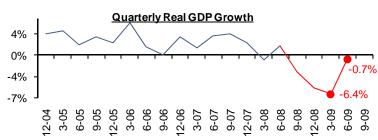


3rd Quarter

# MARKET Recap

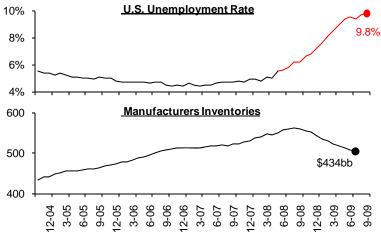
# The Economy: "The Fed's Dilemma"

The US economy shrank at a -0.7% annualized pace in the second quarter, a much more moderate rate of decline than experienced in Q4 and Q1. The problem areas were largely the same for three quarters running (e.g., residential fixed investment, exports, equipment & software). Consumer spending resumed its downward course after turning modestly positive in Q1. Significantly, motor vehicle output added 0.19% to the second quarter change in real GDP, after subtracting



1.69% in the first quarter. The trend likely continued into the third quarter on the backs of the "Cash for Clunkers" program. Unfortunately there is a two-fold price to pay for this – the obvious bill to the taxpayer, and the less obvious decel-

eration in car sales that will occur because future purchases were simply moved to the present period.



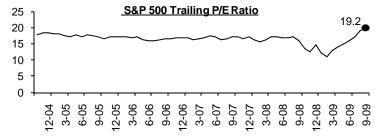
To be frank, the U.S. consumer is on life support. They will indeed spend money if you pay them to do so, as the aforementioned program shows. An \$8,000 first-time homebuyer tax credit has similarly helped liven up the stagnant residential marketplace in many regions, as the number of home sales has been on a modest upward trend after bottoming out in January. Prices continue to fall though; the median new home price broke through \$200,000 in August and existing home sale prices weakened in July and August, further stressing the fragile household balance sheet. Manufacturing inventories continued to fall through August, and unemployment rose to 9.8% in September, further stress-

ing the household income statement. Against this backdrop it is difficult to envision anything other than more fiscal stimulus programs and more monetary expansion, for at least as long as the consumer is in workout.

And there is the problem, because expansion of the money supply and government debt will inevitably lead to inflation. In fact we believe inflation is already present, although the anemic state of the consumer just described will likely prevent consumer prices from rising for some time. Inflation, rather, is re-materializing in risky asset markets, at least those not directly connected to housing. Witness spreads on investment-grade and high yield corporate bonds, which have fallen back to pre-Lehman levels (CMBS spreads are nearly there as well). P/E ratios on U.S. stocks achieved their highest level since 2004, on admittedly depressed earnings, implying future earnings that are somewhat hard to imagine unless consumers are soon able and willing to spend money on something other than their mortgages. It is the asset markets that the Fed and Congress must pay close attention to, not the CPI, and the Fed at least is well aware of it. Problem is that, projecting forward the increasing magnitude and frequency of disruptive asset bubbles in recent history, dangerous asset

inflation is likely to occur before the U.S. consumer recovers and financial life support can be discontinued.

Unlike consumer price inflation, asset price inflation actually *feels good* while it is occurring. That's why there is so little will to contain it, and why our memories are so short after painful collapses occur.

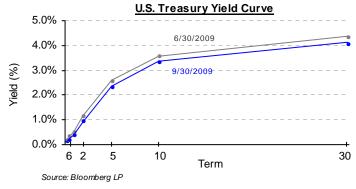


### The U.S. Bond Market

Demand for treasuries increased over 3Q 2009, raising prices and lowering yields across the curve (roughly 10 – 30 basis points). At quarter-end, the benchmark 10-year yield was 3.31%, and the difference in yields between the 2-year and 10-year notes was at 236 bps, the narrowest since May.

Although government debt returns lagged the corporate side, modest gains were evident across the fixed-income category. This was in part due to Federal Reserve purchases and foreign government demand for newly auctioned Treasury debt. The Treasury's \$43 billion sale of 2-year notes on September 22nd attracted bids for more than 3 times the available securities, the most since September 2007. Treasury Inflation-Protected Securities (TIPS) were up nearly 4% in the quarter and 8% year-to-date.

Investors have surged into corporate bonds across the spectrum of credit risk over the past two quarters. Investment



grade debt issuance increased 83% to \$120 billion, with Financial companies dominating the list of issuers in Q3. Spreads as measured by the Barclays Capital U.S. Corporate index shrank to 222 basis points from 317 bps at the start of Q3 and from 580 bps at the end of 2008, making it an attractive time for companies to go to market with debt issues. Year-to-date, investment grade debt has posted gains of 18%, about even with the S&P 500.

Bond Indices - Q3 Total Return			
BarCap Aggregate	3.74%		
BarCap Interm. Gov't	1.63%		
BarCap Long Gov't	4.66%		
BarCap Interm. Credit	6.10%		
BarCap Long Credit	11.96%		
BarCap High Yield	14.22%		

High-yield bonds continued to rally, up 40% for the first nine months of the year. According to Standard & Poor's, the risk premium (or spread) on junk bonds over Treasuries narrowed to 750 basis points last week from more than 1,600 bps at the beginning of 2009 and 2,200 bps in mid-December 2008, indicating investors have become more comfortable with riskier assets. Many expect spreads to tighten even further as the economy moves out of recession. Not surprising in this environment, high yield issuance increased a dramatic 600% from the 3Q 2008 to \$35 billion.

The wave of debt issuance is helping to restore corporate resources depleted when investors fled from anything but cash and treasuries last year. It gives companies the means to make acquisitions and refinance maturing and costlier debt. Unfortunately, the recent increase in issuance combined with lower yields has the potential to slow the pace of future new bond sales. But there are more ominous clouds on the horizon, in the form of a second-wave mortgage-backed securities crisis – this time commercial instead of residential. At the beginning of the quarter, real estate research and analytic firm Realpoint LLC set its delinquency rate on CMBS to 3.14%, more than 6X greater than a year ago. The commercial mortgage market had benefitted from the same easy credit that set up the residential-driven credit crash. With occupancy and rents on office buildings, hotels, stores and other commercial property continuing to fall, many analysts believe property values already have dropped so low that borrowers will have difficulty extending or rolling their debt. According to Deutsche Bank, there is \$153 billion of CMBS loans which will come due by 2012; \$100 billion of which will face difficulty getting refinanced.

## The U.S. Stock Market

The third quarter of 2009 closed with all major indices posting double digit returns for a second consecutive quarter. The Dow turned in its best quarter in 11 years, closing at 9,776, up 15% for 3Q and up 48% from its 12-year low of 6,547 in March. While some are pointing to the last six-months as the most powerful bull market in decades, there is still much ground left to regain. At the close of the quarter the S&P 500 was down 9.1% from a year ago and 32% from its October

2007 high. The Dow was down 10% from one year ago and down 21% from its peak of 14,164 in October 2007. Toward the end of September, market-watchers noted that the Dow was coming within reach of 10,000 – a psychological landmark for many. But we would point out that the Dow first closed above 10,000 in March of 1999. Should we achieve the milestone, it will simply complete a decadelong roundtrip!

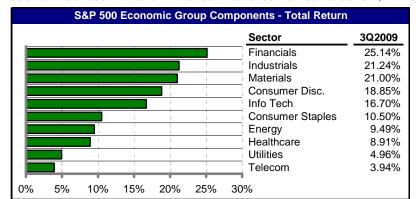
In a repeat from 2Q, returns were spread fairly evenly across the capitalization sectors, with value stocks leading their growth counterparts across the board. Again, some of the hardest-hit stocks in

Stock Indices - Q3 Total Return			
Largecap Stocks		Midcap Stocks	
S&P 500	15.61%	S&P Midcap 400	19.98%
Russell 1000	16.07%	Russell Midcap	20.62%
Growth	13.97%	Growth	17.58%
Value	18.24%	Value	23.62%
Broad Markets		Smallcap Stocks	
NASDAQ Comp.	15.91%	S&P Smallcap 600	18.66%
DJ Wilshire 5000	16.12%	Russell 2000	19.28%
		Growth	15.95%
		Value	22.70%

the recent market slide posted the best gains in the quarter. Financial sector stocks led the S&P 500, propelled by the Consumer Finance sub-sector, which turned in a 45% return for the period as it benefitted from the first time home-buyer credit and "Cash for Clunkers" program.

The REIT sector (another subset of Financials) also contributed with a 32% return for 3Q. Real estate investment trusts have doubled since early March despite warnings from the Federal Reserve and economists that commercial real estate could fuel the next stage of the financial crisis. Federal Reserve Chairman Ben Bernanke has pointed to defaults in commercial real estate are one of the most serious challenges facing the U.S. economy. The subsector has experienced its own junk rally with riskier segments (e.g., lodging, malls, developers, and highly-leveraged REITs) outstripping those generally viewed as safer (e.g., health-care REITs, companies with strong balance sheets).

News of corporate mergers appeared by the end of the period, helping to push the market higher. However, overall merger activity is still down compared to last year and is at its worst level since 2002. So far this year, 1,896 deals have been announced in North America with a combined value of \$471.5 billion, a drop of 41% in volume and 34% in value



compared to the same period last year, according to Mergemarket. Despite these figures, any revival of merger activity is a sign that credit is beginning to flow again.

According to Thomson Reuters, the average 3Q earnings-growth rate for the S&P 500 is estimated to be -25% on a year-over-year basis. This will be the ninth consecutive quarter of negative earnings growth. To date, there have been few downward revisions to estimates from analysts or companies. At the start of the quarter, earnings were expected to be down 21%. Thomson Reuters has noted that

this trend of revisions is similar to what was seen in the second quarter of 2009, when 73% of companies ultimately topped expectations (the largest percentage since the first quarter of 2004). On average, in 2Q 2009 companies topped expectations by 13%, helping the market continue its rally through the summer and into September.

## **Overseas Markets**

Global markets continued to perform well during the quarter as expectations of improving economic conditions (a slowing recession) were evident in many markets. Global economic indicators remained mixed, however talk abounded about a return to growth sooner rather than later. Pacific and Latin American emerging markets lead performance as developed markets struggled to keep pace, fueling chatter about a decoupling of international markets.

While conditions in the Eurozone appear to have moderated the sector is not out of the woods. At the start of the quarter private-sector loan growth had slowed to an historically low level of 1.5%. The ECB has not implemented quantitative-easing measures, but has moved to boost liquidity in the euro zone banking system, providing €442 billion in one-year collateralized loans at a fixed-rate of 1%. Much of the money was deposited in the ECB's overnight facilities (earning interest of just 0.25%) rather than being lent out to investors at higher rates. Encouraging signs from Germany and France point to the recession ending soon as both countries reversed 4 previous quarters of economic contraction during the second quarter with GDP in both countries growing 0.3%. Consensus is that growth will continue in the third quarter and beyond. In Germany retail sales began increasing in July, a positive sign, although most economists believe that any rebound will be reliant on a factory-led revival rather than a consumer driven one. Growing GDP notwithstanding, the recovery in France remains a bit more tenuous as the private sector currently has 580,000 jobless with expectations of an additional 180,000 added to the rolls next year.

In Japan, data from second quarter showed improvement in consumer confidence as the Tankan Index rose sharply. Industrial production also appeared to be strengthening at the start of the quarter. Japan's consumer goods output was driven by government incentives to buy electronics products as part of the previous ¥25 trillion stimulus package buoyed demand for televisions, personal computers and refrigerators. The unemployment rate fell to 5.5% from 5.7% in July and spending by households unexpectedly rose 2.6% from a year earlier, the biggest jump in nearly 2 years. The run-up

in the Yen during the quarter has been alarming and threatens to erode exporters' earnings and make their products less competitive abroad – never a good thing for a long-struggling economy trying to break out of a recession.

China continued to press for a new global reserve currency prompting new calls from the U.S. to allow the yuan to float against the dollar. However, even with all of the rhetoric China continues to purchase U.S. assets. China's total U.S. dollar holdings have increased \$229 billion since mid-2008 to \$1.43 trillion; Chinese foreign-exchange reserves, the world's largest, grew to \$2.1 trillion during 2Q, as a record \$178 billion were added according to the People's Bank of China. The higher foreign-exchange reserves call into question any immediate danger of China diversifying away from the U.S. dollar. The end of the quarter also saw signals that Chinese authorities may be about to loosen its policy on the yuan, allowing appreciation against the U.S. dollar to resume, although the pace is likely to be slower than it was before the financial crisis. As part of its fiscal stimulus package China cut its benchmark interest rate by a cumulative 216 basis points to 5.31% in an attempt to keep economic growth above 8.0%. Virtually every other Asian country has also implemented substantial fiscal packages (albeit not as big as China's) and cut interest rates aggressively. These measures should be expected to boost economic performance in the short-term, but it is unclear whether it will be sustainable in the long run.



Mainland China trailed other Asian countries for the quarter as worries over growing asset bubbles, excess liquidity, and concerns regarding rumors that the government would tighten loan controls and introduce other tightening measure weighed on performance. The MSCI China Index was up only 7%.

Latin American emerging markets, again, performed well. In Brazil, the central bank signaled the start of reducing stimulus measures as total outstanding loans hit a record 1.3 trillion reais. Policymakers tightened the rules for banks to meet reserve requirements and also left the benchmark interest rate stable at 8.75% in September, ending 7 months of rate cuts. Median estimates call for

GDP growth of 4.5% next year. Signs of recovery are also evident in Argentina where, in August, industrial production was up 1.4% for the month. It appears that risk premiums on Argentina's sovereign bonds are subsiding, and with the government needing to return to the international capital markets, Argentina has been making overtures about repaying its debt on defaulted paper it owes to the Paris Club.

## Focus On: Venture Capital – a Refresher

When is the best time to take risk? When no one else wants to, of course – that's when you get paid the most for bearing the risk. In the near-term, the news will probably focus on the reasons that too much optimism about an incipient recovery turns out to have been unwarranted and on government programs' failure to "fix" the economy. Instead, we have chosen to go back and look at venture capital (VC).

Small companies receive a chronic lack of attention. While large-cap domestic equity is the main ring of the investment circus and fixed income has received vast attention over the last few years, small-cap is always an after-thought, with even less attention paid to the relatively tiny investments that comprise venture capital. Mainstream U.S. firms are facing stagnating growth, at least in the near to mid-term, and investments associated with these companies are likely to produce similarly stagnant returns. In this environment, investments in VC will likely be one of the few sources of attractive returns, at least in developed economies, especially as an access point to emerging markets or emerging technologies.

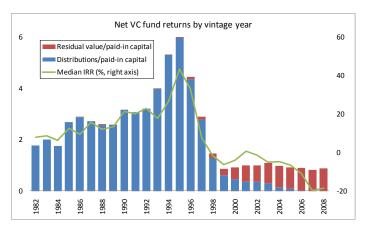
There is also a question of cyclicality. In theory, during times of recession and economic stress, large and well-established companies should do best. Newer, more speculative ventures should tend to gain momentum and be recognized later in the business cycle. The reality is less clear. After the 1981-82 recession, VC lagged the market consistently over the decade. After the recession of the early 1990s, it took off and never looked back. It lagged once again after the tech bubble burst in 2000-01, until slowly recovering relative ground from 2005 on. From this history, we might conclude that VC does not perform well every cycle, but never loses ground once it has taken off – at least until the next recession. While it remains to be seen whether this pattern will hold coming out of the current environment, one notable difference has already occurred: VC seems to have held up better than the public markets since the current recession's late 2007 start.

#### The VC Landscape

The first thing to note about venture capital is that the deals and companies are very small. The median Russell 2000 company, generally considered a small company, is almost 12 times larger than the median venture-backed company; even the median Russell Microcap company is four times as large.

Measuring venture capital returns is problematic. There is no comprehensive source of information about venture-backed companies, especially those that do poorly (as VC firms are understandably secretive). VC firms frequently get a large proportion of their success from a few outstanding investments, and the illiquid nature of the investments generates issues similar to those in buyout funds and real estate (along with some of the same solutions, such as paired transactions methods). Also like buyout funds, VC funds' variable cashflows create challenges around calculating periodic returns versus internal rates of return (IRR).

However, two well-known indices are available for industry data: the Sand Hill Index (from Sand Hill Econometrics) and the Cambridge Associates US Venture Capital Index. The Sand Hill Index is a company-level, gross (of management fees and carried interest) index; Cambridge Associates is a fund-level, net index (arguably a peer group, not an index – but beggars can't be choosers). From the start of 1981 through 1Q2009, Cambridge Associates returned 12.8% annually, ver-



sus 7.4% for the NASDAQ and 6.5% for the S&P 500. However, if we look at a period in which the Sand Hill Index also becomes available, 1988 – 2004, Cambridge Associates returned 19.4% versus 16.9% for Sand Hill. Since Sand Hill is a gross index, we need to subtract some approximate fees, perhaps five percent, bringing us to an approximate 11.9% net return. Given this, the range of possible returns for venture capital as an asset class might be as wide as 7.5%. Not surprisingly, venture capital returns are most correlated with the NASDAQ. But when it comes to other relationships, they are actually more correlated with the S&P 500 than with small-cap or micro-cap indices – probably a function of venture-backed companies' dependence on large acquirers and their complete growth orientation.

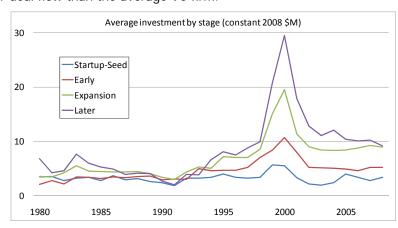
Given the massive uncertainty about returns, it seems questionable to apply a factor model such as the well-known Capital Asset Pricing Model (CAPM). Preliminary attempts to do so, however, result in a market beta of approximately 1.8. We would expect the Fama-French size beta to be very positive, but it is not clear that this is so; the value beta seems to tilt significantly toward growth, as expected. Interestingly, estimates of the historical liquidity premium are only about 1%.

We can also look at VC returns by the fund's vintage year (year in which it was originated). Predictably, the best vintage years were shortly before the internet bubble, and the worst will likely turn out to have been those at its height and just after. Due to VC's long holding periods, it is difficult to assess returns fully for some years; returns for recent years look poor due to the "J-curve effect," which essentially just means that IRRs for long-term investments look poor before they pay out and while management fees are being paid.

#### **VC** Investment Trends

According to the National Venture Capital Association (NVCA), there are about 882 VC firms managing an average of only \$224 million each, for a total capital of \$197 billion. The NVCA's capital under management figure assumes new investments last eight years, so we can confidently expect that figure to fall in 2009, as 2001's significant commitments fall out, and then recover for a few years, as the post-bubble lean years work out. The ten most well-known firms (Kleiner Perkins, Sequoia, etc.) manage about 20% of the industry's total capital, and there is some reason to believe those firms benefit from reputational effects that bring them better deal flow than the average VC firm.

Industries tend to move in and out of favor with VC. Information technologies, including software, hardware, telecom, and media, have always comprised the largest segment, followed by healthcare, including biotech, medical devices, and healthcare services. IT fell to 46% of total investment in 2008 from its high of 74% in 2000, while healthcare has hovered around 30% for the last few years. The last time it reached these levels was 1992, shortly before the last major attempt at healthcare reform. Industrial and energy investment is up to 16%, its highest proportion since the early 1980s (the end of another perceived energy crisis).



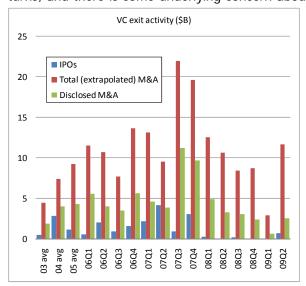
The stage at which VC firms become involved has changed significantly over time – what we see in the graph is that, while the size of the average startup-seed deal has not changed, the 1990s saw the advent of much larger follow-on deals. VCs have supplied much less seed money, used for proof of concept or to develop a business plan, although this activity has started to pick up again in the last few years, while later-stage investing has become much more significant. Early-stage investments, by way of definition, are generally used to bring a product through testing / pilot to commercial viability, while expansion-stage funds improve existing product development, production, and marketing capabilities. Startup capital has become the province of angel investors, who actually invest 30% less (\$19 billion in 2008) than VC firms (\$28 billion) but supply about six times as much startup capital (\$8.6 billion vs. \$1.5 billion), according to the Center for Venture Research.

Finally, VC firms are often described as looking for a few big wins. For example, the first modern VC firm, American Research and Development Corporation, earned 15.8% annually for 25 years, but only 7.4% when excluding Digital Equipment Corporation. The industry's statistics, however, do not seem quite so dire. Historically, the average first-round investment has a 22% chance to go public and a 24% chance to be sold privately for more than the initial investment, versus a 15% chance to be sold for less than the initial investment and a 39% chance of becoming defunct. On the other hand, considering the long holding time for VC investments, only 24% of first-round investments result in realized value more than three times investment, which works out over ten years to a satisfactory but unspectacular 12% per year.

#### The State of VC Today

The credit crunch has had a considerable effect on VC, through depressed public equity and M&A markets. The NVCA complains only six venture-backed companies went public in 2008, the worst figure in 30 years, at a time when many companies founded early in the decade would have been ready to do so. The fortunate instead received more VC funding or were acquired – at lower prices – and the unlucky went bankrupt. In the short term, there has been some hope that buyout firms will fill the gap now that the debt supply for LBOs has dried up. A recent buyout of Skype by a VC / buyout firm consortium has been held up as a model, but there have not yet been many similar deals. VC firms fear a situation similar to that of Europe in the late 1980s and early 1990s, where the 1987 crash killed off a previously vibrant IPO market, making new VC fundraising difficult for a prolonged period (in contrast to the US, which revived more quickly, enabling VC's extraordinary 1990s experience).

There is also widespread angst about venture capital's longer-term sustainability. Is there enough money flowing into public markets to provide VC liquidity and the returns to justify new VC funds? Were expectations set during the Internet bubble about relatively fast IPOs too high? Given VC's long holding periods, the bubble's excesses continue to affect returns, and there is some underlying concern about whether the industry shrank sufficiently afterward. IPO activity in the



last few years before the credit crunch, while revived from the postbubble crash, was not even at mid-1990s levels, and it is not clear if this is just the bubble's overhang.

On the other hand, for those investors who have ready liquidity and can still make long-term capital commitments (typically very few, even among institutional investors), attractive terms are available. Generally, the market is currently paying investors more for taking on illiquidity than had been the case a few years ago. In addition, typical VC investment structures such as participating convertible preferred stock give the VC fund more upside than its share of the company might suggest and as much downside protection as one can have in such a speculative investment. However, given the risk associated with VC investments, a thorough and lengthy (e.g., 12 – 18 months) vetting process is standard. We hope this refresher gives a good starting point for those who may be considering venture capital investing in the next year or so and for all others should venture capital gain visibility in the next few years.





