Angeles Investment Advisors

Commentary
First Quarter 2014

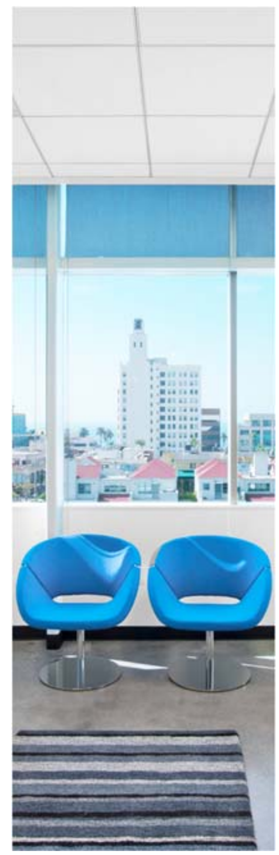
Trump

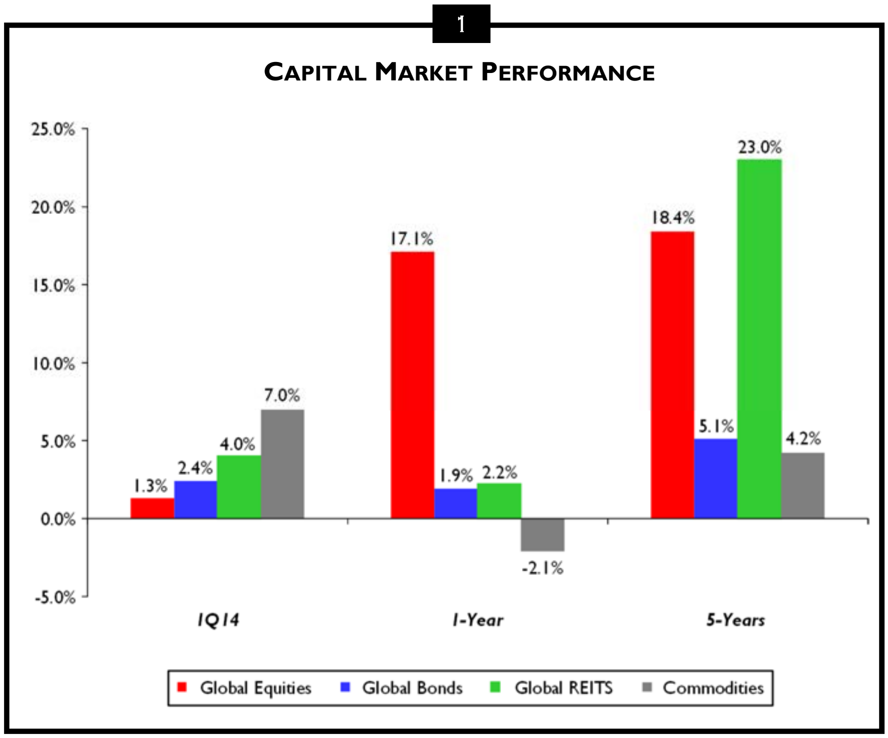
Sports have been integral in societies since at least the ancient Greeks, and probably before. Today, through the magic of the internet (and ESPN), more people can watch more sporting events around the globe than at any time in history. Despite (or maybe because of) the ubiquity of sports, interest is concentrated in only a few games: the English Premier League averages about 35,000 fans per game, baseball draws around 30,000 per game, basketball and hockey about 17,000. Attendance for other sports drops off pretty quickly after that.

It wasn't always so. From the 1920s to the 1950s, our sporting interests were much broader. In September 1927, 105,000 packed Soldier Field in Chicago to watch Jack Dempsey re-gain his heavyweight title from Gene Tunney. Two months later at Soldier Field, 123,000 college football fans saw Notre Dame defeat Southern Cal, 7-6. More than 30,000 (including Al Jolson, Clark Gable and Will Rogers) attended the opening of Santa Anita Park in 1934 to bet on the ponies. Polo matches would often draw crowds of 20,000. Interest in sports was broad, deep and diverse in the middle part of the 20th century.

Perhaps most popular of all, certainly as a participant sport, was card playing. Poker, of course, was played, but gin rummy tournaments would draw thousands of players every weekend. By the 1930s, though, a few rules changes transformed the old English game of whist into the most popular card game for decades to come.

Bridge came to define much of American society. Tournaments were followed closely by millions. Every newspaper in the country carried a regular column covering the famous players and their recent games. When not attending a sporting event or going to the movies, every middle class American adult was playing bridge. In this respect, Dwight Eisenhower personified the era. Proficiency at bridge was understood to be a prerequisite for being on his general staff, so it was no surprise that the best bridge player in the army, Alfred Gruenther, was swiftly promoted. Following the war, Eisenhower took the undemanding position as president of Columbia University which afforded him ample time to play bridge. One day in 1948, he was called away from the card table to take a call from President Tru-





"...he's the better bridge player."

man. When he returned, he told his partners that Truman had just asked Eisenhower to take over the NATO command. Asked who he would bring as chief of staff, Eisenhower replied, "Well, I ought to take Bedell Smith, but I think I'll take Gruenther because he's the better bridge player." When Eisenhower returned to the US to run for President, Gruenther, the ace card player, succeeded him as head of NATO.

Bridge is a game of partnership and logic, and has two parts: the bidding and the play. Each part requires a different set of skills. In the bidding, each team will wager how many of the 13 hands they think they can win. This is complicated because each player only sees his own hand, and doesn't know if his partner's hand is compatible. Bidding is the way to communicate to your partner the strength of your hand. But since bidding is verbal, your opponents will hear the same information as your partner. Bidding spades, for example, indicates that you hold a lot of high-card spades and you would like to make spades the trump (winning) suit.

Players go around bidding how many rounds they think they can win and in what suit. The bidding ends when all pass, and the highest number and suit thereby becomes the target for whichever team had the highest bid. Then the play begins, and the team with the highest bid has to achieve their stated goal of winning that many hands. If they do, they win the game. If they fall short, the other team wins the game. It's easier to succeed with a low bid, but the other team won't let that pass, so there is a considerable amount of posturing in bidding, either in trying to sneak in with a low bid or to force the other team to play with a high bid, making it less likely they will succeed. Once play begins, another set of skills is required, being able to determine who holds which cards in order to know the best sequence of play that will maximize the number of hands you can win.

Bridge requires insights to game theory and mathematical computation, effective communication and problem solving. All skills required of successful investors, and we will draw lessons from the life of the most extraordinary player in history, who mastered not only bridge, but multiple games, and along the way, helped to win a war we were on the verge of losing. His approach to cards holds lessons for us on how best to play our own investment hand.

Reversals of previous trends marked the beginning of the new year. Bonds, which posted a rare loss in 2013, posted healthy gains in the first quarter amidst

globally weak economic data. Even the basket cases of peripheral Europe saw record low yields (Chart 2). Ten-year Italian and Spanish bonds yield just above 3%, their lowest ever, and Greece, which was facing 50% yields two years ago, floated 5-year notes below 5%.

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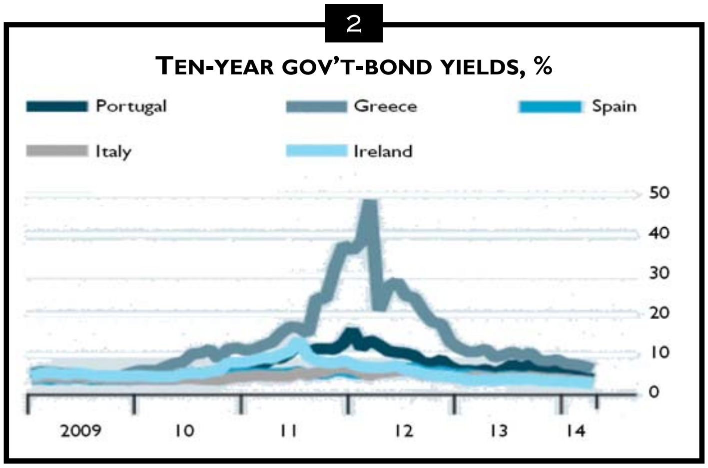

Source: *The Economist*

Bonds outpaced equities, but more surprising was the strong showing by commodities. The economically sensitive areas of oil and copper were off 5% and 10%, respectively, but agricultural commodities soared, with cocoa, soybeans and corn up between 10-20%. Beating everything, though, was coffee, surging 61% as the world's largest producer, Brazil, suffers through a severe drought. With coffee prices spiking, it is likely that stress levels will soon rise around the world (Chart 3).

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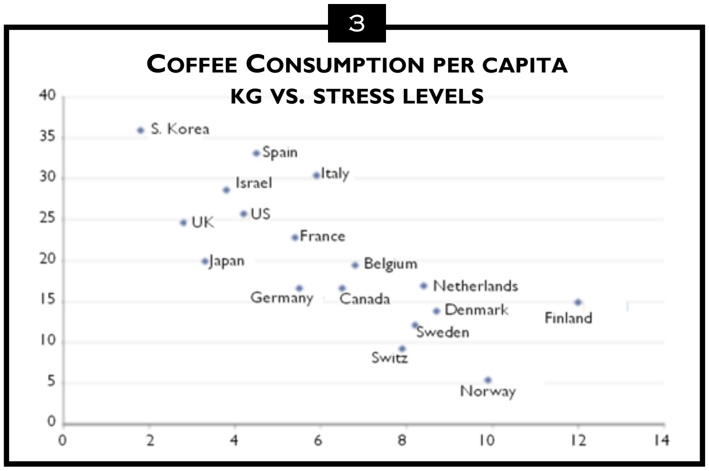

Source: *WRI, Bloomberg* Courtesy: *Goldman Sachs*

"Stress may be rising, but volatility is not."

Stress may be rising, but volatility is not. Notwithstanding record cold temperatures in much of the US, which froze economic activity, and mounting geopolitical tensions as Russia dismembers Ukraine, volatility across major asset classes this past quarter was near the lowest in over 30 years. Low volatility could reflect complacency, but to a large extent, it reflects the transition from major disequilibria in all global markets to a rebalancing of risks, expectations and outcomes. It is tempting to obsess on our problems, both real and potential (that's what sells newspapers, as they say), but we need to recognize the healing that has occurred.

The world economy is strengthening, led by the US, which has advanced furthest in mitigating the imbalances that precipitated, caused and followed in the aftermath of the global financial crisis five years ago.

The data were weak to start the year, but brutally cold weather is to blame. Spring thaw has brought improving, and broad-based, economic trends. Auto sales are running at more than 16 million units, annualized, the fastest pace in seven years. Industrial production is up a solid 3.7% over the past year, and accelerating, while capacity utilization is above 79%, the highest level in five years, and above the long-term average. Retails sales are up 3.8% in the last twelve months, and orders for durable goods are 9% ahead of a year ago.

More than 500,000 jobs were added in the first quarter, bringing private sector employment now above its previous peak in

January 2008 of 116 million (Chart 4), fully recovering the 8.8 million jobs lost in the 2008-2009 decline. Over the past year, more than 2 million jobs have been created, while the labor force has grown by about 1 million, resulting in a decline in the unemployment rate from 7.5% to 6.7%.

Fed chairman Janet Yellen noted that there remained considerable slack in the labor force, pointing to the large number of both long-term unemployed and part-time workers. More than one-third of the unemployed, 3.7 million out of the 10.5 million total, have been out of work more than six months, and 7.4 million part-time workers would prefer full-time employment. Additionally, average hourly earnings are up just 2% over the past year, barely ahead of inflation, while the number of hours worked is still below the 2008 peak.

"...there may be less slack in labor than recognized."

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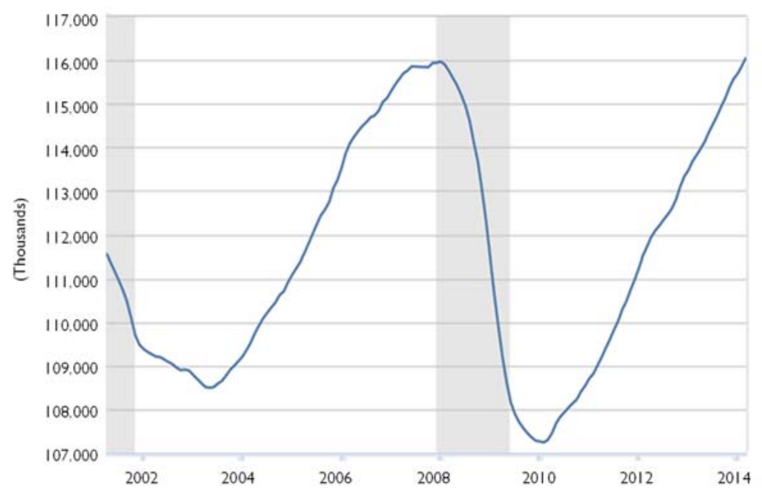
TOTAL NONFARM PRIVATE PAYROLL EMPLOYMENT



Source: Automatic Data Processing, Inc.
Shaded areas indicate US recessions. 2014 research.stlouisfed.org

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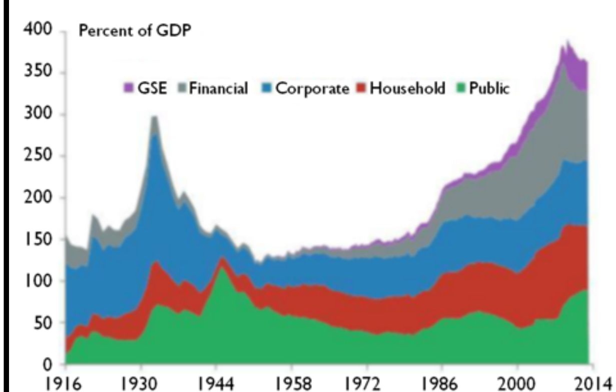
OUTSTANDING DEBT BY SECTOR



Source: Morgan Stanley Research, Federal Reserve Board, Bureau of Economic Analysis

But there may be less slack in the labor market than the Fed acknowledges. Many of the long-term unemployed may not return to the labor force at all, and the number of part-time workers looking for full-time work has fallen rapidly, from 9.1 million to 7.3 million in the past four years. The meager gains in earnings and hours worked may be due partly to the changing composition of employment. Employment in private services is up 3.1 million since January 2008. During this time, there are 1.6 million fewer manufacturing jobs and 1.5 million fewer jobs in construction. Hours worked in services is about 20% less than in manufacturing and construction, and services also have more part-time jobs.

To the extent this shift in the composition of employment is permanent, there may be less slack in labor than recognized. This means that wage growth is more likely to be higher, and sooner, with important implications for monetary policy.

Total debt outstanding in the US remains elevated, at 364.7% of GDP (Chart 5), but the composition has shifted significantly, with public sector debt at record levels (rising from 55% of GDP to 90%). But banks and consumers have deleveraged their balance sheets significantly. Household debt has declined from more than 94% of GDP to 76%, and servicing

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Interest Coverage Ratio-Net Cash Flow to Net Interest Payment

Source: Bureau of Economic Analysis, Morgan Stanley Research

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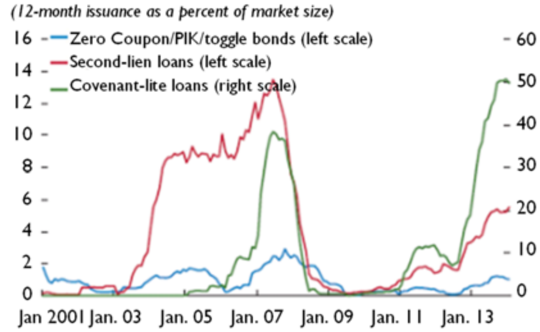
U.S. High-Yield Bond & Leveraged Loan Issuance with Lower Standards

(12-month issuance as a percent of market size)



Source: Bank of America Merrilll Lynch; and IMF staff estimates. Note: PIK=payment-in-kind

that debt takes just 10% of income, the lowest on record. Financial institutions have lowered their debt from 110% of GDP to 82%, and have the strongest capital ratios in decades.

Corporations have increased their debt modestly over the past few years, but their balance sheets have become stronger. Debt-to-equity ratios are back to pre-crisis levels of around 40%, close to record lows, and interest coverage is at an all-time high (Chart 6).

Corporate balance sheets may be strong, on average, but there are worrying signals of froth among the weaker credits. Leveraged loans are showing debt levels equal to seven times EBITDA, below the 2007 peak of eight times, but on the rise. And strict loan covenants have all but been abandoned (Chart 7). Default rates are very low, but

"...worrying signals of froth..."

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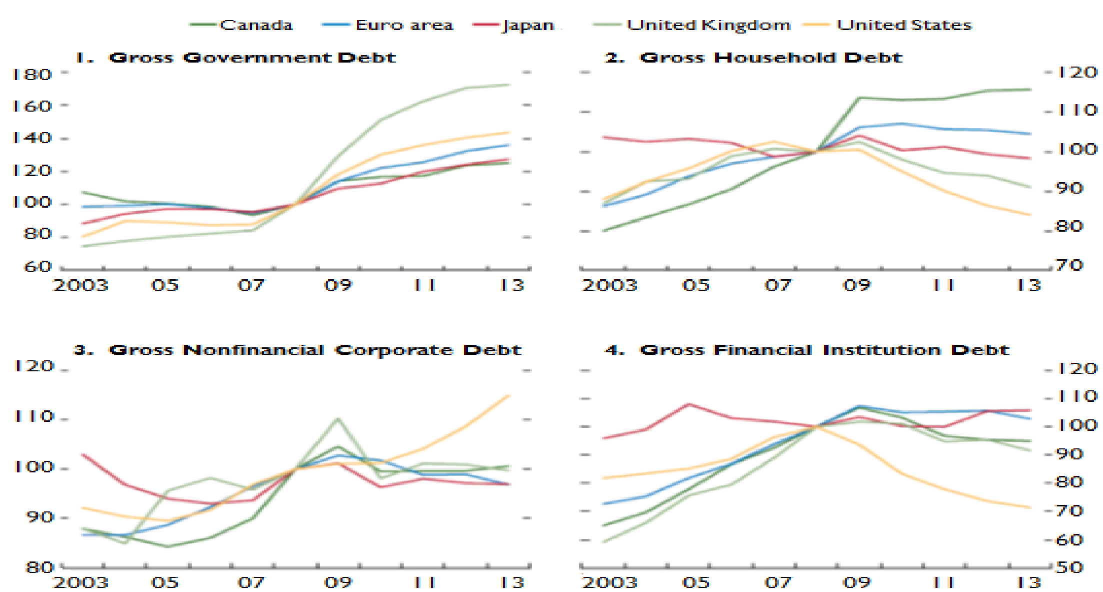
Trends in Indebtedness in Selected Advanced Economies since the Crisis (Index: 2008=100)



Source: National Statistics; IMF, World Economic, Outlook database; and IMF staff calculations.

the seeds are being sown for future problems.

The significant progress US households and banks have made in deleveraging can be seen in the context of other developed countries, where the US has far outstripped other countries and regions. The common thread among developed economies has been the steady rise in government debt (Chart 8, page 5).

With government debt at record levels and central banks' balance sheets sporting rocket trajectories (Chart 9), many are mystified at the very low levels of inflation globally. Inflation is below 2% in almost every developed economy[1] (Chart 10) and has fallen to just 0.5% in Europe.

"...many are mystified at the very low levels of inflation..."

Europe seems especially vulnerable to outright deflation as it has yet to escape its debt trap. Nominal interest rates are low, 10-year bunds yield just 1.5%, but are nonetheless higher than nominal GDP growth. Therefore, while nominal rates are low in Europe, real (inflation-adjusted) rates are too high. The European Central Bank (ECB) has resisted calls for loosening monetary policy, and in any event, has limited authority to pursue quantitative easing. The ECB is prohibited by charter from buying sovereign debt and, of course, there is no pan-European instrument. It's as if the US had no Treasury market and the Federal Reserve was not permitted to buy state bonds. The ECB is considering the purchase of private debt as a means of quantitative easing, but ignoring the moral hazard issue, the private debt market is undeveloped in Europe. Securitized debt outstanding is only about €850 billion, less than 10% of Europe's GDP. In contrast, the Fed has access to $20 trillion of Treasuries and agencies, more than 120% of US GDP.

Real interest rates have fallen dramatically, and the fact that this phenomenon has occurred coincidently around the world suggests common factors at play. Three stand out in particular.

First, there has been a large increase in the amount of savings in the world, emanating especially from developing countries. Pre-2008, world savings averaged 23% of global GDP, but has since risen to more than 25%. Steady income growth in developing economies over the past few decades led to substantially higher savings rates in those countries, from around 23% of GDP in the 1990s to over 33% today. A case in point is China. With a savings rate of 50%, $4.5 trillion of new savings must find its way into the financial system *each year*.

Secondly, the demand for safe assets has increased significantly. The financial crisis high-

[1] Australia has the highest among the top 15 countries, at just 2.6%

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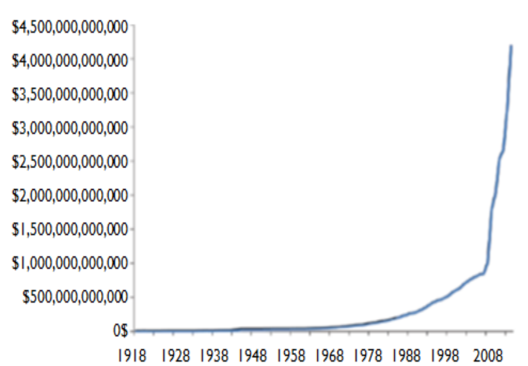
FEDERAL RESERVE ASSETS



Source: Federal Reserve Board, Morgan Stanley Research

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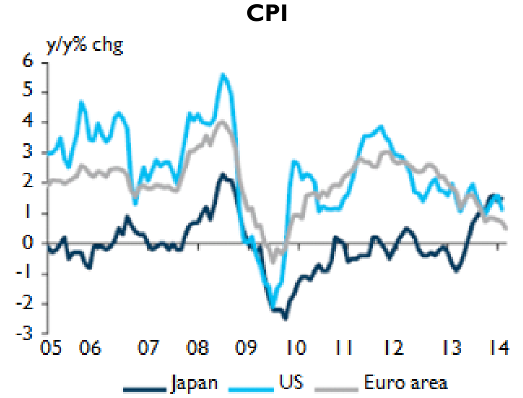

Source: MIC, BLS, Eurostat, Have Analytics   Courtesy: Barclays Capital

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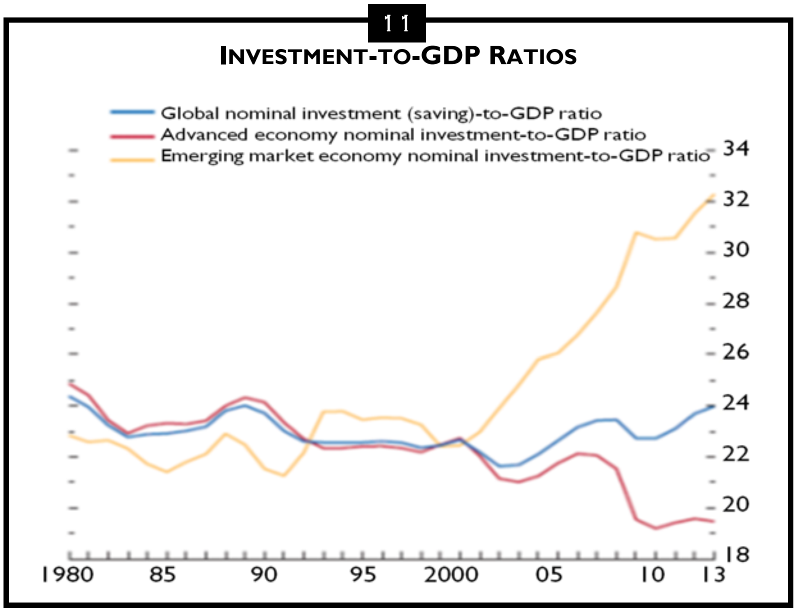

Source: Haver Analytics; Organization for Economic Cooperation and Department; and IMF staff calculations.

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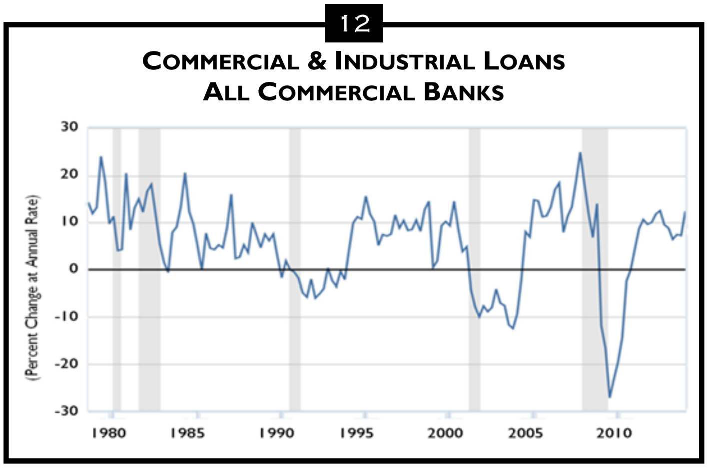

Source: Board of Governors of the Federal Reserve System
Shaded areas indicate US recessions—2014 research.stlouisfed.org

lighted the volatility of risk assets, driving investors to favor security. Additionally, aging demographics push both pensioners and pension funds toward safe assets. Thirdly, there has been a material decline in investment rates among advanced economies. The investment-to-GDP ratio in developed countries has been falling since 1980, but the decline accelerated around 2000 (Chart 11).

This combination of a rising supply of savings, a greater demand for safe assets, and a lower rate of investment (and therefore, demand for savings) in the developed world has resulted in very low real rates of interest (return). A belief that higher real rates will occur has to hinge on a reversal of some or all of these trends, and that is unlikely soon.

Persistently low inflation, negative real interest rates, tepid economic growth: all signs point to a heightened risk of deflation. This is true for Europe, where monetary policy is tight and further flexibility is constrained by law and/or politics, but outright deflation in the United States is very unlikely. Deflation (inflation) is a monetary phenomenon (thank you, Milton Friedman), and occurs when there is a shortage of money relative to its demand. When money is scarce, its value rises, and the prices of things it can buy therefore falls. Scarcity of money can occur when policy is tight (rates are well above the rate of inflation) or when the demand for money is very strong and the central banks fails to meet this demand. The latter occurred in 2008, when investors were selling all assets in order to hold cash and the Fed was slow to respond in providing additional funds.

"…no evidence that money is scarce in the US…"

There is no evidence that money is scarce in the US today. The US dollar is relatively weak, and the yield curve is steep. There is growing evidence that the demand to hold cash is falling: savings deposit growth is slowing (from 19% annual growth four years ago to just 7% today) and loans to businesses are rising at more than a 12% pace (Chart 12). The decision to remove the growth in excess reserves ("tapering") is consistent with the lower demand to

> *"Perhaps the best news for the US economy is in the realm of energy."*

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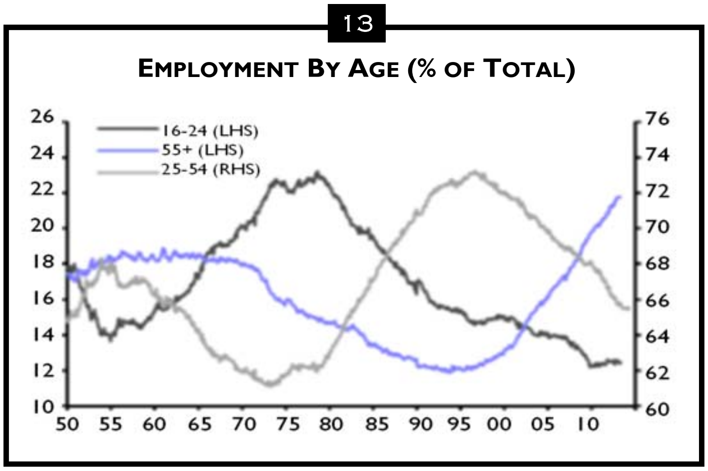

Source: *Thomson Datastream*

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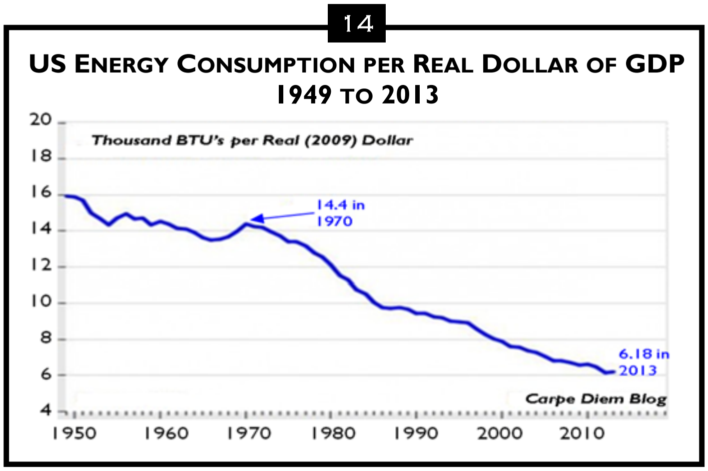


Source: *EIA*

hold cash. Should these trends, lower savings growth and stronger commercial lending, accelerate, the Fed will have to accelerate its withdrawal of stimulus, or risk stoking inflation.

Another factor that could impact monetary policy, and thus affect inflationary pressures, is the growth in labor productivity. The golden age of productivity was seen from 1950 to 1975, where annual non-farm business productivity growth averaged 3.1%. It fell to only 1.5% p.a. over the subsequent 20 years, generally attributed to the energy crises and the surge in inflation. Additionally, the entry of inexperienced (and unproductive) young baby boomers into the labor force may also have contributed to the drop. This 20-year slowdown in productivity growth was echoed across the developed world.

During the next decade, 1996-2005, productivity again averaged 3.1%, likely due to massive technology investment and the widespread adoption of computers. However, since 2006, productivity growth has slowed again, to just 1.6% p.a. The fading effects of the technology boom and the aging of the workforce are the likely culprits. Unfortunately (rather, alarmingly), most research suggests that physical and mental capabilities decline after the age of 50, which is the fastest growing segment of workers (Chart 13).

The Congressional Budget Office (CBO) assumes that productivity will grow around 1.9% p.a. in the future. With labor growth of about 0.6%, the CBO estimates that the economy can sustain 2.5% growth. The Fed assumes a slightly lower figure, 2.2% to 2.4%, but if productivity growth does not pick up, the potential growth rate in the economy is lower, and the Fed runs the risk of being too accommodative for too long.

Perhaps the best news for the US economy is in the realm of energy. Since 1949, the US economy has grown about eight-fold, from $2 trillion to nearly $16 trillion, but energy use has merely tripled. That works out to a 61% decline in the amount of energy required to generate a dollar of output, from nearly 16,000 BTUs in 1949 to 6,000 BTUs today (Chart 14). Today we consume about 19 million barrels of oil per day, the same as we did in 1978, but our economy is two-and-a-half times larger now.

As we have become significantly more efficient, in just the past few years we have seen a surge in domestic energy production. Natural gas production is up 25% since 2010, surpassing

Russia as the largest gas producer in the world. Another 30% increase to 2020 is expected. Oil production is up 60% since 2008, or more than 3 million barrels of oil per day. More than 8 million barrels are pumped per day in the US, and we should exceed the previous all-time record of 10 million barrels per day in a few years, when the US will become the largest oil producer in the world. In 2008, the US was a net importer of petroleum products by 2 million barrels per day. Today, we are a net exporter by about the same amount.

A decade ago, the experts were near-unanimous that oil and gas production were in inexorable decline ("peak oil"). But extraction costs have been falling 25% per year, and as costs fall, so should prices. Households could save $30 billion per year in electricity costs, and another $750 per driver per year in gasoline.

Plentiful energy extracted with greater efficiencies and lower costs has enabled the world economy to grow for the past few millennia. That is beyond our forecasting horizon, but should almost certainly be true for the coming years and even decades.

Oswald Jacoby ("Ozzie" to all his friends) was born in Brooklyn in 1902, son of Russian-Jewish immigrants. At 15, he lied about his age to join the US Army in time to fight in the last few months of World War One. He saw plenty of action in the war, at the card table, winning $2,000 in poker which he turned into his tuition at Columbia University. At Columbia, he played then US chess champion Frank Marshall and won, but gave up chess as he found it too slow a game. He left college in his junior year, bored with his course, and at the age of 21, became the youngest person ever to pass the Society of Actuaries exam. He spent the next four years crunching numbers in his head for Metropolitan Life till the 1929 crash ended his employment, but enabled him to concentrate on what he really loved: bridge.

In December 1931, Ely Culbertson and his wife, Josephine, challenged Sidney Lenz and a partner of his choosing to a marathon match. The Culbertsons were the most famous husband-and-wife in the United States, the most successful bridge team the world had seen. The year before, the British issued a challenge to any American pair. The Culbertsons sailed over and delivered a thrashing, to the delight of every American newspaper. Sidney Lenz was head of the US Bridge Association, and widely considered to be the best player in the country. When he chose Oswald Jacoby as his partner for this match, it was front-page news across the country. The wire services set up their telegraph equipment in the ballroom of the Chatham Hotel in New York to cover the event live.

The teams were to play 150 rubbers (a set of best two-out-of-three) to determine a champion. As the match wore on, Ozzie grew ever more upset with Lenz' poor play (at least in his mind), and at the end of the 103rd rubber, stormed out of the room in disgust. Lenz was forced to finish with another partner, losing to the Culbertsons, but Oswald Jacoby became a household name.

In 1937, the legendary Texas oilman, H. L. Hunt, lost $250,000 playing gin rummy, and hired Ozzie to teach him how to play. In subsequent years, Hunt staked Ozzie to some of the biggest, private poker games in the country, a lucrative arrangement for both men. In December 1941, Jacoby was in the middle of a national bridge tournament when he learned of the Japanese attack on Pearl Harbor. He found a substitute, and enlisted in the Navy.

The early months of the war were disastrous for the US and its allies as the Japanese conquered the vast expanse from the Pacific to the Indian Oceans. Millions of books and articles have been written about that war, and what turned the tide in America's favor. A strong case can be made that it was the breaking of the Japanese military and diplomatic codes that conferred the decisive advantage. In the basement of a naval administration building at Pearl Harbor toiled a small group of men working around the clock to decipher the codes. Among them achieving the breakthrough was Oswald Jacoby. He ended the war with the rank of lieutenant commander.

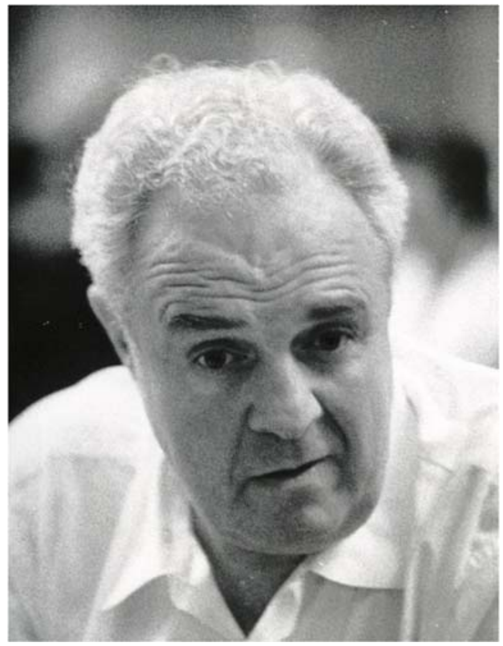
He returned to cards, but rejoined the navy at the outbreak of the Korean War, his third, and final, war he fought in. In 1963, he played to a draw the world chess champion, Tigran Petrosian. He took up backgammon, and won the national title three straight years in the mid-1960s, and again in 1972.

In December 1983, ill with cancer, *The New York Times* led with this lead:

> ***MIAMI BEACH, Dec. 5—*** *Perhaps the most popular victory in the history of bridge concluded the American Contract Bridge League's Fall Nationals here Sunday.*

Going into the final round of the national championship, Jacoby's team was far behind. They were able to make up some ground, but it would take a miracle on the final hand to pull out the victory. The bidding began slowly, when suddenly Jacoby jumped to a bid of seven hearts. He would have to win all 13 hands played; losing just one trick would cost the championship. He pulled it off, a grand slam to win the national championship. He died a few months later.

In his lifetime, Oswald Jacoby wrote the definitive tutorials on bridge, gin rummy, poker, whist, backgammon, chess and many other games. He penned more than 10,000 articles on bridge that were syndicated coast-to-coast, and his name was famous in virtually every household in the country. He revolutionized



bidding in bridge, and rewrote the rules on using the doubling cube in backgammon. And, of course, he helped to break the code that won a war.

Few of us possess his innate intellect, but we can emulate his success by following his example. We cannot control the cards that are dealt us, but by understanding the probabilities dictated by the rules of the game, we can know how to bet, when to raise the stakes, when to walk away. Oswald Jacoby proved that we can control our destiny, even if we can't control the hand we're given.

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