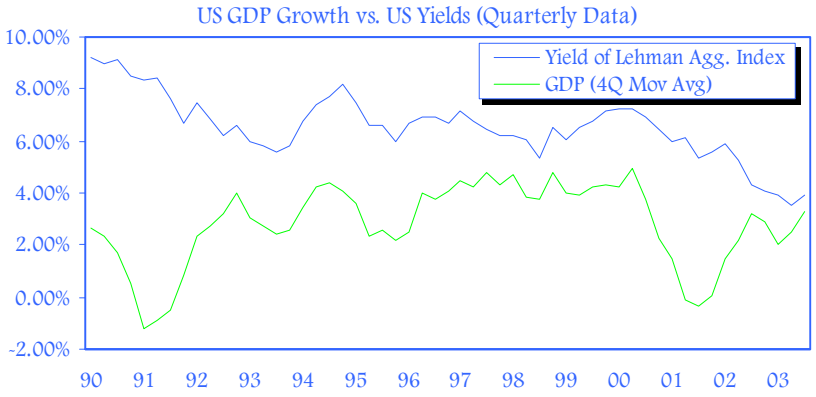
Agincourt Capital Management, LLC

November 2003

Investment Update

Our prediction, in May's *Investment Update*, that interest rates would probably move higher over the next year was not terribly heroic, even for a group like us who would rather walk on hot coals than forecast interest rates. At the time, yields on ten-year Treasury Notes were hovering around 3.3%, resulting in miniscule "real" yields of less than 2%, yet buying was heavy. Even though we were as spooked as most professional investors over the Fed's admission of deflationary risks and the "unconventional" measures that could be used to energize the economy, we still believed that the massive fiscal and monetary stimulus that was heading our way would push rates up before too long.

Now, a few months later, we find that popular opinion has moved "student body right" to the conclusion that rates have nowhere to go but up from here. Again, this doesn't appear to be a particularly controversial call, as just-released third quarter GDP figures showed an economy that's not just growing, but racing ahead at a 7.2% annual rate, after inflation. Faster economic growth, the thinking goes, leads to more demand for credit, pushing interest rates up.



This points to a simple remedy for bond investors: Since rising rates mean falling bond prices, especially for longer-maturity bonds, the only reasonable response is to load up on shorter-maturity bonds, shortening the portfolio's duration, isn't it? What could possibly be wrong with this strategy?

The first assumption we need to question is the linkage between economic growth and interest rates. While it's true that, in general terms, rates should rise and fall in concert with the economy, the correlation is far from perfect, as the chart on this page shows. Note that the yield of the Lehman Aggregate Index fell throughout the entire decade of the 1990's (with a couple of upward "blips"), a period of sustained economic prosperity. Further, rates have continued this downward trend despite the recent volatile, yet upward progress in the GDP data.

Clearly, forecasting interest rates is the single most difficult task that a bond manager can attempt, and relying simply on the strength of the economy is both dangerous and narrow-minded. Ultimately, the level of rates is determined by countless factors that impact the relationship between the supply and demand for fixed income securities. For a myriad of reasons, bond prices can fall even when the economy is growing or rise even when economic growth slows.

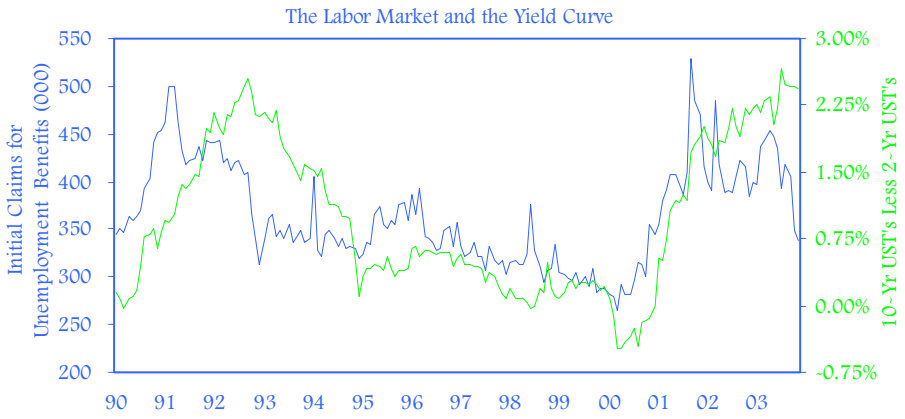
If we can't predict how the "general" level of interest rates behave when the economy strengthens, can we at least identify which maturities of bonds are most vulnerable in an economic recovery? We know that the yield curve (the imaginary line that connects bond yields of various maturities) changes shape as we move through the economic cycle—shorter rates respond to a different set of stimuli than longer rates—but can we identify what those factors are and make some profitable predictions about how they impact the shape of the yield curve?

Fortunately, predicting yield curve movements is a little more straightforward than trying to forecast the general direction of interest rates. At the long end of the yield curve (i.e., 30-year bonds) inflation and inflation expectations, along with a few other variables, are the key drivers. Inflation has a corrosive effect on longer maturity bonds—the more distant the ultimate

back of principal, the more inflation erodes the bonds' value. At the opposite end of the maturity spectrum, Fed policy is the key variable determining the level of US short-term rates.

Anticipating yield curve moves therefore depends on solid fundamental macroeconomic analysis of inputs into the inflation equation as well as an examination of the main indicators that the Fed uses to form their interest rate policies. This analysis is not cut-and-dried—there are plenty of ways to get it wrong—but at least the determinants of the shape of the yield curve are more tightly bound, not as open-ended and not as subject to exogenous variables as "forecasting interest rates."

The chart on this page shows one economic factor that we've identified as being closely correlated to the shape of the yield curve—initial claims for unemployment benefits, a figure that is released weekly by the Department of Labor. In this chart we see that the difference in the yield of 10-year and 2-year US Treasuries (a popular measure of steepness of the yield curve) has historically tracked the number of US workers filing claims for unemployment benefits for the first time. Intuitively, this makes sense: the weaker the labor market, the more inclined the Fed will be to keep rates low (and the yield curve steep). As the economy strengthens (at least in part due to the Fed's monetary stimulus), Fed policy becomes less accommodative and short rates rise more than long rates. While unemployment is typically considered to be a lagging indicator of economic growth, initial unemployment claims appear to be a concurrent, if not leading indicator of yield curve movements.



Which brings us to the final piece of this puzzle: implementation. If we are convinced that the yield curve is destined to flatten (as it now appears), we can reallocate the holdings of our portfolios to take advantage of that re-shaping. But again, there's much to consider here. Most yield curve flattening strategies involve moving holdings from the middle part of the yield curve to either end of the maturity range, in what's commonly known as a "barbell" trade. Unfortunately, these types of trades almost always reduce the yield of a portfolio since a combination of short and long maturities almost always generates less yield than an intermediate bond in an upwardly sloping yield curve.

As a result, yield curve management also involves an element of market timing: since putting on a "yield curve flattener" means giving up yield, bond yields (and thus, bond prices) must move quickly in the anticipated direction for the trade to be profitable. If the yield curve doesn't flatten, the portfolio would have been better off in its previous, higher-yielding state. Even if the curve does move in the desired direction after some period of time, it may not move enough to make the trade profitable, depending on how much of the portfolio was reallocated and how much yield has been sacrificed with the passage of time.

So we see that even the most intuitively appealing approaches to protecting a portfolio from rising yields have the potential to make matters worse. In fact, our current portfolio scenario analysis shows that if all yields in the high-grade universe rise by 100 basis points (a fairly punitive scenario), the Lehman Aggregate Index outperforms the shorter, more "defensive" Lehman Intermediate Government/Credit Index over a time period as short as 18 months! The yield advantage of longer maturities can offset the duration protection of shorter bonds in a surprisingly short period of time.

The conclusion is that while there is often a great temptation to "time the market" either by outright duration management or by yield curve positioning, care must be taken at every step in the process. We'll go ahead and say it: There's no such thing as a free lunch.