* 2012 real GDP is based on GS GIR estimates of year-over-year growth for the full year.

** For Eurozone bond yield, we show the German bund 10-Year.

*** For current CPI readings we show the YoY inflation rate for the most recent month available.

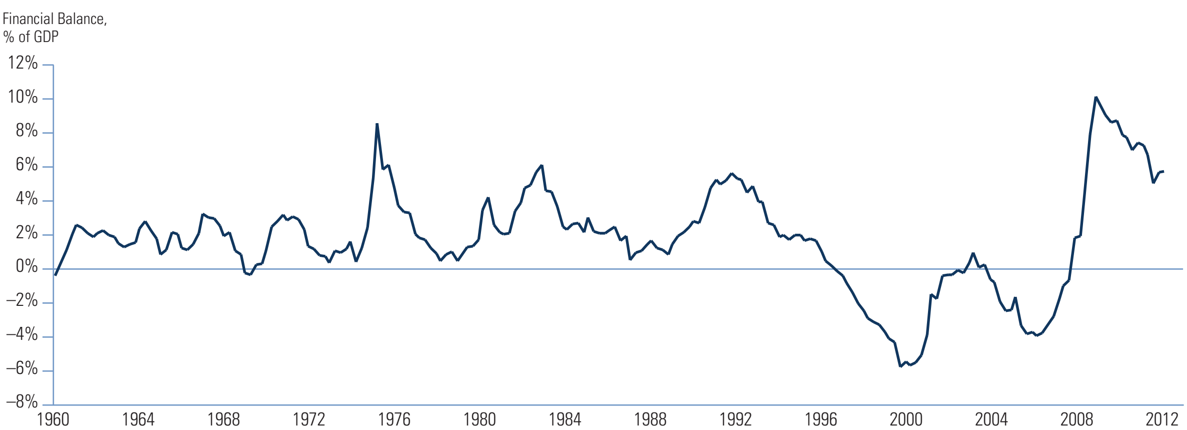
Source: Investment Strategy Group, Datastream, GS GIR

introduction of fiscal austerity makes a recession a fait accompli.

Broader economic signals support our view that a recession is unlikely this year, though it remains a risk. The collective message of the leading economic indicators we track still suggests positive near-term growth. In addition, the conditions required to signal a recession in our models are not present. Of equal importance, the private sector excesses that often precede a recession are markedly absent today. If anything, as shown in Exhibit 25, the significant gap between the income and spending of combined US households and businesses provides a long runway for further private sector expansion. As they say, it is hard to crash if you never get off the runway.

Exhibit 25: US Private Sector's Total Income Less Total Spending as a Percent of GDP

With the combined income of households and businesses exceeding their spending by almost 6% of GDP, there is ample room for spending to increase.

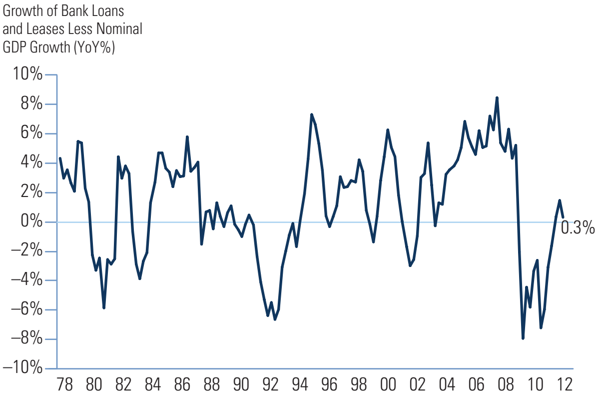


Data as of Q3 2012

Source: Investment Strategy Group, Federal Reserve, GS GIR

Exhibit 26: US Bank Loans and Leases Less Nominal GDP

Loan growth is now running ahead of GDP expansion.



Data as of Q3 2012

Source: Investment Strategy Group, Datastream

Exhibit 27: Housing's Effect on US GDP

Housing's indirect effects on consumer spending are greater than its direct contribution to GDP through residential investment.

	Contribution to Real GDP Growth (percentage points)		
	2011	Normal Expansion	Boom
Residential Investment	0.00	0.20	0.50
Consumer Spending via			
Wealth Effects	–0.15	0.15	0.35
Credit/Collateral	0.00	0.10	>0.30
Home Turnover	0.00	0.05	0.10
Total Housing Effect	**–0.15**	**0.50**	**>1.25**

Source: Investment Strategy Group, GS GIR

It is also worth remembering that the US economy has weathered several storms in recent years and managed to sidestep a recession each time. With tentative signs of stabilization on several of these storm fronts, the hurdle for a US contraction is proportionately higher. Accordingly, we believe the probability of recession in 2013 is around 20%.

Therefore, barring a shock, we anticipate continued economic expansion this year, underpinned by an ongoing housing recovery, a strengthening labor market and resilient business investment. We discuss each of these key drivers below.

Housing

After several fits and starts, the housing upturn is likely to continue in 2013. While it is true that residential investment's small 2.4% share of GDP limits its *direct* contribution to US growth, the sector's *indirect* effects are arguably more important. Indeed, 2012's 5% gain in national home prices boosted consumers' net worth by an estimated $1 trillion, pushing consumer confidence to a four-year high. In turn, rising net worth typically decreases consumers' desire for precautionary savings, providing a tailwind to spending. Moreover, with the bulk of bank loans backed by real estate, rising home prices decrease banks' credit losses and bolster their willingness to lend. On this point, Exhibit 26 shows that the growth of loans now exceeds that of GDP for the first time since the crisis, a positive credit impulse with pro-growth implications.

Exhibit 27 summarizes housing's various economic impacts. A few points are worth considering. First, as mentioned above, real estate's indirect effects are larger than its direct contribution. Second, housing has transitioned from being an economic headwind from 2006–2011 to being a tailwind. Third, if the housing recovery turns out to be above average, history suggests there is room for a larger positive GDP impact.

Employment

The housing downturn was particularly detrimental to employment. Exhibit 28 shows the fate of construction employment, which has collapsed to multi-decade lows. In fact, roughly two percentage points of today's 7.8% unemployment rate stems from job losses related to construction and real estate. Similarly, new business formation, a key driver of employment, slowed dramatically during the housing slump, as many entrepreneurs could no longer use their homes to back their startup loans. Of equal significance, the large share of homeowners with negative equity hobbled labor mobility and thereby elongated the duration of unemployment.

Fortunately, the unfolding housing recovery has begun to reverse these trends, as shown in Exhibit 29. In particular, rising home equity has brought about an increase in not only real estate employment, but also broader business formation.

Notably, an additional increase of just 5% in national home prices could put 2 million borrowers – or about one-fifth of homeowners with negative equity – above water on their home loans.[64] Such a development would be positive for employment, as discussed above, and in turn the housing market, considering the majority of foreclosures result from a combination of negative equity and loss of employment.[65] Thus, even a gradual increase in home prices would continue to support real-estate-related hiring, labor mobility and new business formation, underpinning our expectation that the unemployment rate will fall further this year.

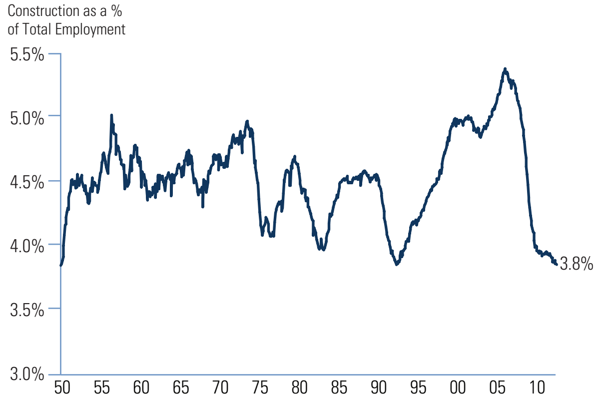
Business Investment

In an economic recovery best characterized as tepid, corporate investment has been an exception. Indeed, this category's share of GDP has risen from a trough of 9.1% to 10.3% recently, with equipment and software investment now 1.9% *above* its 2007 peak. Clearly, it will be difficult to sustain this pace, particularly with signs of a slowdown emerging late in 2012.

Even so, we think several factors support continued corporate investment growth in 2013, including strong corporate profitability, expanding credit markets and greater policy clarity. On this last point, many CEOs specifically mentioned uncertainty about the election, fiscal cliff and tax policies as the reason for delayed capital investments late last year.[66] Empirical evidence corroborates their view, showing that deteriorating fundamentals (e.g. availability of credit) were not the cause of the recent slowdown.[67] As a result, the declining uncertainty and moderate pickup

Exhibit 28: Construction as a Percent of Total US Employment

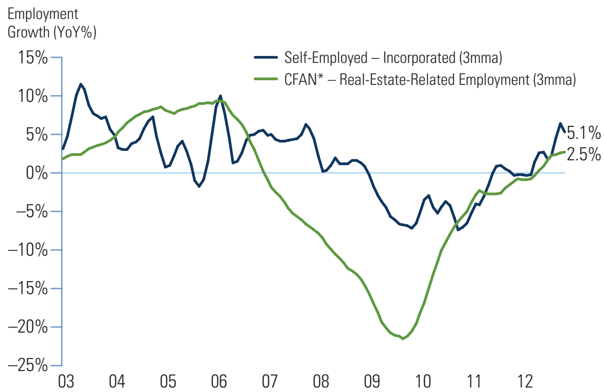
Construction employment stands at multi-decade lows, suggesting room for upside as housing recovers.



Data as of November 2012
Source: Investment Strategy Group, Datastream

Exhibit 29: Employment Related to Real Estate and Self-Employment

The unfolding housing recovery has boosted both business formation and real-estate-related employment.



Data as of November 2012
* CFAN – California, Florida, Arizona & Nevada.
Source: Investment Strategy Group, Bureau of Labor Statistics

in global growth we expect this year should enable business investment to bounce back from its brief lull.

Our View on US Growth

To be sure, the US faces familiar challenges, both homegrown and foreign. Yet the underlying narrative of this year's outlook is different, even if our headline GDP growth forecast is the same as in 2012. The story of 2013 is one of a gradually strengthening US private sector, underpinned by a housing upturn, expanding credit and some pent-up demand, pitted against greater fiscal retrenchment. For now, this tug-of-war seems roughly balanced, leading to our moderate growth expectations for 2013.

Against this backdrop of slow growth and still-abundant slack in the US economy, we expect inflation to remain subdued. While many are concerned about runaway inflation, keep in mind that broad-based price increases are difficult to sustain without a wage-price spiral. With unemployment still elevated, union membership half of what it was in the 1970s and flat unit labor cost growth, such concerns seem premature for 2013.

As a result, we expect the Fed to remain accommodative this year, particularly since the economy is unlikely to meet either their 6.5% unemployment rate target or their 2.5% expected inflation trigger. Even so, some normalization in treasury rates is likely, as continued economic growth raises market expectations for an eventual withdrawal of accommodative monetary policy.

Eurozone: Waiting for Godot

Much to the chagrin of numerous and varied skeptics, the Eurozone survived another year intact.

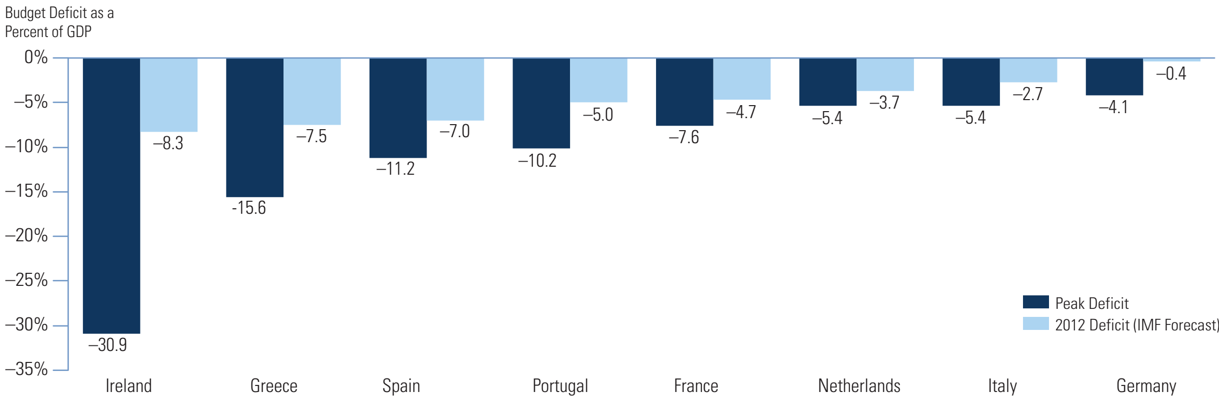
Even Greece, long considered the Achilles' heel of the currency bloc, improved in 2012, as S&P raised its credit rating six notches from selective default to B-. In turn, the likelihood of a Greek default, or a disorderly "Grexit," fell, reducing Eurozone tail risk. True, generous debt restructurings on the part of Greece's EU creditors prompted the upgrade, but the implication was more meaningful: it demonstrated European leaders' tangible commitment to keeping the union intact.

The developments in Greece mirror a broader mosaic of policy improvements in Europe. Chief among these was the ECB's announcement of Outright Monetary Transactions (OMT), a program to purchase a Eurozone country's sovereign bonds directly in the secondary market, provided the requesting country meets certain economic conditions. The significance of this measure is twofold. First, by committing to "unlimited" purchases, the ECB dashed contagion fears by convincing markets there is now a credible liquidity backstop in place for both Spain and Italy, previously assumed to be "too big to save." Second, because the market rarely tests a *credible* commitment, the move has reduced sovereign borrowing costs across the Eurozone, along with bank funding costs, greatly easing financial conditions.

Progress is encouraging outside the ECB as well. Exhibit 30 shows that country-level fiscal reforms are bearing fruit, as budget deficits have shrunk from peak levels across the Eurozone. Indeed, for the entire Eurozone, the IMF projects a fiscal deficit of roughly 3% of GDP in 2012, half its peak and well below the ~8% level in the US and UK. Structural reforms are also under way, with measures to increase labor market flexibility already

The story of 2013 is one of a gradually strengthening US private sector pitted against greater fiscal retrenchment.

Exhibit 30: Eurozone Budget Balances: Deficits Have Contracted
Fiscal reforms are chipping away at budget deficits across the Eurozone.



Data as of 2012
Source: Investment Strategy Group, IMF

Much to the chagrin of numerous and varied skeptics, the Eurozone survived another year intact.

approved in Italy, Spain and Portugal.

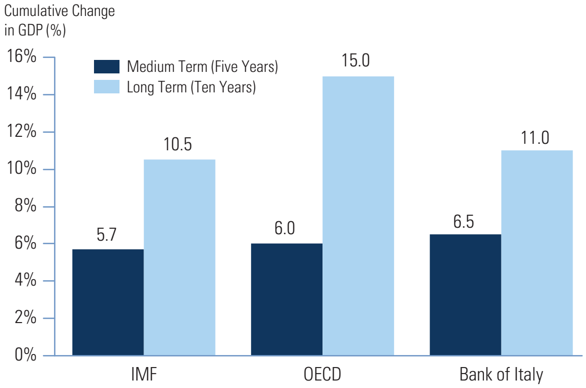
At the same time, measures to strengthen the region's institutions are coming into focus. The €500 billion European Stability Mechanism (ESM) is now operational, providing a permanent Eurozone firewall. Meanwhile, member countries have agreed to stricter fiscal rules, including a target structural deficit of 0.5–1% in the long term. This "fiscal compact" should help prevent another unchecked accumulation of debt. Notably, the European Court of Justice may impose penalties for non-compliance, providing a more credible enforcement mechanism. Finally, EU governments took a vital first step toward a banking union late in 2012 by granting the ECB broad supervisory powers over the largest banks in the Eurozone starting in 2014.

Despite these measures, Europe is likely to remain a source of headline-driven volatility in the year ahead. While operational, the OMT has not been field-tested, raising the potential for implementation issues. In fact, the most likely recipient of OMT, Spain, has yet to request assistance. Moreover, concerns about potentially disruptive leadership changes will remain acute, as both Italy and Germany face elections in 2013. At the very least, Germany will try to delay any larger financial commitments until after its elections in the fall, raising uncertainty in the interim. Lastly, after years of high unemployment and austerity in the periphery, the potential for social unrest and the rise of anti-euro sentiment remains a risk. That said, it is noteworthy that pro-euro governments, not the opposite, continue to displace incumbents across the Eurozone. In addition, all mainstream political parties in Germany remain pro-EU.

We are also mindful that while cumulative progress in the Eurozone is notable, the individual policy responses have remained incremental, reactive and at times inconsistent over the course of

Exhibit 31: Estimated Impact of Structural Reforms on Italian GDP

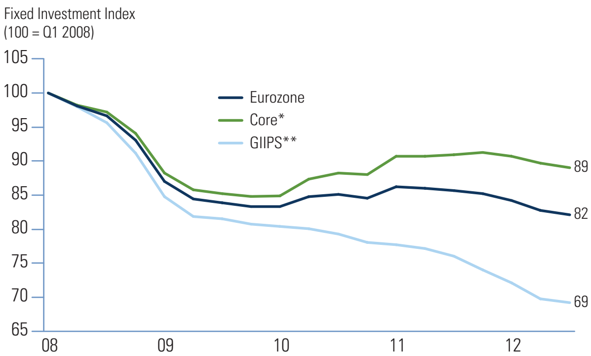
Proposed reforms could give growth a significant lift over time.



Data as of 2012
Source: Investment Strategy Group, IMF, OECD, Bank of Italy

Exhibit 32: Fixed Investment in Core and Peripheral Eurozone Countries

Some recovery in deeply depressed fixed investment could help pull the region out of recession.



Data as of Q3 2012
* Core = Eurozone ex-GIIPS.
** GIIPS = Greece, Ireland, Italy, Portugal and Spain.
Source: Investment Strategy Group, Datastream, Eurostat

the now three-year-old sovereign crisis. We believe this dynamic is likely to continue. Moreover, hopes of finding a cure-all for the region's woes have been repeatedly disappointed, leaving market participants feeling a bit like the main characters in Samuel Beckett's absurdist play *Waiting for Godot*. Here too, we do not expect the emergence of any silver bullets.

Nevertheless, we should not let this continuing uncertainty obscure the fact that the perception of risks is shifting. Instead of a singular focus on existential threats and systemic risks, the market's view is widening to capture the prospects for a Eurozone that is still intact after the crisis. Clearly, the types of reforms necessary to transform the region are politically unsavory and challenging to implement. Yet if sufficient political will materializes, the potential upside to growth is sizable (Exhibit 31).

Equally important, the crisis countries are not without a template for success. Ireland has passed eight IMF/EU program reviews, consistently exceeded targets for deficit reduction despite slowing growth, seen its three-year government bond yield fall from a peak of almost 23% in mid-2011 to just 1.8% today and finally regained capital market access in 2012.

Turning our attention to the present, we expect the Eurozone to exit its recession in the second half of this year, a reflection of a stabilizing external environment, the waning drag of fiscal adjustments and some recovery in deeply depressed fixed investment, as shown in Exhibit 32. While the core of Europe will continue to outperform the periphery, both will see activity accelerate from last year's levels. That said, with first-half growth expected to be more challenging, our full-year GDP growth forecast is a subdued range of (0.75)–0.25%. Against this backdrop of weak growth, the ECB is likely to remain accommodative, limiting the risk of a rapid increase in German bund yields.

United Kingdom: From a Rock to a Hard Place

While the economic recovery has been lackluster in most of the developed world, it has been particularly so in the UK. In fact, this recovery has been the weakest in UK history, not to mention one that lags even the crisis-stricken Eurozone. Although such below-trend growth would typically suggest a sizable snapback, we expect UK growth to remain uninspiring, at 0–1% in 2013.

Our circumspect forecast reflects four key headwinds. First, households continue to repair their balance sheets at the expense of consumption, evidenced by a still-rising savings rate. Second, business conditions remain challenging, as macro uncertainty continues to delay investment and deliver only lukewarm growth in UK exports. Third, fiscal austerity continues, with further cuts to public spending likely. Finally, credit conditions remain unsupportive.

With weaker growth on the horizon, inflation should slow to 1.75–2.75%, providing cover for the Bank of England (BoE) to retain an easing bias, including the possibility of additional gilt purchases. Such a move will likely hinge on the success of the BoE's new Funding for Lending Scheme (FLS), which was introduced last year to increase lending to UK households and non-financial firms. While significant traction for FLS could obviate the need for additional quantitative easing, the bigger challenge for the UK economy remains how to foster loan demand, not expand the credit supply.

Japan: In with the Old, Out with the New

There has been no shortage of false dawns in Japanese domestic politics, with the ascendance of Shinzo Abe as Japan's new prime minister marking the seventh leadership change in as many years. Even so, this year's shift may carry more economic significance than usual. After all, the Abe administration has repeatedly pledged to push aggressive fiscal and monetary policy until growth recovers and deflation reverses. With his Liberal Democratic Party (LDP) now representing a majority in the lower house, he appears to have a mandate to do so. Of equal importance, Abe has specifically promised to pressure the Bank of Japan (BoJ) into depreciating the yen using all tools available, including introducing a 2% inflation target, expanding the asset purchase program and moving to outcome-based guidance. With current BoJ Governor Masaaki Shirakawa set to retire in April, a more dovish appointee seems likely.

Of course, such policies are far easier to announce than to implement. Despite heightened rhetoric about more aggressive action from the BoJ, deflation is well entrenched. There are also still more job applicants than open positions in Japan, and employment growth remains weak. In addition, Prime Minister Abe appears reluctant to implement the consumption tax hike set for April of 2014. In turn, the uncertainty could temper the inflationary benefit of consumption front-loaded into 2013 to get ahead of higher taxes. Lastly, there are very real limits to Japan's room for fiscal stimulus, with a budget deficit of 10% of GDP and

There has been no shortage of false dawns in Japanese domestic politics.

net government debt expected to approach 150% of GDP in the next two years. In short, sluggish wage growth and tepid credit expansion will likely limit inflationary pressures in the near term.

Nevertheless, a weaker yen would be incrementally helpful to the Japanese economy against not only its lower-end competitors in Korea, but also its European industrial rivals. Already, Japanese exports are likely to rebound this year for a few reasons. First, provided tensions with China over the disputed islands do not worsen, there should be some snapback from the almost 20% annualized decline in exports late last year. Second, real exports stand some 19% below their pre-crisis peak, providing ample scope for further gains. Finally, our forecasts suggest that growth in most of Japan's export markets will accelerate this year. In turn, a significantly weaker yen, although not our expectation, would strengthen these tailwinds.

While the potential for a meaningful political shift in Japan provides room for a positive surprise, our central case remains a moderate recovery of 0–1% GDP growth, supported by increased monetary stimulus and a gradual recovery in global growth.

While the potential for a meaningful political shift in Japan provides room for a positive surprise, our central case remains a moderate recovery.

Emerging Markets: A Tepid Recovery

Last year served as another reminder that emerging economies remain coupled with those of the developed world. After all, the unfolding recession in Europe, as well as slower growth in the US, directly affected emerging markets through weaker international trade, tighter financial conditions and depressed business sentiment. The combined impact was not trivial, as declining exports to Eurozone countries alone subtracted about 0.5 percentage points from BRIC growth between mid-2011 and mid-2012.[68]

In thinking about 2013, keep in mind this synchronization also works in reverse. With growth in developed markets now stabilizing, there are early signs that the EM business cycle is firming. Export growth is picking up in China and other parts of Asia, while recent economic indicators in Brazil and India show sequential improvement. Furthermore, the GLI points to further export strength in the months ahead.

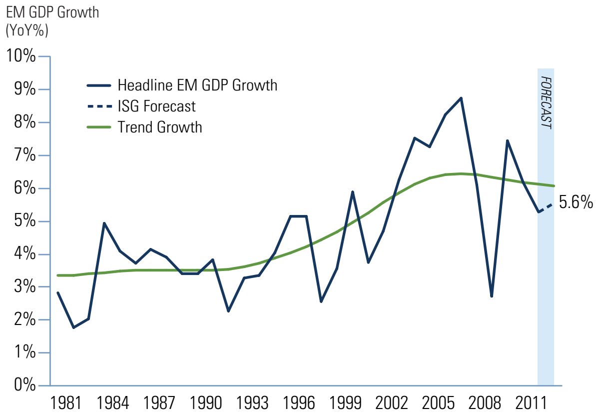
Of equal importance, last year's slowdown tempered inflationary pressures, enabling EM policymakers to cut interest rates and employ looser fiscal policy to stoke growth. With inflation largely under control and government balance sheets healthy, we expect easier fiscal and monetary policy to persist in 2013.

Nevertheless, the rebound is likely to be tepid by emerging market standards for two reasons. First, GDP growth in developed markets, while showing signs of stabilizing, remains below trend. Second, underlying trend growth appears to have downshifted in the wake of the crisis. This may prove to be more cyclical than structural, but it currently implies less room for growth to re-accelerate before inflationary pressures emerge. The relative resilience of labor markets during the last slowdown lends credence to this view.

Against this backdrop, we expect emerging market GDP growth to improve modestly to 5.6% in 2013, as shown in Exhibit 33.

Exhibit 33: EM GDP Growth vs. Trend

We expect a moderate economic expansion in emerging markets.



Data as of 2012

Source: Investment Strategy Group, IMF

Emerging Asia

Although emerging Asia was not immune to last year's slowdown, it nonetheless remained the fastest-growing region in the world. Its buoyancy came from a confluence of factors, including robust domestic demand from a steadily expanding middle class, and accommodative fiscal and monetary policies. We expect stabilizing external demand to support these growth contributors in the months ahead, leading to a modest acceleration in GDP this year.

China: Once again, China sidestepped a much-feared hard landing last year, but questions remain about its growth trajectory. China's annual GDP growth fell below 8% for the first time since 1999 and has declined some four percentage points in less than three years. True, a portion of this slowdown was self-inflicted, as the uncertainty around China's once-in-a-decade leadership transition exacerbated the drag from slowing end markets and erstwhile policy tightening. Even so, investors are increasingly concerned that China may be unable to arrest the ongoing deceleration in growth.

We believe 2012's smooth power transition greatly reduces the probability of a downward spiral, as does the accumulating evidence of a cyclical upturn. Moreover, while we do not expect major policy stimulus, some additional liquidity through the repo market and ongoing infrastructure spending should nonetheless support growth. In fact, it is typical for China to accelerate government investment in the year following a leadership transition.[69]

What is less clear is whether the new leadership will embrace more structural reforms. Unfortunately, there will be little visibility on this front until late 2013, when the third session of the 18th Party Congress convenes. That said, we expect future reforms to focus on identifying new sources of growth and improving productivity, with priority given to urbanization and social welfare reforms. As premier-in-waiting Li Keqiang has made clear, any reforms will be introduced gradually to minimize resistance.

Against this backdrop, we expect a modest acceleration in GDP growth to 7.5–8.5% in 2013, with a stable inflationary backdrop enabling the central bank to keep interest rates and reserve requirements on hold, barring unforeseen events.

Once again, China sidestepped a much-feared hard landing last year, but questions remain about its growth trajectory.

India: Like China's, a portion of India's sharp slowdown last year was self-inflicted, as policy paralysis hobbled investment spending. At the same time, persistent inflation pressures necessitated tight monetary policy, dampening growth further.

Going forward, the ability to enact critical structural reforms will be the linchpin of India's economic prospects. While the government announced several such measures last year, much to the delight of investors, a new investment up-cycle will require actual implementation. We are cautiously optimistic on this point, but also cognizant of the government's political and budgetary constraints. Moreover, we recognize that while a small drop in inflation this year is a welcome development, it is unlikely to prompt a shift in monetary policy to boost growth materially. As such, our forecast calls for a moderate rebound in GDP growth to 5.5–6.5%.

Latin America

While Latin America suffers from the same difficult global environment as the rest of the EM community, it also faces several region-specific challenges. First, with stable commodity prices expected in 2013, commodity production, a key driver of the region's growth in recent years, is unlikely to rebound strongly. Second, the region's sticky inflation has resulted in relatively tight monetary policy and pronounced currency appreciation, a lethal combination for a manufacturing-reliant region. Indeed, Brazil, Chile, Colombia and Peru have each experienced real effective exchange rate appreciation of over 20% since 2005. Against this backdrop, we expect some uptick in growth as external demand stabilizes, but think inflation concerns will likely constrain fiscal and monetary policy this year.

Brazil: The Brazilian economy slowed markedly in 2012, a function of weak investment and external headwinds. In contrast to its Latin American peers, Brazil eased aggressively despite inflationary pressures, with the central bank slashing the policy rate by more than five percentage points since the peak in 2011.

This easing, coupled with the central bank's commitment to remain on hold, will undoubtedly benefit growth this year, but we worry about the inflationary repercussions. More specifically, Brazil's unorthodox mix of loose interest rate policy and a quasi-fixed exchange rate pegged to the US dollar is reinforcing inflationary pressures in the economy. Meanwhile, planned administrative measures, such as cuts in electricity tariffs, do not address the excess demand that results from loose fiscal policy. As a result, such measures are unlikely to contain inflation. Already, break-even inflation rates derived from Brazilian bonds have increased since mid-2012.

In short, although we assume GDP growth improves to 2.75–3.75% in 2013, this growth comes at the expense of inflation trending toward 6%.

Europe, Middle East, Africa (EMEA)

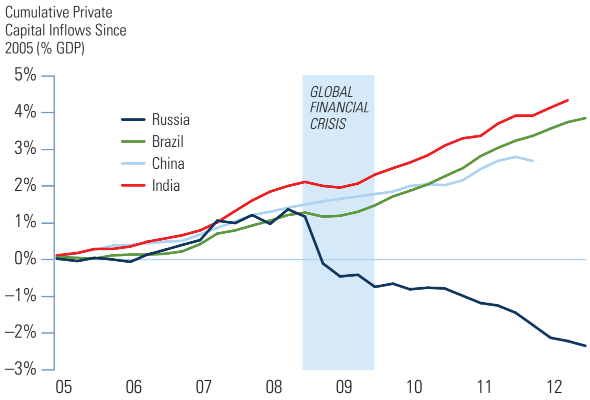
Among the emerging markets, countries in EMEA have been hardest hit by the Eurozone recession. Their close connection reflects several links, including EMEA's high share of exports to the Eurozone, its generally open economies and a reliance on Eurozone banks as a funding source. In response, EMEA policymakers have adopted easier fiscal and monetary policies, a stance we expect them to maintain in 2013.

Even so, EMEA growth is likely to remain subdued this year, as the Eurozone struggles to emerge from recession. In turn, countries with the closest Eurozone trade links, such as the Czech Republic, Hungary and Poland, face the largest potential hurdles. Even South Africa is not immune, as lower exports to the Eurozone significantly reduced growth last year.[70]

While Latin America suffers from the same difficult global environment as the rest of the EM community, it also faces several region-specific challenges.

Exhibit 34: BRIC Cumulative Private Capital Inflows Since 2005

Russia is the only BRIC economy with persistent net private capital outflows in recent years.



Data as of Q3 2012

Source: Investment Strategy Group, CEIC, Datastream

Russia: Unlike several of its peers, which enjoyed blistering economic recovery following the crisis, Russia has maintained a more stable but uninspiring 4% annual growth rate since 2010. The heavy hand of the Kremlin in many parts of the economy is largely to blame, as it creates a challenging business environment. In turn, investors have fled Russia en masse, rendering it the only BRIC economy with persistent net private capital outflows in recent years, as shown in Exhibit 34.

Looking forward, we expect growth to ease to 3.25–4.25% in 2013, extending the slowdown that began in late 2012 on the back of falling oil prices. Notably, risks to our view are tilted to the downside, reflecting the likelihood that the central bank, despite allowing some slippage along the way, will ultimately tighten policy this year to achieve its new inflation target.

Scaling the Wall of Worry

LAST YEAR'S IMPRESSIVE 17% GAIN in global equities was a poignant reminder of the old Wall Street adage that "markets climb a wall of worry." After all, there was no shortage of concerns in 2012, including the ongoing European sovereign crisis, US fiscal cliff, and risk of a Chinese hard landing. Against this wall of worry, forceful policy action supplied a much-needed "top-rope" for risky assets. In particular, global central banks' aggressive easing of financial conditions and introduction of new facilities, such as the ECB's OMT, reduced the likelihood of extremely adverse outcomes or "tail risks."

While this wall of worry persists in 2013, it is admittedly less daunting. Concerns about the viability of the Eurozone are diminishing. A last-minute agreement in Washington averted the worst of the US fiscal cliff. Healthier oil supplies are likely to keep crude oil prices range-bound this year, to the benefit of global growth. And Chinese industrial production is expanding once again in the wake of that nation's successful once-in-a-decade leadership transition last year.

When the wall of worry finally crumbles, the rally in risky assets will likely have run its course. After all, doubt and investment opportunity are two sides of the same coin.

These incremental improvements, coupled with ample central bank liquidity and attractive valuations, provide a supportive environment for stocks (see Exhibit 35). Although last year's strong performance may imply more muted equity returns in 2013, they nonetheless look attractive relative to bonds. Here, a combination of negative real yields and duration risk underpins our tactical underweight of investment grade fixed income. As discussed at the outset of this *Outlook*, today's low yields also make clear that investors will need to take on more risk to generate attractive returns.

On this point, we continue to recommend positions in corporate high yield and emerging market local debt. Within equities, we maintain our overweight positions in the Euro Stoxx 50, the Japanese Topix and US banks. Each of these positions offers investors an attractive alternative to high-quality bonds.

Despite this generally constructive outlook, we are certainly not Pollyannaish. Europe will no doubt remain a source of volatility, as will ongoing fiscal debates in the US, particularly since the latest compromise falls short of a grand bargain. Moreover, easy central bank policy can provide an environment conducive to growth, but it cannot create prosperity on its own. Thus, the ability of developed economies to generate a self-sustaining recovery will remain a source of angst.

Yet, as investors, we ought to be thankful for these lingering uncertainties. For when the wall of worry finally crumbles, the rally in risky assets will likely have run its course. After all, doubt and investment opportunity are two sides of the same coin. Perhaps Voltaire said it best when he quipped, "Doubt is not an agreeable condition, but certainty is an absurd one."[71]

Exhibit 35: ISG Global Equity Forecasts – Year-End 2013

We expect positive total returns across equity markets in 2013.

	2012 YE	End 2013 Central Case Target Range	Implied Upside from Current Levels	Current Dividend Yield	Implied Total Return
S&P 500 (US)	1,426	1,450–1,525	2–7%	2%	4–9%
Euro Stoxx 50 (Eurozone)	2,636	2,700–2,900	2–10%	4%	6–14%
FTSE 100 (UK)	5,898	6,100–6,400	3–9%	4%	7–13%
Topix (Japan)	860	850–950	(1)–10%	3%	1–13%
MSCI EM (Emerging Markets)	46,731	49,500–52,000	6–11%	3%	9–14%

Data as of December 31, 2012
Source: Investment Strategy Group, Datastream

US Equities: Fueled for the Long Haul

Although last year began with a focus on what could go wrong in the world, it ended with recognition that things can go right as well. After all, last year's 16% total return has only been bested in two other years in the last decade: in 2003, following the collapse of the technology bubble, and in 2009, in the wake of the worst financial crisis since the Great Depression. Clearly, stock valuations embedded a good deal of uncertainty at the start of last year, the partial removal of which provided a powerful tailwind to returns.

Thankfully, there is still a wall of worry to scale in the US. Around the globe, investors remain circumspect about US valuations and the sustainability of profit margins. In addition, there is growing angst that market participants have become carelessly bullish on the back of last year's gains.

We think these concerns are unwarranted. In our view, valuations are at worst middling. Meanwhile, *adjusted* profit margins appear reasonable, and massive outflows from US mutual funds contradict concerns about exuberant sentiment.

That said, we acknowledge that 2013's view is more nuanced. After several years of appreciation, US equities are likely to deliver moderate price gains this year, likely in the mid single digits. That may sound disappointing relative to historical equity returns, but it remains attractive compared to other asset classes, particularly bonds.

Below, we discuss the four key factors that inform our equity outlook.

Valuations

While valuations are not a binding constraint in the short run, they can help define an investor's margin of safety, even over the course of a year. On this point, Exhibit 36 makes clear that although today's valuations leave room for further gains, the ratio of upside to downside price moves is no longer asymmetric: this ratio was nearly 3-to-1 at the start of 2012, but we begin 2013 with a more balanced trade-off.

This is not to suggest that US equities are overvalued. Far from it: the S&P 500 would need to rally well above 1,600 to reach top-quartile valuations, the zone in which most historical bull markets have topped. As such, we think valuations still provide fuel for future equity gains. Exhibit 37 echoes this point, showing that, on average, various valuation measures reside around the middle of their post-war ranges. If anything, today's valuations remain understated, as historical periods with similarly low interest rates supported much higher multiples.

As a result, stocks look particularly attractive relative to Treasury bonds, especially over the intermediate term. On this point, Exhibit 38 shows that nearly 60% of S&P 500 companies now have a dividend yield greater than the 10-year Treasury yield. Perhaps as a prelude of things to come, equities have outperformed Treasury bonds in three of the last four years, despite the relentless decline of interest rates.

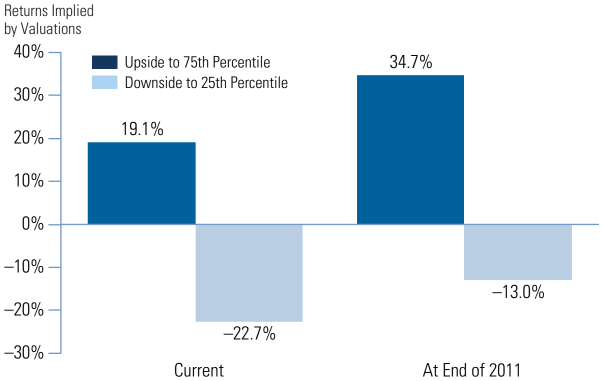
The S&P 500 would need to rally well above 1,600 to reach top-quartile valuations, the zone in which most historical bull markets have topped.

Fundamentals

Among market participants, few topics have engendered more debate of late than profit margins. This dispute has important implications for normalized equity returns (say over the next 5–10 years), as skeptics contend that profit growth, and by extension equity returns, face an insurmountable headwind as margins revert from

Exhibit 36: Upside vs. Downside in US Equities Based on Historical Valuations

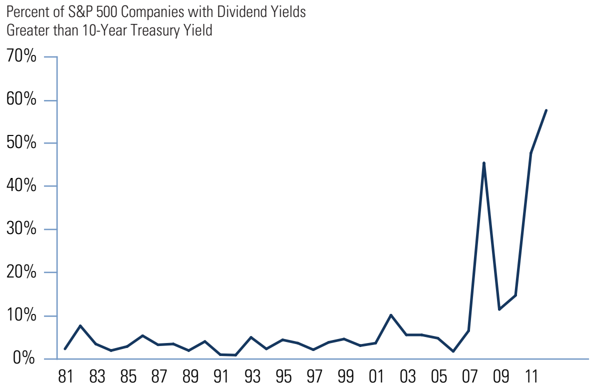
Investors face a more balanced risk vs. reward trade-off in US equities this year.



Data as of December 31, 2012
Source: Investment Strategy Group, Datastream, Robert Shiller

Exhibit 38: Stocks Now Offer a Yield Advantage over Bonds

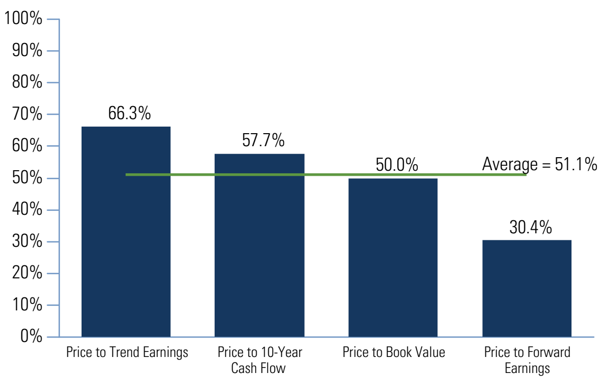
Nearly 60% of S&P 500 companies have a dividend yield greater than the 10-year Treasury yield.



Data as of December 31, 2012
Source: Investment Strategy Group, Factset

Exhibit 37: Percent of Time US Equity Valuations Have Been More Attractive than Current

On average, US equities have been more attractive about half the time.



Data as of December 31, 2012
Note: Based on data since 1957
Source: Investment Strategy Group, Datastream

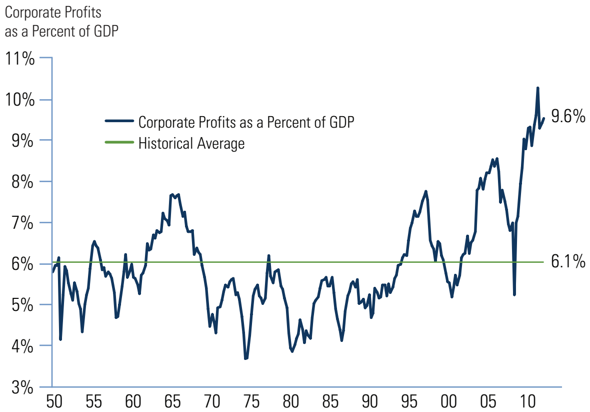
their currently high perch toward their long-term average. To be sure, the current after-tax margin of nearly 10% appears very elevated relative to the historical average of approximately 6%, as shown in Exhibit 39.

Our view is more sanguine, largely because the calculation underpinning Exhibit 39 exaggerates margins in two ways. First, it uses the wrong denominator. After all, US firms' foreign profits as a percent of total profits almost doubled over the last 20 years (to 30%), as they aggressively pursued new markets and leveraged the global supply chain to reduce costs. Thus, scaling these growing foreign profits by US GDP, where exports represent only 14% of the total, overstates the margin increase.

Second, its use of after-tax profits inflates the level of margins. Keep in mind tax rates are significantly lower outside the US. While US corporate tax rates stand at 40% (including state and local taxes), the comparable global average is only approximately 24%.[72] Hence, US firms' growing foreign profits have driven their tax bill lower over time, causing *after-tax* profits as a percent of US GDP to rise commensurately. Using pre-tax earnings to remove the second effect and adjusting the denominator to address the first,

Exhibit 39: US Corporate Profits as a Percent of GDP

On the surface, after-tax margins appear quite elevated.

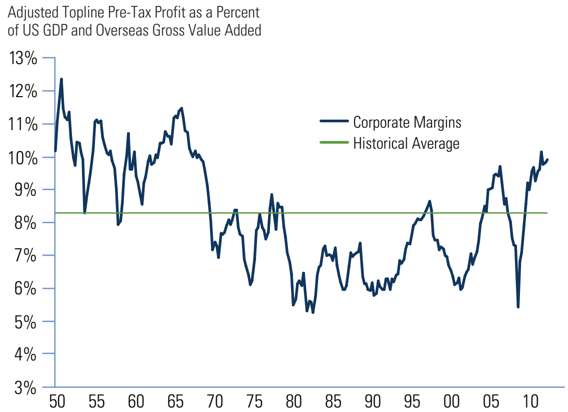


Data as of Q3 2012

Source: Investment Strategy Group, Datastream

Exhibit 40: Margins Adjusted for Taxes and Overseas Sales

Adjusted margins stand within their historical range.



Data as of Q3 2012

Source: Investment Strategy Group, Datastream

as we do in Exhibit 40, paints a far less alarming picture of margins.

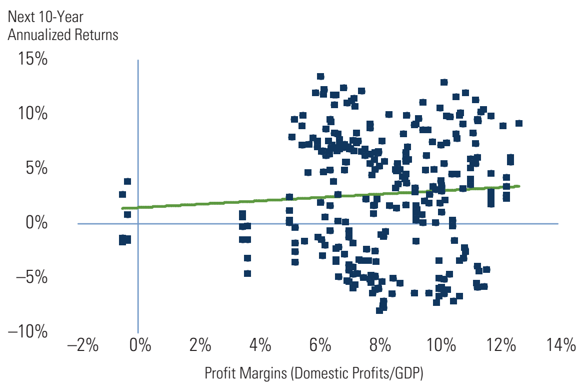
Furthermore, while high margins would seem intuitively bad for future stock returns, their actual impact has been far more benign historically. Exhibit 41 shows that since 1929, starting margins have had little impact on returns over the following decade, explaining less than 1% of their variation. Similarly, their effect on earnings growth over the following decade is muted.

This dynamic holds even over shorter periods. For example, an investor who purchased the S&P 500 at the peak of every margin cycle since 1950 would have enjoyed a 12% median return after two years, with positive returns in three-fourths of those episodes. Notably, this analysis suggests attractive returns through the end of 2013, given that margins appear to have peaked in late 2011.

These counterintuitive results reflect several factors. First, earnings are the product of both revenues and margins. Hence, rising revenues can offset falling margins, reducing the effect. Second, the business cycle is the primary driver of margins, not "mean reversion" acting as an independent force. That is why normalized measures of earnings growth, which deliberately

Exhibit 41: The Influence of Margins on Subsequent Equity Returns

Starting margins have had little impact on equity returns over the ensuing decade.



Data as of Q3 2012

Note: Based on data since 1929

Source: Investment Strategy Group, Bureau of Economic Analysis, Robert Shiller

There is ample scope for rebalancing from cash/bonds into equities going forward, creating a sizable potential tailwind.

smooth out the swings of the business cycle, show little sensitivity to starting margin levels. Finally, starting dividend yields and the trajectory of valuation multiples exhibit more influence on equity returns than margins.

For these reasons, today's margin level does not figure prominently in our normalized equity return expectations.

Technicals

The market's technical backdrop is supportive of further gains, with the ongoing S&P 500 price trend displaying a series of higher highs and higher lows since the 2009 trough. In addition, the index stands above its rising 200-day moving average, typically considered the dividing line between technical strength and weakness. Lastly, Fibonacci analysis argues that the previous S&P 500 high of 1,576 is likely attainable before this bull cycle ends, given the fact that the market has already retraced nearly 84% of its crisis-fueled decline. History suggests there is still time to overtake this former peak, as the average bull market has lasted 59 months, while the current rally is just 45 months old.

Sentiment / Positioning

Despite the strong gains in 2012, investors are not exactly bullish on equities. In fact, US equity mutual fund *outflows* have exceeded $365 billion since 2009, despite the market returning some 129% over this period (see Exhibit 42). Investors' appetite for "inverse" ETFs, or those that profit from a *decline* in stock prices, echoes this disdain. Trading in these bearish ETFs reached 5% of total S&P 500 volume in late 2012, a level last seen at the nadir of 2011's almost 20% equity decline. Foreign buyers have been no more receptive, selling a net $35 billion of US equities over the last four quarters.

In our view, such aversion to US equities is a contrarian indicator. As shown in Exhibit 42, the clear beneficiary of these equity outflows is bonds. However, with yields across the credit spectrum now near all-time lows, this positioning is vulnerable to losses when rates eventually move higher. In turn, there is ample scope for rebalancing from cash/bonds into equities going forward, creating a sizable potential tailwind (see Exhibit 43).

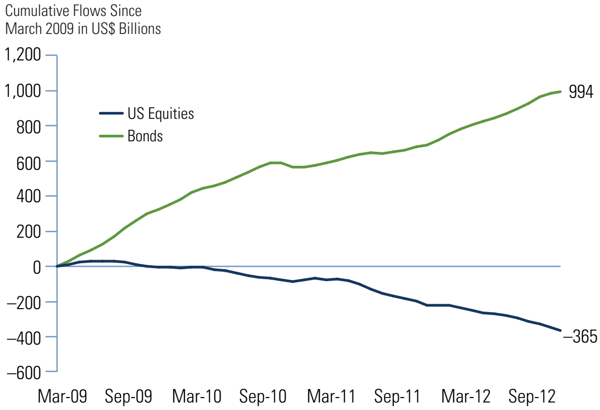
Even without a fiscal "grand bargain," we continue to like the US financial sector, particularly US banks.

Our View on the US Market

Exhibit 44 presents our range of projections for US equities. All told, we expect stable margins to support mid-single-digit earnings growth, underpinning price returns of around 4.3% to the midpoint of our forecast range this year. With reported earnings already above trend levels and earnings growth decelerating, any upside to this scenario will increasingly rely on higher valuation multiples in response to greater policy clarity in the US, Europe and China.

Exhibit 42: Cumulative Mutual Fund Flows since the Financial Crisis Trough

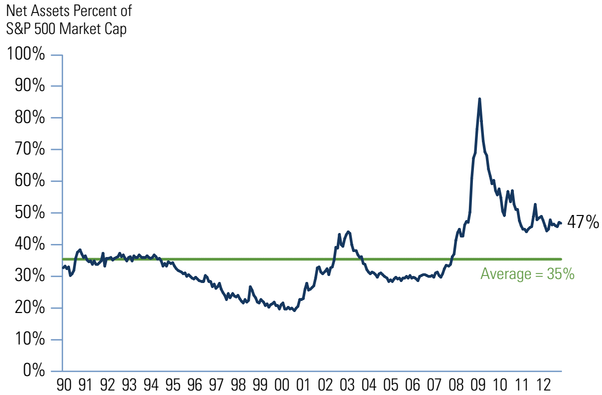
Investors have overwhelmingly favored bonds over stocks since the nadir of the crisis.



Data as of December 26, 2012
Source: Investment Strategy Group, Investment Company Institute

Exhibit 43: Cash and Bond Net Assets as a Percent of S&P 500 Market Cap

Cash and bond holdings relative to equities are higher than normal, leaving scope for rebalancing.



Data as of November 2012
Source: Investment Strategy Group, Datastream

In the US in particular, a *credible* fiscal roadmap that stabilizes the US debt-to-GDP ratio could represent such a source of upside. True, such a plan would entail higher taxes and decreased government spending going forward. Nevertheless, focusing solely on this drag overlooks the offsetting boost to private sector confidence, investment and hiring that a stable fiscal outlook could engender. Notably, the market has historically embraced fiscal prudence, with real equity returns during periods of contracting US government spending some two percentage points higher than average.

Even without a fiscal "grand bargain," we continue to like the US financial sector, particularly US banks. Here, attractive valuations, exposure to the US housing recovery, falling credit costs, and still negative sentiment frame an attractive risk/reward. What is more, financials have the lowest dividend payout ratio of any sector, at a time when capital ratios stand near all-time highs. As such, financials are likely to post the fastest dividend growth of any sector this year, while their dividend yield is set to eclipse the S&P 500's for the first time since the financial crisis began.

Beyond this year, we believe normalized fundamentals support average annual equity returns of about 6%. While this stands below the long-term average, it remains particularly attractive relative to investment grade fixed income. As a result, bonds are the logical funding source for the vast majority of our current tactical tilts.

Exhibit 44: ISG US Equity Scenarios – Year-End 2013

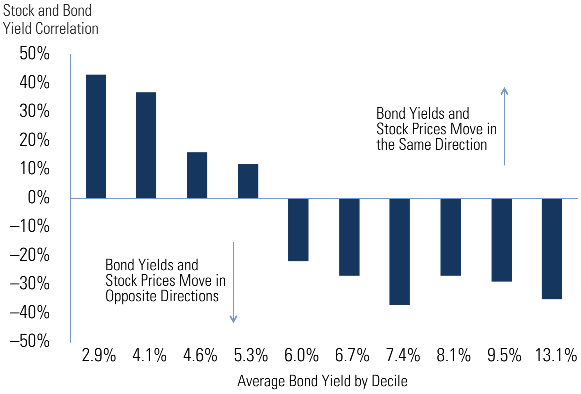
Our central case calls for modest growth in earnings and some valuation multiple expansion.

	Good Case	Central Case	Bad Case
Probability	25%	55%	20%
S&P 500 Operating EPS	$112	$102–107	≤ $80
S&P 500 Reported EPS	$106	$93–98	≤ $68
S&P 500 Trend EPS	$83	$83	$83
S&P 500 Price to Trend Reported Earnings	18.5–20.0x	15.5–18.5x	11.0–14.0x
S&P 500 Fundamental Valuation Range	1,542–1,667	1,292–1,542	917–1,167
S&P 500 Price Target	1,650	1,450–1,525	1,150

Data as of December 2012
Source: Investment Strategy Group

Exhibit 45: Correlation between Stock Prices and Bond Yields

Stocks and interest rates move in the same direction until rates exceed around 6%, far above today's levels.



Data as of December 2012

Source: Investment Strategy Group, The Leuthold Group

Of course, investors are concerned that rising rates will also hobble stock returns. However, stock prices and bond yields remain positively correlated until risk-free rates begin to compete with equity returns, as shown in Exhibit 45. That inflection point has coincided with 10-year Treasury yields of about 6% historically, suggesting there is still headroom for rates and equities to move higher together.

Against this backdrop, we continue to recommend clients build toward (or maintain) their strategic allocation to equities.

Eurozone Equities: Still Attractive

Sovereign fears have been a key driver of Eurozone equities since the crisis began, and last year was no exception. This dynamic is evident in Exhibit 46, which shows Eurozone equities and Spanish bond yields moving as mirror images. In turn, "core" countries such as Germany continue to outperform those on the periphery (e.g. Spain), where sovereign concerns remain elevated. This close linkage, combined with last year's receding tail risk concerns, helped the Euro Stoxx 50 – our preferred index of mega-cap companies headquartered in the Eurozone – deliver a healthy 18% total return.

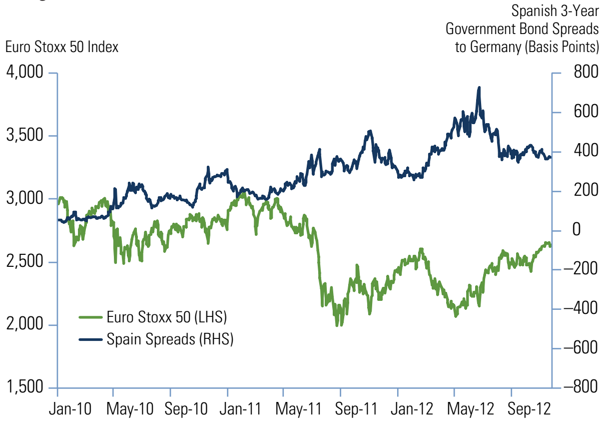
Despite these strong gains, we see several reasons for higher prices in the year ahead. First, Eurozone valuations remain extremely attractive, standing in the lowest historical quartile compared to their own history, with nearly every sector and country currently below its historical average. These attractive valuations demonstrate that Eurozone equity prices still embed a great deal of uncertainty, providing scope for further price gains as visibility improves. In fact, prices would have to rise another 35% just for valuations to reach average levels. Even so, we conservatively assume valuation multiples expand only 5% this year, leaving them far short of that mark.

Second, Eurozone equities are attractive relative to other markets – fixed income and equity alike. The region's 4% dividend yield is an alluring source of income in a yield-starved world, while its valuation discount to US equities is also appealing (see Exhibit 47). This relative valuation advantage is broad-based across sectors and includes some of the world's most recognizable brands, as seen in Exhibit 48.

Third, we believe the resumption of earnings growth will be an incremental driver of returns this year. This may sound at odds with our expectation that the Eurozone will remain in recession for the first half of 2013, but keep in mind that Euro Stoxx 50 companies derive nearly half of their sales from *outside* Europe. Of equal importance is the fact that roughly two-thirds of their European sales

Exhibit 46: Systemic Risk Concerns Have Been the Key Driver of Eurozone Equities

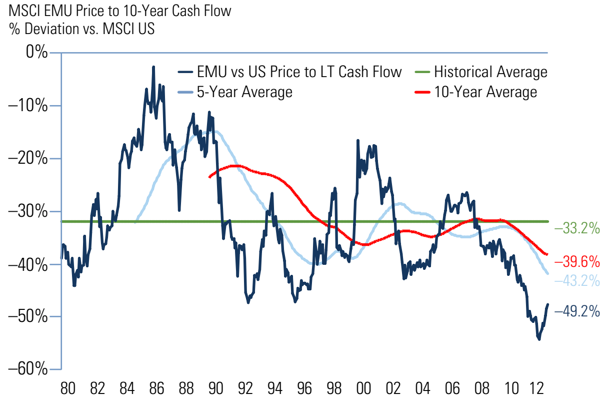
Eurozone equities and Spanish bond yields are nearly a mirror image of each other.



Data as of December 31, 2012
Source: Investment Strategy Group, Bloomberg

Exhibit 47: The Valuation of Eurozone Equities vs. US Equities

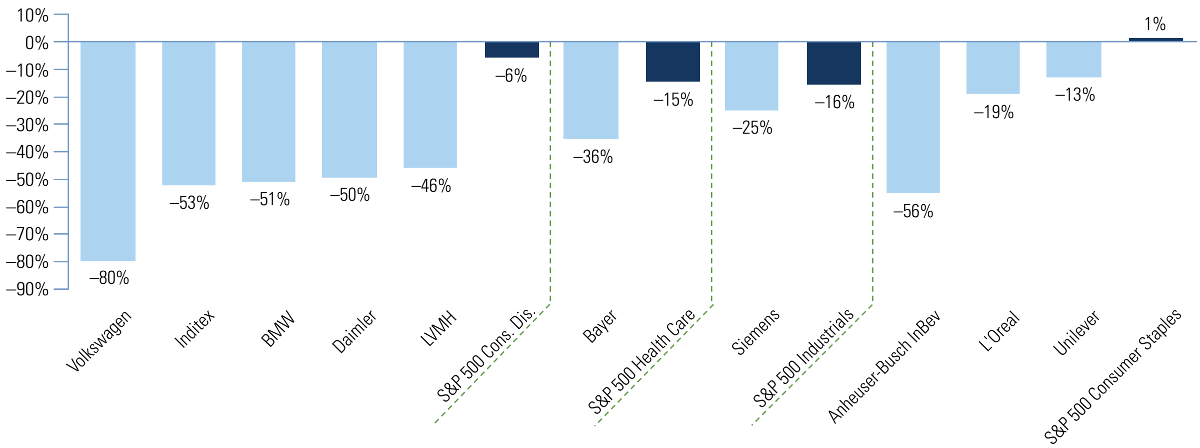
Eurozone equities are very attractively valued compared to those in the US.



Data as of December 31, 2012
Source: Investment Strategy Group, Datastream

Exhibit 48: Percent Deviation of Current PE Multiple from 10-Year Average

The Euro Stoxx 50 includes some of the world's most recognizable global brands at very attractive valuations.



Data as of December 31, 2012
Source: Investment Strategy Group, Bloomberg, Intrinsic Research

We continue to recommend a tactical overweight to Eurozone equities via the Euro Stoxx 50.

originate in the stronger and more export-oriented "core" countries such as Germany. As such, these companies stand to benefit directly from the slight acceleration in global GDP that we expect.

Finally, earnings and margins historically revert to the mean in the Eurozone, and both measures are currently below trend levels. We therefore expect some boost to both this year. At the very least, we expect margins to stabilize, as ample economic slack contains input and overhead costs.

In short, a combination of diminishing sovereign risks, expanding earnings and tempting dividend yields underpin our 6–14% total return expectation this year. We therefore continue to recommend a tactical overweight to Eurozone equities via the Euro Stoxx 50.

UK Equities: Still Neutral

The United Kingdom's unique position as a member of the European Union but not part of the euro currency bloc has enabled it to pursue more accommodative monetary policy during the crisis. This fact was not lost on investors, as UK equities have significantly outperformed their Eurozone brethren, despite grappling with significant exposure to the same troubled regions. As a result, the Euro Stoxx 50 still trades 27% below its 2007 peak, while the comparable figure for the FTSE 100 is just 3%.

As hard as it may be for UK equities to sustain this level of outperformance, we do not expect the FTSE 100 to decline in 2013. On the contrary, the resumption of earnings growth and somewhat higher valuation multiples should drive prices higher this year.

That said, we do find the FTSE 100 *relatively* less attractive for a few reasons. After several years of outperformance, UK valuations have largely caught up to their five-year averages, leaving less potential upside. Moreover, much of the UK's remaining valuation signal stems from its defensive sectors, such as healthcare and telecom, that are less likely to benefit from the modest pickup in growth we expect this year. In contrast, its key cyclical sectors are the most expensive, as both the industrials and technology sectors have had lower valuations about 86% of the time historically. In addition, earnings and margins are above trend levels for the FTSE 100, elevating downside risks.

All told, UK equities' appreciation in recent years has narrowed their margin of safety, leaving us tactically neutral toward them at this time.

Japanese Equities: Asymmetric Upside

Japanese equities enjoyed a strong finish to 2012, with the Tokyo Price Index (Topix) rallying more than 21% in the last six weeks of the year. Even so, Japan remains a notable laggard among global equity markets. Consider that the MSCI All Country Index is nearly 99% above its 2009 low, while Japan gained only 34% over the same period. Meanwhile, Japan's share of the global equity market has collapsed from 44% in 1988 to just 7% today.

From such low starting levels, we think the potential for upside outweighs the risk of downside, particularly in the first half of 2013. To be clear, this is not a view on the long-term health of the country. We, like most investors, are well aware of the myriad fault lines in the Japanese

Exhibit 49: Japan's Price-to-Book Ratio

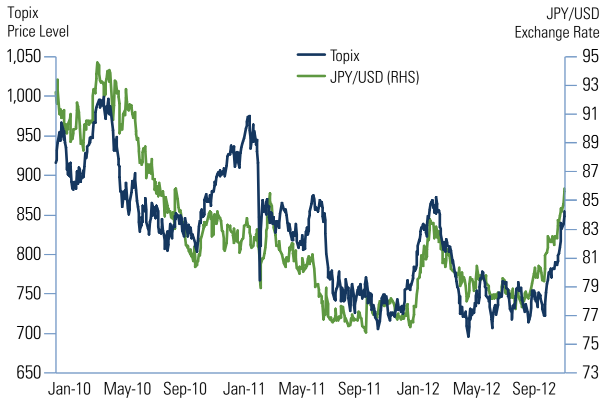
Japanese equities are still trading near crisis-level lows despite significant reduction in global tail risks.

Data as of December 31, 2012

Source: Investment Strategy Group, Datastream

Exhibit 50: Japanese Equities Compared to the Yen

Japanese equities remain highly correlated to the value of the yen.



Data as of December 31, 2012

Source: Investment Strategy Group, Bloomberg

economy, including its unfavorable demographic trends and its alarming level of government debt. Even so, these structural headwinds do not obviate the tactical case for Japanese equities in 2013.

Several factors underpin our constructive stance. First, Japan is arguably the most attractively valued equity market in the world, having been less expensive only 11% of the time historically. This undervaluation is broad-based, with 67% of the 1,176 Topix constituents trading below their book value. In fact, Japan's aggregate price-to-book ratio remains near the low established during the financial crisis, despite the significant reduction in global tail risks since then (see Exhibit 49).

Structural headwinds do not obviate the *tactical* case for Japanese equities in 2013.

Second, investors remain deeply underweight Japanese equities, a positive from a contrarian standpoint. Tellingly, a recent survey among institutional money managers found that allocations to Japan have fallen to an almost four-year low.[73] Closer to home, domestic investors may also rotate into Japanese equities, as the dividend yield is now more than triple the country's 10-year government bond yield. The intensity of 2012's closing rally no doubt reflected investors reversing a portion of these underweight positions.

Third, the repeated pledge of Prime Minister Abe to weaken the yen is a positive catalyst for Japanese equities, given the close correlation between the two assets (see Exhibit 50). True, Abe may eventually fall short of his campaign promises, or his policies may prove ineffective even if they are implemented. Nevertheless, investors will trade based on *expectations* that yen-weakening policies will persist through the first half of the year, particularly as the new government tries to engineer

Although emerging markets may appear inexpensive, other equity markets are more so.

favorable economic results ahead of the Upper House elections in July.

Finally, fundamentals appear supportive of equities as well, as 2013 is likely to represent the second consecutive year of earnings growth, and margins remain below trend.

Taken together, these factors offer investors an attractive tactical investment opportunity. Accordingly, we continue to recommend an overweight to Japanese equities.

Emerging Market Equities: Relatively Uninspiring

While the long-term diversification benefits of emerging market equities earned them a larger allocation in our recommended *strategic* portfolio last year, we are more circumspect about their *tactical* merits for 2013. True, emerging market equities have lagged the S&P 500 by nearly 20 percentage points in the last three years, providing scope for outperformance going forward. Nevertheless, such a cursory comparison overlooks several less supportive factors that we think argue for a neutral position at this time.

Chief among these is their *relative* valuation. Although emerging markets may appear inexpensive, other equity markets are more so. This dynamic is evident in Exhibit 51, which shows that while emerging market equities offer about 10% upside to their average valuation level, the same mean reversion analysis implies negative returns relative to other markets. Indeed, EM equities' current 14% discount to the US falls at the low end of its historical 15–25% discount range, an inadequate margin of safety for a tactical overweight, in our view. Given that market participants can typically invest across equity markets, we think these relative comparisons should dominate.

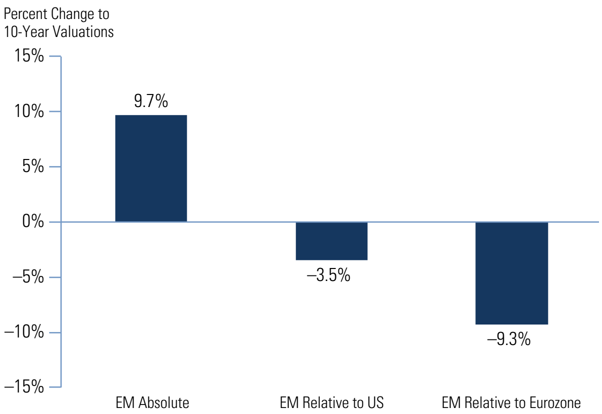
Beyond valuations, we see a risk of disappointment stemming from already elevated expectations for earnings this year. Bottom-up analysts are calling for earnings to increase 13%, yet the level of global growth we expect in 2013 has historically been associated with only single-digit earnings gains. Furthermore, our forecast for range-bound commodity prices does not bode well for basic resource firms, which account for roughly 50% of non-financial EM earnings. As a result, we think 5–10% earnings growth is more likely this year. While this would not be a catastrophic outcome, EM equity returns are far more sensitive to surprises in earnings growth than absolute levels.

Exuberant sentiment is not limited to earnings, as investors' expectations for a turn in the global economic cycle have fueled significant inflows into EM mutual funds and ETFs. Such vehicles enjoyed 15 consecutive weeks of net inflows into the end of 2012, and they registered a significant full-year tally of nearly $50 billion. Institutional investors have followed suit, with a recent survey of portfolio managers showing their highest allocation to EM in eight months.[74] In short, these bullish expectations are eerily reminiscent of other periods in recent years that preceded bouts of emerging market underperformance.

This is not to suggest that emerging markets are devoid of equity opportunities. Both India and China are more attractively valued than EM overall, offering about 15–20% upside to their historical average valuations. In addition, Chinese earnings expectations have fallen further than any other emerging market, setting a lower

Exhibit 51: Emerging Market Valuations in Context

Although emerging markets may appear inexpensive in their own right, other equity markets are more so.



Data as of December 31, 2012

Note: Based on Price to Cash Flow, Price to Book, Price to Equity, Price to Peak Earnings.

Source: Investment Strategy Group, Datastream

hurdle for positive surprises in the future. With leading growth indicators in China also improving, the pieces for a tactical overweight are coming into focus. That said, China's recent 23% rally, coupled with the generally bullish EM sentiment discussed above, has us waiting for a better tactical entry point.

In summary, as much as EM equities are likely to generate a positive return this year, we do not think they offer a compelling tactical opportunity at this time, particularly in light of their significant structural fault lines. We therefore retain our neutral weighting. As was the case last year, we prefer to express our positive stance on long-term emerging market growth through our allocation to EM local debt, as well as selective exposure through EM private equity funds.

2013 Global Currency Outlook

With global central banks, particularly in the developed world, pursuing extremely loose monetary policy, concerns are mounting about exchange rates becoming a weapon of trade once again. At issue is whether the global trade imbalances and uneven growth trajectories of the world's economies will trigger deliberate attempts to devalue the currency aimed at improving a country's competitive position. Japan's latest political rhetoric has catalyzed these fears, as Prime Minister Abe has repeatedly pledged to weaken the yen through aggressive fiscal and monetary policy. More recently, he has expressly suggested that other G-20 nations are already in violation of their 2009 pledge to avoid such competitive devaluations: "How many countries have kept the promise? The US should have a stronger dollar. What about the euro? Foreign countries have no right to lecture us."[75] In turn, provocative headlines like *Japan Pushes World Closer to Currency Wars*[76] have done little to allay these concerns.

Sensationalist headlines notwithstanding, we think an eruption of currency wars or widespread trade protectionism is unlikely. Today's global growth remains relatively resilient, in contrast to the very weak global demand typically prevalent during such episodes in the past. Moreover, deliberate attempts to improve competitiveness through currency devaluation are quite rare in the post-crisis world, with only five small countries – Vietnam, Venezuela, Ethiopia, Nigeria and Kazakhstan – employing that tack since November 2008.[77] More common is currency intervention by emerging market countries, but here the aim is to arrest currency appreciation pressures from capital inflows, not devalue per se. As such, currency weakness is best viewed as a byproduct of loose monetary policy, rather than a conscious objective. Of equal importance, the proliferation of global trade serves as a powerful deterrent to engaging in trade wars for all countries, particularly the US and China.

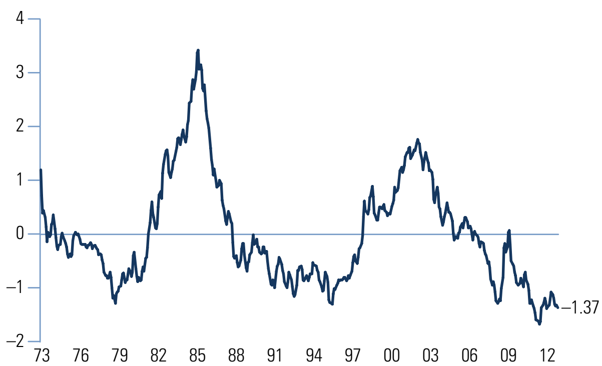
It is also worth recalling that a devalued currency offers no assurance of an export renaissance.

In short, we do not expect "currency wars" to materialize in 2013. In fact, our forecast calls for the major developed currencies to remain relatively range-bound this year. Meanwhile, in the absence of any strong emerging market currency views, we suggest clients continue to gain exposure through their EM local debt, EM equity, and EM private equity allocations.

It is also worth recalling that a devalued currency offers no assurance of an export renaissance, as the exchange rate is just one of many factors determining the competitiveness of a country's goods and services. Consider the case of the UK, where despite a nearly 19% depreciation in the pound since 2007, the country's trade deficit has actually *widened* over that time. In contrast, Eurozone countries such as Spain, Ireland and Portugal are unable to depreciate the euro but have still managed to strengthen their exports' competitiveness by cutting costs and penetrating new markets.[78]

Exhibit 52: US Dollar Valuation: Deviation from Average

The US dollar is more than one standard deviation, or 13%, undervalued against the currencies of its trading partners.



Data as of December 2012
Source: Investment Strategy Group, Datastream

US Dollar

The likely trajectory of the US dollar depends on one's timeframe. Looking out beyond 2013, we believe the US dollar's attractive valuation provides room for appreciation. As shown in Exhibit 52, the dollar is more than one standard deviation, or 13%, undervalued against a weighted average of America's trade partners' currencies, after adjusting for inflation. An eventual tightening of Federal Reserve policy, along with continued gradual improvement in the US current account balance driven by lower oil imports, could help the dollar eventually close this gap. True, an unexpected or sudden rise in US inflation or a higher fiscal risk premium could undermine this scenario, but we attach a low probability to these downside risks.

The outlook for the coming year is a different story, as we expect the dollar to remain relatively range-bound. For starters, the Fed is likely to remain very accommodative, which will limit significant dollar strength. In addition, the roughly 3% US current account deficit will remain a drag on the dollar.

Euro

Like the US dollar, the euro is also attractively valued. Indeed, it is about 7% inexpensive on a real effective exchange rate basis. As was the case with the US, we expect this valuation gap to close over the medium term, aided by fading fears about the Eurozone sovereign debt crisis and a slow return to trend growth. A key concern for investors has already been removed, as the ECB's introduction of the OMT (or its capacity to purchase a Eurozone country's sovereign bonds directly in the secondary market) effectively truncated fears that a breakup of the Eurozone would leave investors with an inconvertible euro.

Even so, the euro's valuation gap is unlikely to close in 2013. After all, ECB monetary policy is set to remain highly accommodative this year, given the weak Eurozone growth and benign inflation we expect. This easy policy will serve to anchor any euro strength. Moreover, concerns about the economic health and viability of the Eurozone will persist, even as the OMT removed the tail risk of an immediate collapse. Thus, while fading sovereign fears are a significant long-term positive for the euro, they are only a modest one this year.

Given these competing tensions, we retain our neutral euro view.

British Pound

The escalation of the European sovereign crisis has been positive for the British pound. Since mid-2011, the currency has appreciated 6% in trade-weighted terms driven by a 12% appreciation against the euro as sovereign fears intensified. While we expect sovereign fears to persist, several other factors will likely limit further pound appreciation.

First, the UK's own structural fault lines, including slow growth and fiscal challenges, will increasingly come into focus as European tail risks fade, tarnishing the pound's allure. Second, the recent appreciation has left the pound only 3% below fair value, limiting any lift from mean reversion going forward. Third, fundamental forces are broadly offsetting, with the the BoE's slower pace of quantitative easing (a plus for the pound) counterbalanced by the country's persistent current account deficits (a currency negative). Finally, recent downgrades to the UK's growth prospects are an additional headwind.

The foregoing underpins our neutral view of the pound. While the pound, euro and US dollar are undervalued on a trade-weighted basis, they do not significantly deviate from fair value relative to each other. Moreover, they share a similar fundamental backdrop of loose monetary policy pitted against below-trend growth and fiscal austerity. As a result, we expect these three currency pairs to remain broadly range-bound relative to each other, similar to our muted expectations for the underlying currencies.

Yen

Among currencies, the yen has received a disproportionate share of the spotlight in recent months. The attention is understandable, considering Prime Minister Abe has specifically promised to pressure the BoJ into depreciating the yen using all tools available. While these pledges have yet to materialize, the BoJ has already accelerated the pace of quantitative easing for the third time in the last four months.

Clearly the situation remains fluid and it is possible the BoJ will forgo its independence in pursuit of a significantly weaker currency. After all, there is little inflationary risk to prevent the BoJ from taking action that is more aggressive. While it is uncertain whether Abe's policy prescriptions will ultimately come to fruition, we are sympathetic to the idea that the yen could weaken further from current levels in the medium term.

We think several factors limit the *magnitude* of the yen's depreciation in the year ahead.

At the same time, we think several factors limit the *magnitude* of the yen's depreciation in the year ahead. For one, the currency has already depreciated 8% on a trade-weighted basis in the last several months, leaving it in line with average valuations and thereby weakening the case for further broad-based depreciation. While

Most EM currencies provide an alluring incremental yield of 2–7% against developed market currencies, a key positive in a yield-starved world.

the yen remains about 9% overvalued relative to the US dollar, currency moves always reflect *relative* fundamentals, such as the growth and interest rate differentials between two countries. With the Fed expected to maintain near-zero interest rates and expand its balance sheet by 7.4 percentage points of US GDP in 2013, it may be difficult for the BoJ to "out-ease" the Fed.

It is also important to note that investors are already betting on further depreciation in the yen, with short positioning at its highest levels since 2007. From a contrarian perspective, this may limit further yen weakness in the absence of significantly more aggressive easing from the BoJ.

Finally, we are somewhat skeptical of Abe's campaign pledges, given the frequent turnover of Japan's political leaders and failure of previous intervention measures to weaken the yen. That said, given the weakness of Japan's economy, we think the BoJ will remain very accommodative. For this reason, we explicitly hedge the yen exposure of our overweight equity position in the Topix.

Emerging Market Currencies

We remain modestly positive on emerging market currencies for several reasons. First, EM currencies stand to benefit from our broadly constructive view on risk assets, particularly given their 80% correlation to the S&P 500. This linkage was evident in 2012, as the reduction of Eurozone tail risk led most EM currencies to appreciate against the dollar. Not surprisingly, the emerging European currencies most affected by the crisis, such as those of Hungary and Poland, benefited the most, rising about 10%. Second, EM currencies have room to appreciate, as they remain 10% undervalued against the US dollar and 12% below their summer 2011 peak. Third, most EM currencies provide an alluring incremental yield of 2–7% against developed market currencies, a key positive in a yield-starved world. Finally, private capital flows should continue to benefit emerging markets, a reflection of the above-mentioned tailwinds and the ongoing quantitative easing of central banks in the developed markets. On this point, the Institute of International Finance estimates that net flows will increase some 7% to $1.1 trillion in 2013, fueling additional pressure for EM currency appreciation in the months to come.

While policy uncertainty across the globe will no doubt remain a source of volatility, we expect to see easing tail risk fears lead to greater differentiation among EM currencies. Already, the sensitivity of EM currencies to negative shocks in both peripheral European spreads and S&P 500 returns has fallen since the ECB introduced its OMT program last year. With greater differentiation in EM currencies, we expect a richer set of tactical opportunities in 2013.

In the meantime, clients should continue to gain exposure to emerging markets through their EM local debt, EM equity, and EM private equity allocations.

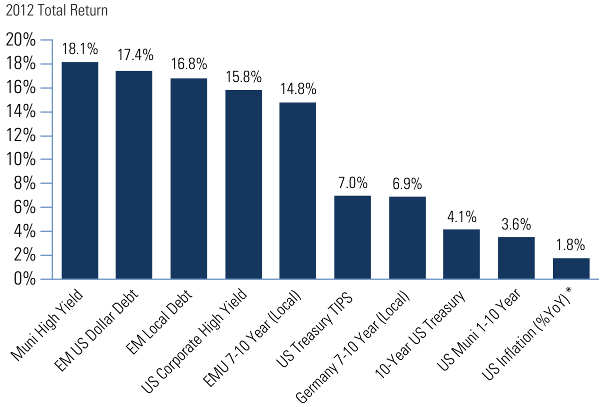
In the spirit of the Caribbean limbo dance, interest rates across the globe continued to plumb new lows in 2012. Of course, this was a welcome development for fixed income investors, as even 10-year government bonds delivered inflation-beating returns last year (see Exhibit 53). Of equal note, the riskier portions of fixed income, such as corporate high yield, generated another year of equity-like returns, but with significantly less volatility.

As with the limbo, however, the level of the bar matters. We begin this year with interest rates across the globe already at or near all-time lows. The 10-year German bund, for example, yielded just 1.3% at the end of 2012. Moreover, 10-year rates in the US, Germany, and the UK stand below prevailing inflation, implying that investors are literally paying governments to borrow from them in real terms. To be sure, interest rates have repeatedly defied forecasts – our own included – during their downward march. Nevertheless, today's lowly levels set a practical limit on their ability to decline further.

Accordingly, we find the tactical investment merits of government bonds, as well as investment grade fixed income, unattractive. No doubt, below-trend growth and easy monetary policy are likely to hinder any interest rate increases in 2013. Even so, the moderate pickup in growth and risk sentiment we expect this year implies slightly higher rates and, in turn, negative real returns for these bonds. As a result, investment grade fixed income remains the largest underweight in our tactical portfolio.

Exhibit 53: Fixed Income Returns by Asset Class

Bonds delivered inflation-beating returns last year.



Data as of December 31, 2012, except where indicated
*US inflation data is through November 2012.
Source: Investment Strategy Group, Datastream

This is not to suggest, however, that investors should completely abandon bonds. As the last several years have reminded us, investment grade fixed income serves a vital strategic role in the portfolio, due to its ability to hedge against deflation, reduce portfolio volatility and generate income. Moreover, some bond sectors remain attractive, such as high yield and emerging market local currency debt. Thus, clients should continue to overweight these two assets in their portfolio.

In the sections that follow, we review each market in more detail.

We find the tactical investment merits of government bonds, as well as investment grade fixed income, unattractive.

US Treasuries

When evaluating the attractiveness of Treasuries, investors should consider more than just the ultimate return of their principal. There are several other sources of risk to bear in mind. For one, investors face mark-to-market losses. Consider that with 10-year Treasury notes yielding only 1.76%, an increase in yields to 1.95% – or just 19 basis points above today's level – would generate a capital loss sufficient to offset an entire

Even the modest lift in interest rates we expect would generate paltry fixed income returns for the next few years.

year's worth of interest. Notably, 10-year Treasury rates have exceeded 1.95% about 98% of the time since 1962. Of course, ongoing Treasury purchases by the Fed and below-trend growth are likely to prevent a rapid rise in interest rates. Still, even the modest lift in interest rates we expect would generate paltry fixed income returns for the next few years.

Investors also risk losing their real purchasing power. Already, the US inflation rate of around 2%, as well as most forward-looking inflation measures, exceeds the yield on the 10-year Treasury. As a result, today's Treasury note buyers are almost assured of a negative real return, or a loss of their purchasing power relative to inflation, over the coming decade.

This latter fear helps explain growing interest in Treasury Inflation-Protected Securities (TIPS). In our view, the attractiveness of TIPS depends on an investor's tax status. For *tax-exempt* clients, TIPS' inflation-linked cash flows provide some insulation for real purchasing power, and thus warrant a small strategic allocation. For *taxable* clients, however, TIPS' unfavorable tax treatment (discussed at length in our *2011 Outlook*) and current valuations make them unattractive at this time. Exhibit 54 shows that the inflation rate at which TIPS break even with fixed-rate 10-year Treasuries is 2.5%, slightly above long-term inflation forecasts of 2.3%. Moreover, TIPS continue to have a negative real yield, implying a loss of 0.7% of their purchasing power per year if held to maturity.

In short, while Treasuries continue to have a place in a client's portfolio, particularly given their ability to hedge against the risk of a recession or a geopolitical shock, we think their paltry returns warrant a tactical underweight at this time.

Exhibit 54: 10-Year TIPS Yield and Implied Break-even Inflation Rate

TIPS continue to have a negative real yield, implying a loss of 0.7% of purchasing power per year if held to maturity.

Data as of December 31, 2012

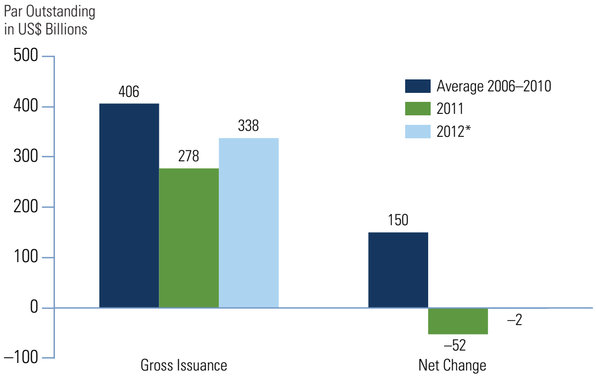
Source: Investment Strategy Group, Federal Reserve, US Department of the Treasury

US Municipal Bond Market

Just as falling Treasury rates were a key driver of positive municipal returns last year, rising rates could be a headwind in 2013. This is particularly true now, as municipal bonds possess little valuation support. More specifically, investors have picked up an additional 72 basis points of after-tax yield by owning 10-year municipal bonds instead of Treasuries over the last three years. With today's valuations close to that average, there is little spread to absorb potentially higher Treasury yields in 2013.

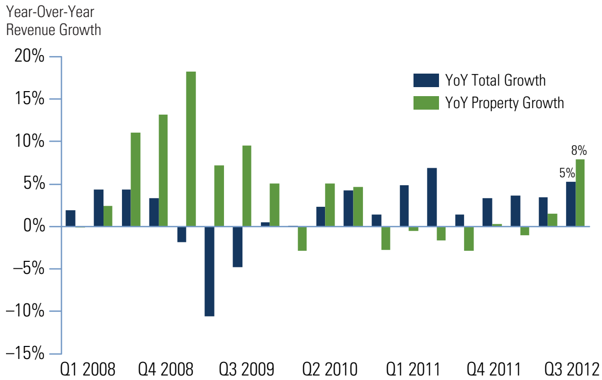
Given this valuation backdrop, we think Treasury rates, not spreads, will be the primary driver of municipal returns. This is particularly true now, since we expect spreads to remain low on the back of ongoing mutual fund demand and contracting municipal supply. Keep in mind that

Exhibit 55: Municipal Bond Supply and Demand
The municipal bond universe has contracted in the last two years, supporting municipal bond prices.



Data as of December 2012
*The 2012 net change based on JP Morgan estimate.
Source: Investment Strategy Group, Federal Reserve, JP Morgan

Exhibit 56: State & Local Government and Property Tax Revenue Growth
State and local taxes have grown for 12 consecutive quarters and property revenue growth has turned the corner.



Data as of Q3 2012
Source: Investment Strategy Group, US Census Bureau, Bureau of Economic Analysis

municipal bond funds have enjoyed 15 consecutive months of inflows until December 2012, averaging about $4.3 billion per month in 2012.[79] At the same time, banks in search of tax-exempt income have become increasingly active buyers. We think this search for yield is likely to endure.

The supply backdrop also argues for below average spreads. As seen in Exhibit 55, last year was the second in a row in which municipal bond scheduled redemptions and refunding exceeded gross issuance. This contracting pool of bonds stands in sharp contrast to the $150 billion or so of average yearly net supply seen during the 2006–2010 timeframe. Notably, some forecasts call for the municipal bond universe to shrink yet again this year.

While valuations remain uninspiring, municipal fundamentals continue to improve. State and local taxes, for example, have grown for 12 consecutive quarters. Similarly, property tax revenue appears to have turned the corner, as third quarter's 8% annual growth was the strongest in three years. As seen in Exhibit 56, the unfolding US housing recovery provides an ongoing benefit to municipal finances. Of equal importance, states have maintained tight expense discipline, with public sector hiring flat compared to last year and public construction spending still 15% below its peak.

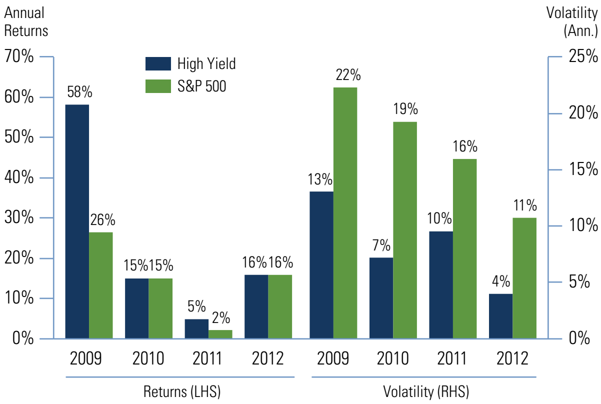
In turn, rising revenue and expense controls have bridged gaping budgetary gaps across the US. In fact, all 50 states passed their budgets on time for the second consecutive fiscal year.

Perhaps the best illustration of improving municipal fortunes is California, the poster child for cash flow difficulties and acrimonious budgetary negotiations in recent years. Here, an unfolding cyclical recovery and the passage of Proposition 30 have led the state's budget gap estimates to collapse from $16 billion last year to just $1 billion for the upcoming fiscal year (2013–14).[80] Due in large part to these improvements, S&P placed California's A– rating on "positive outlook" in February 2012, and an upgrade appears increasingly likely.

Against this backdrop, we think defaults are likely to remain uncommon and situation-specific. To be sure, the unusual spurt of bankruptcy filings last year by three local California governments raised concerns that the stigma of municipal bankruptcy was fading. Yet, there is limited evidence to corroborate that fear. In fact, the total par value of defaults in 2012 actually *fell* compared to the previous year. Moreover, unrated issuers continue to comprise the bulk of defaults. Outside this group, the default rate was a strikingly low 0.02%.[81]

Exhibit 57: Total Returns Compared to Volatility

Corporate high yield continues to generate equity-like returns with bond-like risk.

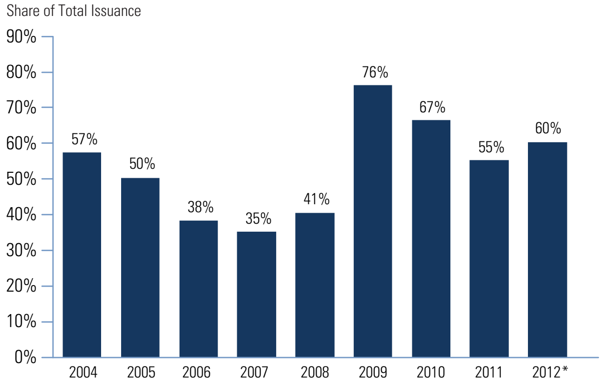


Data as of December 31, 2012

Source: Investment Strategy Group, Barclays, Moody's, Standard & Poor's

Exhibit 59: Share of High Yield Issuance Used for Refinancing

Refinancing debt, not increasing it, constitutes the majority of today's issuance volume.



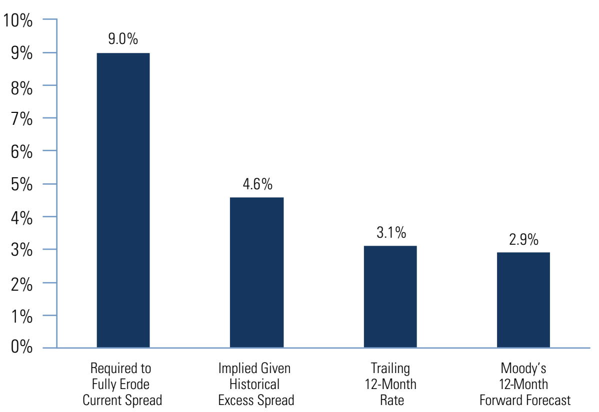
Data as of December 2012

* Data in 2012 is through mid-December.

Source: Investment Strategy Group, Datastream, JP Morgan

Exhibit 58: Corporate High Yield Default Rates

Today's spreads still look attractive relative to expected defaults.



Data as of December 31, 2012

Source: Investment Strategy Group, Barclays, Moody's

Of course, there are risks beyond rising interest rates and defaults. Chief among these is President Obama's budget proposal to limit the tax deductibility of interest from municipal bonds. While the situation remains fluid, we note there is a strong case against capping municipal interest deductions, as it would raise comparatively less revenue than eliminating other tax preferences. Moreover, it risks disrupting the $3.7 trillion municipal market, which could adversely affect state and local government borrowing costs. This last point is particularly relevant considering Congress is comprised of state level politicians. As such, we do not recommend shifting municipal allocations based on highly uncertain tax policy at this time.

In short, we think clients should moderately reduce their high-quality municipal bond allocation to fund various tactical tilts. High yield municipal bonds are one exception, as we recommend clients stay invested at their customized strategic weight. This neutral advice seeks to balance the bonds' appealing 2.8% incremental yield against their duration risk in a rising-rate environment.

As was the case with Treasuries, our recommended *underweight* in municipal bonds is not tantamount to a *zero* weight. Given their important portfolio hedging characteristics, municipal bonds should remain the bedrock of the "sleep-well" portion of a US-based client's portfolio.

US Corporate High Yield

The fact that corporate high yield gained 16% in 2012 – its fourth consecutive year of positive returns – was noteworthy. That it did so with only 4% volatility was extraordinary. Last year extended a pattern of equity-like returns with bond-like risk that has been in effect since the trough of the financial crisis (see Exhibit 57). While high yield is unlikely to repeat this caliber of risk-adjusted returns in 2013, we nonetheless remain overweight.

To be sure, the potential for gains is more moderate now that yields have dipped below 7%, an all-time low. That said, these low absolute yields mainly reflect the collapse in risk-free Treasury rates. In contrast, high yield spreads of about 511 basis points remain above long-term median levels and therefore continue to compensate investors for the likely path of defaults (see Exhibit 58).

Notably, actual defaults would have to exceed 9% to erode this spread fully, while implied defaults reflecting high yield's historical risk premium are still 4.5%. This implied default level is 1.5 times the actual trailing default rate, above the year-ahead base case forecast of Moody's and higher than our 3% default expectation. As such, there is still some room for spreads to compress as macroeconomic fears recede.

While concern is growing about high yield exhibiting bubble-like characteristics after five consecutive years of mutual fund inflows and several years of record-setting issuance, there are several reasons why we are not that alarmed. First, valuations are the ultimate expression of sentiment and spreads do not yet reflect investor exuberance. Second, the *use* of bond proceeds is more important than the *volume* of issuance. Exhibit 59 shows that *refinancing* debt, not *increasing* it through acquisitions or leveraged buyouts (LBOs), constitutes the majority of today's issuance volume. In contrast, refinancing volume was about half this level in the years preceding the crisis. Third, the credit rating of today's issuers is much healthier than in the pre-crisis era. In fact, bond issuers rated split-B or lower accounted for just 17% of last year's record-breaking issuance, about half the level seen in 2007.

We also note that high yield may be a better interest rate hedge than many investors realize. When spreads are significantly larger than the risk-free Treasury rate, as they are today, they have the capacity to absorb some portion of a backup in rates. This is exactly what we have seen historically, as evidenced in Exhibit 60.

Exhibit 60: Corporate Bond Performance When 5-Year Treasury Yields Rose 70bps or More

High yield bond returns exceeded those of investment grade fixed income 82% of the time when rates rose quickly.

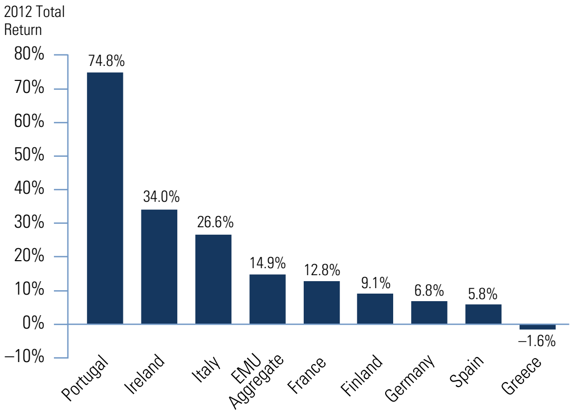
		Total Returns		
3-Month Period Ending	**Change in 5-Year Treasury Yield (bps)**	**Investment Grade Fixed Income (IGFI)**	**High Yield**	**High Yield – IGFI Difference**
Apr-94	162	–3.8%	–4.7%	–0.9%
Nov-94	98	–2.9%	–1.0%	1.9%
Apr-96	115	–1.2%	0.2%	1.5%
Feb-99	70	1.4%	1.0%	–0.4%
Jan-00	74	0.6%	1.9%	1.3%
Jan-02	76	0.2%	3.9%	3.7%
Aug-03	116	–2.2%	2.9%	5.1%
Jun-04	101	–1.9%	–1.0%	0.9%
May-08	91	2.5%	4.3%	1.9%
Jun-09	87	0.7%	23.1%	22.3%
Jan-11	78	–2.0%	2.8%	4.9%
Average	**97**	**–0.8%**	**3.0%**	**3.8%**
% of Time Positive	**–**	**45%**	**73%**	**82%**

Data as of December 2012
Source: Investment Strategy Group, Barclays

We think clients should moderately reduce their high-quality municipal bond allocation to fund various tactical tilts.

Exhibit 61: 2012 European Sovereign Bond (7–10 Year) Returns

Eurozone bonds across the rating spectrum benefited in 2012 as policymakers reduced tail risks.



Data as of December 31, 2012

Source: Investment Strategy Group, Datastream

Note that high yield bonds provided an excellent hedge against unexpected interest rate increases, generating a positive return 73% of the time and a higher return than investment grade fixed income 82% of the time. This is important, as our high yield overweight is funded out of investment grade fixed income.

Against this backdrop, we expect corporate high yield to deliver around 6% returns in the year ahead. While this falls shy of the heady returns of recent years, it is nonetheless attractive relative to its funding source, where we expect rising rates to generate negative returns over the next few years. Even if rates stay depressed while growth remains positive, the loss-adjusted return in high yield should still trump investment grade fixed income.

Eurozone Bonds

Eurozone bonds across the rating spectrum benefited last year as policymakers took additional steps to address the region's sovereign crisis. As shown in Exhibit 61, peripheral bond returns in Portugal, Ireland and Italy were clear leaders, a stark reversal of fortune from their heavy 2011 losses. Even Germany, whose 10-year bond yield started 2012 at just 1.8%, saw yields fall to a post-war low of 1.2%.

As a result, German bunds now yield less than prevailing Eurozone headline inflation of 2.2%, making it almost certain that investors holding these bonds to maturity will experience a loss of purchasing power. We expect these negative real rates, coupled with a resumption of Eurozone growth in the second half of 2013, to apply upward pressure on German yields in 2013. Of course, accommodative ECB policy and a less-than-robust economic expansion will likely hinder their ascent. Even so, keep in mind that even a moderate increase in yields will generate a loss for German bunds.

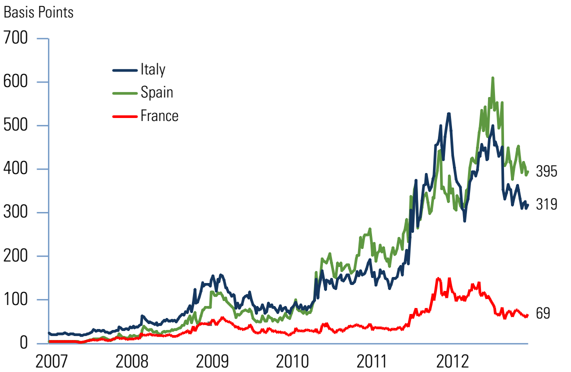
The 10-year UK gilt faces a similar fact pattern. Recent yields of 1.8% also stand below inflation expectations, while easy monetary policy and a lackluster economic recovery forestall rate increases. In contrast to Germany, though, the UK faces the potential for a faster normalization in interest rates in 2013, given its greater macroeconomic risks. Inflation has been resilient in the UK, suggesting that an economic uptick, which we expect, could quickly translate to higher inflation and hence bond yields. In addition, the UK fiscal adjustment is off-track, which could prompt the bond market to assign a higher sovereign premium to its bonds.

The case for peripheral bonds is more intriguing, despite their exposure to the same central bank and broad economic forces as Germany. As seen in Exhibit 62, these bonds benefit from much higher starting sovereign spread levels. In turn, their expected returns benefit from both a higher starting coupon and the potential for further spread compression as sovereign fears ease.

Overall, we think a limited exposure to Spanish and Italian bonds remains appropriate given the current level of spreads, but only for clients whose base currency is euro and who can withstand the significant volatility of these bonds. That said, euro-based clients should retain a core holding of higher-quality government bonds in the "sleep-well money" portion of their portfolio given their important portfolio hedging characteristics.

Exhibit 62: Eurozone Countries' 10-Year Government Bond Spreads over German Bunds

Spanish and Italian bonds benefit from a higher coupon and the potential for further spread compression as sovereign fears ease.

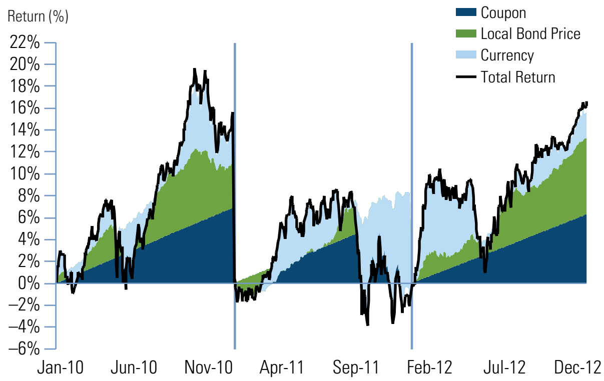


Data as of December 31, 2012

Source: Investment Strategy Group, Bloomberg

Exhibit 63: Components of Emerging Market Local Debt Return

All three sources of return contributed to 2012's gain in emerging market local currency debt.



Data as of December 31, 2012

Source: Investment Strategy Group, JP Morgan

Emerging Market Local Currency Debt

Emerging market *local currency* debt (EMLD) was among last year's highest-returning fixed income assets, rising some 17% (see Exhibit 63). We remain structurally positive on EMLD and believe it should be part of the strategic asset allocation of long-term investors for several reasons. First, the countries in the EMLD index have a relatively healthy sovereign outlook: At 40% of GDP, the underlying government debt that supports this asset class is less than half that of the developed economies.

Second, EM countries' improving ability to manage inflation has fostered demand for their fixed-income investments. One such source of growing demand is EM pension funds, a trend we expect to continue. While still in their infancy, these funds have seen assets increase threefold since 2002 to $1.7 trillion.[82] Even so, EMLD remains a relatively untapped asset class, with foreign institutional investors accounting for only about 10% of the universe.

Finally, EMLD offers unique diversification benefits to a global portfolio, given its lower volatility compared to EM equities and its above-mentioned structural advantages.

For the year ahead, we continue to recommend a tactical overweight to EMLD, in addition to the newly introduced strategic allocation. We expect mid- to high-single-digit returns in 2013, largely a function of EMLD's 5.5% yield and exposure to modest EM currency appreciation as the global economy improves. We also like the bonds' lower duration, which reduces their risk in a rising interest rate environment.

We also continue to prefer EMLD to emerging market *US dollar denominated* debt (EMD). Spreads in EMD now stand at post-crisis lows, with attractive credits like Mexico yielding only 2.5% over 10 years. That is well below the 5.5% on offer for peso bonds in EMLD. In fact, EMDs' still-intriguing 4.4% yield is driven up by highly speculative sovereign credits like Venezuela, Argentina, Ecuador and Egypt, which we find unattractive. Of equal importance, EMD's longer maturity bonds make it more sensitive to rising US treasury yields than EMLD.

Already, investors have started to question whether the commodity "supercycle" has run its course.

2013 Global Commodity Outlook

In contrast to the sharp gains in a variety of risky assets last year, commodities returns were unimpressive in aggregate. This is even more noteworthy considering some important supply shocks in 2012, including restrictions on Iranian oil exports and droughts in both the US and Russia. These factors, however, were ultimately offset by a slowdown in global growth and better-than-expected supplies. As shown in Exhibit 64, the net result was relatively flat returns in the overall S&P Goldman Sachs Commodity Index (GSCI), its second consecutive year of lackluster performance.

While a single year of flat returns is unremarkable, two in a row are more notable. Already, investors have started to question whether the commodity "supercycle" – the now decade-old upturn in emerging market demand that coincided with a supply-constrained market – has run its course. After all, persistently high prices over this period have led to both greater supply and lesser demand, creating a self-correcting dynamic. In this section, we explore this dynamic and its implications going forward.

Oil: The End of the Supercycle?

After a decade in which Brent oil spot prices increased almost 14% per year, the recent stagnation in prices has raised eyebrows. Brent has been mostly range-bound since late 2010, despite all the geopolitical uncertainty and concerns about peak oil in that period. Already, media speculation is growing that the commodity price rally that began in 2003 is rolling over, with *Commodity Supercycle Running Out of Steam* just one recent newspaper example.[83]

We see two factors that suggest we have reached at least a pause in the supercycle. First, there is the matter of demand. The rate of global consumption growth associated with the oil price peak of 2007 is now decelerating, falling from an average of 2.1% in the five years preceding the financial crisis to

Exhibit 64: Commodity Returns in 2012

2012's commodity returns were unimpressive in aggregate.

	S&P GSCI	Energy	Agriculture	Industrial Metals	Precious Metals	Livestock
2012 Average Spot Price vs. 2011 Average	–3%	–1%	–8%	–14%	4%	3%
2012 Spot Return	0%	–2%	4%	4%	7%	6%
2012 Excess Return*	0%	–1%	6%	1%	6%	–4%

Data as of December 31, 2012

* Excess return corresponds to the actual return from being invested in the front-month contract and differs from spot price return depending on the shape of the forward curve. An upward-sloping curve (contango) is negative for returns while a downward-sloping curve (backwardation) is positive.

Source: Investment Strategy Group, Bloomberg just 0.8–1.0% over the past two years. Similarly, the key incremental driver of oil price demand, emerging market industrialization, is slowing as well. Consider that Chinese GDP growth has fallen from 14.2% in 2007 to around 8% now. History suggests Chinese oil demand could fall further still as it transitions away from investment-led growth. After all, oil demand growth in Indonesia, Malaysia, Thailand and South Korea was collectively as high as 9% in the years preceding the 1997 Asian crisis, but fell below 3% thereafter.

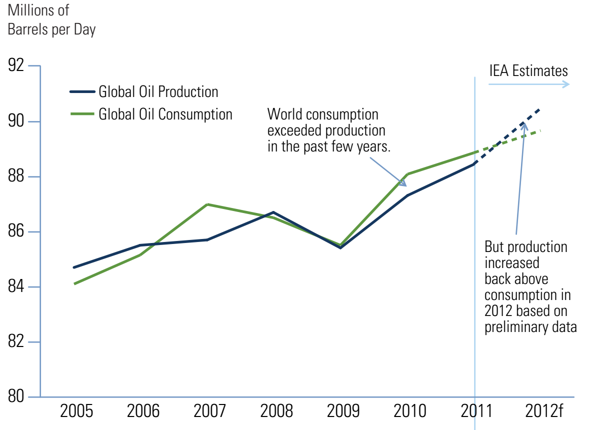
Second, there is the matter of supply. High oil prices often sow the seeds of their own demise, contrary to the notion of ever-higher "demand-rationing" prices. This is particularly relevant now, as this supercycle has lasted longer than the oil price spike of 1972–80. In turn, it has already engendered significantly higher exploration and production investments, with the International Energy Agency estimating that last year's $619 billion upstream investment was 2.5 times higher than in 2000 on a cost-inflation adjusted basis. Such high prices typically foster technological improvements that ultimately undermine prevailing oil prices. We see today's "shale revolution" in the US as a prime example of this tendency, as it shares many similarities with the discovery of large oil resources in the North Sea in the 1970s.

Perhaps as a prelude of an unfolding trend, shorter-term oil market dynamics have started to mirror these longer-term shifts. As shown in Exhibit 65, the persistent supply/demand gap of the last several years appears to have reversed in 2012. As a result, OECD inventories grew last year, the first expansion in three years. Moreover, in a nod to the unfolding shale revolution, production of US liquids is fast approaching levels last seen in the 1970s (see Exhibit 66). In fact, the US accounts for most of the forecasted non-OPEC production growth in 2013.

Having said all that, we do not expect an imminent departure from the oil price range of recent years. Profitably extracting US oil shale requires oil prices of at least $70/barrel, while less developed international projects can exceed $90/barrel. Similarly, many OPEC countries need oil prices of over $90/barrel to balance their budgets.

Exhibit 65: Global Oil Supply and Demand

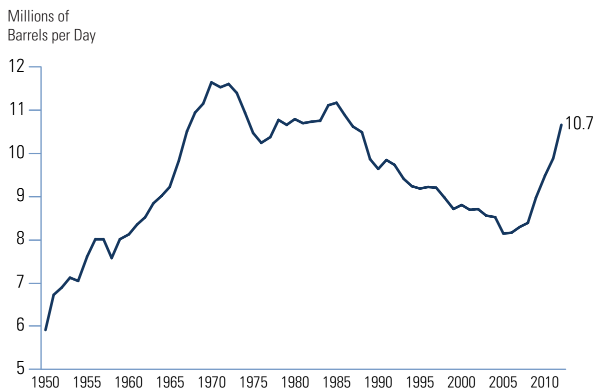
The persistent supply shortage of the last several years appears to have reversed in 2012.



Data as of 2012
Source: Investment Strategy Group, International Energy Agency

Exhibit 66: US Production of Oil Liquids

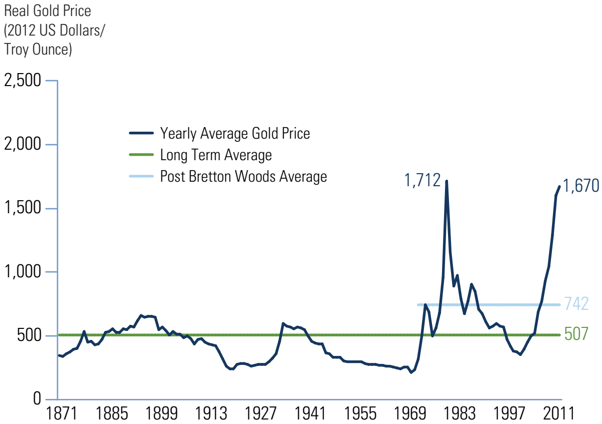
Production of US liquids is fast approaching levels last seen in the 1970s, compliments of the "shale revolution."



Data as of December 2012
Note: Includes crude oil, NGLs, LPGs and biofuels.
Source: Investment Strategy Group, US Department of Energy

Exhibit 67: Real Annual Gold Price

Last year's average price has 56% downside to long-term average levels.



Data as of December 31, 2012

Source: Investment Strategy Group, World Gold Council, Bloomberg

Meanwhile, Saudi Arabia has already stated a preference for prices around $100/barrel and is in a position to cut production to support prices, even at the expense of limiting future gains from the higher spare capacity that would result.

As such, we expect Brent oil prices to stay between $85 and $110 this year, implying a slightly lower average price than in 2012. Meanwhile, West Texas Intermediate (WTI) should remain at a $5–15 discount to Brent, reflecting the ongoing tension between the ramp-up of new outbound pipelines, rapidly increasing supply from domestic production growth and refinery turnarounds. While prices are likely to remain volatile within this range, particularly given unpredictable geopolitical developments, we do not see a compelling tactical opportunity in oil at this time.

Gold

Like the energy markets, gold experienced a few subtle shifts in 2012. For one, last year's 7% gold price gain was the smallest since 2001 and fell significantly behind the S&P 500's 16% total return. In fact, it was the first time in the decade-long commodity supercycle that gold meaningfully underperformed the S&P 500. It was also the first time over the last decade that physical investment demand actually *declined*.

While these developments could simply be statistical noise, we remain circumspect about gold for other reasons. As seen in Exhibit 67, current gold prices have significant downside relative to historical levels. Keep in mind that the average real gold price since the end of dollar convertibility in 1971 is $742/ounce, some 56% below last year's average price. Moreover, gold trades well above its average production cash cost of around $750 per ounce. In fact, over 80% of gold production costs less than $1,000/ounce to mine.[84] This is even more troubling when we consider current gold prices leave little room for further gains compared to historical peaks. Indeed, the average annual real gold price during the 1980 peak was $1,712, a mere 2.4% higher than the 2012 average.

The difference between gold's price and its production cost presumably reflects the premium investors are willing to pay for its ability to hedge against inflation and the debasement of the dollar. Yet, gold's performance in this capacity has been spotty historically. Changes in the dollar, real rates and the Consumer Price Index (CPI) explain less than half of gold's historical price movements. Meanwhile, in 60% of the episodes when inflation surprised to the upside in the post-World War II period, gold actually underperformed inflation.

We also note that gold is increasingly becoming a tarnished safe haven. After all, gold prices actually declined over 30% during the worst of the financial crisis, while the dollar served as the better store of value, rallying 24% over the same period. Even outside the crisis, gold experienced a larger peak-to-trough decline than equities over any three-year period since 1969 (–64.5% for gold vs. –56.8% for equities). Moreover, the correlation between gold and equities was *positive* 52% over the last year, making it an inferior hedge relative to US Treasuries' *negative* 69% correlation. These statistics reinforce the fact that gold, despite its safe-haven moniker, has equity-like volatility.

Lastly, while low real rates have supported gold prices by diminishing the opportunity cost of holding it, the opposite is true in a rising rate environment. Similarly, the gradual improvement in growth and risk sentiment we expect makes gold vulnerable, as the uncertain macro backdrop has suppressed real rates and increased the demand for gold. That gold prices have already risen on expectations of higher inflation and dollar weakness exacerbates this vulnerability, as the failure of either to materialize could lead to investors selling gold.

Against this backdrop, we do not think gold is an appropriate substitute for the "sleep-well" portion of a client's portfolio. Moreover, gold appears vulnerable over the medium term, as a combination of a range-bound US dollar, an improving US economy, moderate inflation and slowly rising real interest rates lift the opportunity cost of holding gold. That said, we remain tactically neutral in the year ahead, as emerging market central banks continue to buy record amounts of gold to diversify their foreign reserves, providing a short-term offset to gold's numerous headwinds.

Key Global Risks

Although this year's *Outlook* argues that the "wall of worry" facing financial markets may be less daunting, it remains formidable. The ongoing European sovereign crisis, fiscal imbalances in the US and the trajectory of Chinese growth will all continue to foster volatility. In addition, many of today's risks are political in nature, leading to a wide range of outcomes that can quickly undermine even thoughtful market forecasts. We also begin this year with more fiscal constraints and less central bank flexibility in the developed markets, leaving fewer tools available to address any new sources of market stress.

The risks that follow, while by no means exhaustive, represent those that would be most detrimental to our central case view:

Escalation of Eurozone Sovereign Crisis: Last year made clear that Eurozone politicians, when pressed, would do just enough to pull the region back from the brink. However, it is premature to rule out significant setbacks, given the sheer number of countries, interest groups, and institutions with overlapping authority that make up the European Union. Several adverse developments – such as a protracted stalemate after the Italian elections, large-scale labor strife in France, a deeper-than-expected recession, or a contentious fight over Catalan independence in Spain – could engender renewed concerns about European growth or the viability of the euro itself.

A delay in raising the debt ceiling could result in a US default on its debt and/or trigger another US credit downgrade.

Hard Landing in China: The outgoing Chinese government managed a soft landing in 2012. Even so, formidable challenges face the country as it transitions from government-directed to a more liberalized consumer-based economy. These challenges should sustain the risk of a hard landing. In turn, this is likely to keep a wide range of dependent markets on edge, particularly in commodities and other emerging market equities.

Renewed Downturn in US Housing: With prices on the rebound, existing home sales back to pre-crisis levels, and affordability at all-time highs, the housing market is in better shape today than at any point since its downturn started in 2005. Even so, persistent problems with mortgage financing availability and still-high foreclosure rates remain threats to the unfolding recovery.

Delay in Raising US Debt Ceiling: While Congress recently passed legislation to avert the "fiscal cliff," the looming and likely contentious debate on the US debt ceiling, as well as the contours of future spending cuts and tax reform, muddy the US fiscal outlook. A delay in raising the debt ceiling could result in a US default on its debt and/or trigger another US credit downgrade.

Botched Exit from Stimulus Programs: Policymakers face a difficult balancing act as they try to maintain enough support to sustain the recovery, but not so much as to foster either runaway inflation or excessive indebtedness. The resulting risk comes in two forms:

Fiscal policy: The deleterious effect on growth of austerity measures in parts of the Eurozone illustrates the risks facing developed markets. Thus, premature fiscal adjustments could derail the recovery in global growth.

Monetary policy: The unsustainably loose monetary policy instituted by central banks in much of the developed world will eventually need to be withdrawn. While we think this is a very low probability risk in 2013, ultimately monetary authorities will face a difficult choice: if they withdraw stimulus too soon, it could derail the recovery; if too late, it could lead to an inflationary outcome and/or a loss of confidence in the government's credibility, raising borrowing costs through higher interest rates.

Escalation of Currency War Rhetoric: Japan's recent rhetoric about weakening the yen has rekindled fears about currency wars. In turn, provocative headlines about competitive devaluation could renew concerns that countries will resort to the type of protectionist policies that hobbled global trade during the Great Depression. That said, we assign the risk of actual trade wars a very low probability in 2013.

Major Geopolitical Crisis: An outbreak of war, a major terrorist act or simply a greater probability of either one could undermine confidence, disrupt trade and cause an economically damaging spike in oil prices. The tectonic shifts we are witnessing in the Middle East in the wake of the Arab Spring are sources of great uncertainty, particularly since the region accounts for over a third of global oil exports. Moreover, the violent civil war in Syria, the uneasy constitutional confrontation in Egypt, the drawdown of US forces from Iraq and Afghanistan, and the renewed confrontation between Israelis and Palestinians are meaningful sources of risk in their own right. Although the risk of a military confrontation between Israel and Iran over its nuclear program has eased for now, the potential remains for the situation to devolve into a larger conflict.

Other Risks: Other risks that are less likely, but could nonetheless have a profound geopolitical and market impact, include instability in the two most fragile nuclear powers, Pakistan and North Korea, as well as the potential for the new Chinese leadership to engage in maritime conflicts with regional neighbors, especially Japan, the Philippines, and Vietnam. Other highly destabilizing events include a massive natural disaster like the tsunami in Japan or Superstorm Sandy, or a large-scale intentional or accidental cyber attack.

In Closing

THE FURTHER WE MOVE AWAY from the depths of the financial crisis, the more we see former skeptics coming around to the view that a core allocation to US assets makes sense. We believe this confidence is well placed. Our longstanding premise of US preeminence relative to major economies and emerging markets still holds. In fact, in some cases, US comparative advantages have become more entrenched.

This becomes clearer the more we consider the risks facing the Eurozone, Japan and key emerging market countries. These risks emanate from persistent structural fault lines, and therefore create potential pitfalls that no prudent investor can afford to ignore.

That said, opportunities always present themselves in uncertain and risky environments. While we remain bullish on US assets – particularly equities – we identify investment opportunities in some non-US asset classes and have detailed those in this *Outlook*.

We have sought to look over the horizon, beyond our usual one-year window. We believe that some areas of opportunity are more obvious when one considers a longer-term investment horizon. By extending this year's forecasts to the intermediate term, and factoring in longer-term global trends, we hope to provide our clients with the insights they need to make the appropriate asset allocation decisions.

Footnotes

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