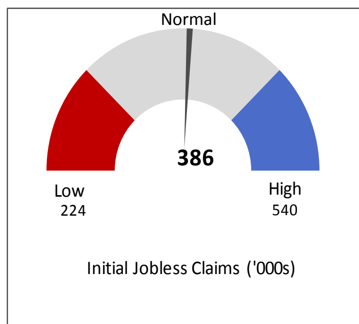
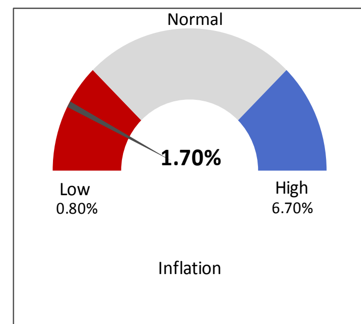
HPM PARTNERS

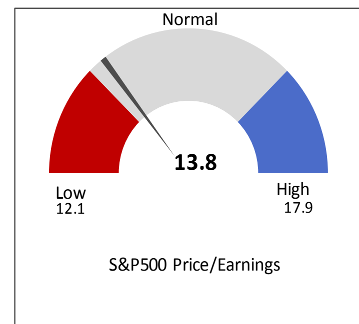
INVESTMENT ADVISORY ● WEALTH PLANNING ● TAX SERVICES ● PRIVATE CAPITAL FINANCE

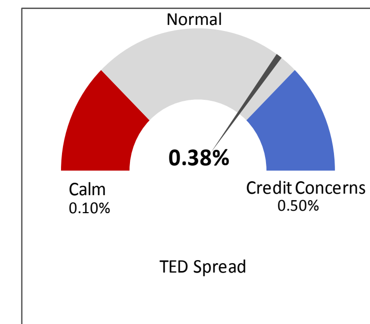
Market Digest

Second Quarter 2012









Exorbitant Privilege

The term “exorbitant privilege” was first used by French President de Gaulle and Finance Minister Giscard d’Estaing in 1965 to describe what they saw as the great advantages conferred on the dollar by reserve currency status. Reserve currency status confers both privileges and obligations on the host currency. Indeed, as we will discuss below, reserve currency status may be both a curse as well as a blessing for the dollar.

With continuing concerns about the long-term safety of the dollar, we think this is an opportune time to review the benefits, responsibilities and drawbacks of being a reserve currency; examine whether the dollar is about to be toppled off its perch and explore alternatives to the dollar, if any.

Source: Classical Numismatic Group, Inc.

Role of a Reserve Currency

The US dollar is currently the primary trade and reserve currency for the world. Dollars are freely traded and accepted around the world and prices of important commodities such as oil and gold are quoted in dollars. In this role, the US is required to supply dollars on demand, whether to fulfill other countries’ needs for liquidity or for safety during periods of economic instability or geopolitical unrest. The dollar’s success in living up to this obligation was clear when investors continued to seek refuge in the dollar after Standard & Poor’s stripped the US of its prized AAA rating in August 2011. Even the threat by some lawmakers to allow the US to default on its debt obligations was brushed aside when investors needed a safe haven from turmoil elsewhere in the world.

As the image on the right illustrates, a variety of currencies have fulfilled the role of global currency over the ages. In general, the prevailing imperial or mercantile power of its time assumed the role of global reserve to facilitate and promote trade outside its borders. At various points in history, the currencies of each of the Roman, Byzantine, Venetian, Hapsburg and Ottoman Empires were used as reserve currencies.

There have also been periods where multiple currencies shared the role of reserve currency. During the 19th century, there were three main reserve currencies – the French franc, Deutsche mark and British pound. Among the three nations, Britain was the dominant imperial, mercantile and industrial power, so sterling came to be the dominant currency for global trade in the 19th and early 20th century.

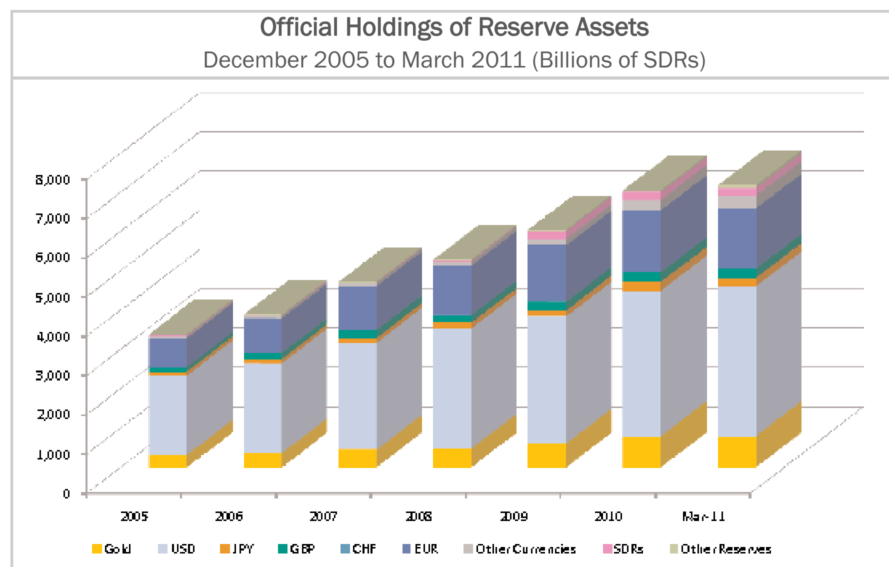
Although the US economy was already larger than that of Britain by 1870, the dollar was not used much outside the US. Due to the size of the domestic market, US trade was mainly internal. Also, dollars were not readily accepted externally as they were issued by a fragmented system of state-chartered banks. With no federal oversight or protection, the banking system was plagued by inadequate capital, risky lending and wide variations in bank note issuance, deposits and reserve levels. Under these conditions, the US economy was subject to frequent boom and bust cycles. The establishment of the Federal Reserve System in 1914 finally allowed the US to adopt a centralized monetary policy and enabled the wider use of dollars outside the US as US trade with other nations expanded.

Subsequently, the dollar and pound shared the role of global reserve through the 1920s and 1930s. Even though the US was unquestionably the greater economic power, sterling continued to play a major role and it was not until 1944 that the dollar became the sole global reserve, a role which has continued until today.

Exorbitant Privilege

While other nations have fretted about the dollar's exorbitant privilege for many years, calls for an alternative to the dollar have grown stronger in the aftermath of the financial crisis. Countries that hold their financial reserves in dollars are concerned that the US lacks the political resolve or financial discipline to tackle its fiscal problems and that this will lead to the erosion of their reserve holdings. Tellingly, in her first major US interview after becoming IMF Managing Director in 2011, Christine Lagarde invoked the exorbitant privilege and called on the US to fulfill its role as steward of the world's reserves and put its economic house in order.

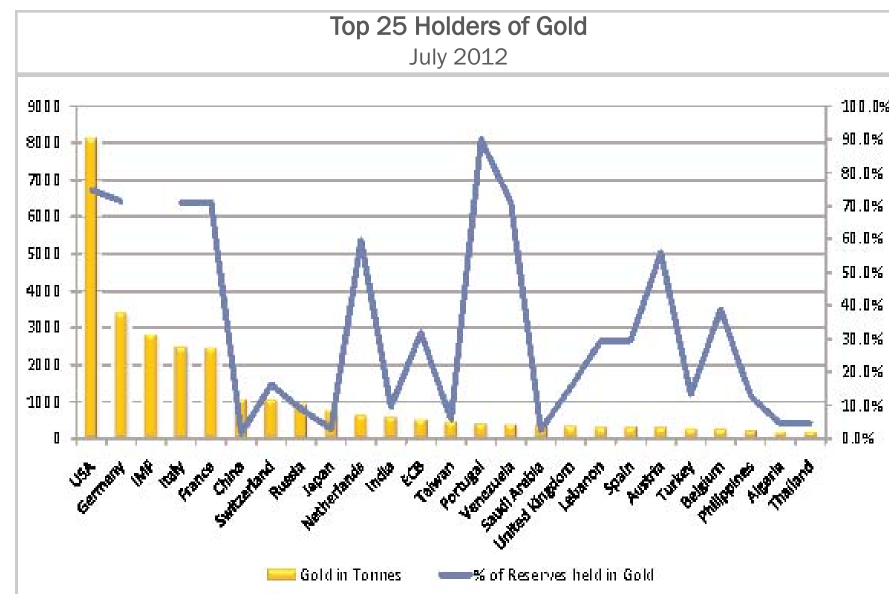
The Role of Gold in Reserves



Source: IMF Annual Report 2011 and IMF Data & Statistics Archives

Gold has been used in coinage for millennia (and silver to a lesser extent), and many currencies were convertible into gold. In the 19th century, most of the industrialized nations explicitly adopted the gold standard and linked their currencies directly to gold as a mechanism for introducing fiscal discipline. Under the gold standard, each nation defended its currency in relation to gold and the treasury or central bank was required by law to buy and sell gold without limit at the stated price. Most critically, the level of money creation, and hence, economic growth, was directly constrained by the finite amount of gold held by the country. This was a major impediment to economic growth. Nonetheless, the gold standard was widely used until the two World Wars and Great Depression depleted the gold reserves of many nations and forced them to stop redeeming gold.

There are two options for holding official reserves – currency and gold. As of March 2011, 88% of the world's official reserves were held in currencies and 11% held in gold (see chart at left). The remaining 1% shown as other reserves represents member countries' positions in the IMF itself. Given the current dissatisfaction with the dollar and the euro as reserve currencies, why is the amount of gold reserves so low? If we take the top 25 holders of gold reserves and look at the percentage of their reserves held in gold, we see some interesting results:



Source: World Gold Council

Exorbitant Privilege

Developed nations such as the US, Germany, Italy and France hold a significant percentage of their official reserves in gold. Levels range from a low of 38% for Belgium to a high of 75% for the US. Japan is an outlier among the developed countries, with only 3% of its official reserves held in gold. We believe this is because Japan depleted its gold holdings to pay World War II reparations and did not rebuild its reserves.At #17 among the top 25 holders, the UK is an interesting case. Following a long period of stagnation in the gold price, the Bank of England sold off half its gold reserve for £2 billion in 1999. The prevailing price was $300 per ounce; at today's prices, those same 400 tonnes would fetch £13 billion. The sale is now seen as a major policy blunder by the Bank of England, and the UK is again rebuilding its gold reserves.

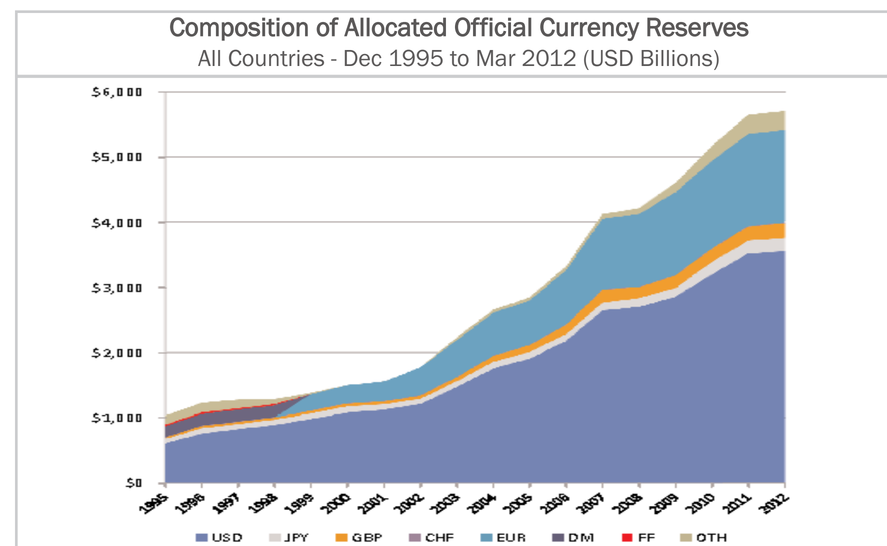
The BRICS countries are accumulating huge reserves through trade surpluses with the rest of the world. Brazil (#33 and, therefore, not on the chart) holds only 0.5% of its reserves in gold. Russia holds 9%, India holds 10%, China holds 1.6%, and South Africa holds 12.5% of reserves in gold. These figures are surprising when we consider that three of the five BRICS countries are among the world's top five gold producers (China is #1, South Africa is #3, and Russia is #5; Australia is #2 and the US #4.).

Thus, it appears that the world's emerging economic powers are avoiding holding a large portion of their official reserves in gold and would rather hold their reserves in currency for some reason. This may appear strange, given that some are major producers of gold; however, recent history suggests that gold may not be an effective inflation hedge. Gold was quoted at a spot price of $1,587.95 per ounce on July 14, 2012. It peaked at $850.00 per ounce in 1980, equivalent to $2,275.99 per ounce in today's dollars.

A further rationale for holding currencies goes back to the Asia financial crisis of 1997/98. A prolonged economic boom had led to inflated property and stock markets among the Asian Tiger countries, and their governments took on huge amounts of debt to finance infrastructure development. With their currencies pegged to the dollar, most of these loans were also in dollars. When concerned international investors became reluctant to roll over the short-term debt, it quickly led to a crisis of confidence. This in turn, put downward pressure on the local currencies. Thailand was forced to float the baht as it lacked the foreign currency to support the fixed peg to the dollar. Like falling dominos, Indonesia, South Korea and the Philippines all underwent drastic devaluations and the imposition of severe austerity measures in return for IMF aid. Hong Kong was able to defend its peg to the dollar, as the Monetary Authority held very large foreign currency reserves.

It is estimated that the Asian Tigers lost a decade of economic progress from the crisis; however, it taught them two lessons: One, they should accumulate and hold massive foreign currency reserves to prevent a future run on their currency and as ammunition to fight currency speculators. Two, drastic austerity measures are a one-size-fits-all solution that can cause more harm than good. Famously, Malaysia repudiated the IMF and was able to reform its economy without inflicting as much harm on its population as the countries that complied with the IMF. In summary, these experiences may explain why we see countries holding enormous levels of foreign currency reserves.

Currency Reserves



Source: COFER, Currency Composition of Foreign Reserves, IMF, June 2012

Exorbitant Privilege

The chart on the previous page shows the allocations to various currencies from 1995 onwards. Fully 62% of all currency reserves are held in dollars and a further 25% in euros. No other currency represents more than a 4% share. It is rather striking that despite their criticism of US monetary policy and the well-known problems in the Eurozone, so many countries continue to hold the bulk of their reserves in dollars and euros. In particular, we note that the allocation to euros does not seem to have been affected by the Eurozone crisis, falling from 27.5% at year-end 2010 to 25.0% at year-end 2011 and now 24.9%. As we will see below, this may be simply due to the lack of other viable options.

The Era of Dollar Supremacy

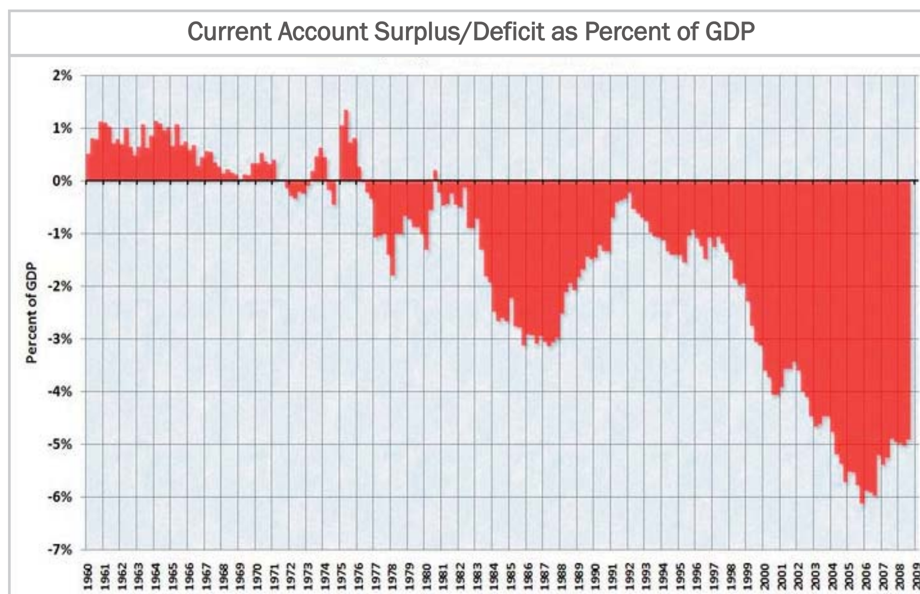
The dollar's dominance of world finance began as World War II was ending. Prior to the end of the war, 44 allied nations got together at Bretton Woods, New Hampshire to discuss how they could avoid repeating the policy mistakes that worsened the Great Depression. The war had impoverished most of the participants, and they feared slipping into a severe recession once the hostilities ended. The US was considerably better off than the other allied nations, and as the largest and strongest economy, it was only natural that the others looked to the Americans for leadership.

The gathering culminated in the 1944 Bretton Woods Agreement, under which the dollar was established as the world's principal reserve currency. All other currencies were pegged to the dollar at fixed exchange rates and the dollar was the only currency convertible to gold at a fixed $35 per ounce. In effect, the US assumed the role of central banker to the rest of the world and took on the responsibility for supplying liquidity to other nations as needed.

With the supply of dollars based on the finite level of US gold reserves, it was soon apparent that the supply of dollars in circulation was far smaller than what was required to facilitate the global reconstruction effort and fund growing world trade. The US was forced to run persistent current account deficits in order to provide liquidity for the world, and because the dollar was backed by gold, the deficits were covered by drawing down on US gold reserves.

This situation went on for a number of years, but by 1971, the US had spent down 78% of its gold reserves and foreign holders were losing faith in its ability to fulfill its role. Ultimately, President Nixon cut the link to gold on August 15, 1971, making the dollar a "fiat currency" not backed by any physical reserves and ushering in an era of floating exchange rates.

Once the US went off the gold standard, its customary trade surpluses with other nations quickly turned into continuous current account deficits (see below).



Source: Balance on Current Account, FRED Economic Data, St. Louis Fed

It is important to recognize the distinction between the current account deficit and the budget deficit. The current account deficit is not the evil twin of the budget deficit, but rather a reflection of the massive inflows of capital into the dollar based on reserve status. By definition, a budget deficit is harmful as it denotes an inability to control domestic spending. A current account deficit, on the other hand, reflects not just the excess or deficit of imports over exports (the trade surplus or

deficit), but also the reserve-related inflows outflows affecting the capital account. Since the decoupling of the dollar and gold in 1971, foreign inflows to purchase dollar assets have far exceeded US outflows to purchase foreign currency assets; hence, the US has run a perennial current account deficit.

Even 40 years ago, the US was running chronic current account deficits, and it was being severely criticized for doing so. The economist Robert Triffin noted that the flexibility to run large deficits is both a key obligation and a key drawback of being a reserve currency. In his view, the deficits were not caused by irresponsible domestic policy, but rather a reflection of the dollar's reserve status, and hence, were crucial to keep the monetary system functioning. His insight is now known as Triffin's Dilemma: If the US fails to run deficits, the international monetary system will be deprived of liquidity and grind to a halt; but if the US continues to run deficits in order to fuel economic growth around the world, confidence in the dollar as the world's reserve currency will be shaken.

Benefits of Reserve Status

One of the primary benefits of reserve currency status is seigniorage – the ability to print $100 bills at negligible cost and then exchange these for goods and services worth $100. Another benefit of reserve status is that foreign holders are willing to hold US dollars for safety and liquidity. It is estimated that half of the dollars in circulation (roughly $400 billion) are held overseas for this purpose.

Aside from the perceived prestige of being a reserve currency, there is the opportunity for increased financial services and commercial business when the currency is used for global trade. This factor has helped turn New York, Tokyo and London into major global financial centers.

A further benefit to reserve currency status is that high demand for dollars from foreigners seeking a safe haven allows US interest rates to be lower than they would be otherwise. In effect, the foreign holders subsidize domestic borrowers and the Federal government, who pay far lower interest on their borrowings. With debt service low, both the US government and US taxpayers can carry higher debt levels. For this reason, some say that reserve status allows the US to live beyond its means.

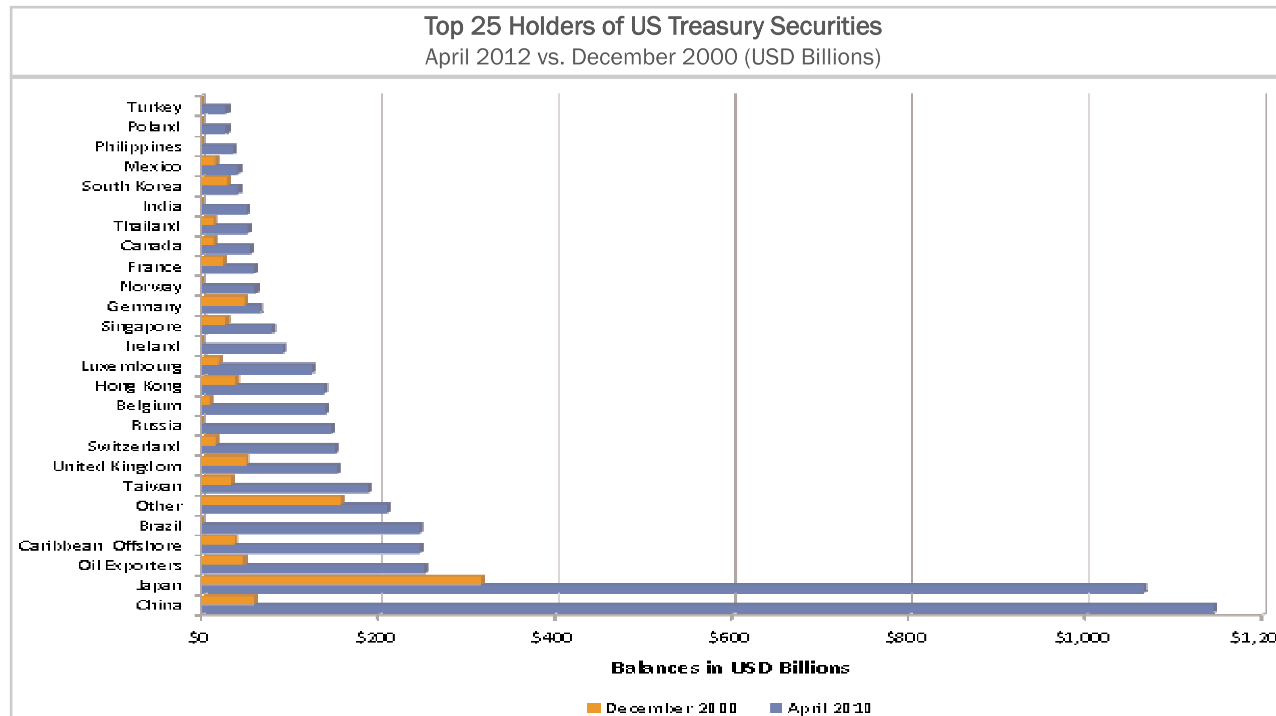
By keeping interest rates at historically low levels, the Fed has benefited debtors at the expense of creditors. Savers and foreign holders have experienced negative real yields, as the inflation rate is higher than the interest rate they are paid. This is a major contention among foreign holders of US debt securities, especially among sovereign holders.

It is widely believed that the US derives a huge financial benefit from its reserve status. However, a recent McKinsey study to quantify this benefit concluded that in a normal year, the net financial benefit to the US for reserve currency dominance is all of $40 to $70 billion, or 0.3% to 0.5% of GDP. McKinsey concluded that the main benefit is the ability to run larger fiscal deficits and looser monetary policy, but that with so much US Treasury debt now in foreign hands, it will be much harder to do so in future.

Drawbacks of Reserve Status

In several respects, the dollar's reserve status can be seen as a liability. The US is required to supply dollars on demand, and it is forced to juggle conflicting domestic and foreign policy considerations. For example, the Fed undertook various quantitative easing programs to jump start the US economy. While these programs may have benefited the domestic economy, they were criticized by foreign holders because historically, excess liquidity has led to high inflation, which then serves to depreciate the currency.

Another reason some economists view reserve currency status as a liability is that it forces the reserve country to continually toggle between higher unemployment and higher debt. If the government wants to maintain the value of the currency, a higher interest rate will attract capital inflows from abroad and lead to further currency appreciation. The higher currency, in turn, will make US exports less competitive and eventually lead to higher US unemployment. If the US government wants to reduce domestic unemployment, it can do so by reducing interest rates



Source: US Treasury, International Capital System - Major Foreign Holders of US Treasury Securities

to provide relief to borrowers. However, the lower rates will attract more borrowers, leading to higher levels of private or public debt. If the government then tries to discourage borrowing by raising interest rates, it will trigger higher unemployment.

From this perspective, the huge US trade deficit, low level of national savings, low US interest rates and high levels of public and private debt are direct consequences of the dollar's reserve currency status. As long as foreigners want to hold US dollars, the US is forced to supply these dollars, which further exacerbates the trade deficit. This point is highlighted in the chart above, which compares the top 25 holders of US Treasury securities in 2000 and 2012. With the exception of Japan, it is evident that the traditional holders of US Treasurys have been eclipsed by new buyers – emerging economies such as Brazil that have accumulated large budget surpluses by exporting commodities and natural resources to the developed countries.

China has become the biggest holder of US Treasury securities in a relatively short period, mainly by exporting cheap manufactured goods to the rest of the world and accumulating these surpluses in dollars. Of greater significance, the People's Bank of China has been an aggressive buyer of dollars to keep the renminbi undervalued, thereby making Chinese export goods cheaper for foreign buyers.

As the Chinese have continued to accumulate dollars, many commentators have expressed fears that China could cause serious damage to the US dollar and US economy if it refused to buy any more dollars. This is unlikely to happen for a

couple of reasons. First, China needs an external repository for the surpluses that it continues to build up. As explained above, the domestic economy is not large enough to absorb the surpluses, and China has already experienced massive bubbles in real estate and equities. The government is unwilling to allow further speculative pressures to build up in the economy, and the dollar is the most accessible and most liquid repository for these ever-growing flows. Second, and more important, China is the largest holder of US Treasury debt. Any fall in the value of the dollar would directly affect the value of China's existing US dollar assets. For these reasons, the Chinese government can neither afford to stop buying dollars in the near term, nor to talk down the US dollar.

Japan is another interesting case. Historically, Japan accumulated large trade surpluses with the US, through US imports of automobiles, electronics and industrial goods manufactured in Japan. More recently, investors used the Japan carry trade to borrow yen cheaply and reinvest in higher yielding US Treasury securities. As Japan came to be viewed as a safe haven during the recent turbulent markets, the Bank of Japan began to intervene aggressively in the currency markets, buying dollars and selling yen to prevent the yen from rising and making Japanese exports less competitive. Thus, Japan continues to be among the largest holders of US Treasury debt.

We see a number of parallels between Japan and China. Both are heavily export driven, but China has an undeveloped domestic market that is still growing rapidly, whereas Japan is caught in a 20+ year deflationary spiral. Both countries need to maintain a competitive (read undervalued) exchange rate to drive exports. Now that the euro is in trouble, there is no real alternative to the dollar; hence, we can expect China and Japan to continue accumulating dollars for the foreseeable future.

Alternatives to the Dollar

In March 2009, the governor of the Bank of China called for a sweeping overhaul of global finance and replacement of the US dollar with a new reserve currency administered by the IMF and modeled on the Special Drawing Rights currently issued by the International Monetary Fund.

There are a number of problems with the Chinese proposal. First, the SDR is not a currency. It is simply a claim to the hard currency reserves of the IMF member nations and certain supranational institutions. Second, SDRs are only available to central banks and multilateral institutions. Third, SDRs are a currency basket whose value is derived from a basket of four designated currencies (dollar, yen, euro and sterling). It does not make sense to view SDRs as an alternative to the dollar when the dollar comprises 62% of the basket. Fourth, as we saw with the euro, a global currency can only be viable if it integrates both monetary policy and fiscal policy. After the euro, no sovereign nation is likely to cede control over monetary policy to a global central bank without some assurance that the country will receive fiscal assistance when needed.

The call by China was quickly picked up by other countries, including the other three BRIC nations and Iran. There is an element of mercantilism or political rivalry at play, with both China and Russia seeking to dilute what they see as undue US influence on world finance, and the Iranians looking for a way to sidestep international sanctions that prevent them from trading oil in dollars. Putting these issues aside, there is widespread concern in the international community that the US is abusing its privileged position by flooding the world with dollars to finance its runaway domestic spending.

The Chinese have made it clear that commensurate with their growing economic might, they want the renminbi to be a global currency and that they want it to eventually supplant the dollar. The government has already allowed the yuan to be traded on a limited basis outside China, and it is working hard to develop a domestic capital market. By all accounts, it will take many years for China and others to catch up to the dollar.

Among the necessary preconditions to achieve reserve status are the following:

1. The currency should be widely used outside its home country for cross-border trade.
2. The currency should be fully convertible into other currencies on demand.
3. Investors must have confidence that the currency will be stable and hold its value over time.

4. The domestic financial system and monetary policy should be well- regulated, and appropriate investor protections should be in place for all holders.
5. Financial markets in the home country must be liquid enough to support massive inflows and outflows into the currency.
6. Monetary and fiscal policy must be integrated.

Judged by these criteria, there are few alternatives to the dollar. The euro was gaining ground as a reserve currency until now. Further progress in adoption will be unlikely until the Eurozone crisis is resolved. Additionally, a major structural shortcoming needs addressing. At present, the ECB is responsible for monetary policy, but responsibility for fiscal policy and taxes still resides with the individual member states. Discussions about fiscal integration are ongoing, but Germany, Finland and the Netherlands are reluctant to assume the fiscal burden for Greece, Italy, Spain and the other peripherals facing difficulties.

Other currencies such as the Canadian dollar, Australian dollar, Norwegian krone, Chinese renminbi and Russian ruble have been touted as potential candidates for reserve currency status. However, none of them fulfills all the preconditions. Canada, Australia and Norway have very small home markets and their resource-based currencies are subject to considerable fluctuations in commodity prices. And of course, Russia and China have a long way to go in developing functioning and well-regulated markets that are trusted by investors.

In September 2009, the United Nations Conference on Trade and Development (UNCTAD) came out with a recommendation to replace national currencies with a new "global currency" managed by a "Global Reserve Bank" and based on a basket of national currencies (Reform of the International Monetary and Financial System, Trade and Development Report, UNCTAD, September 2009). The report called for a system of fixed exchange rates, more stringent financial regulation and diversification away from the dollar as a prescription for avoiding future crises. The UNCTAD proposal may sound unworkable, but even the IMF has proposed a new global currency named the bancor, to be issued by a new global central bank (Reserve Accumulation and International Monetary Stability, Strategy, Policy & Review Department, IMF, April 13, 2010). Neither proposal is likely to come to fruition, but clearly a lot of people are seeking an alternative to the dollar and not finding one.

Currency Trilemma

The currency trilemma or "impossible trinity" was first raised in 1963 by Nobel laureate Robert Mundell. According to Mundell, a nation's leaders have to choose among three desirable but mutually exclusive outcomes:

1. An independent monetary policy to suit domestic needs.
2. The benefit of free capital flows.
3. A stable exchange range.

History and experience suggest that it is impossible to achieve all three outcomes simultaneously. When countries were on the gold standard, they elected to have a fixed exchange rate and open capital markets. Similarly, countries in the Eurozone have open capital markets and fixed exchange rates within the euro bloc, but they have sacrificed monetary independence to the ECB. China has a stable exchange rate managed very aggressively by the People's Bank of China and can raise and lower rates based on domestic conditions; however, capital movements in and out of the currency are severely restricted.

In comparison to these others, the US has the most flexible set-up, with an independent Federal Reserve to set monetary policy, an open capital market and a system of flexible exchange rates. The dollar's value can fluctuate in response to both domestic and global needs. This flexibility has been an important factor in the dollar's continuing importance in global finance. The currency can appreciate sharply in times of financial or geopolitical turmoil and weaken during times of prosperity. Unlike the US, many other countries would be unwilling to live with this level of volatility and the inability to control their exchange rate.

Canada, Australia and Norway have been proposed as future reserve currency candidates. Examining the criteria, we see that all three fall short in two respects. One, all are resource-based currencies. The volatility of commodity prices adds

considerable instability to their exchange rate, and this is undesirable in a reserve currency. Two, none of their home markets is large enough to accommodate massive currency flows without disrupting the economy. Finally, neither China nor Russia can be considered a viable candidate, for all the reasons detailed earlier.

Not every country automatically aspires to reserve currency status. For instance, when certain Latin American and Asian central banks began to diversify out of dollars by buying Japanese government bonds in 2011, the Bank of Japan intervened forcefully to bring down the value of the yen. By buying dollars, it effectively converted the foreign yen purchases into dollars.

Similarly, during the Eurozone crisis, the Swiss National Bank established a CHF1.20 peg to the euro. It has repeatedly intervened, selling Swiss francs and buying euros, to ensure that the franc does not appreciate beyond that level. The Swiss National Bank is determined to keep the franc from appreciating, in the expectation that investors will seek safety in other alternatives, such as dollars, yen or gold.

Intervention is a costly undertaking as it requires countries to deplete reserves in defending their currencies. As these examples show, certain nations are determined to maintain control over their currencies at any cost.

Conclusion

Reserve status entails both privileges and obligations on the host currency. A key responsibility is to protect the longer term value of the currency through prudent monetary and fiscal policy. As the world's primary reserve currency, it is incumbent upon the US to live up to its obligations to other nations, who have entrusted their reserves to the US.

We have seen growing calls for an alternative to the dollar; however, few viable options are available in the near term. The euro is hobbled by the ongoing crisis and its structural deficiencies. Japan and Switzerland do not want to take on the responsibility, while Russia and China are not ready to take on this role. It is conceivable the renminbi will be among the options, but it will take considerable time to fulfill the necessary conditions for it to become acceptable as a global reserve.

Thus, we conclude that the US dollar is the only currency capable of filling the role of reserve currency. The continued large US current account deficits, unstable banking sector and expansionary Fed policy, all serve to undermine confidence in the dollar, but the world will live with these problems until a better alternative comes along, and none looks likely to appear for the foreseeable future. Many informed investors believe that we will not see the dollar eclipsed by a single currency, due to the onerous demands on the host country, and that the more likely outcome will be a fragmented system based on multiple currencies. Until then, the world is stuck with the dollar as its primary reserve, and in turn, the dollar is stuck with this role.

Given this conclusion, what implications are there for portfolio positioning? Though we expect the dollar to be the world's primary reserve currency for some years to come, we still recommend that US investors seek diversification opportunities outside the dollar, mainly in the currencies of emerging and developing markets. These economies are growing at considerably faster rates than the US and will continue to do so for years to come. Currency appreciation has historically accompanied higher economic growth, so exposure to these markets should be beneficial for US investors.

Additionally we can expect continuing US fiscal imbalances to exert downward pressure on the dollar and cause gyrations in the US markets. Since prospects for meaningful reform appear remote in the current highly partisan climate, diversifying into other markets should help to mitigate these effects.

Second Quarter Performance Summary

Asset Class	Benchmark	2Q12 Return	YTD Return	Performance Summary
Cash	Citi 3-month T-bill	0.02%	0.03%	Cash yields to remain low for the foreseeable future. Fed is reportedly considering further easing measures to help boost the flagging US economic recovery.
Domestic Gov't / Agency	BC U.S. Gov't & Related 5-7	1.45%	1.07%	US Treasurys benefited from a flight to quality as weaker economic data raised concerns of a stalling US and global outlook. Strong demand has helped push yields to historical lows.
Domestic Tax-Exempt	BC Municipal Bond 5-Year	1.21%	1.80%	Municipals posted strong returns in Q2, boosted by rising state revenues and overall low default levels, coupled with continuing high demand for tax free investments.
TIPS	BC TIPS	3.15%	4.04%	High demand for safety and declining US Treasury yields contributed to another strong quarter for returns on TIPS.
Investment-Grade Debt	BC Inv. Grade Intermediate	2.06%	2.37%	Reversing a move into riskier assets in Q1, investors sought safety in higher quality bonds in Q2 as the market environment deteriorated.
High-Yield Debt	BC High-Yield Intermediate	1.74%	6.99%	High yield spreads widened in Q2, reflecting higher market volatility and fears of an economic slow-down. Default rates remain exceptionally low.
Global Bonds	Citi World Gov't Bond Index (Hedged)	0.92%	0.41%	The Eurozone crisis weighed heavily on Q2 returns. Rising yields on Spanish and Italian sovereign debt called into question the EU's ability to contain the crisis.
Emerging-Markets Debt	Morningstar EM Composite Bond Index	1.90%	6.86%	Based on strong demand for emerging markets debt as a higher yielding alternative to developed market debt, Q2 issuance was the highest on record.
Large-Cap Equity	S&P 500	-2.75%	9.49%	US equity markets were hit by fears of a global slowdown in Q2. Weak US job growth and manufac-turing data added to concerns about the Eurozone crisis and the US fiscal situation.
Small/Mid-Cap Equity	Russell 2000	-3.47%	8.53%	Small- and mid-cap stocks had a difficult Q2, due to the perceived risks of smaller stocks in a deterio-rating economic environment.
International Equity	MSCI EAFE	-6.93%	3.31%	Deteriorating economic conditions in Europe had a major impact on EAFE returns in Q2. Returns for US investors were further hurt by the stronger US dollar.
Emerging-Markets Equity	MSCI EM	-8.79%	3.97%	Performance was strongly affected by faltering demand in key developed markets, leading to weaker commodity prices and economic slowdowns in China. Brazil and other supplier economies.
Real Estate	DJ Composite REIT Index	3.20%	12.68%	Q2 performance was boosted by strong returns for infrastructure, health care and mortgage REITs, offset by weakness in industrial and apartment REITs.
Commodities	DJ UBS Commodity Index	-4.57%	-3.74%	Commodities had a difficult quarter overall. With the exception of natural gas (up 30% in Q2), all other major commodities fell on fears of a global slowdown leading to weaker demand.
Private Equity	S&P Listed Private Equity	-2.55%	14.10%	Q2 returns were impacted by the economic slowdown, weak public market comparables and tighter financing conditions. Nonetheless, US and European PE firms saw strong fund raising activity, while Asia experienced a slowdown in activity.
Hedge Funds	HFRX Global Hedge Fund Index	-1.86%	1.23%	Performance reflect the challenges of slowing global growth, lower risk tolerance and the continuing Eurozone crisis. Defensive strategies such as hedged equity, event driven and relative value performed well and helped to offset losses on macro, directional and commodity-based strategies.

Source: Bloomberg; Data as of 7/15/12.

Second Quarter Market Summary

						Annualized			
		2011	1Q12	2Q12	YTD	1-Year	3-Year	5-Year	10-Year
US Equity Benchmarks	**Price**								
Dow Jones Industrial	12,880.09	8.38%	8.84%	-1.85%	6.83%	7.96%	17.87%	1.98%	5.99%
Nasdaq Index Composite	2,935.05	-0.79%	18.98%	-4.76%	13.32%	8.35%	17.99%	3.42%	8.12%
S&P 500	1,362.16	2.11%	12.59%	-2.75%	9.49%	6.52%	16.07%	0.19%	5.32%
Russell 1000 (Large Cap)	750.61	1.53%	12.91%	-3.11%	9.40%	5.44%	16.36%	0.38%	5.74%
Russell 1000 Growth	634.43	2.64%	14.69%	-4.02%	10.08%	6.90%	17.21%	2.83%	5.92%
Russell 1000 Value	671.67	0.39%	11.12%	-2.20%	8.68%	3.91%	15.48%	-2.21%	5.36%
Russell Mid Cap	1,044.59	-1.50%	12.95%	-4.19%	8.22%	-0.53%	19.40%	1.12%	8.61%
Russell Mid Cap Growth	472.33	-1.65%	14.52%	-5.60%	8.10%	-2.04%	18.83%	1.89%	8.55%
Russell Mid Cap Value	1,062.99	-1.38%	11.41%	-3.26%	7.78%	0.38%	19.70%	-0.14%	8.22%
Russell 2000 (Small Cap)	798.49	-4.17%	12.44%	-3.47%	8.53%	-1.18%	17.62%	0.41%	7.12%
Russell 2000 Growth	460.76	-2.91%	13.28%	-3.94%	8.81%	-1.86%	17.94%	1.90%	7.47%
Russell 2000 Value	1,049.00	-5.50%	11.59%	-3.01%	8.24%	-0.48%	17.23%	-1.20%	6.56%
S&P GICS Sectors	**Weight**								
Consumer Discretionary	9.6%	6.13%	15.96%	-2.60%	12.95%	11.68%	25.63%	3.90%	6.21%
Consumer Staple	11.5%	13.99%	5.54%	2.88%	8.57%	15.71%	17.88%	8.33%	7.25%
Energy Sector	11.4%	4.72%	3.88%	-5.99%	-2.34%	-6.80%	12.44%	1.04%	11.06%
Financials	14.6%	-17.06%	22.05%	-6.83%	13.72%	-2.33%	8.27%	-14.72%	-2.90%
Health Care	13.0%	12.73%	9.06%	1.75%	10.97%	10.17%	15.16%	3.65%	4.95%
Industrials	10.5%	-0.59%	11.31%	-3.56%	7.35%	0.44%	19.77%	-0.14%	5.62%
Information Technology	19.4%	2.41%	21.46%	-6.68%	13.34%	15.38%	18.07%	4.51%	7.49%
Materials	3.5%	-9.75%	11.19%	-4.19%	6.53%	-5.98%	14.82%	0.04%	7.08%
Telecommunication Services	3.0%	6.27%	2.08%	14.13%	16.51%	16.60%	17.95%	1.71%	8.06%
Utilities	3.6%	19.91%	-1.62%	6.55%	4.82%	15.68%	14.44%	3.00%	8.77%
Global Equity Benchmarks	**Price**								
MSCI World Index	1,235.72	-4.98%	11.73%	-4.85%	6.30%	-3.12%	11.38%	-2.27%	5.93%
MSCI AC World x-USA	312.11	-6.87%	12.01%	-5.36%	6.00%	-4.73%	11.14%	-2.05%	6.44%
MSCI EAFE	1,423.38	-11.67%	11.00%	-6.93%	3.31%	-11.97%	6.35%	-5.42%	6.04%
MSCI EAFE Growth	1,086.71	-11.80%	12.12%	-7.14%	4.11%	-11.01%	7.86%	-4.03%	5.72%
MSCI EAFE Value	2,282.10	-11.57%	9.87%	-6.78%	2.43%	-12.99%	4.75%	-6.89%	6.27%
MSCI Emerging Markets	937.35	-18.30%	13.99%	-8.79%	3.97%	-14.74%	9.76%	0.17%	14.16%
MSCI BRIC	263.03	-22.78%	13.87%	-11.61%	0.65%	-21.14%	3.09%	-2.58%	15.36%
Nikkei 225	9,006.78	-15.58%	20.29%	-10.62%	7.52%	-6.25%	-0.93%	-11.34%	0.03%

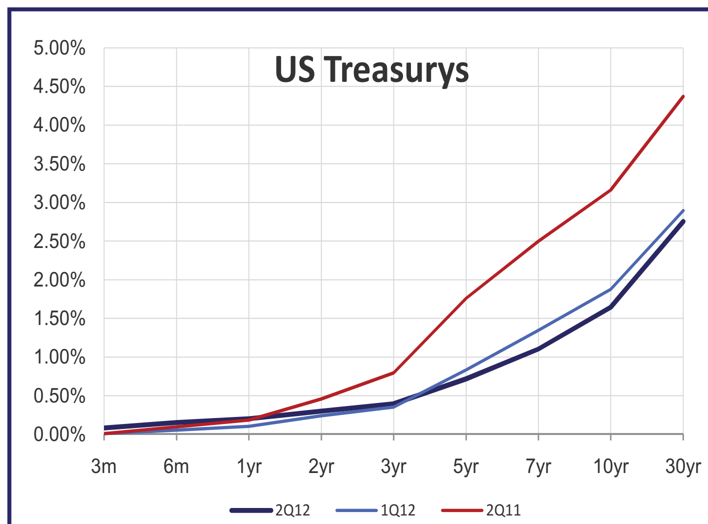
Global Equity Valuation Summary

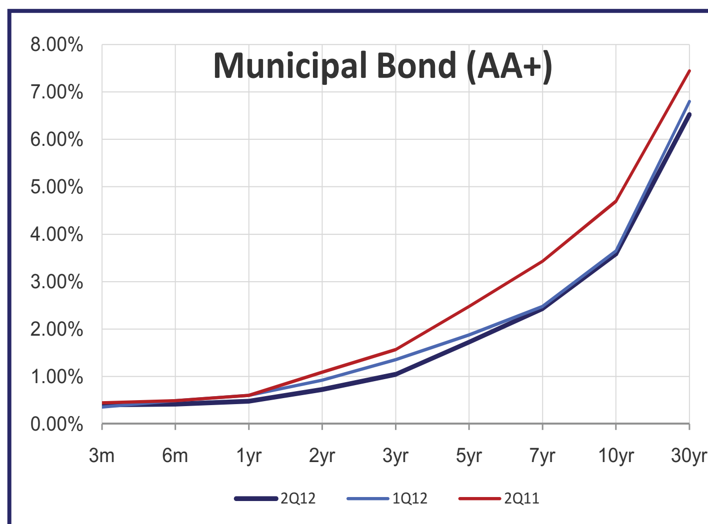
Benchmarks	1Q12	2Q12	QoQ
S&P 500			
Price	1,408.5	1,362.2	-46.3
Trailing P/E	14.5	13.8	-0.8
Est P/E	13.5	13.1	-0.4
Trailing 12m Earnings	96.8	98.8	2.0
Est Forward 12m Earnings	104.2	103.8	-0.5
Implied 1yr Earnings Growth	7.6%	5.0%	-2.6%
Russell Mid Cap			
Price	1,097.6	1,044.6	-53.0
Trailing P/E	18.2	16.9	-1.4
Est P/E	15.7	15.5	-0.2
Trailing 12m Earnings	60.3	62.0	1.7
Est Forward 12m Earnings	69.8	67.5	-2.3
Implied 1yr Earnings Growth	15.9%	9.0%	-6.9%
Russell 2000			
Price	830.3	798.5	-31.8
Trailing P/E	31.3	31.5	0.2
Est P/E	20.3	19.6	-0.8
Trailing 12m Earnings	26.5	25.4	-1.2
Est Forward 12m Earnings	40.9	40.8	0.0
Implied 1yr Earnings Growth	54.0%	61.0%	7.0%
MSCI EAFE			
Price	1,553.5	1,423.4	-130.1
Trailing P/E	14.2	12.9	-1.3
Est P/E	11.4	10.5	-0.9
Trailing 12m Earnings	109.7	110.6	0.9
Est Forward 12m Earnings	136.8	136.2	-0.7
Implied 1yr Earnings Growth	24.7%	23.1%	-1.6%
MSCI Emerging Markets			
Price	1,041.5	937.4	-104.1
Trailing P/E	11.8	11.3	-0.5
Est P/E	10.1	9.3	-0.8
Trailing 12m Earnings	88.2	82.8	-5.4
Est Forward 12m Earnings	103.1	101.1	-2.0
Implied 1yr Earnings Growth	16.9%	22.1%	5.2%

Source: Bloomberg; Data as of 7/15/12.

Second Quarter Market Summary (Continued)

		2011	1Q12	2Q12	YTD	Annualized 1-Year	3-Year	5-Year	10-Year
Interest Rates	**Yield**								
Prime Rate	3.25	0.00	0.00	0.00	0.00	0.00	0.00	-5.00	-1.50
3m Treasury Bill	0.08	0.02	0.02	0.02	0.07	0.06	-0.09	-4.68	-1.61
US LIBOR 3m	0.46	-0.01	-0.01	-0.01	-0.12	0.21	-0.14	-4.90	-1.40
US Treasury 3m	0.09	0.02	0.02	0.02	0.07	0.07	-0.11	-4.69	-1.61
US Treasury 10yr	1.67	-0.56	-0.56	-0.56	-0.22	-1.47	-1.84	-3.45	-3.17
US Treasury 30yr	2.75	-0.58	-0.58	-0.58	-0.14	-1.62	-1.53	-2.45	-2.76
Fixed Income									
Citi 3-month T-bill		0.08%	0.01%	0.02%	0.03%	0.04%	0.10%	0.87%	1.77%
BC U.S. Gov't & Related 5-7		6.08%	-0.38%	1.45%	1.07%	5.01%	4.44%	5.77%	4.63%
BC Municipal Bond 5-Year		6.93%	0.58%	1.21%	1.80%	5.32%	5.50%	5.97%	4.58%
BC TIPS		13.56%	0.86%	3.15%	4.04%	11.66%	9.63%	8.44%	7.23%
BC Investment Grade Intermediate		7.84%	0.30%	2.06%	2.37%	7.47%	6.93%	6.79%	5.63%
BC High Yield Intermediate		4.79%	5.16%	1.74%	6.99%	7.11%	15.59%	8.07%	9.78%
Citi World Gov't Bond Index		6.35%	-0.51%	0.92%	0.41%	2.94%	5.23%	7.34%	6.82%
Morningstar EM Composite Bond Index		2.65%	4.86%	1.90%	6.86%	5.86%	12.63%	8.34%	
Real Estate	**Price**								
Dow Jones Composite REIT Inde	202.19	1.68%	9.19%	3.20%	12.68%	7.43%	24.84%	-3.73%	3.55%
FTSE EPRA/NAREIT Europe	1,325.81	-9.92%	9.97%	3.14%	13.43%	-4.53%	16.09%	-9.17%	5.44%
Commodities	**Weight**								
DJ UBS Commodity Index		-13.37%	0.87%	-4.57%	-3.74%	-14.84%	2.75%	-4.29%	3.19%
Energy	21.0%	-16.01%	-6.11%	-8.96%	-14.52%	-26.29%	-14.74%	-18.77%	-6.29%
Agriculturals	33.0%	-14.40%	3.16%	2.23%	5.47%	-5.92%	11.08%	4.94%	3.54%
Livestock	6.7%	-2.36%	-5.19%	3.09%	-2.26%	-1.47%	1.04%	-11.48%	-4.94%
Softs	8.3%	-14.02%	-2.20%	-11.88%	-13.82%	-26.74%	14.37%	5.31%	1.20%
Industrial Metals	20.2%	-24.27%	5.75%	-9.04%	-3.81%	-23.71%	5.28%	-8.72%	8.93%
Precious Metals	10.8%	4.50%	8.49%	-6.83%	1.08%	-1.44%	20.81%	17.71%	15.25%
Private Equity / Hedge Funds	**Price**								
S&P Listed Private Equity Index	128.66	-18.85%	17.09%	-2.55%	14.10%	-8.32%	15.17%	-9.91%	
HFRX Global Hedge Fund Index	1122.95	-8.87%	3.14%	-1.86%	1.23%	-5.41%	1.32%	-3.68%	
Currencies	**Price**								
ICE Dollar Index	81.63	1.46%	-1.46%	3.32%	1.81%	9.29%	0.74%	-0.17%	-2.61%
Euro / US Dollar	1.27	-3.16%	2.95%	-5.07%	-2.27%	-12.25%	-3.47%	-1.19%	2.51%
Pound / US Dollar	1.57	-0.44%	2.99%	-1.88%	1.06%	-2.21%	-1.76%	-4.74%	0.27%
US Dollar / Yen	79.79	-5.19%	7.75%	-3.72%	3.74%	-1.23%	-6.00%	-8.32%	-3.97%





Municipal bond yields are shown on a comparable, adjusted basis using a 35% tax rate.

Source: Bloomberg; Data as of 7/15/12.

Important Information

This document contains general information that is not applicable to everyone. The information contained herein should not be construed as personalized investment advice. Past performance is no guarantee of future results. There is no guarantee that the views and opinions expressed in this document will come to pass. Information contained herein has been obtained from sources believed to be reliable but is not guaranteed accurate. All information is as of July 15, 2012, political and economic changes after that date may impact the accuracy of the information herein and HPM Partners LLC ("HPM") is not obligated to update this document. Investing in the financial markets involves risk, including the risk of loss of the principal amount invested, and may not be appropriate for everyone. The information presented is subject to change without notice and should not be considered as a solicitation to buy or sell any security. HPM is an SEC-registered investment adviser with offices in New York, Illinois, Ohio, Michigan and California. For information pertaining to the registration status of HPM, please contact us or refer to the Investment Adviser Public Disclosure website (www.adviserinfo.sec.gov). For additional information about HPM, including fees and services, send for our disclosure statement as set forth on the Form ADV using the contact information herein. Please read the disclosure statement carefully before you invest or send money.