Bellwether CONSULTING

Your Quarterly Update on the Financial Markets

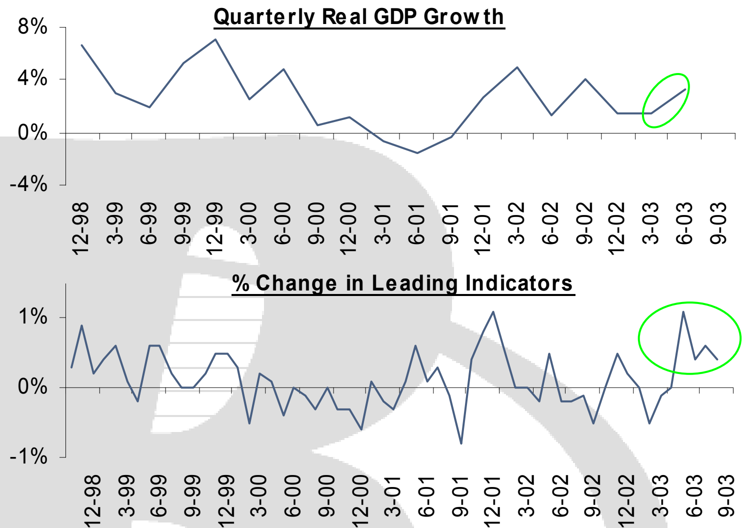
September 30, 2003

3rd Quarter

MARKET Recap

The Economy: *"Jobless Recovery" Picks Up Speed*

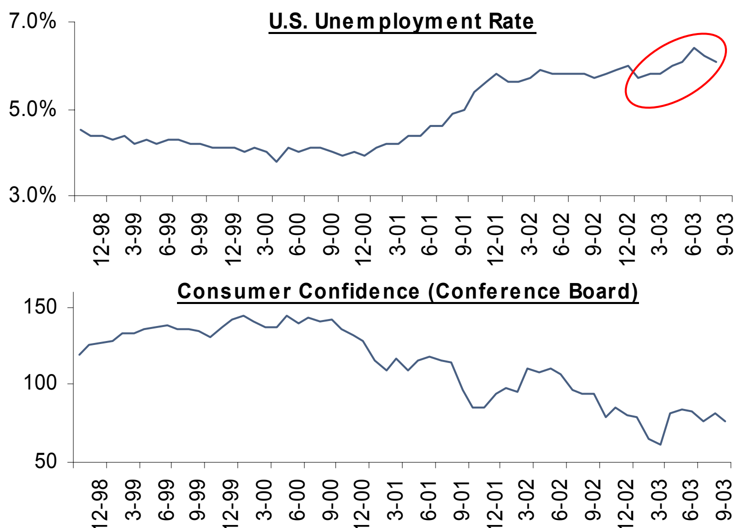
A post-war surge in economic activity pushed gross domestic product up 3.3% for the second quarter, largely in line with expectations. The more fickle but forward-looking index of leading economic indicators turned positive in the second quarter, due largely to the charging U.S. stock market, but importantly remained positive through the third quarter. Early growth in activity-based components of the index such as manufacturer's new orders is certainly encouraging, although a decline in factory orders for August suggests the current pace represents a peak. Consensus estimates for third quarter growth are currently 4.5%, falling back to around 4% for the final quarter of 2003.



The Fed remained accommodative, holding short-term interest rates at current, historically low levels. Commentary around the decision was growth-oriented, and remarkably free of dissent.

As we've discussed in past issues, unemployment is generally a lagging indicator of economic activity. Companies are reluctant to hire into a recovery until absolutely necessary, preferring to improve margins first. Unemployment edged down slightly to 6.1% in August, a somewhat misleading decline driven as much by people discontinuing their job-search activities than by new hiring activity. First-time jobless claims at the end of September approached a quarterly high point, while worker productivity grew 6.8% (triple the growth rate for the second quarter). Productivity gains usually precede growth in employment during a recovery, but the magnitude of productivity growth this time is exceptional.

Unemployment is a driver of consumer sentiment, which retreated in September after an August surge. Dissatisfaction with progress in Iraq and the pace of the recovery likely contributed to moodiness as well. While clearly the administration must be concerned as the election creeps closer, economists are becoming concerned as well. Investments in technology throughout the nineties have likely increased the sustainable level of productivity growth and, with it, the level of structural unemployment in our economy. Fed district presidents Alfred Broaddus (Richmond) and Michael Moskow (Chicago) both expressed concern recently that lack of job growth represents a considerable risk to the recovery, particularly due to the ongoing importance of consumer spending.



Consequently we'll all watch the holiday sales numbers closely this year. Early forecasts are for year-over-year growth of 4 – 5%, at or above levels seen in 2000. Strong sales forecasts are based on lack of a major international crisis, strong stock market performance, consumer confidence, and low interest rates. Achieving 4% sales growth or better would be a significant milestone in the face of moody public sentiment.

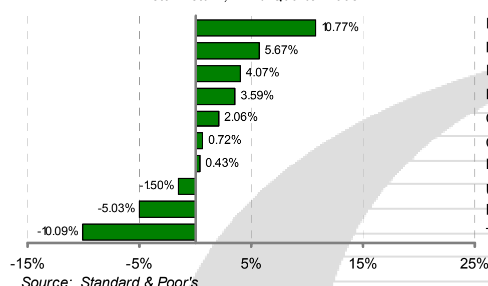
Oil prices moderated after spiking in the second quarter, but they remain a source of concern heading into the cold months. Current price trends are up on news of OPEC production cuts and a threatened strike in Nigeria.

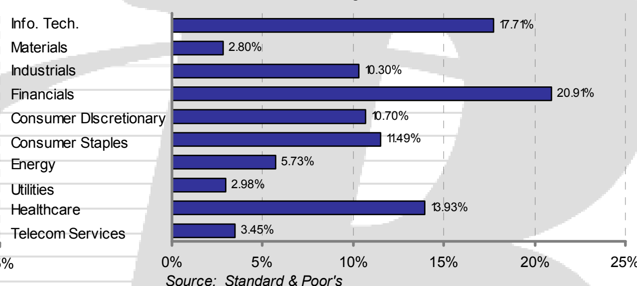
The U.S. Stock Market

Equity markets continued to build on their strong performance from the second quarter. For the second straight quarter the major indices all showed gains. Market performance continued to be highly volatile, with trading on both positive and negative news causing the market to waffle between strong gains one day and strong losses the next. Trading volume continued to stay robust and market breadth showed some stamina with 336 S&P 500 stocks up for the quarter. The Federal Reserve left interest rates unchanged for the quarter with no bias, pledging to keep rates low to allow continued economic growth. The S&P and Dow closed the quarter with gains of 2.7% and 3.2%, respectively. The NASDAQ Composite rose 10% for the quarter.

Stock Indices - 3Q 2003 Total Return			
Large cap Stocks		**Midcap Stocks**	
S&P 500	2.65%	S&P Midcap 400	6.59%
Russell 1000	3.00%	Russell Midcap	6.43%
Growth	3.91%	Growth	7.16%
Value	2.06%	Value	5.94%
Broad Markets		**Small cap Stocks**	
NASDAQ Comp.	10.11%	S&P Smallcap 600	7.08%
Wilshire 5000	3.70%	Russell 2000	9.08%
		Growth	10.47%
		Value	7.73%

S&P industry sector performance was mixed. Information technology led all sectors, up nearly 11% for the quarter as the sector continues to put distance between itself and accounting scandals, and fundamentals continue to improve; however, September ended with the techs losing ground on reports of lower consumer confidence and slow job growth. The telecommunications sector was down over 10% as slow manufacturing and factory orders hurt performance. The top performers in the S&P were Advanced Micro Devices and Novell, both up over 73% for the quarter. S&P laggards included Qwest and Nvidia, down 28% and 30%, respectively.





Corporate earnings numbers continue to hold up well and should be good market drivers for the upcoming quarter. Expectations are that upward earnings estimate revisions will outpace last year's by 20% which we would expect to translate into positive stock market performance. According to Firstcall, the number of companies warning on earnings at the end of the third quarter was 385 – the same as at the end of the third quarter 2002; companies announcing upward revisions for 3Q were 227 versus 181 for the same period last year. Although positive revisions can likely be attributed to low expectations, signs do suggest an improving business environment.

As positive news continues to flow into the markets and positive performance maintains momentum we expect consumers to regain confidence in the markets. However, we can't underestimate the potential negative impact that continued lagging job growth and slowing economic growth can have on the equity markets. That said, we remain cautiously optimistic that the improved market performance we have seen will continue into the fourth quarter.

The U.S. Bond Market

The solid bond market returns that we've seen for the better part of the last two years came to a halt in the third quarter. The Fed held the line on further easing during the quarter keeping the Fed Funds rate at 1% with a neutral bias for future moves. Informally, the Fed has passed the word that they will work to keep interest rates low in an attempt to spur economic growth.

Bond Indices - 3Q 2003 Total Return	
Lehman Aggregate	-0.15%
Lehman Interm. Gov't	-0.13%
Lehman Long Gov't	-2.68%
Lehman Interm. Credit	0.12%
Lehman Long Credit	-0.99%
Lehman High Yield	2.87%

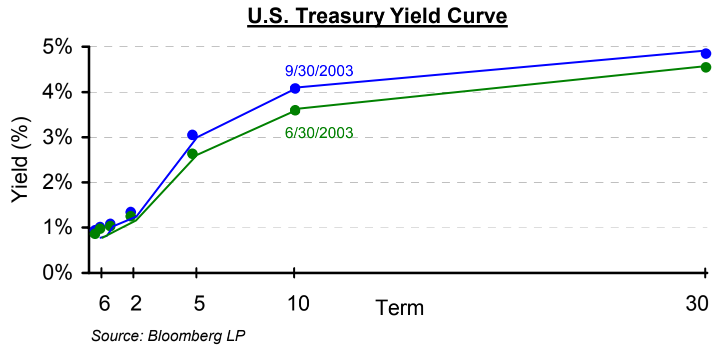
Credit spreads narrowed in the third quarter, a continuing trend. The beneficiary continues to be corporate bonds, one of the few sectors to finish the quarter in positive territory. However, the recent turnaround in equity markets has seen investors who were formerly searching for yield and lower volatility selling out of fixed-income positions and buying into equities, putting upward pressure on interest rates, resulting in depressed bond returns. Notable debt issues at the end of the quarter included $1 billion of 5-year bonds by Wal-Mart and $1.5 billion of ten-year notes by Kraft, both with attractive spreads.

There was a good amount of interest rate volatility in the fixed-income markets during the quarter with the yield curve becoming steeper. Treasuries sold off to start the quarter even with poor economic reports hitting the news wires. In addition, mortgage-related selling added to Treasuries early quarter woes. Treasuries rallied to end the quarter as speculation of slowing economic

growth and lower consumer confidence readings flowed into the market, with yields on the ten-year falling below 4% for the first time since mid-July. The rally wasn't enough to turn quarterly performance positive for the sector however.

High yield performance was mixed, but continued to lead performance for all fixed income sectors. Lower quality issues performed better than their higher quality peers as companies continue to improve their fundamentals and investors gain more confidence in the market. High yield spreads have been narrowing for the last year and are currently approaching historical averages.

We look for lower volatility in rates and an upward bias on signs of moderate growth and improvement in earnings.

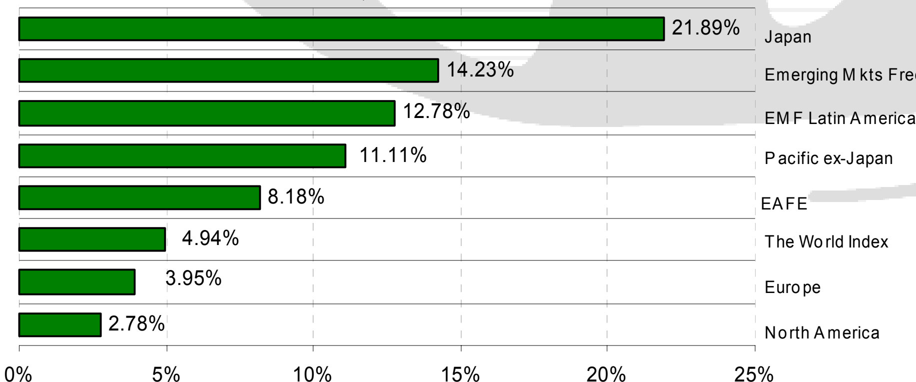


Overseas Markets

Global markets turned in a positive performance with most sectors in the black, led by strong performance in emerging markets. The MSCI World Index was up nearly 5% for the quarter.

In the Eurozone, the European Central Bank left interest rates unchanged in July after a 0.50% cut in June, as anticipated by the markets. ECB chief Wim Duisenberg indicated that the ECB is looking for Eurozone governments to do their part to bolster growth. France and Germany continue to suffer the effects of a global economic slowdown. France is forecasting a budget deficit greater than 3% of GDP for the third consecutive year in violation of EU limits. France's Finance Minister believes that the 3% limit should be relaxed to provide member countries more flexibility during economic downturns. The MSCI France Index finished the quarter up nearly 3%. In Germany, the deficit and unemployment both remain elevated. Unemployment remains over 10% and Germany has also flouted the 3% deficit rule of the EU. The MSCI Germany Index posted a gain of 3.4% for the quarter as investor sentiment jumped to an 11-month high despite budget deficits and lower exports. There is some belief that the two largest EU economies are turning the corner.

There was cause to celebrate in Japan, finally! After countless quarters of both lackluster and underperformance, the MSCI Japan Index was up almost 22%. Japanese companies have shown some success in restructuring and have also improved cashflow. Japanese car companies have also taken market share in the U.S. and European markets. Both of these factors have attracted investment in Japan as trailing indicators showed the economy grew at a faster rate than the U.S. during the second quarter. Exports also provided a significant lift. Shipments of cars, electronics and other goods to China and the United States helped offset slower domestic spending, and strong overseas demand has shown little sign of slowing.



Other Asian markets also fared well. In China, the economy is growing fast enough that there is fear of inflation. The latest data from the country's National Bureau of Statistics showed the consumer price index for August jumped 0.9 percent from the year earlier, driven by rising food and property prices -- the biggest gain in four months and worse than economists' forecast of a 0.6 percent gain. The MSCI China Index was up over 18%. Korea continues to struggle from two quarters of contraction and was hard hit by a typhoon near then end of the quarter further slowing recovery. Bank of Korea officials estimate storm damage caused a 0.50% hit to third quarter growth. The MSCI Korea Index was up 9.8% for the quarter. Thailand got a boost from better than expected economic growth due to rising exports and consumer spending. The MSCI Thailand Index was up 24.3% for the quarter.

Latin American markets showed a second quarter of strong performance, but lagged their Asian EM peers. During the quarter Argentina defaulted on $3 billion in payments to the IMF in an effort to avoid dipping into reserves. This comes after the IMF freed up $300 million in loan disbursements last quarter. The MSCI Argentina Index was up 4.7% for the quarter. In Brazil the central bank's monetary policy committee reduced interest rates by four percent, from 26% to 22%, and the country is moving towards its inflation target of 8.5%. The MSCI Brazil Index gained 18.3%.

Focus On: *Pension Liabilities – A Bond by Any Other Name...*

As corporations and other pension sponsors have suffered from rising plan liabilities over the past few years, much debate has developed over pension reform and funding relief. Central to the debate is the question of how pension liabilities should be valued. Experts and partisans are arguing technical issues before Congressional committees, regulators, and standards boards whom, like the investing public, may not be well grounded in the fundamentals. In fact, many benefits and finance professionals know through experience that liabilities rise when interest rates fall, but have never faced a reason to understand why. As reform debate continues, let's take a step back and study the mysterious pension liability.

Why Do Pension Liabilities Act Like Bonds?

All other things equal, pension liabilities rise when interest rates fall. Sounds like a bond? That's because a pension plan is nothing more than a bond; a complicated bond to be sure, but hardly more so than many of the securitized bond instruments produced by Wall Street over the past couple of decades. A bond is simply a series of future cash flows, promised by a company or other organization, backed by its full faith and credit, for the purpose of raising capital. The issuer obtains capital from the bondholder, and then puts it to work in order to generate earnings (companies) or do good deeds (governments and non-profits).

Parallel Concepts, Different Names

Pension Plan	Bond
Plan Sponsor	Issuer
Employee	Bondholder
Service Cost	More Bonds
Interest Cost	Amortization
Plan Assets	Sinking Fund
Benefit Payment	Redemption
Lump Sum Payment	Put
Service Life	Duration/Maturity
Funded Ratio	Credit Risk
Discount Rate	Market Interest Rate
ERISA	Covenants
Plan Termination	Call
PBGC	Credit Enhancement

A pension plan promises future cash payments to employees to raise labor capital, instead of financial capital. Plan participants are therefore bondholders of the employer, a financial interest they purchase using their services for barter. As we know, working with pension financials requires a unique vocabulary. On closer examination, nearly every pension concept has a parallel bond concept. For example, municipal bond issuers are often required by bond covenants to set aside a sinking fund, the required value of which increases over time, to insure that funds will be available at the time of the bond's redemption. ERISA or other applicable laws require plan sponsors to set aside assets in a trust fund, the required value of which increases over time due interest cost, to insure that funds will be available when benefit payments are due.

If a pension plan is in fact a bond, then we should be able to calculate the value of the liability using the methods traders use to value bonds in the open market. In fact, that's exactly what current law and accounting standards require.

How Are Bonds Valued?

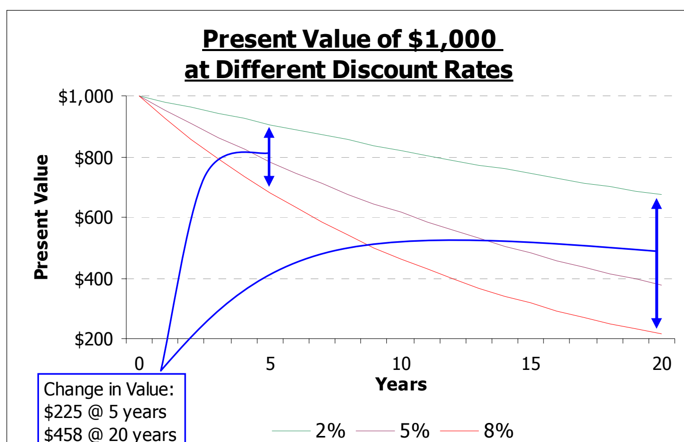
A bond is a stream of future cashflows, from the issuer to the bondholder, that are either known in advance or can be accurately estimated. To value the bond, we need a mechanism to figure out what those future cash flows are worth today. Fortunately, such a mechanism exists.

It's a fundamental concept of finance that a *future* cash flow is worth less than the same cash flow paid today. If someone offers you $1,000 today or $1,000 a year from now, clearly you would take the money today – you could invest the money and end up with $1,000 *plus interest* a year from now. For example, if market interest rates are at 2%, then $1,000 today would be worth $1,020.00 in one year, $1040.40 in two years, and so on. The familiar process of successively applying an interest rate to principal is called "compounding". If you run the process longer, or use a higher interest rate, you end up with a greater future value.

To calculate the *present value* of a future cash flow, we can apply the same process backward. If you've been promised $1,000 one year in the future, you could achieve the same outcome by investing $980.39 today at 2% interest. You could achieve the same results in two years by investing $961.17 today, and so on. This process is called "discounting" because the present value is always less than the future value. If you discount for a longer period of time, or use a higher interest rate, you end up with a smaller present value.

A traditional bond consists of many of cashflows occurring at different times: e.g., coupon interest payments every six months and a final redemption payment at maturity. The market value of the bond is the sum of the present value of all of its cashflows. Details become complicated, but the bond market discounts cashflows continuously to arrive at market prices as interest rates change.

Present values are very sensitive to changes in interest rates. Because discounting is an iterative process, changing interest rates will have a greater impact on cashflows that are farther out into the future. The chart below illustrates how changes in the discount rate have a greater impact on present value as the number of years to payment increases. Bond investors are particularly interested in a statistic called *duration*, which is related to the dollar-weighted average time required for all of the bond's cashflows to occur. It is a good measure of how sensitive the bond's present value will be to changes in interest rates.



When rates move up (or down), the value of short-duration bonds will move down (or up) only a small amount. The value of long-duration bonds will be more heavily impacted.

Pension plan liabilities are valued the same way – by discounting the expected benefit payments. One added complexity is that we don't know precisely when benefit payments will occur, since the amount of benefit ultimately paid will depend on factors such as how long employees live in retirement. However, while we can't predict the fate of any individual employee, the plan's actuary can use techniques to accurately estimate the timing of future cashflows for the aggregate population of employees. Those estimates can then be discounted to arrive at the present value of the pension liability, and an estimate of the duration of the liability. It turns out that pension liabilities typically have durations of 10 to 15 years, about three times longer than a typical intermediate-term bond. That's why pension liabilities are very sensitive to rate changes.

Pension Liabilities – What's at Stake?

When an organization borrows money by issuing bonds it creates financial leverage. Sponsoring a pension plan also creates financial leverage; in fact, it is not unusual for a pension plan to be the single largest source of leverage for the sponsor. Current accounting standards obscure the leverage, as the pension liability is not carried directly on the sponsor's balance sheet, but that does not change the economic consequences for the sponsor. When interest rates rise the value of the pension liability falls, and the sponsor gains an economic benefit reported on the income statement as reduced pension cost. Conversely, falling rates cause liabilities to swell, and the change in value flows through the income statement as increased pension cost. A plan sponsor can "cancel" much of the leverage by investing plan assets in long-duration bonds, at some long-term cost since over the long run we expect stocks to outperform bonds.

Pension liabilities also drive funding requirements. For ERISA plans, cash contribution requirements are currently driven by liabilities based on 30-year Treasury bond rates, the value of which recently reached a 40-year low. Many companies, already carrying tremendous leverage and suffering from recession, simply cannot afford to service their pension contribution requirements and the rest of their debt obligations. Further complicating matters, the treasury suspended issuance of 30-year bonds in October 2001. As the duration of current 30-year debt shortens, market rates will gradually fall, artificially increasing liabilities.

Congress and the Administration appear to be headed toward a compromise between two methods of selecting appropriate discount rates. Plan sponsors have lobbied hard for using a corporate bond rate in place of treasury rates; due to their higher credit risk, corporate bonds have higher yields than treasuries, creating immediate funding relief. Many experts have argued that pensions should not be valued using a single interest rate – rather, rates should be selected off of a yield curve and applied to projected cash flows, causing lower rates to be used for benefits due to older employees (as those benefits will be paid sooner). The approach makes perfect sense to us; problem is, it could ultimately cause liabilities to increase, particularly for plans with an older participant population. Current proposals from Representative John Bohner (R-Ohio) and Senator Chuck Grassley (R-Iowa) would have sponsors use a rate base on long corporate bonds for a transition period; the Grassley proposal goes further by mandating a switch to curve-based valuation in three years.

The "Right" Course...

Crafting legislation to set discount rates is an incredibly complicated problem, with high short-term and long-term stakes. On one hand, it is tempting to cut corners and mandate artificially high rates, to keep the recovery going. A rare coalition of business and labor support that very policy. On the other hand, high rates lead to inadequate funding, creating additional pressure on the PBGC and creating a much bigger retirement security problem down the road. We prefer an immediate transition to discount rates based on the yield curve, without adjusting the discount rate to provide short-term funding relief. A better approach is to simply provide funding relief directly, by temporarily lowering the amount of funding required by law, rather than adjusting rates.

That said, in our opinion the Grassley proposal has merit. If a transition rate methodology is established without requiring curve-based valuation at some point, we risk losing the approach to lobbying. Funding relief should be temporary, and it's incumbent on responsible parties to keep it that way.

Bellwether Consulting LLC
2 Yorkshire Drive, Cedar Grove, NJ 07009
www.bellwetherconsulting.net
Copyright © 2003 All Rights Reserved.