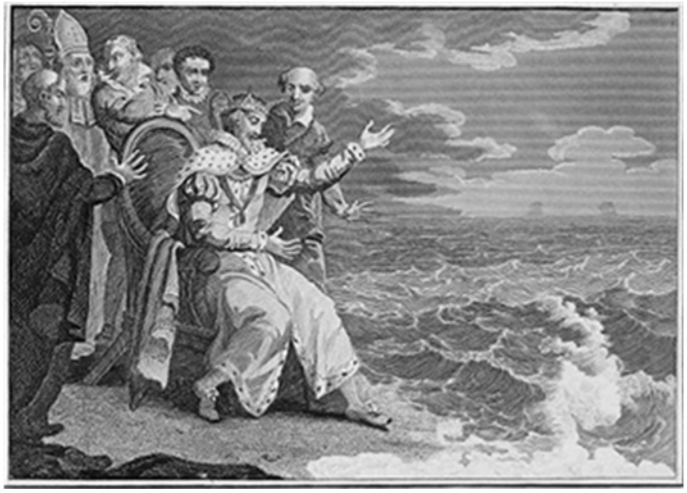
Angeles
INVESTMENT ADVISORS

Commentary
Fourth Quarter 2014

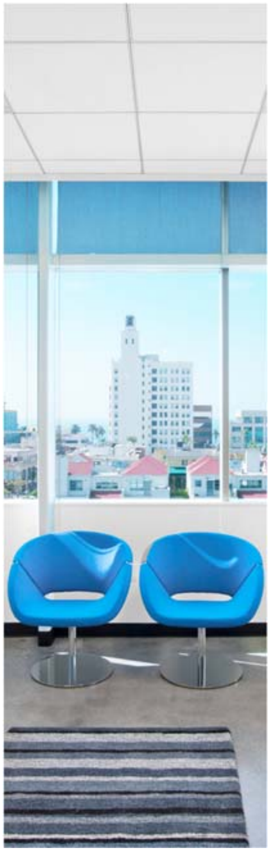
Canute



Beginning in the late 8th century, an intrepid band of explorers set out from their harsh, frozen lands, first to plunder, then to conquer most of northern Europe and beyond. To the east they settled the vast European steppes of Poland and Ukraine, south as far as Sicily, and west to Iceland, Greenland and onto Canada.

The Vikings exacted tribute from all the peoples they conquered, but they were not interested in building an empire, and most were allowed to keep their laws and customs and kings, as long as annual payment was made. Viking families settled in these new lands, more or less blending in with the local people.

One such area was known as Danelaw, most of England north of London, where Danish law was observed. At the end of the 9th century, King Alfred of England won a decisive victory over the Vikings, and England had peace for the next century. But in the year 1000, Svein Forkbeard resumed the Viking raids along the English coast. Two years later, the English king, Ethelred, allied with Richard, the powerful Duke of Normandy, by marrying his sister, Emma, and thus emboldened, Ethelred struck back at the Vikings by ordering the English to kill all the Scandinavians in Danelaw. Among those killed was Svein's sister and her husband, which greatly displeased Svein. The next two years, Svein raided England all along the south and east coasts to devastating effect. In 1005, a terrible famine struck England, and Svein withdrew his army back to Denmark. But he would return, with a bigger army and his son, who would, in time, become one of the most notorious men in history, his name synonymous with bombastic conceit. As we shall see, history has his reputation exactly backwards. His words and actions offer us lessons for the ages, especially pertinent in our times.



Averages can be deceiving, and the final quarter of 2014 was a case in point. Global equities gained fractionally, masking wide differences among markets. Regionally, nearly 1,000 basis points separated the US (+5.2%) from Europe (-4.4%) and emerging markets (-4.5%). Within emerging markets, the discrepancies were wider: Shanghai was the big winner, up 54%

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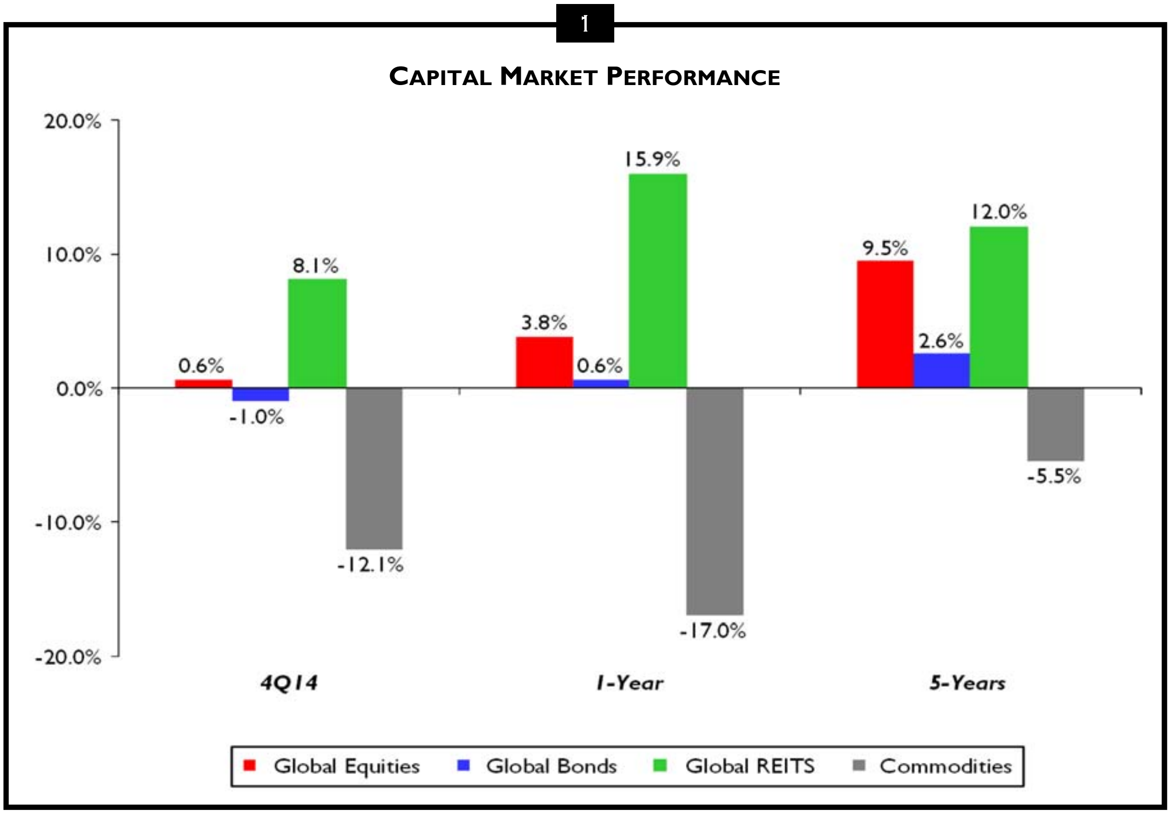

CAPITAL MARKET PERFORMANCE

"The pace and magnitude of the price decline was severly under-estimated."

in the quarter after languishing all year, while the oil-related markets of Russia (-34%), Nigeria and Norway (each off 25%) paced the losers. Ukraine lost one-third of its market value in the quarter, although that was probably due less to the price of oil than the Russian troops (or just concerned local citizens) occupying the eastern part of the country.

Commodity prices offered their usual high volatility and dispersion. Wheat and corn surged more than 15% in the quarter, but still posted double-digit declines for the year. Coffee fell 5% in the quarter, but was the year's big winner, up 55%. Of course, the most influential move was seen in oil, which plummeted 27% in the quarter, off 50% since July.

Commodity prices are cyclical, which should be self-evident with a little historical perspective, but is often lost in the heat of the moment. For the past 40 years, there have been distinct periods of investment followed by exploitation, where rising prices prompt more investment, which eventually reverses as prices fall and investment slows. Chart 2 depicts this cycle showing the clear inverse relationship between oil prices and the age of the capital stock. Beginning about 18 months ago, additional rail and pipeline capacity freed the massive surge in shale oil to Gulf Coast refineries, thus beginning the swift decline in prices.

The pace and magnitude of the price decline was severely underestimated. The scale of North American shale oil coming to market was not foreseen, global demand appeared strong and big supply disruptions from Libya and Iran were not expected. When the market did come to appreciate each of these factors, the Saudis announced they would be maintaining their level of production in the

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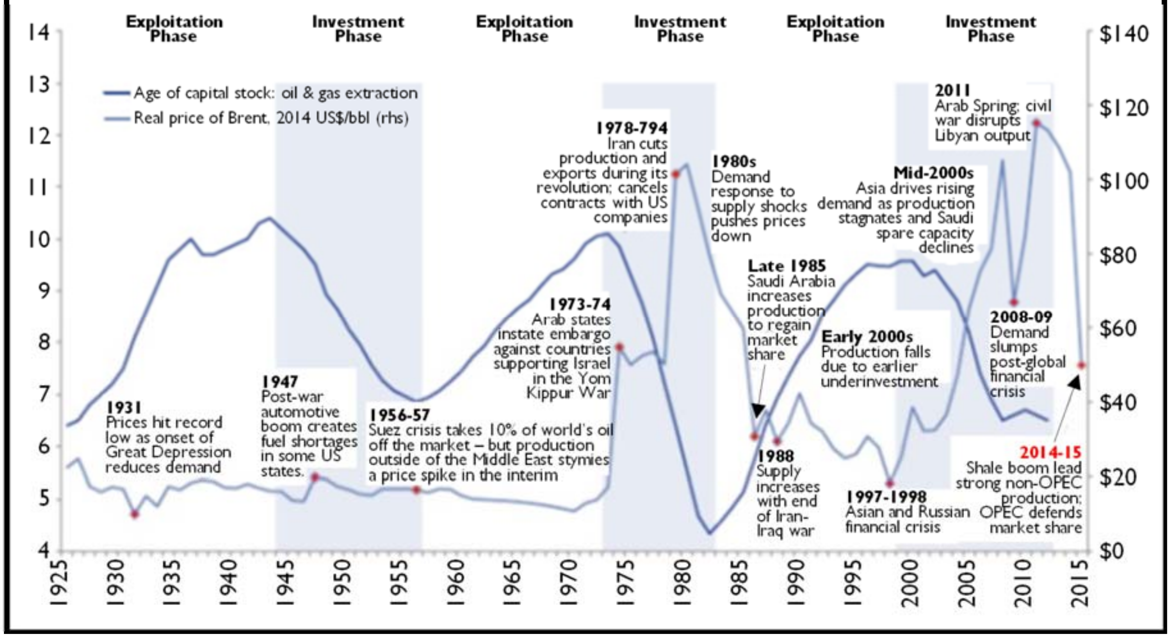
Age of oil and gas capital stock, years (LHS) and Brent price, 2014 US$/bbl (RHS) over structural oil industry cycles



Source: BEA, Goldman Sachs Global Investment Research

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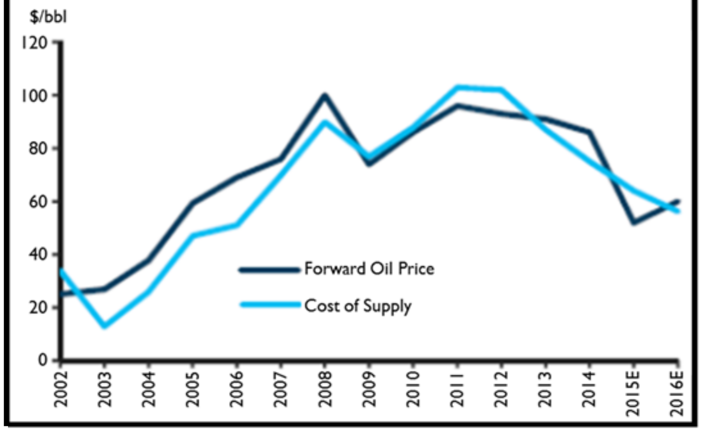
Relationships of U.S. Tight Oil Supply Costs vs. Forward Price



Source: Barclays Research, Bloomberg

face of weaker prices, transforming a moderate price decline into a free-fall.

In the past 40 years, there have been two non-recessionary periods where oil dropped more than 50%: in 1985-86, when oil fell from $31 in November to $12 in July 1986, and in 1997-98, when oil fell from $25 to $11 over these two years. In each case, the US economy performed well, with real GDP rising 4.5% and 4.7%, respectively, following the trough in oil prices.

The sharp fall in oil prices can be expected to pressure energy companies, but even here, the industry has a long track record of aligning costs with revenues (Chart 3). For example, well costs rose 75% between

"...the industry has a long track record of aligning costs with revenues."

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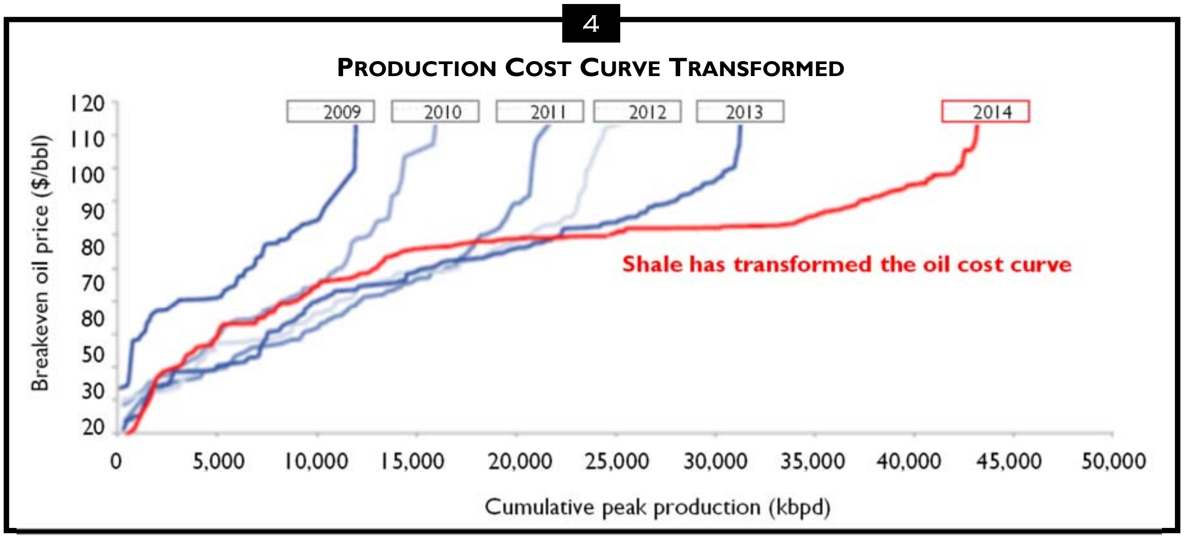


Production Cost Curve Transformed

Source: Chart: Goldman Sachs Global Investment Research, Glossary: EIA, EPA, IEA, ASPO, Schlumberger Oilfield Glossary.

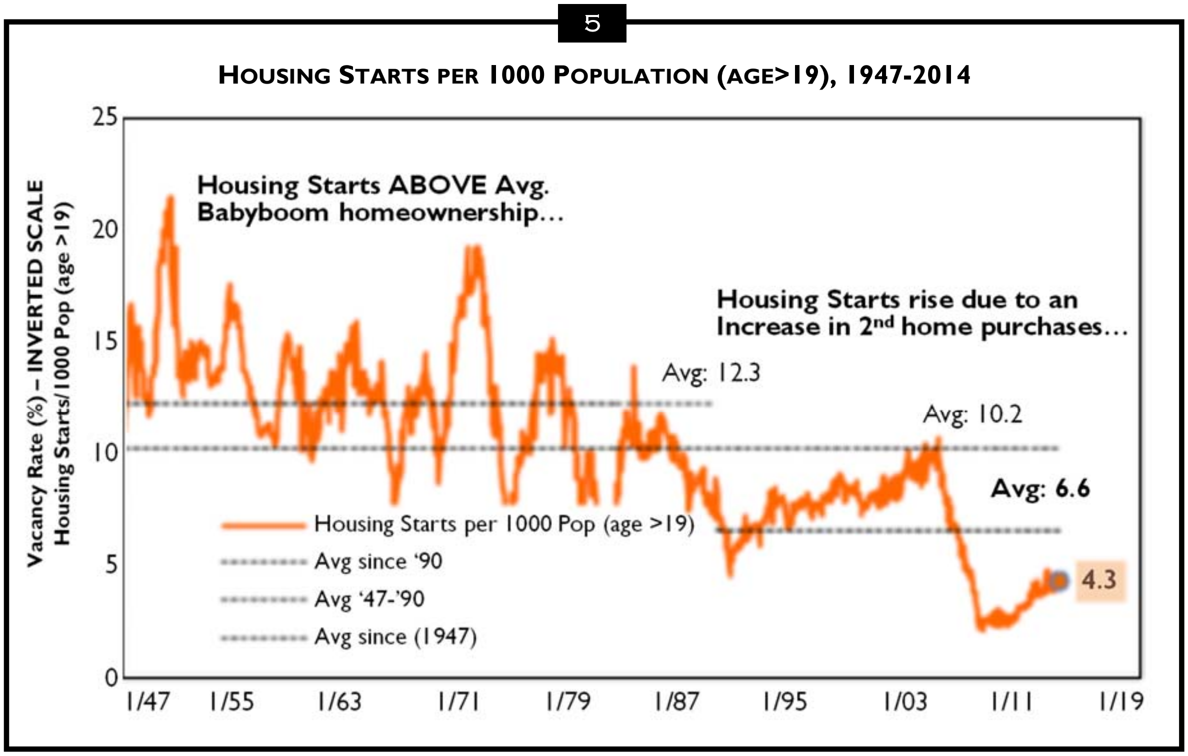
"Lower inflation and stronger growth is the outcome of lower oil prices…"

1975 and 1982, then completely reversed over the subsequent two years. We are already seeing deflation in shale exploration costs, with day rates for land drilling rigs down 30% and other efficiencies being squeezed throughout the supply chain. Some companies will no doubt be severely harmed, but more than 70% of U.S. oil production comes from companies with investment-grade debt ratings, and should be able to weather the storm. Meanwhile, technological advances will continue to drive costs lower, as seen dramatically in Chart 4.

The drop in the price of oil is best understood as a transfer of wealth from producers to consumers. The big net consumers of oil—Japan, China, et al.—are the beneficiaries, while the large producers—especially Russia, Iran, Venezuela—are most harmed. Russia, for instance, has already seen a 50% decline in the value of the ruble (tied to oil, but also to other factors) despite spending $100 billion to defend the currency. Interest rates are 17% and inflation has jumped to 11%, and a recession of 5-6% of GDP is almost a lock for this year. Russia still has $400 billion of reserves, enough to service all of its debt, but at some point, a default or capital controls may occur.

For Western economies, including the US, lower oil prices are a net positive to the economies, but are often associated (wrongly) with deflation. Deflation is a decline in the general level of prices. It makes debt service more expensive, negates the effects of stimulative monetary policy and risks a self-reinforcing loop of delayed spending and lower output. But lower oil prices create none of these. Debtors benefit from the higher income available, part of which is spent by consumers, thus boosting sales and government revenue. Lower inflation and stronger growth is the outcome of lower oil prices, which seems like a good combination, for central bankers as well as everyone else.

Leadership of the global economy continues to rest with the United States. Real GDP grew at a 2.6% annual pace in the fourth quarter, and the economy grew 2.5% in 2014, even with a 2.1% decline in the frigid first quarter of



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HOUSING STARTS PER 1000 POPULATION (AGE>19), 1947-2014

Sources: J.P. Morgan and Bloomberg

the year. This was a little faster than the 2.3% average pace since the economy bottomed in mid-2009. Most of the recent data have been very strong, from consumer sentiment at an 11-year high to record highs in corporate profits. Annual auto sales have doubled to 17 million units over the past five years and bank lending rose 8% in 2014. Housing starts were up 5.3% last year, to the highest level since 2007, with further growth likely (Chart 5).

The economy's strength is best seen in the employment data. Three million net new jobs were created in 2014, better than 250,000 per month. Employment gains averaged 2.5% p.a. in the second half of the year, about the fastest pace in the last two decades. The hiring rate is close to normal and the firing rate is near a record low. The unemployment rate fell from 6.6% to 5.6% over the course of the year. Hourly wage growth was up a modest 2%, but the number of workers and hours worked are at record highs, and personal income rose 4.6% last year.

The US has the highest potential growth rate in the developed world due to more flexible labor markets, advanced technology and lower costs of energy and labor. Electricity prices in the US are less than half that in Europe or Japan, and natural gas costs twice as much in Europe and three times as much in Japan as in the US. Considering the hours worked, costs of regulation and bureaucracy, etc., European workers are nearly twice as expensive as US laborers.

U.S. economic strength contrasts sharply with the moribund European economy.

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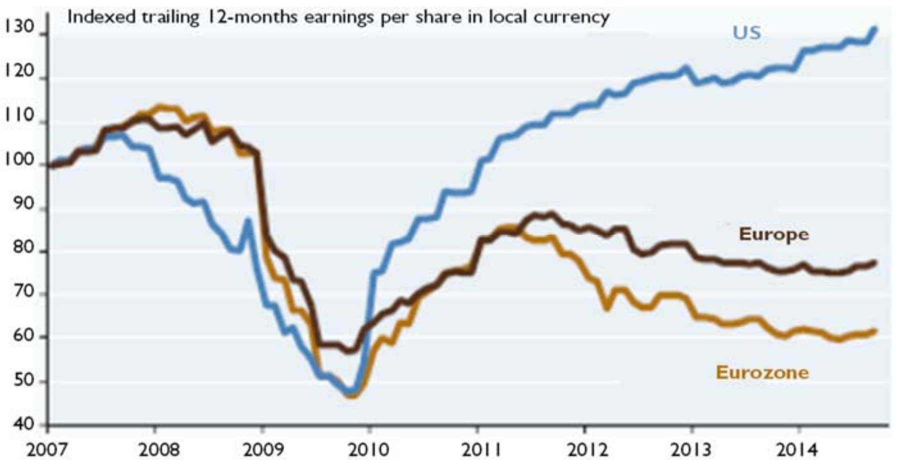
The Earnings Divide, US vs. Europe
Indexed trailing 12–mo. Earnings per share in local currency



Sources: MSCI indexes used. Q1 2007 = 100. November 2014, Graph Courtesy: J.P. Morgan

> *"The US has the highest potential growth rate in the developed world..."*

Profits have diverged dramatically over the past four years (Chart 6), and the euro declined 19% against the dollar last year.

Since the end of Bretton Woods in the early 1970s, there were two extended periods of US dollar strength: a 53% increase from October 1978 to March 1985, and a 34% appreciation from July 1995 to February 2002 (Chart 7). In both episodes, the current account deficit expanded, although under very different conditions. A deficit in the current account is a national accounting calculation, simply the difference between domestic savings and investment. If savings are insufficient to fund investment, capital must be imported. Foreign currency is sold to buy dollars to fund the deficit. This is just simple accounting, and buying dollars causes the price of dollars to rise.

But in the early 1980s, the current account deficit widened as both domestic savings and investment declined with the economy entering two consecutive, and severe, recessions. In the mid-1990s, investment surged and savings rates declined. Productivity and income growth were strong, spending rose, deficits shrunk, interest rates fell and this virtuous cycle produced the longest peacetime expansion in US history (to date—120 months).

In the 1980s, the rising US dollar visibly harmed US manufacturing and agriculture, and led to the Plaza Accord in 1985 with the major trading

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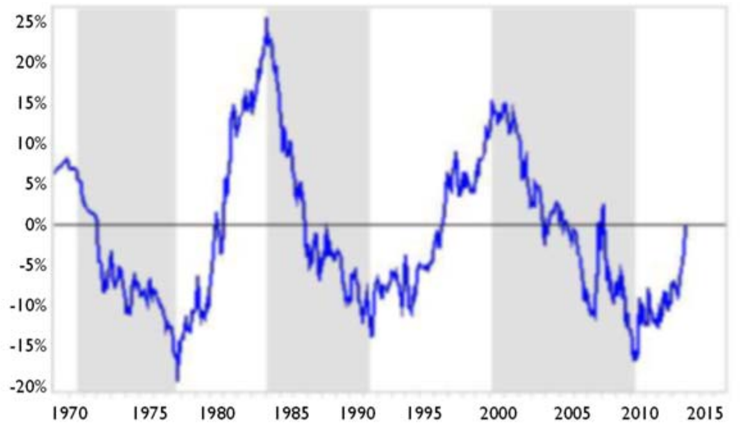
US Real Exchange Rate vs. Traded Weighted Index



Courtesy: Bridgewater Associates

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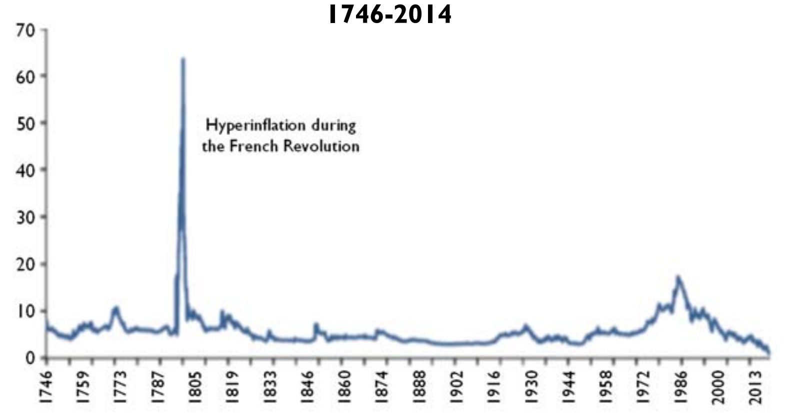
FRENCH 10-YEAR GOVERNMENT BOND YIELD (%) 1746-2014



Source: BAML Global Investment Strategy, GFD

partners to devalue the dollar. An unexpected consequence of the subsequent 35% rise in the Japanese yen was stimulative policies that eventually inflated Japanese real estate and equities in one of the greatest bubbles in history. The dollar rise in the 1990s was against a very different international backdrop of rising global trade with NAFTA born in 1994 and the WTO a year later. The dollar's rise in the 1980s was thus a product of economic weakness, whereas the rise in the 1990s was due to relative US economic strength.

The direction of the US dollar from here will depend on the relative changes in three key variables versus the rest of the world: US economic growth, US real yields and US share of global fixed investment. In all three cases, the relative data favor the US: economic growth is accelerating, real yields are rising, as is the US share of global fixed investment. The dollar is therefore poised to rise further, and if history is a guide, for the next few years.

Europe has struggled with a stagnant economy, on average, that masks stark differences in economic conditions across the continent, from 5% unemployment in Germany to 25% unemployment in Spain. Monetary policy has remained tight, which is why there is now deflation in Europe, and there is considerable doubt as to whether the ECB has the tools or ability to dig out of this hole.

Following much contentious debate, and over strenuous German objection, the ECB announced it would begin buying €60 billion of bonds per month until September 2016 or inflation rises to 2%, whichever comes later. This €1 trillion commitment was twice what the market expected, and widely hailed (except in Germany) as saving the euro and the Eurozone. One odd aspect of the program, adopted in order to assuage German opposition (it didn't work), is that technically, the ECB will not be buying bonds. Instead, the ECB will give money to each national bank who will, in turn, buy bonds. This way, should a country default, the ECB won't directly hold the debt, only that country's central bank will. Of course, a follow-up question might be, how will the ECB be repaid if the assets of a country's central bank are the defaulted bonds of that country?

Putting that question aside,[1] there is another question as to *how* the ECB hopes to push inflation up over 2%. Nominal interest rates are lower in Europe than in

"The direction of the US dollar from here will depend on the relative changes in three key variables..."

[1] Not because it's not important; we'll come back to it later.

the US when the Fed began its programs of quantitative easing (QE) and real interest rates are much lower in Europe than they were in Japan when the Bank of Japan began its QE program. Ten-year German bunds yield less than 0.40%, so lower yields will achieve…what? Even French yields are at (at least) 270-year lows (Chart 8, page 7). With yields and term premia already so low, the ECB's impact may be muted.[2]

There is considerable debate as to whether any quantitative easing program has had any beneficial effect on any economy. The Bank of Japan, for example, has purchased government bonds equal to 50% of its GDP, and central banks have expanded their balance sheets by over $8 trillion since 2008. More than half of all government bonds yield less than 1% and there is more than $7 trillion of negative yielding debt in Europe, Switzerland and Japan. Yet these conditions have hardly stimulated the global economy, whose growth rate has been declining.

"...these policies only favor government, large corporation and very wealthy individual debtors..."

Zero-interest rate policies (ZIRP) have now been succeeded by negative interest rate policies (NIRP, I guess), but it seems clear that rather than providing economic stimulus, these policies only favor government, large corporation and very wealthy individual debtors at the expense of small businesses and average households, as well as harming savers, retirees, pension funds and foundations. The Swiss National Bank lowered its overnight deposit rate to -0.75% as they abandoned the franc's peg to the euro. At -0.75%, meaning owners of Swiss francs pay the bank to hold their deposits, investors couldn't buy francs fast enough, and its value soared 33% in a matter of minutes.[3]

The Fed (and the Bank of England) embarked on quantitative easing originally to provide liquidity to the markets and ease credit conditions. These actions were initially successful.[4] The Bank of Japan and now, apparently, the ECB, initiated QE programs in order to raise inflation, and their success remains an open question. But Japanese and European policymakers are missing (or more likely, avoiding) the main point: monetary policy is distracting from necessary, real structural changes in sclerotic economies. Monetary policy is important, but absent pro-growth policies across the economies, QE will only likely perpetuate the zombie economic conditions.

We can measure the state of economic affairs, but the challenge all countries face, including the US, is more political than economic: building national consensus to enact the right mix of policy and regulation to encourage new businesses, raise productivity and allocate all resources—labor, capital, environmental—efficiently and effectively.

The United States has an advantage in that it was founded on certain principles, and citizenship is extended to all who embrace those principles. To be sure, there was a very serious disagreement over those principles that led a very bloody Civil War, but Americans were willing to die for those tenets, and to preserve the union.

Europe's identity is opposite in nearly every respect. It's not clear there even is a European identity. There seems to be little unity over almost anything: how to respond to Russian aggression in Ukraine, how to alleviate Spanish unemployment, even whether to permit a state (Greece) to secede.

Legalities aside, citizenship does not have the same meaning in Europe as it does in the US. Large numbers of immigrants reside *in* Europe but apart *from* Europe, separate and certainly not equal. The shocking murders in France last month were not caused by poverty, or by the Iraq invasion or by the existence of Israel. But it's insufficient to condemn only the individuals and not

[2] *Muted* is polite for ineffective.

[3] It settled the day 20% higher.

[4] Subsequent QE rounds have been less effective.

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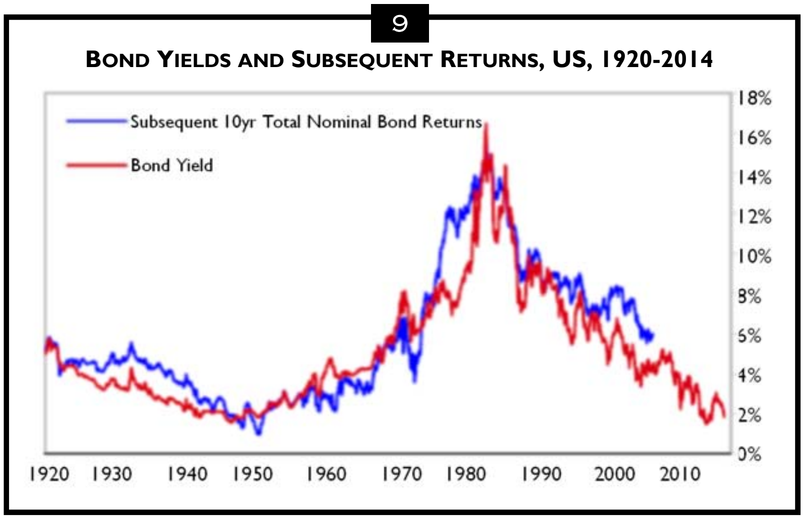

Courtesy: Bridgewater Associates

acknowledge the broader threat of militant Islam that infects a very small, but very determined, percentage of the population. This is an urgent problem, but there may be no good answers.

Returns investors earn are a function of the future cash flows of an investment, discounted back to a present value. For investors in fixed income, the future return is almost entirely determined by the initial yield[5] (Chart 9).

For other investments, it's useful to think of the marginal cost of capital equaling the marginal return on capital. There are certainly periods of disequilibria, but over time, the equation holds true. There are two significant macroeconomic forces, the debt cycle and global surplus capital, which suggest that investors will be faced with future returns well below those enjoyed in previous decades.

Interest rates have fallen since the early 1980s, leading to rising debt and higher growth. Each contraction (recession) ended with even lower interest rates and rising debt levels. By 2008, debt had risen to unsustainable levels and began to contract even with near-zero interest rates. The Fed then flooded the banks with liquidity (QE), thus meeting the demand for cash and (eventually) lowering risk premia. That process is essentially over with rates and risk at record lows.

Thus, economic growth can no longer be supported by ever lower interest rates and rising debt levels, as was the case for the past three decades. Unless economic growth accelerates, through technological advances or productivity enhancements, future cash flows generated by assets will diminish. Monetary policy will likely offer ample liquidity as to generate positive returns for investors, but the absolute level of returns may be lower than many investors expect.

"...investors will be faced with future returns well below those enjoyed in previous decades."

There is a second force that could pressure future returns. The price of (and therefore, the return on) an investment is determined by its scarcity value, its supply relative to its demand. It is reasonable to think that the global supply of capital may well exceed its potential demand, thus causing its price (return) to fall. The biggest potential source of this ample supply of capital could be China.

Domestic investment in China accounts for 26% of all global investment, up from just 4% in 1995. In contrast, the US share of world investment peaked at 35% in 1985 and is now under 20%. Japan fell from 20% in 1993 to just 6% today. China may have also reached a peak in domestic investment, and that capital will now seek other ventures.

China's economy is over $10 trillion, and it saves and invests nearly half of that. It will be ever more difficult to deploy $5 trillion an-

[5] Absent default or currency devaluation, important caveats.

nually in a country with new infrastructure that has American civil engineers drooling with jealousy. Add an aging population and a declining work force, and it is reasonable to expect more of that surplus capital will seek investments around the world, and this excess supply of capital will pressure prospective returns.

Svein returned with his son (and army) in 1011 to lay siege to London. King Ethelred fled to his brother-in-law, the Duke of Normandy, and in 1013, London fell. But Svein died the following year, and Ethelred returned to take back his kingdom.

"The past few months have given us multiple examples of hubris..."

Ethelred died in 1016, and the fight was passed to the next generation to continue. That year, on the fields of Assandun in Essex, King Edmund of England faced Svein's son, Canute, and the Viking army in a decisive battle. After many days of fierce fighting, both armies took heavy losses, but the Vikings had the edge. A truce was called and an agreement struck which divided England: Edmund retained the lands south of the Thames for the rest of his lifetime, and Canute controlled everything north of the river. Upon Edmund's death, the agreement was that his lands would pass to Canute.

Edmund's death, under mysterious circumstances, came a few weeks later, and Canute became the first king in history to rule over a united England. Canute, to the surprise of all, as it was contrary to all prior behavior, respected local laws and customs, built churches, preserved the peace, and England flourished. In 1018, his brother, Harald, King of Denmark, died, and Canute sailed there to claim the throne. Two years later, Canute conquered Norway, and part of Sweden, and ruled over those lands. Finally, in 1031, King Malcolm of Scotland decided to stop paying tribute to the Vikings, and Canute led his army north, where Malcolm was persuaded to change his mind.

Canute's greatness was hailed by his courtiers, who claimed he could command the tides of the seas. For the past thousand years, the name of King Canute has been associated with this hubris, and when he failed in his attempt to turn back the tides, he is held as an example of shame for believing in this self-deceit.

The past few months have given us multiple examples of hubris that collapsed in the face of a stronger force. OPEC, for years manipulating oil supplies, succumbed to greater force of North American technology. That cartel, so dominant in the world economy over the past four decades, may have seen its final days of power. The Swiss National Bank abandoned its currency peg in the face of a European monetary policy that would lead to ever more worthless assets accumulating on its balance sheet, capitulating to the market forces that demanded to hold Swiss francs. The ECB, which finally reversed its policy of monetary tightening that has Europe in deflation and recession. And central bankers, in general, who see the price of oil as affecting monetary policy instead of what it is, a transfer of wealth from producers to consumers.

Legend has it that King Canute took his throne down to the sea to command the tides to recede. His pride is a cautionary tale for all those who believe they can command the forces of nature (or the markets). But actually, the legend of King Canute and the tides has it backwards. Canute knew that the talk of his greatness was false, and when he sat at the ocean, his words to his court were: *Let all men know how empty and worthless is the power of kings. For there is none worthy of the name but God, whom heaven, earth and sea obey.* Canute gives us the true lesson with these words. We would be wise to follow them.

Founded in 2001, Angeles Investment Advisors LLC provides investment advice to select institutions and high net worth families and individuals.

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PRINCIPAL & CHIEF INVESTMENT OFFICER
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