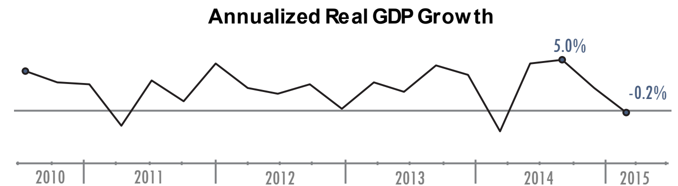
Bellwether CONSULTING

Your Quarterly Update on the Financial Markets
June 30, 2015

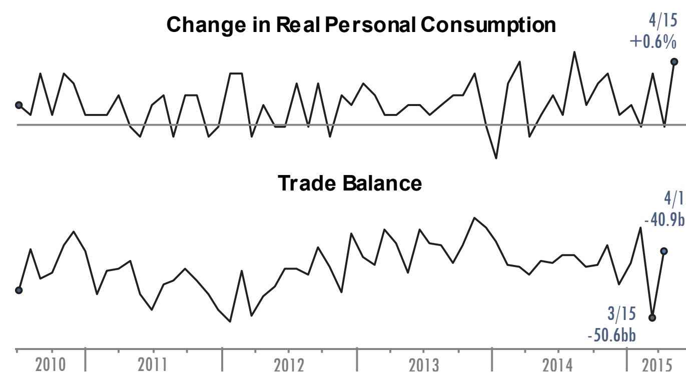
MARKET Recap

The US Economy: "Partly Sunny with a Chance of Thunderstorms"



The US economy paused in the first quarter of 2015, contracting 0.2% following a deceleration of growth in Q4. Although dramatic on a graph, the negative data point did not prompt a strong market reaction; leading indicators already suggested that the downturn would prove short-lived. Drivers of the winter slowness, a downturn in personal consumption expenditures and increase in imports, reversed in April. Imports fell following a spike due likely to resolution of the west coast ports slowdown, and better weather loosened consumers' wallets. Other data were on balance positive, leading us to think a slow, choppy recovery continues. The May trade report (scheduled for release on July 7) will be closely-watched in light of currency volatility following the Greek bailout referendum.

More on Greece later; it is briefly the source of much market volatility. Over the same weekend in which the Greek referendum was announced, the market also had to process relatively hawkish comments from New York Fed President William Dudley. On June 5th he was quoted as saying, "If the labor market continues to improve and inflation expectations remain well-anchored, then I would expect, in the absence of some dark cloud gathering over the growth outlook, to support a decision to begin normalizing monetary policy later this year." He largely confirmed that view in an interview with the Financial Times on June 28th.



Scarcely a week later, the June jobs report was released. The US economy added 223,000 jobs, and one must now look back to the halcyon days before 2008 to find a lower unemployment rate. If one were to search for negatives, say, to support an argument for continued low rates, those data were there as well; wages remained flat and the workforce participation rate fell to a long-term low point. This statistic reflects the decision of workers to discontinue their job searches by various means – early retirement, long-term disability, or simply dropping out. Civilian labor participation peaked at 67.3% in April 2000 and has since declined steadily, at a more rapid pace following the credit crisis. Each reduction of 1% equates roughly to 1.5 million people.

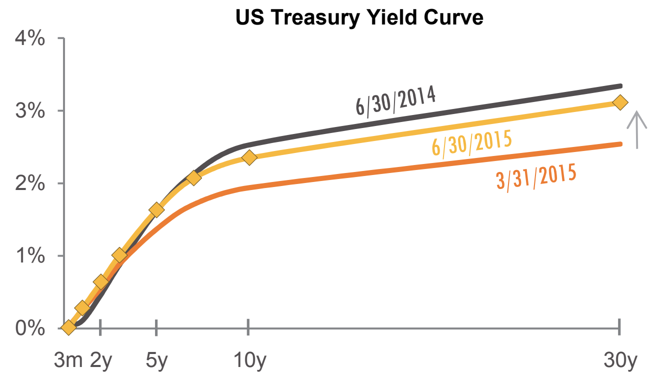
We have often discussed the various causes of falling workforce participation: technological improvement, globalization, inadequate or inefficient education systems, anti-labor tax policies, and lower job entry rates for women following decades of growth. The first wave of retiring "boomers" will inevitably push the number lower still. Wage stagnation owes its source to many of the same issues, as does the increasing dispersion of income and wealth.

While troubling, stagnant wages and falling participation are hardly news, nor do we think they qualify as the "dark clouds" to which Mr. Dudley referred. What do they have to do with interest rates? Little if anything. To what extent the long-run fate of the US workforce is determined by free markets or government policy remains to be seen, but it will not be determined by the Fed. Near-term we have something akin to full employment, stable core inflation (despite plummeting oil prices) and pockets of severe inflation; for example drug prices, tuition, and the value of nearly every asset.

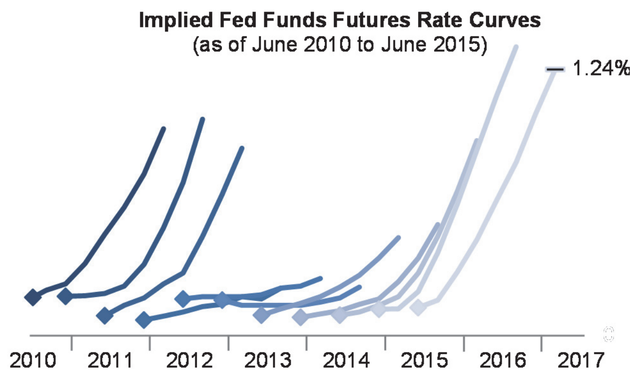
So what would preclude a rate hike this fall, likely accompanied by volatility in the equity markets? Not much, we think, other than contagion from a bad outcome to the latest Greek crisis or some unforeseen geopolitical event.

The US Bond Market

In Q2, the yield curve reversed its long-standing "lower and flatter" trend. Relative calm in April preceded sizable ebbs and flows in May and June, during which rates rose and fell around an upward trend that led the 10-year from comfortably below 2% to anxiously testing 2.5%. Two sharp moves higher in yield from April 28th to May 6th and June 1st to June 10th moved the 10-year by over 30 basis points each. Yields at the short-end remained anchored, with maturities up to 1-year seeing minimal movement. Treasury benchmark rates appeared set to end the quarter near their 3Q2014 closes. However, in the penultimate day of the quarter, Greece's financial freeze prompted a 16 bp rally in the 10-year and pushed credit spreads 5 bps wider (BAML US Corporate Master Index).



Although small compared to Greece's $380 billion debt, Puerto Rico also faces a likely restructuring or default as the commonwealth struggles to service $72 billion in outstanding issuance. As with Greece, Puerto Rico's debt has compounded steadily and GDP growth has spent most of the past decade in negative territory – pushing the average annual salary down to $19,500 and forcing 60% of residents to rely on government programs to cover healthcare costs. As a US territory, Puerto Rico cannot invoke chapter 9 bankruptcy, though Governor Padilla has reached out to Congress and the White House in hopes of at least writing-off the $25 billion portion of debt issued by the island's public corporations. This would make for the largest public US default on record and lead to noticeable losses in roughly 180 mutual funds holding over 5% of assets in PR bonds (Morningstar). Recently, the Puerto Rico Senate narrowly passed a bill to increase the sales tax from 7% to 11.5%, which would add $1.15 billion to tax revenues in fiscal 2016; 100 public school closings are also underway. Measures to raise taxes and cut spending may be too late to compensate for a long-term brain-drain that has decimated Puerto Rico's healthcare and education systems, as the population endures average net emigration exceeding 100 people per day.



Though the focus around coming Fed rate hikes has been on the timing of "liftoff," comments from two Fed officials since the last FOMC meeting have brought attention to the number of hikes likely to occur before year-end. Projections published as of the last FOMC meeting show a lack of consensus on where rates will end up just 6 months from now, though all projections came in below 1%. The Fed's anticipated pace of tightening appears to be around +100 basis points per year over the next two years. With eight FOMC meetings scheduled per year, tightening may follow a schedule of 25 basis point increments at every other meeting. Based on this and on comments made by officials since the last meeting, it appears that 25 bp hikes in both September and December may be as likely as 50/50, or may be easily derailed by signs of deflation, economic slowdown in the US, or a Greek default, among other potential calamities.

Overnight rates anticipated by the Fed-funds futures market strongly resemble expectations five years prior of rate hikes yet to materialize. Increases that were priced to begin in the first half of 2015 equal another false start. As of quarter-end, the March 2017 Fed-funds contract settled at 98.765, predicting an effective Fed-funds rate averaging 1.235% for that month. That translates to 4 or 5 rate hikes of 25 bps each over a time span that contains 12 scheduled FOMC meetings. The market is discounting Fed projections – a practice justified by history. This is not to say markets lack faith in the Fed. The projections simply reflect what FOMC members deem most likely. If the Fed is driven to deviate from their tentative rate hikes, it will likely be towards further patience. The sizable steepening in rates this quarter may be a theme which does not recur for some time.

US Bond Index Total Returns

Barcap Indices	2Q15
Aggregate	-1.68%
Interm. Gov't	-0.43%
Long Gov't	-8.10%
TIPS	-1.06%
Municipal	-0.89%
Interm. Credit	-0.94%
Long Credit	-7.26%
High Yield	0.00%
MBS	-0.74%

High yield investors benefited from tightening credit spreads in the first two weeks of April. Spreads widened back out in the second half of the quarter, with the term structure of spreads flattening modestly. Greece's shutdown spiked high yield spreads up 58 bps in the last two days of the quarter (BAML US High Yield Master II Index). Issuance for Q2 was a strong $94 billion despite slowing from April to June; a decrease to $60 billion is projected for Q3 (Forbes).

The US Stock Market

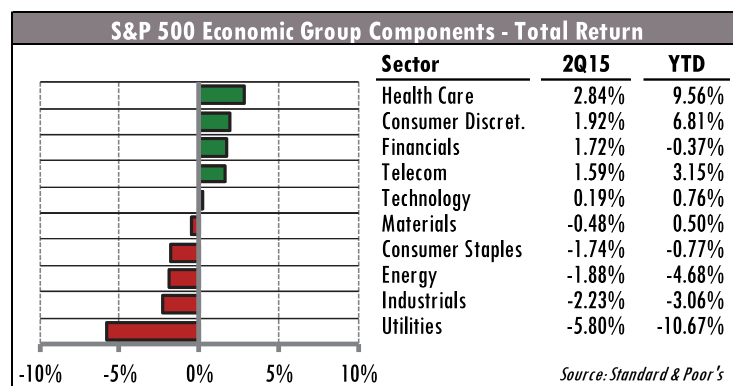
US stocks continued to grind higher during most of the second quarter, weathering expectations of late 2015 interest rate increases. These gains were quickly eroded during the final trading days of June after concerns of a Greek default spread rapidly across global markets. Volatility, as measured by the CBOE volatility index (VIX), also remained muted up until issues surrounding Greece arose. Macroeconomic data in the US was mixed, with soft data in durable goods and the Chicago Fed National Activity Index, but strong new/existing home sales and employment data. Yet, investors remained confident that the economy is continuing to head in the right direction. Of the S&P 500 constituent companies, 67% reported earnings above analyst expectations, which is above the long-term average of 63% but below the average over the past four quarters of 70%. Additionally, 44% of the companies in the S&P 500 reported revenue above analyst expectations, but this is below both the long-term average of 61% and trailing 1-year average of 58%, signaling a potential slowdown in corporate profits.

Stock Indices - Total Returns

Large-cap Stocks	2Q15	YTD	Mid-cap Stocks	2Q15	YTD
S&P 500	0.28%	1.23%	S&P Midcap 400	-1.06%	4.20%
Russell 1000	0.11%	1.71%	Russell Midcap	-1.54%	2.35%
Growth	0.12%	3.96%	Growth	-1.14%	4.18%
Value	0.11%	-0.61%	Value	-1.97%	0.41%
Broad Markets			**Small-cap Stocks**		
Russell 3000	0.14%	1.94%	S&P Smallcap 600	0.19%	4.16%
Growth	0.27%	4.33%	Russell 2000	0.42%	4.75%
Value	0.00%	-0.51%	Growth	1.98%	8.74%
			Value	-1.20%	0.76%

Growth stocks outperformed value stocks across all market cap segments, however, the spread was significantly greater among small-caps. Mid-cap issues generally lagged their large- and small-cap counterparts, with REIT performance a drag on the sector. Year-to-date, small companies have been the top performers in the US as larger companies with greater percentages of overseas revenue have experienced currency headwinds from a strengthening US dollar. It is estimated that 38% of US large-cap stock corporate revenue comes from overseas, while only 19% of total revenue for US small-cap companies is foreign (FactSet, Fidelity).

Top performing sectors included healthcare, consumer discretionary, and financials. The healthcare sector continued its rally with many stocks soaring to new highs, mainly driven by strong earnings and revenue growth and increased M&A activity. Within consumer discretionary, Charter Communications' proposed buyout of Time Warner led to speculations of further consolidation among major players in the broadcasting industry. Overall, the financial sector also had a positive quarter, but with wide dispersion of underlying industry performance relating to interest rate movement. Diversified and investment banks benefitted greatly from increasing rates during Q2, from which they earn higher levels of interest income. Conversely, rising rates had a negative effect on REITs as the yield spread between the securities and bonds narrows, making REITs less attractive as a fixed income replacement. Additionally, outsized gains during 2014 also led to profit taking within the industry.



S&P 500 Economic Group Components - Total Return

Sector	2Q15	YTD
Health Care	2.84%	9.56%
Consumer Discret.	1.92%	6.81%
Financials	1.72%	-0.37%
Telecom	1.59%	3.15%
Technology	0.19%	0.76%
Materials	-0.48%	0.50%
Consumer Staples	-1.74%	-0.77%
Energy	-1.88%	-4.68%
Industrials	-2.23%	-3.06%
Utilities	-5.80%	-10.67%

Source: Standard & Poor's

Underperforming sectors in Q2 included utilities, industrials, and energy. Similar to REITs, utilities experienced losses amid rising rates as the stocks are often viewed by investors as a bond substitute. Profit-taking was also a key driver of losses for the sector. Within industrials, fear that plane capacity increases by Southwest Airlines would lead to both market oversupply and a price war between legacy and low-cost airlines resulted in a broad sell-off of airline stocks. Energy stocks continued to suffer small declines during the second quarter, as losses from lower oil prices began to impact income statements. However, the price of crude oil did begin to stabilize in May and June around $60/barrel on growing demand and falling inventory levels.

Since 2013, merger and acquisition activity has played a large role in driving market dynamics. In 2015 thus far, more than 4,500 deals have been announced in the US, totaling a record $1.03 trillion in value (Dealogic). Most glaring is the number of deals with a value greater than $10 billion, which currently stands at 21 and makes up approximately 57% of total M&A activity this year. Not surprisingly, the most active sector has been healthcare which has accounted for $294 billion, up 73% from the first half of 2014. Technology remains the second most active sector for M&A this year at $144 billion where activity has been concentrated in the semiconductor industry. This trend has not been isolated to only the US, as companies worldwide have been taking advantage of low-cost borrowing to increase synergies, expand business capabilities, and diversify geographically. With low levels of interest rates globally and high levels of corporate cash, expectations are that this trend will continue for the near future.

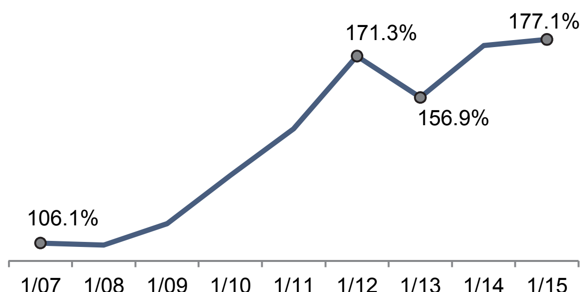
Overseas Markets

Volatility spiked significantly right at quarter-end as Greece's solvency and its continued participation within the eurozone worried investors. The threat of a "Grexit" roiled markets, putting pressure on many regions and erasing most of the quarter's gains in a number of geographic sectors. Latin American emerging market performance was good despite slowing growth estimates from the World Bank.

Foreign Stock & Bond Indices - Total Returns			
MSCI Broad Indices	**2Q15**	**Barcap Global Indices***	**2Q15**
World Index	0.31%	Global Aggregate	-1.18%
EAFE (Developed)	0.62%	Pan-Euro	-0.09%
Emerging Markets	0.69%	Asian-Pacific	-2.13%
		Eurodollar	-0.10%
MSCI Regions	**2Q15**	Euro-Yen	-1.89%
Europe	0.36%	Other Currencies	-2.03%
Japan	3.09%	**Unhedged*	
Pacific ex-Japan	-2.48%		
Latin America	3.51%		

The World Bank downgraded its outlook for global economic growth this year amid a broad-based slowdown in emerging markets and softer output in the US. The Bank now expects the world economy to grow by 2.8%, slower than its January estimate of 3.0%. In its Global Economic Prospects Report the Bank attributed its lower forecast to sharp contractions in Brazil and Russia, with weaker growth in Turkey, Indonesia and scores of other developing economies offsetting healthier growth in Europe and Japan. The bank expects global economic growth in 2016 to accelerate to 3.3%, barring trouble in emerging markets as the US Federal Reserve moves toward rate tightening. The forecast assumes recoveries in the eurozone and Japan take hold. Different challenges are weighing on growth in many of the world's largest emerging markets. Many countries that helped drive the recovery in the wake of the financial crisis are running out of capacity to grow without major policy overhauls that would open up markets, improve the business environment and increase productivity.

The main story in Europe was the on-going Greek saga, replete with all the posturing one expects from a playground dispute. On June 28, Prime Minister Alexis Tsipras abruptly halted talks with European creditors and called for a referendum on whether to accept the terms offered. Capital controls were also put in place, and it was announced that banks would close beginning on June 29. Cash withdrawals by Greeks have been limited to €60 per day. The controls that have been implemented create uncertainty over the ability to pay other creditors, including the ECB next month, and have increased global market volatility and anxiety over Greece's survival in the euro.



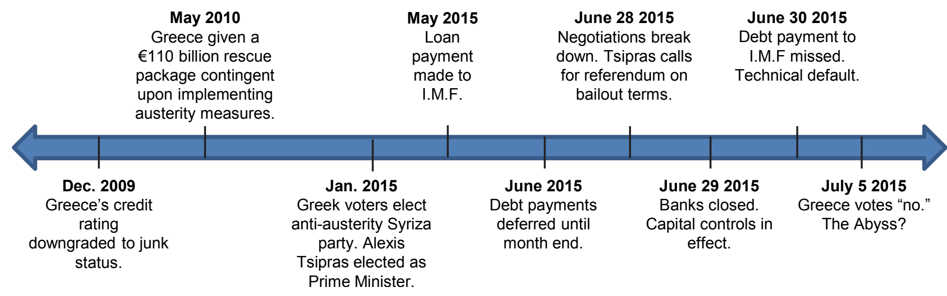
On the final day of the quarter, Greece requested a new bailout as a last-minute diplomatic push to gain an agreement before the country's current rescue deal expired and it defaulted on a payment to the IMF. The government submitted a proposal for a two-year agreement with the eurozone bailout fund to cover its financing needs and restructure its debt, according to a statement issued by the Prime Minister's office. The question is whether the eurozone would consider Greece's request after the June 30 deadline. While European officials have said that a new aid program would be possible, it would require Greece to accept the policy overhauls and budget cuts it had previously rejected. Many officials also don't trust the Tsipras government to implement any of the necessary fundamental changes to prevent the on-going problems of early retirement, high pension costs, low tax revenue collection, and the outspending of revenue. The eurozone portion of Greece's €245 billion rescue deal ran out on June 30, the last day Athens had to make a €1.55 billion payment to the IMF without falling into arrears.

It appeared that the Greek government was prepared to stick to its rejection of creditors' demands and called on voters to do the same, despite appeals from other European members. The belief, albeit misplaced, is that a "no" (rejecting creditor's terms) from Greek citizens would allow the government to resume talks with creditors and reach a compromise deal for Greece and Europe. German and some other European officials have dismissed Athens' claims that a no vote would strengthen its negotiating hand, warning instead that it had greater potential to lead to a Greek exit from the euro.

On July 5 a majority of Greeks voted no and rejected the terms of Greece's creditors. Greece's fate, with respect to its continued inclusion in the Euro, has been handed back to the eurozone. The vote puts pressure on the eurozone, which has steadfastly called for austerity measures to be implemented prior to any additional bailout funds being released. Greek banks are on the brink of insolvency; rules require the ECB to suspend funding to insolvent banks. This means that the emergency loans that have been sustaining Greek banks are at risk of being stopped. However, ECB president Draghi may look to get around those rules citing the "human" cost of suspending emergency funding. Both sides appear to have backed themselves into a corner. Tsipras, by virtue of winning the vote, may force an exit since any bailout agreement would theoretically be more costly after a default. Any new negotiations entered into by Greece would still call for the need to be more responsive to lenders' demands. Europe also shares some of the blame, insisting on a rigid adherence to institutional rules for Greece, while showing flexibility for larger countries, like France, in the past. While the no vote may

have surprised many European officials, it could offer the possibility of backing away from their insistence on austerity terms and acknowledge that those policies are not a viable long-term solution for Greece's debt crisis.

European leaders are set to meet on July 7 to discuss next steps. It remains unclear how the rest of the world will be impacted by events in Greece. The United States has very little direct exposure to Greece and investors have had years since the beginnings of this crisis to limit their exposure. Near-term we expect volatility in global stock and bond markets. A prolonged crisis might foster a flight-to-safety in US Treasury bonds, bolstering the dollar, crimping exports and economic growth. A Greek default could send investors into a panic, pulling money out of not only Greece but other questionable economies as well. A rapid outflow of capital could, in-turn, destabilize countries such as Spain and Italy, threatening a panic impacting greater Europe and potentially spilling over to the US and beyond.



News elsewhere in Europe was better. Spain's economy is expected to grow 2.9% this year, an improved forecast as a result of government spending curbs. A revised set of forecasts for 2015, including one predicting the creation of more than 500,000 jobs, is positive news. The previous forecast for GDP growth in Spain was 2.4%, up from 1.4% in 2014. Prime Minister Rajoy said Spain may create more than two million jobs in the second half of this decade. Spain has been adding jobs faster than most other European countries hit by recession in recent years. The national statistics bureau said the number of Spanish households with all active adults unemployed had fallen by 9.4% over the past year, the steepest annual reduction since 2006. Recent data show that the eurozone economy expanded by 0.4% during Q1- the fastest rate of growth in about two years. The recovery seemed to be spreading throughout Europe with France and Italy (two of the region's largest economies) showing solid growth during the quarter after struggling to emerge from the global recession.

In Japan workers earned slightly more in May than a year ago, a sign that companies may finally be sharing some of their record profits with employees. Wages increased 0.6% in May, according to data released by the Ministry of Health, Labor and Welfare. That compared with a 0.7% increase in April - the second consecutive month of increase. However, the wage increases did not offset an uptick in inflation. After adjusting for price increases, worker compensation fell 0.1% in May. The increase in wages could be a bright spot for Japan's recovery amid a slew of lackluster production and export data. Some economists are forecasting that Japan's economy will show contraction in Q2. The BOJ sees wage increases as key to sustaining an economic recovery and achieving the bank's goal of 2% inflation. According to economists, wages have risen as a result of increases won by workers at annual spring negotiations with employers. Japanese firms raised wages 2.23% according to results compiled by Japan's biggest workers' organization, the Japanese Trade Union Confederation, compared with a 2.08% increase a year earlier. According to labor ministry data, overall wages rose the most in the financial and insurance, construction, and telecommunications industries.

The Chinese stock market saw significant volatility during the second quarter with the Shenzhen Composite Index experiencing an intraday range of more than 11% on the final trading day of the quarter. Chinese shares reversed a severe sell-off on the 30th, with the Shanghai Composite Index ending the quarter up almost 14%. Just a day earlier the benchmark ended in bear-market territory, defined as a fall of 20% or more from the most recent peak. Ultimately the index closed at 4,277.22, 17.4% below its 52-week high set on June 12, but the index has more than doubled over the past year. In response to a dramatic selloff on June 26 (down 7.4%), China's central bank cut its lending rate by 0.25% to 4.85% (a record low for China) and its one-year deposit rate by the same amount to 2.00%. In a bid to free up money for new loans, the central bank lowered the amount of capital that some smaller banks must hold in reserve by 0.5%.

Paradoxically, as China's markets more than doubled over the last year, its growth rate dwindled to its lowest level in 24 years. China's GDP in 2014 grew at 7.4% according to the IMF and it is projected to decelerate to 6.8% this year- still a far faster growth rate than any other major economy is likely to achieve. With the slowdown, the People's Bank of China began to cut lending rates and the reserve ratio requirement earlier this year. Beijing encouraged this year's stock-market rally by keeping mone-

tary policy loose and allowing investors to take on billions of dollars in loans from brokers. But the pace of gains accelerated to an unnerving rate, prompting the central bank to withdraw billions of yuan out of the banking system to reduce funds available for lending, a process known as margin lending. These moves, coupled with concerns about a default in Greece, likely sparked the recent market declines.

The Latin American economy has slowed more than any other emerging region in recent years. It grew just 1.3% last year, and the IMF predicts that this year's figure will fall to 0.9%, marking the fifth consecutive year of declining growth rates. The region has, and continues to suffer from falling commodity prices and a decline in investments. Latin America's main currencies have depreciated by an average of 20% against the dollar since mid-2014 and many of the region's stock markets have suffered. Chile, Columbia and Peru have been able to navigate this difficult environment and maintain growth, albeit slow growth, due to better macroeconomic policies such as lower public debt and floating exchange rates. However, exemplars of malfeasance Brazil and Argentina continue to depress the region.

Rising prices, slow growth and high interest rates are ongoing concerns for Brazil. On June 24, Brazil's central bank issued its quarterly report stating that GDP would contract by 1.1% in 2015, compared with an earlier forecast of 0.5%. The bank also raised its inflation forecast to 9% this year, up from its previous estimate of 7.9% and well above the 4.5% target. Additionally, the Brazilian real remains the year's worst-performing emerging market currency, down 14% against the dollar so far this year. Meanwhile, the Petrobras scandal continues to envelop Brazil, spreading through the private sector, banks and major infrastructure companies. In mid-June Brazil's government arrested the owners of two construction conglomerates, Odebrect SA and Andrade Gutierrez SA, accusing the executives of knowing that their firms paid bribes to politicians that added up to $230 million. Both companies are major Petrobras subcontractors that receive a large portion of their revenue from government contracts. Odebrecht is especially important to Brazil's economy as the firm is active in real estate, infrastructure, petrochemicals, military contracting and agribusiness. This ongoing corruption scandal coupled with a long list of negative macroeconomic data, points to a deepening recession for Brazil.

The economic and political environment in Argentina appears slightly more optimistic, but uncertainty remains in a country mired in default, embroiled in litigation with hedge funds and consumed by double-digit inflation. Some positive signs include consumer confidence at its highest point in the last three years and, in April, industrial production recording its smallest decrease in nine months. Sentiment has improved in hopes that October's presidential elections will bring an economic turnaround. Bulls on Argentina expect a new president to reduce limitations on imports and exports, encouraging foreign capital to return to the country; however many speculate that a new government may not embrace policies that are radically different from President Kirchner's approach. Despite uncertainty surrounding October's elections, hedge funds are moving back into the Argentine market. Argentina's Merval stock index is up 20% in dollar terms this year, making it one of the world's best-performing markets.

Focus On: *Money Market Funds and the "Risk-Free" Rate*

Analogous to the concept of zero in mathematics, the risk-free rate is central to finance. It provides a stable point of reference by which to measure the opportunity cost of risky, volatile investments. Like zero, the risk-free rate is incorporeal. In practice, all investments come with some risk; the two are inseparable. However, for over forty years, one class of securities has served as a suitable proxy to investing in the risk-free rate – the money market fund.

Money market (MM) funds are easily distinguished by their five-letter ticker ending in XX. They are permitted to invest in short-term fixed income securities of high credit quality. Yields on such securities are closely linked to the Federal-funds rate, which is shaped by the monetary policy of the Federal Reserve. As such, the Fed closely influences demand for money market funds, which has become an important factor in our financial system as these funds amassed trillions of dollars. Currently, money market funds hold roughly one-third of commercial paper used by businesses to finance payroll and inventory, three-quarters of outstanding short-term state and local government debt, one-eighth of short-term US Treasuries, and sizable amounts of asset-backed commercial paper used to finance consumer credit. MM funds provide a valuable economic service by efficiently matching short-term risk-averse lenders with short-term cost-sensitive borrowers.

Money market funds calculate their mark-to-market on a per share basis similar to other mutual funds; however, if this "shadow price" is within one half-cent (50 bps) of one dollar, then the fund may report a one-dollar NAV. Even during the major market movements from 2000-2010, average per-share market values of prime money market funds have stayed within two tenths of one cent (20 bps) of $1 (ICI). Unless the fund holds securities that are in default or faces very large redemptions, the fund manager can regain a $1.00 NAV simply by holding marked-down securities to maturity. US money market funds are regulated by the SEC and must report their shadow price to the SEC on a monthly basis.

Breaking the Buck

When money market funds were first introduced in the 1970s, they offered yields above those of savings account. At the time, rates on bank deposits were capped by Federal Reserve Regulation Q. As overnight rates were pushed lower by the Fed's response to the 2008 financial crisis, money market funds were forced to hold lower-and-lower-yielding bonds. By early-2009 the yield on most money market fund holdings had bottomed out just above zero percent. While running a money market fund with such low-return securities has forced asset managers to reach for yield or cut fees, funds in the US have steadfastly maintained their stable NAV.

In August 2014, ten money market funds in South Africa broke their one-dollar NAV. Yet, in the forty years prior, only two money market funds had failed to return the full one-dollar per share. In 1994, a fund holding adjustable-rate issues paid out approximately 96 cents per share. In 2008, a $60bb money market fund exposed to Lehman Bros. debt was unable to maintain its NAV; investors ultimately recovered over 99 cents per share. In contrast, there have been nearly 3,000 bank failures over the past 40 years. While the FDIC protects checking and savings account holders from losses, bank failures ultimately cost taxpayers money.

Relegation to Regulation

Money market fund regulation in the US stems from the four cardinal federal securities laws administered by the SEC. In particular, Rule 2a-7 of the Investment Company Act of 1940 provides strict limits on money market fund holdings and activities. Rule 2a-7 was amended in 2010, and again in 2014.

The 2010 amendments placed tighter restrictions on fund holdings, including liquidity requirements, and mandated stress testing and monthly public disclosure of holdings. Since 2010, funds have been limited to a weighted average maturity of 60 days and a maximum maturity of 397 days for individual securities. Rule 2a-7 also places strict limits on second-tier credit quality securities, which are restricted to 3% of assets (0.5% for a single issuer) and 45 days to maturity (note that second-tier refers to short-term credit ratings and roughly equates to a range of long-term credit ratings from higher BBB to lower A). A notable exception is that government debt is considered first-tier as long as at least two of the three Nationally Recognized Statistical Ratings Organizations (NRSROs) rate the US government second-tier or higher.

Money Market Fund Type	Gates	Liq. Fees	NAV
Government	No*	No*	stable
Retail Prime/Tax-Exempt	Yes	Yes	stable
Institutional Prime/Tax-Exempt	Yes	Yes	floating

*Gov't MM funds may impose fees/gates; deemed extremely unlikely

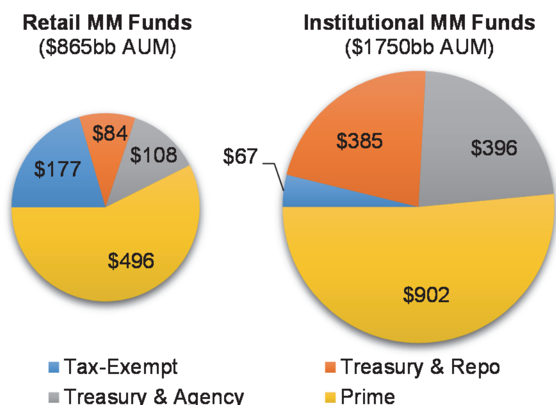
The 2014 amendments will phase in from April 14, 2016 to October 14, 2016 and bring substantial changes. Soon, non-government money market funds may subject investors to a redemption gate for up to 10 days within a rolling 90-day period or a discretionary liquidity fee of up to 2% on redemptions when the fund's weekly liquid assets fall below 30% of total assets. A discretionary liquidity fee or redemption gate requires majority approval by the fund's board of directors. In the case that weekly liquid assets fall below 10% of total assets, a 1% default liquidity fee will apply to redemptions unless a majority board vote deems a different fee level, from 0-2%, is in the best interest of the fund. In another major change, institutional prime money market funds and institutional municipal/tax-exempt money market funds will be required to price themselves at a floating NAV (FNAV) based on their market value (shadow price) rather than at one dollar. Government funds did not escape reform; the basket of non-government securities government MM funds are permitted to hold will drop from 20% of fund assets to a mere 0.5%. The amendments also include stricter diversification requirements, stress testing and disclosure.

On the Way Out

Money market funds have been mostly successful avoiding losses for their investors. Yet even with losses that are quite rare and modest relative to other asset classes, money market funds have failed to provide the problematic promise of a risk-free rate. Now that short-term rates have traded below zero domestically and (to a much greater extent) abroad, money market investors have another significant risk exposure to consider – the ability for money market funds to act as a going concern in a persistently low or negative rate environment. Historically, there has been a high correlation between cash flows into and out of money market funds and movement in short-term rates. With the Fed expected to hike rates at the September FOMC meeting, cash flows to money market funds may increase as investors are lured by positive yields and a functioning money market fund business model.

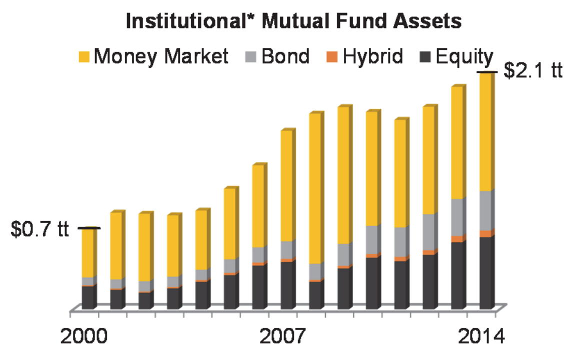
In 2011, the Investment Company Institute (ICI) hosted a money market fund summit where Vanguard Chairman and CEO F. William McNabb III presented his thoughts on a world without money market funds. McNabb predicted that by mandating excessive cash reserves or a floating NAV, money market funds would disappear. With the 2014 amendments to Rule 2a-7 and the EMSA (which regulates euro-zone money market funds) proposing a 3% cash reserve requirement, money market funds are facing exactly such obstacles. Whether these regulations will destroy money market funds or make them a more robust and attractive investment vehicle remains to be seen.

McNabb also highlighted the additional frictional costs that would be imposed on short-term borrowers and lenders without access to money market funds. Short-duration bond funds and savings accounts would be the closest proxy for investors. Ultra-short-duration bond funds typically offer higher yields than money market funds but also come with higher fees, more complex tax accounting, and more risk. Savings accounts retain the protection against loss of a money market fund, but offer lower returns historically versus money market funds. In either case, state and local governments and institutional borrowers would see reduced access and diversification, as well as higher costs to short-term financing. The unwinding of money market funds would potentially create a drag on our economy and increase systemic risk.



Source: ICI as of July 1, 2015

Informal interviews of several prominent money market fund managers conducted recently by Bellwether provided insights into how the 2014 SEC reform will shape money market funds and affect other asset classes. A consensus view among these money market fund managers is that fees and gates are the new equivalent to breaking the dollar. As such, they will likely be rare occurrences, made so by the additional liquidity fund managers will hold (35-40% target likely) to ensure that even the 30% weekly liquidity threshold goes untested. Regardless, massive outflows are expected to occur from non-government money market funds, especially institutional funds subject to a floating NAV. Estimates regarding the size of upcoming outflows range from roughly $200 to $800 billion, with much of this coming from institutional prime funds. The main recipients of these outflows will be government money market funds and vehicles that will invest in money market instruments but without falling under SEC money market regulations – such as separate accounts, stable value funds or OCC-regulated short-term investment funds (STIFs). Although outflows may be modest until October 2016 nears, such an enormous increase in demand for short-term US Treasury and Agency debt and repo would quite probably push yields well into negative territory were they in effect prior to Fed's first rate hike.



Source: ICI Factbook
Includes accounts purchased by an institution, such as a business, financial, or nonprofit organization.

The exact terms of how the floating NAV will work and how much it will vary day-to-day are still up for speculation. For now, consensus appears to be that floating NAV funds will be priced four times each day and the FNAV will likely remain unchanged and occasionally move by one or two basis points between pricings under normal market conditions. To address the FNAV, fund managers have begun converting some prime funds into government funds. More innovative approaches include BlackRock's upcoming FNAV short maturity institutional prime money market funds, which will limit holdings to a maturity of seven days or less. Asset flows will almost surely widen money market credit spreads, but a relative increase in demand for the shortest-duration prime issuance may lead to a notable steepening in the front-end of the term structure of credit spreads. These are very significant flows so expect some jawboning from the Fed along the lines of "don't let the door hit you" if assets fail to roll over in a timely fashion.

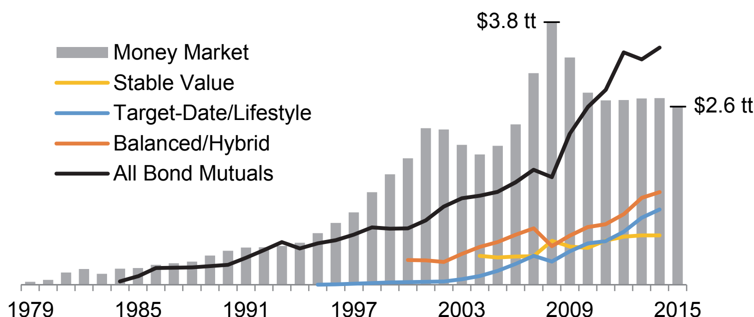
Risk-Free or Return-Free?

Money market funds have prospered over their 40-year history, despite instances of breaking the dollar and despite competition from stable value and target-date/lifestyle funds, especially as QDIAs. Why did the SEC augment Rule 2a-7 with amendments in 2010 and 2014? Will the additional regulatory measures, combined with those of Dodd-Frank, strengthen money market funds in a meaningful way? Or, could they inimically lead to collapse under stress? Motivated by apprehension over liquidity fees and redemption gates, during the next liquidity crisis money market investors may decide to pull their assets out of funds at the first sign of trouble. The failure of money market funds to provide a risk-free investment option may present a serious obstacle to their ongoing success. Retail and institutional investors have little incentive to invest in money market funds when they are more return-free than risk-free.

The 2010 regulatory reforms tightened liquidity requirements in money market funds in a meaningful way while avoiding any structural changes that would present new vectors of systemic risk. The same cannot be said for the 2014 reform. In the quest for risk reduction, adding several gorillas of varying hundred-pound-multiples rings antithetic. Should money market fund investors create a mass exodus during the next liquidity crisis that dwarfs 2008 and the Fed finds their abilities to remediate this "exigent" circumstance hamstrung by Dodd-Frank, what will result?

The success or failure of money market funds will have a large impact on other asset classes and on the US economy. The ready access to short-term financing provided by money market funds and other market participants is critical for the smooth functioning of our financial system. In 2008, when institutions became unwilling to assume the counterparty risk necessary for short-term financing and money market funds saw peak weekly redemptions of over $300 billion, bid-offer spreads widened spectacularly and credit dried up. Consumers and businesses suffered from a lack of access to financing and investors were punished by falling asset prices driven by defaults and illiquidity.

If money market funds are drained of their assets, then where that cash ends up will decide who is able to access it and how much frictional cost it will add to the functioning of our economy. While businesses and institutions currently relying on money market funds will likely find their financing costs increasing due to the 2014 SEC reform, money market issuance will likely decrease when the Fed begins to raise the target fed funds rate. At present, top-tier non-US banks can issue Yankee CDs at 10-15 bps and earn 25 bps from the Federal Reserve on the cash they receive. This arbitrage opportunity will disappear once the Fed hikes rates. The reduced supply of prime issuance will partially offset the effect of reduced demand. The advent of a floating NAV is a novel change whatever the implications. Allowing the NAV to change by increments (or more pointedly, decrements) of a single basis point eliminates the cliff-event of a busted constant NAV. Yet, it goes against the very nature of a risk-free asset. While the yield of money market funds has always been subject to change, investors could mostly rely on sudden changes in interest rates to have no instantaneous effect on net asset value. In other words, volatility only impacted the rate of future accumulations. This is a key feature of a risk-free asset for all practical measures. Now that institutional prime money market funds will float their NAV, the question of how much yield spread is worth ceding for a constant NAV will be at the forefront of every treasurer's mind.



Stable value funds similarly hold the distinction of insulating against downside capture. Impressively, stable value funds have provided much higher returns with slightly lower volatility in yield compared to MM funds {for more information please refer to our 4Q2014 Market Recap: Focus on Stable Value}. However, the past 40-year period that saw the creation and rise of money market and stable value funds is (perhaps more than) coincidentally a period of falling rates. Interest rate cycles have regularly ranged from 25 to 40 years or so. As we currently stand poised for a transition to a period of rising rates, how will money market funds fare against stable value? With stable value advantaged by longer duration, a path-dependent crediting rate, and insurance wrap pricing that erred to the benefit of stable value investors, money market funds may be set to close some of this performance gap, but only if the yield curve rises fast enough, high enough and flattens enough. With fundamental changes to money market funds on the horizon, the choice between money market funds and stable value funds (among other options) will be at the forefront of retirement plan sponsors' and participants' minds.

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