

Hoisington

INVESTMENT MANAGEMENT COMPANY

1250 S. Capital of Texas Hwy. #3-600, Austin, TX 78746 (512) 327-7200
www.HoisingtonMgt.com

Quarterly Review and Outlook

Fourth Quarter 2006

DOLLAR BILLS

In the fourth quarter of 2006, nominal GDP expanded at an estimated 2.5% annual rate. A quarterly growth rate this low has occurred only five times in the past twenty years, four of which were during recessionary periods. The significant downshifting in nominal GDP growth from 9% in the first quarter to the fourth quarter slump was so abrupt that at only one time in the past two decades have we experienced such a large, non-recessionary, downward adjustment (Chart 1).

Nominal GDP measures the current dollars spent (i.e., the **dollar bills** in your pocket), compared with the real GDP concept which attempts to measure "real output" or "units" of goods being produced by the economy. The latter, considered the standard measure of economic performance, is rendered less useful during large changes in price indices, as we saw in the last half of 2006. Indeed, the accuracy in capturing economic performance embedded in the real GDP concept is occasionally impaired by price adjustment factors that are applied to the nominal

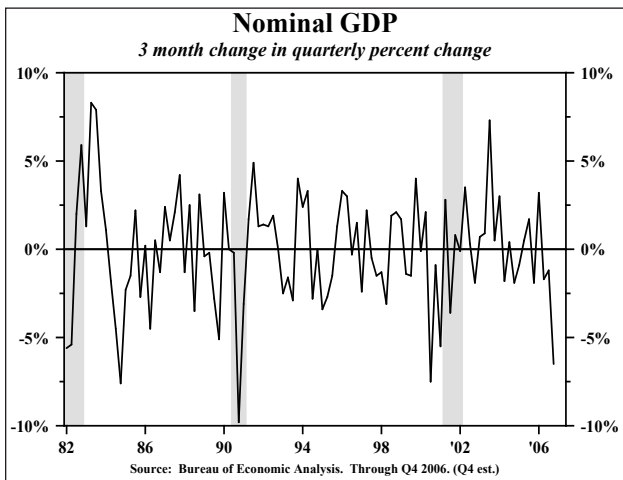


Chart 1

GDP accounts (hedonic price adjustments). Nominal GDP (essentially cash register receipts) is critical to business and consumers since total revenues, not hypothetical or inflation-adjusted dollars, are required to meet monthly bills. In that light, it is significant that we expect that nominal GDP in 2007 could approximate a 3% growth rate, which would be the slowest in almost a half century. But this low nominal growth rate may not mean recession since a 1.5% inflation rate would result in a real GDP expansion. However, the slowdown in the actual dollars accumulating in the pockets of consumers and business would suggest a subdued level of economic activity since belt tightening by both entities would be necessary to meet budgets.

NOMINAL GDP AND THE BOND MARKET

One of the most important foundations of macroeconomics is the Fisher equation, which postulates that the nominal bond yield is equal to the real bond yield plus expected inflation (Irving Fisher, 1867-1947--"Theory of Interest"). Since the real yield is stable over time, expected inflation is the long run determinant of the nominal bond yield. As a corollary, therefore, the more volatile component of nominal GDP is inflation, not real GDP.

Of critical interest to long bond investors is whether real GDP or nominal GDP influence the direction of long term interest rates. History provides an unambiguous answer. When the current year's Treasury bond yield is correlated with the prior year changes in nominal and real GDP, the findings indicate that it is nominal GDP that matters. When changes in real and nominal GDP are assumed to lead the current bond yield by one, two and three years, the correlation coefficients are .50, .55 and .48

respectively for nominal GDP, while the coefficients for real GDP remain unchanged, or slightly lower than 0.13 and statistically insignificant (Table 1). These correlations indicate that nominal GDP is more highly correlated with the bond yield than real GDP because it contains inflation, which is the critical determinant of the bond yield. Real GDP is not correlated significantly to the bond yield because, by its very definition, it does not include inflation. Indeed, since 1954 the Treasury bond yield was correlated at .62 with the GDP deflator, a correlation coefficient almost five times larger than for real GDP. The correlation coefficients rise to .71, .74, and .70 when inflation leads the bond yields one, two and three years respectively.

To paraphrase these findings, what matters to a bond investor, as opposed to a speculator or short-term trader, is inflation. Admittedly, a great deal of daily, weekly, monthly, quarterly, and even annual volatility occurs in the bond markets. But, over time, changes in the Treasury bond yield with respect to errant movements in unemployment, retail sales, housing starts, and a host of other economic measures are simply not important. Inflation is the only important factor that remains with the passage of time.

2006 EXCEPTION

For the full year 2006, the normal and longstanding relationship between inflation and the bond yield did not hold. Although the GDP deflator accelerated in the first half of the year, the rise for the full year was less than in 2005. In the first eleven months of 2006, the consumption deflator rose just 2.1% A.R., down dramatically from 2.9% for 2005.

Correlation Coefficients Between Long Treasury Bond Yield and Nominal GDP, Real GDP and GDP Deflator

		percent				
		1.	2.	3.	4.	5.
		T	T-1	T-2	T-3	
1.	Nominal GDP**	0.43	0.50	0.55	0.48	
2.	Real GDP**	0.13	0.13	0.12	0.12	
3.	GDP Deflator**	0.62	0.71	0.74	0.70	

Source: Bureau of Economic Analysis, Federal Reserve. * - percent per annum. ** - annual percent change.

Table 1

In other words, short-term considerations overrode the Fisher equation last year, as has happened occasionally over time.

2007 BOND YIELDS

The odds are very remote of another divergence in the bond yield and inflation occurring in 2007. In the last half century, only two instances occurred (1959-60 and 1993-94) when the Treasury bond yield diverged from the inflation rate for two consecutive years, and neither time did the year start with the yield curve inverted.

The economy has already shown a clear and unmistakable response to the inverted curve of last summer. Almost coincidental with the arrival of the inverted yield, the rate of growth in nominal GDP dropped sharply. For example, nominal consumer spending in October and November grew at an estimated 2.3% annual rate, down sharply from 5.2% in the third quarter and 6.7% in the second quarter.

The economy was, in reality, weaker in the fourth than in the third quarter, even though real GDP growth was a shade better. Accordingly, conditions forecasted by the inverted yield curve have already materialized. Moreover, since the yield curve remains inverted and is likely to become more so, even less inflation and economic growth lies ahead, conditions that point to lower bond yields this year.

OUTLOOK FOR GDP IN 2007

• Consumer Spending

Of the economy's six major sectors--Personal Consumption Expenditures (PCE), Residential Investment, Nonresidential Fixed Investment, Government Expenditures, Inventory Investment and Net Exports--only the outlook for Net Exports is encouraging.

Real PCE, constituting 68% of final sales to domestic purchasers, should rise in 2007, but this is not a bold prediction since it has increased in all but two years in the post-war era. However, the growth in real PCE should moderate significantly since the consumer desperately needs to rebuild liquidity, a

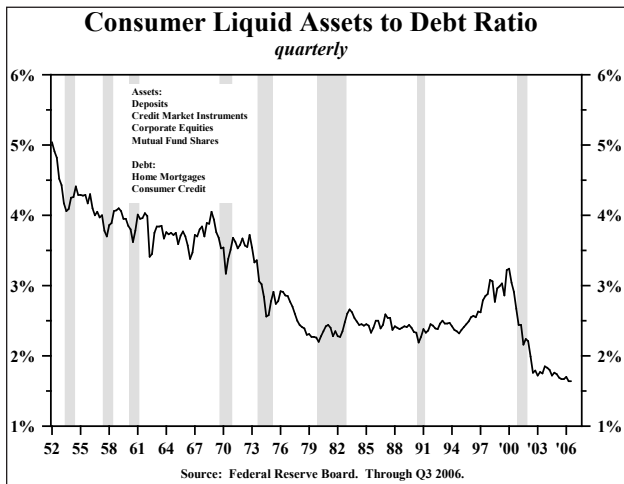


Chart 2

task that will be difficult in the face of rising interest costs and declining mortgage equity extraction. The ratio of consumer liquid assets (the sum of deposits, credit market instruments, corporate equities and mutual fund shares) as a percentage of debt (the sum of home mortgages and consumer credit) fell to a record low 1.6% in the latest quarter (Chart 2). As the chart indicates, the consumer liquid assets to debt ratio fell prior to all recessions since the Korean War.

Almost one quarter of all existing adjustable rate mortgages will be reset in 2007. These resets will be at considerably higher rates. Thus, the household debt service ratio, at 14.5% of disposable personal income and just a shade below the record set in the prior quarter, will move into further uncharted territory in 2007 (Chart 3). This will drain funds from discretionary consumer purchases. Moreover, home equity extraction, according to the Federal Reserve, has turned down sharply. After peaking at an \$869 billion annual rate in the third quarter of 2005, it dropped to a \$380 billion rate in the latest quarter (Chart 4). Pent-up demand for big ticket items, motor vehicles in particular, is likely to be soft in 2007, leading to a continuation of the automotive recession.

While the cyclical components of consumer spending (durables) are likely to contract this year, nondurable goods and services, which are not very cyclical and make up slightly more than 85% of PCE, will continue to rise. Accordingly, real PCE should rise 2.5% in 2007, a full percentage point less than the average rise of the past five decades.

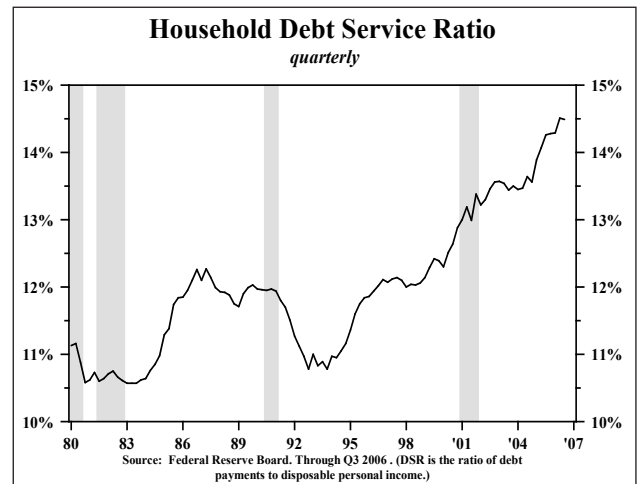


Chart 3

• **Residential Investment**

Real residential investment, representing almost 5% of final sales to domestic purchasers, is likely to contract again in 2007, resulting in fewer jobs in this industry this year. The housing market index compiled by the National Association of Home Builders (NAHB) hit a new cyclical low of 32 in the fourth quarter. In fact, 32 is the lowest reading since the first quarter of 1991, and down 55% from the 2005 peak. The NAHB index is a more reliable indicator of home building than new home sales because home builders take into consideration cancelled sales, while the Census Bureau, the compiler of new home sales, does not. Home builders have been quite candid in acknowledging that cancellations are currently running at record rates.

Building permits fell again in November and

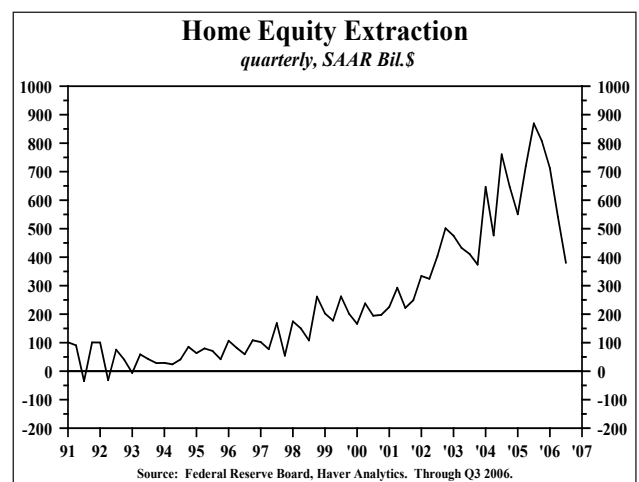


Chart 4

dropped 31% from the year earlier level. Permits, unlike housing starts and sales, are not affected by such extraneous considerations as the extremely mild November or the failure to capture cancellations. The drop in permits and the new low in the housing market index point to a 10% to 15% contraction in real residential investment in 2007, versus a fall of 8.1% in the past four quarters.

• **Nonresidential Fixed Investment**

The economy appears to be on the cusp of a major downturn in nominal and real nonresidential fixed investment--a sector accounting for 11% of real final sales to domestic purchases. In nominal terms, business firms must rely on total revenues, not inflation adjusted ones, to cover their costs; therefore, a sharp slowdown in nominal GDP will fall directly on their ability to fund capital expenditures. Also, capital outlays are sensitive to conditions in housing and automotive, both of which are in significant downturns.

Merger and acquisition (M&A) activity, running at a record pace and expected to increase further, points to weakness in capital spending. Massive consolidations suggest that corporations have few viable internal investments. Also, once the mergers and acquisitions are completed, firms will have both redundant labor and facilities since the premise of the M&A activity is that the key to increased profits is rationalization of existing operations.

Microeconomic considerations also will depress this sector this year. As of January 1, new EPA emissions standards increase the price of the average heavy truck by \$7,500. Buyers avoided this increase by buying in 2006, but this will depress sales in 2007, with some transportation executives saying sales could slump 35%-40% from record sales levels reached in 2006. Also, a considerable moderation in freight movements suggests that the transportation sector will allocate fewer funds to investment in 2007. The American Trucking association's truck tonnage index slumped to the lowest level since late 2003 falling 8.8% in the last 12 months. The current highway bill was enacted in August 2005. Historically, expenditures have surged in the first year of these programs and then moderated in the

second year, suggesting less ebullient spending from that source. The urgency to pump funds into oil and gas exploration, as well as other types of mining, has fallen away, with sharp declines in the price of oil, natural gas, copper, aluminum, steel and other metals. Drilling rose 16.8% in 2006, but declined 1.3% from September to December, suggesting a major turnaround for 2007. Real nonresidential fixed investment should contract at least 1% in 2007, compared with an 8.3% rise in the past four quarters.

• **Government Expenditures**

Real government spending is likely to post slower growth in 2007. The reason for this assessment is in the Federal rather than the state and local sector. The outgoing Congress only passed two of the required 13 annual appropriations for the fiscal year that ends on September 30, 2007. The other 11 areas of the federal government are being funded by what is called a continuing budget resolution. This only allows spending at the level of the prior fiscal year. The incoming leaders of the Democratic Congress have indicated that, rather than waste valuable time on completing the appropriations process, they will fund with continuing spending resolutions. Also, the outgoing Congress ran out of time to pass the annual "pork barrel" bill. Since federal appropriations affect spending at the state and local levels, the entire government sector spending will be diminished.

In the four quarters ending September 2006, real government spending rose 1.6%, compared with a rise of 0.9% in 2005. An increase of only .5% might be expected in 2007. If appropriations bills could not be passed when one party controlled the federal government, it may be reasonable to assume that appropriations bills will not be passed under divided government. Thus, the trend toward slower government spending may persist. This negative effect is considerable since real government spending recently comprised 17.5% of the economy.

• **Inventory Investment**

Real inventory investment was \$55.4 billion in the third quarter of 2006, compared with -\$12.7 billion in the third quarter of 2005. As such, inventory investment added \$68 billion to real GDP

over the past four quarters. Without the buildup of inventories, real GDP would have risen 2.3% instead of the reported 3%. In other words, inventories were an important source of strength to the economy in 2006, but may subtract about \$25 to \$55 from real GDP in 2007.

• Net Exports

All the components of the domestic economy are likely to be weaker in 2007 with the exception of Net Exports. The trend toward a smaller trade deficit has tentatively emerged. There is a heavy import content in all domestic sectors, and since domestic demand will slow sharply in 2007, slower imports should follow.

C+I+G+X

Based on these sector assessments, Consumption (C), Investment (I), Government (G) and Net Exports (X), real GDP should rise about 1.5% in 2007, and with inflation also running about 1.5%, nominal GDP would register a 3% increase, again the slowest nominal growth rate registered since 1958.

MONETARY RECONCILIATION

There is a way to reconcile the sector analysis with aggregate monetary conditions. Fisher's "equation of exchange" states that nominal GDP is equal to the stock of money (M) multiplied by the velocity of M. Algebraically, velocity (V) equals GDP/M. If money velocity over time is stable, then nominal GDP will rise at the same rate as money. This is precisely what has happened for M2. Since 1900, both M2 and nominal GDP have risen an average of almost 7% per annum. Hence, M2 must support real growth and inflation.

In the past two years, M2 has increased by 4.5% per annum, compared with the long-term

average of 7% per annum. It makes a great deal of difference to nominal GDP, and in turn to inflation and real GDP, when money is compounding at 2.5% per annum below its long-term trend rate. An increase of 4.5% in M2 in the past two years, under the assumption of stable velocity, implies that nominal GDP will settle in at a 4.5% annual rate of growth as well.

However, two considerations suggest that M2 growth should be slower than in the past two years. First, the yield curve is inverted while on average it was positive over that time frame. Second, total reserves registered a net decline in both 2005 and 2006. Thus, M2 might grow in a 3% to 4% range in 2007.

Determining nominal GDP for 2007 utilizing money stock is further complicated by the instability in velocity over the short run. In the past two years, velocity rose. However, in the third quarter velocity was flat and apparently declined in the fourth quarter, a development that could portend a cyclical downturn in velocity. Velocity is a function of the rate of change in financial innovation, not its level. Financial innovation must continue increasing at an accelerated rate if velocity is to rise. Our assessment is that financial innovation will not accelerate for the time being. Also, velocity is negatively related to lagged changes in short-term interest rates. Since these rates rose sharply since the summer of 2004, this also points to lower velocity.

Taking likely money and velocity changes into consideration, nominal GDP could be heading into the 2% to 3% range in 2007. If nominal GDP rises by 3%, the high end of our expected range, then both real GDP and inflation would increase by 1.5%. Thus, both the sector analysis and the monetary construct point to very subdued growth and inflation in 2007. This is an environment that should provide for record low bond yields this year.

Van R. Hoisington
Lacy H. Hunt, Ph.D.