

Does Anyone *Ever* Know What Time It Is?

February 4, 2001

Constant Revisions Diminish Investment Significance of Economic Data

- Investing based upon any short-term judgment on the economy is risky, in that the state of the economy is not only difficult to estimate, it is also difficult to measure—even years after the fact.
- GDP data is typically revised a half dozen or more times, and not truly final until years after the fact. 65% of initial GDP reports are too low, with the range between the first and last reports averaging 120 basis points and the range between the high and low reports averaging 200 basis points.
- But even “perfect” GDP foresight would not be of much use to investors, because GDP doesn’t determine stock prices. Earnings do. And there are key geographic and sectoral differences between S&P EPS and U.S. GDP:
 - 40-45% of S&P EPS generated outside U.S.; exports just 11% of GDP.
 - A quarter of U.S. GDP is not in S&P 500 (11% real estate, 12% government).
- Profit cycle likely to be more muted than in past given (i) absence of inflationary pressures—so Fed has plenty of room to ease; (ii) reduced weight of cyclical industrial and commodity sectors in S&P EPS; (iii) few excesses in key parts of economy; (iv) still healthy foreign economies.

L.U.V. What “shape” will the economy follow? Who knows? Really, who does know? It was over ten years ago that we first asked, “Does anyone really know what time it is?” (July 31, 1990). With economic activity slowing in the summer of 1990, a growing number of stock market observers warned investors to prepare for an economic recession. We disagreed—*not* as to whether a recession would occur but, rather, as to what investors should do. We cautioned that investing based upon any short-term judgment on the economy is risky, in that the state of the economy is not only difficult to estimate, it is also difficult to measure—even years after the fact.

In July 1990, the economic data suggested that, after rising at a 1.7% rate in Q1 1990 (see Table 1, “First Revision”), real GNP growth slowed modestly to a 1.2% rate in Q2 (see Table 1, “Advance”). When the Q3 GNP data were released in October 1990, the economic naysayers *appeared* to be proven wrong, with the government reporting that real GNP rose at a 1.8% rate in the quarter (see Table 1, “Advance”).

Table 1: GDP Reports and Revisions and Revisions and . . .

Q	Flash	Adv	Prelim	Final	Revisions							
					1st	2nd	3rd	4th	5th	6th	7th	
1985 Q1	2.1%	1.3%	0.7%	0.3%	3.7%	3.1%	3.8%	4.9%	3.4%			
Q2	3.1	1.7	2.0	1.9	1.1	2.3	2.1	2.5	3.2			
Q3	2.8	3.3	4.3	3.0	4.1	4.1	4.1	6.1				
Q4	3.2	2.4	1.2	0.7	2.1	3.1	3.0	3.3				
1986 Q1		3.2	3.7	2.9	3.8	5.4	6.4	6.6	6.6	3.7		
Q2		1.1	0.6	0.6	0.6	-0.8	-1.8	-1.8	1.7			
Q3		2.4	2.9	2.8	1.4	1.1	0.8	0.8	3.8			
Q4		1.7	1.3	1.1	1.5	1.4	2.3	2.3	2.3	2.1		
1987 Q1		4.3	4.4	4.8	4.4	4.6	5.4	5.2	3.2	3.0		
Q2		2.6	2.3	2.5	5.0	4.4	4.2	4.4	4.3			
Q3		3.8	4.1	4.3	4.5	5.3	4.1	3.5	3.4			
Q4		4.2	4.5	4.8	6.1	6.6	6.6	7.2	7.1			
1988 Q1		2.3	3.9	3.6	3.4	4.0	5.1	2.6	2.7			
Q2		3.1	3.3	3.0	3.0	3.7	3.6	4.3	4.8			
Q3		2.2	2.6	2.5	3.2	2.7	2.5	2.0	2.1			
Q4		2.0	2.0	2.4	2.7	2.7	3.9	3.9	5.2	5.3		
1989 Q1		5.5	4.3	4.4	3.7	3.6	2.5	3.2	4.9	5.0		
Q2		1.7	2.7	2.5	2.5	1.7	1.9	1.8	2.1	2.2		
Q3		2.5	2.7	3.0	0.3	1.1	0.0	1.8	1.9			
Q4		0.5	0.9	1.1	1.2	1.2	1.5	1.5	1.3	1.4		
1990 Q1		2.1	1.3	1.9	1.7	2.8	3.5	5.0	5.1			
Q2		1.2	1.2	0.4	1.6	1.0	1.5	1.0	0.9			
Q3		1.8	1.7	1.4	0.2	-1.6	-0.9	-0.6	-0.7			
Q4		-2.1	-2.0	-1.6	-3.9	-3.9	-3.2	-3.2	-3.0	-3.2		
1991 Q1		-2.8	-2.6	-2.8	-2.5	-3.0	-2.4	-2.1	-2.2	-1.7	-2.0	
Q2		0.4	-0.1	-0.5	1.4	1.7	1.5	2.2	1.7	2.6	2.3	
Q3		2.4	1.7	1.8	1.2	1.4	1.0	1.0	1.3	1.0		
Q4		0.3	0.8	0.4	0.6	0.6	0.1	1.0	2.5	2.2		
1992 Q1		2.0	2.4	2.7	2.9	3.5	3.1	4.7	4.3	3.8		
Q2		1.4	1.4	1.5	2.8	2.4	2.5	4.0	3.8			
Q3		2.7	3.9	3.4	3.4	3.5	3.0	3.1				
Q4		3.8	4.8	4.7	5.7	5.7	4.3	4.3	4.3	5.2	5.4	
1993 Q1		1.8	0.9	0.7	0.8	1.2	0.0	-0.1	0.1	-0.7	-0.1	
Q2		1.6	1.8	1.9	2.4	1.7	1.9	2.0	2.0	2.1	2.5	
Q3		2.8	2.7	2.9	2.7	2.3	2.3	2.1	2.1	1.5	1.8	
Q4		5.9	7.5	7.0	6.3	4.7	4.8	5.3	5.3	6.0	6.2	
1994 Q1		2.6	3.0	3.4	3.3	2.5	2.5	3.0	3.0	3.6	3.4	
Q2		3.7	3.8	4.1	4.8	4.9	4.7	4.7	5.7	5.7		
Q3		3.4	3.9	4.0	3.6	3.5	1.8	1.8	2.2	2.2		
Q4		4.5	4.6	5.1	3.2	3.0	3.6	3.6	5.1	5.0		
1995 Q1		2.8	2.7	2.7	0.6	0.4	0.9	1.7	1.5	1.5		
Q2		0.5	1.1	1.3	0.5	0.3	0.4	0.8	0.8			
Q3		4.2	3.2	3.6	3.8	3.0	3.3	3.2	3.1			
Q4		0.9	0.5	0.5	0.3	2.2	2.8	3.3	3.2			
1996 Q1		2.8	2.3	2.2	2.0	1.8	3.3	2.9	2.9			
Q2		4.2	4.8	4.7	6.0	6.1	6.9	6.8				
Q3		2.2	2.0	2.1	1.0	2.1	2.2	2.0				
Q4		4.7	3.9	3.8	4.3	4.2	4.9	4.6				
1997 Q1		5.6	5.8	5.9	4.9	4.2	4.9	4.4				
Q2		2.2	3.6	3.3	4.0	5.1	5.8					
Q3		3.5	3.3	3.1	4.2	4.0	4.3					
Q4		4.3	3.9	3.7	3.0	3.1	2.8					
1998 Q1		4.2	4.8	5.4	5.5	6.7	6.5					
Q2		1.4	1.6	1.8	2.1	2.9						
Q3		3.3	3.9	3.7	3.8	3.4						
Q4		5.6	6.1	6.0	5.9	5.6						
1999 Q1		4.5	4.1	4.3	3.7	3.5						
Q2		2.3	1.8	1.6	1.9	2.5						
Q3		4.8	5.5	5.7	5.7							
Q4		5.8	6.9	7.3	8.3							
2000 Q1		5.4	5.4	5.5	4.8							
Q2		5.2	5.3	5.6								
Q3		2.7	2.4	2.2								
Q4		1.4										

Note: Switch to GDP basis of reporting for Q3 1991 Prelim. estimate. Switch to 1992 chain-weighted basis of reporting for Q3 1995 Prelim. estimate. No Prelim. Q4 1995 estimate was prepared due to a government shutdown. Switch to 1996 chain-weighted basis of reporting for Q3 1999 Prelim. estimate.

Source: UBS Warburg LLC.

Today, there is a very different picture of what happened to the economy in 1990. Indeed, the data (last updated in 2000) now show that, after surging at a torrid 5.1% rate in Q1 1990, real GNP growth slowed dramatically, to just a 0.9% rate in Q2, and then fell 0.7% in Q3 (see Table 1, "Fifth Revision").

The 3.4 percentage point swing between an early estimate of Q1 1990 GDP and the most recent estimate is remarkably large but, unfortunately, not that unusual. As Chart 1 illustrates, 65% of initial GDP reports are too low, with the range between the first and last reports averaging 120 basis points (Chart 2), and the range between the high and low reports averaging 200 basis points (Chart 3). And note that the accuracy of the data shows *no signs* of improving: Q2 1997 real GDP, which was initially reported at 2.2%, now stands at 5.8%—a full 360 basis points swing.

The January 31 advance report showed that Q4 2000 real GDP growth was +1.4%. However, if previous trends are anything to go by, the fifth revision of that data in 2005 could well show that Q4 2000 real GDP was actually -1.4% . . . or +4.4%.

Chart 1: Difference (in Basis Points) Between First and Last GDP Reports

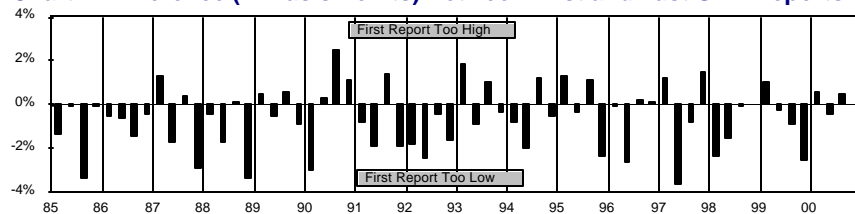


Chart 2: First and Last Estimates of Quarterly GDP Reports

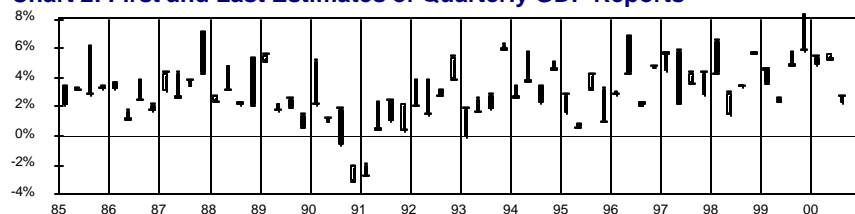
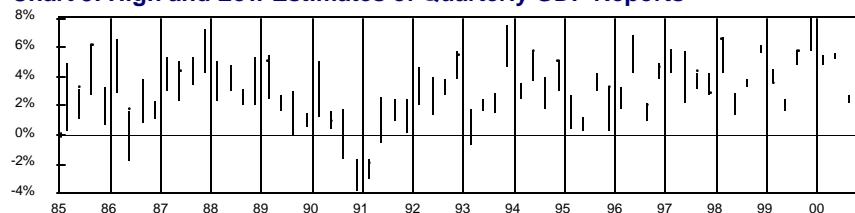


Chart 3: High and Low Estimates of Quarterly GDP Reports



Source: UBS Warburg LLC.

It's not surprising then that even the most astute observers of the data have a hard time figuring out exactly what is going on in the economy. For example, in a June 1990 presentation to the Senate Banking Committee, Fed chairman Alan Greenspan argued that "all things considered, continued modest economic growth remains the most likely outcome." The National Bureau of Economic Research (NBER) subsequently determined that the 1990 recession began one month later.

"All things considered, continued modest economic growth remains the most likely outcome" — Alan Greenspan, June 1990.

And Does Anyone Know What a Recession Is?

The NBER’s Business Cycle Dating Committee is the official arbiter of economic peaks and troughs. How does this committee define a recession? Is it:

- A. Two consecutive quarters of economic contraction.
- B. A period of declining real incomes and rising unemployment.
- C. However they want.

The answer is, of course, C. *The Wall Street Journal* recently quoted Professor Robert Hall, the Stanford University economist who has headed the Business Cycle Dating Committee since 1978, as saying: “Experience has shown that if we adopted any hard-and-fast definition [of a recession], something would occur that would show we had the wrong definition.” So instead of a hard-and-fast definition, the NBER describes a recession as “a recurring period of decline in total output, income, employment, and trade, usually lasting from six months to a year, and marked by widespread contractions in many sectors of the economy.”

However, some economists cannot even agree on when those conditions have occurred. For example, the decision by the NBER to label the downturns in 1980-81 as two separate recessions prompted Nobel laureate Milton Friedman to send Professor Hall a 14-page letter of opposition.

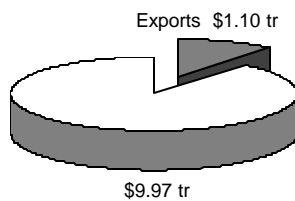
It Doesn’t Matter

GDP doesn’t determine stock prices. Earnings do.

Fortunately, for investors, none of the above matters. GDP doesn’t determine stock prices. Earnings do. And, as we have pointed out many times in the past (see “What Is the S&P 500?” March 14, 1999), there are considerable differences between S&P EPS and U.S. GDP:

- Exports are only 11% of U.S. GDP; around 40-45% of the earnings of S&P 500 companies is from outside the U.S. (Chart 4).

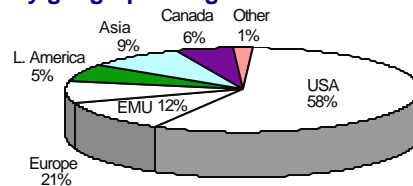
**Chart 4:
U.S. GDP**



Sales of U.S. foreign affiliates abroad



S&P 500 earnings by geographic region



Source: UBS Warburg LLC.

- Almost one-fourth of the U.S. economy is not represented in the S&P 500—11% real estate, 12% government (Charts 5, 6).
- Services are greatly underweighted in the S&P 500 (5% weighting versus 20% in GDP) while financials and tech are overweighted (40% combined weighting versus 13% in GDP).
- Nondurables are 23% of S&P earnings versus only 7% of U.S. GDP.
- Agriculture, mining & construction are 1% of S&P earnings and 7% of U.S. GDP.

Chart 5: U.S. GDP by Sector

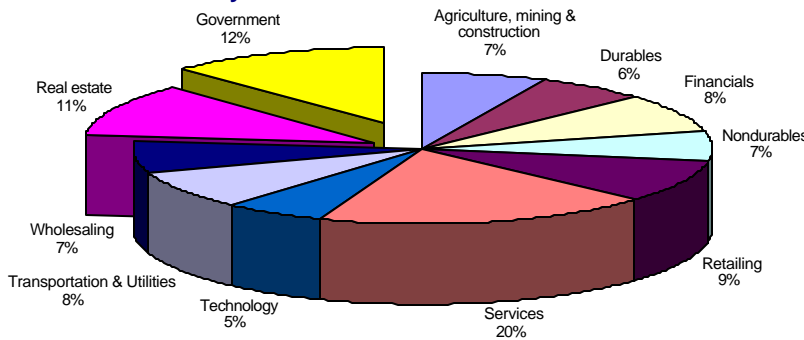
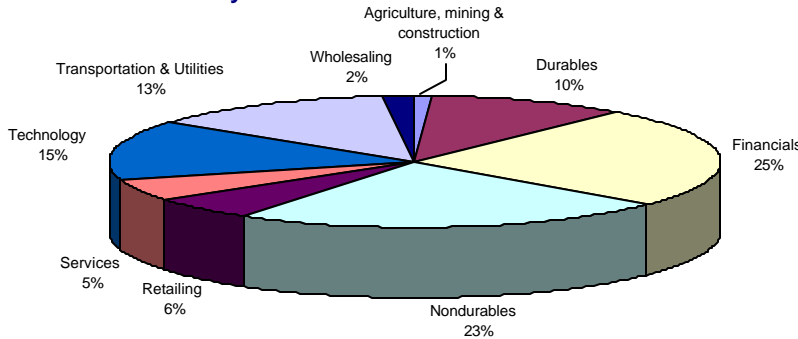


Chart 6: S&P EPS by Sector



Source: UBS Warburg LLC.

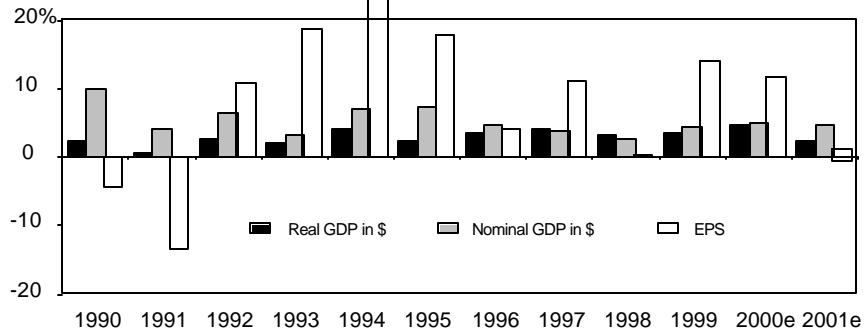
Not surprisingly then, S&P EPS and U.S. GDP do not move in lockstep. To be sure, the direction of U.S. GDP growth is an important variable for corporate profits, but it is not the only variable.

- In a strong economy, earnings can fall if individual industries experience profit declines owing to some combination of overexpansion, changing government regulation, shifting consumer tastes, financial shocks, currency fluctuations and other factors. For example, in 1985, real GDP rose 3.8% but S&P 500 EPS fell 12%, largely because of the negative impact on corporate profits of the strong dollar, which had surged 15% in 1984 (against a trade-weighted basket of currencies).
- Even if the economy is weak, S&P EPS need not be down if the earnings of a key sector are particularly strong. That was the case in 1980 when real GDP fell 0.2% for the year (and was down 7.9% in Q2 and down 0.6% in Q3), but S&P 500 EPS were flat (although up 7% in Q2 and flat in Q3) because of very strong energy earnings (oil prices rose \$10 per barrel in 1980).

So, partly because the S&P 500 does not mimic the U.S. economy, GDP growth is not a good input for projecting S&P EPS growth. But “going global” does not help either. While profit-weighted real global GDP growth has ranged from +0.7% to +4.7% over the past 11 years, S&P EPS growth has ranged from -13.6% to +23.9% (Chart 7). And, profit-weighted GDP growth of +2.4% has produced EPS growth as low as -4.5%, while GDP growth of +2.2% has produced EPS growth as high as +18.5%.

Chart 7: Profit-weighted global GDP growth, EPS growth

Year-to-year percent change



Source: Bureau of Economic Analysis, Standard and Poor's and UBS Warburg LLC.

Further, stock prices discount *future earnings*, so even if a weak economy adversely affects corporate profits, that is typically discounted in stock prices *long before* the data indicate a slowing in economic activity. Conversely, in downturns, stock prices typically start to rise even as the economic data show the economy mired in recession, as investors begin to discount a rebound in corporate profits.

The stock market bottomed in October 1990 (the middle of the last recession) and was 27% higher by March 1991 (the official end of the recession).

For example, as noted above, the NBER determined that the last recession began in July 1990 and ended in March 1991. However, the stock market bottomed in October 1990 (the middle of the recession) and was 27% higher by March 1991 (the end of the recession), as it correctly discounted a resumption of growth in the second half of 1991. So by the time of the release of the Q2 1991 GNP report in July 1991 (which confirmed that positive economic growth had resumed), the bulk of the stock market rebound from the trough was over.

A Muted Profit Cycle

Whether or not the U.S. economy slipped into recession in late 2000/early 2001 will be debated for years. Regardless, the impact of the current economic slowdown on corporate profits is likely to be more muted than in the past for four key reasons:

- Many economic slowdowns of the past, such as that of 1981-82, have been engineered by the Fed, which was trying to kill inflation i.e., pricing power. In the process, however, the Fed killed corporate profits. For example, S&P 500 EPS dropped 19% from the peak in Q4 1981 through the trough in Q1 1983. But with pricing power limited in recent years, corporate profit growth has largely been driven by margin expansion and “mix shifts” into higher profit products. And with inflationary pressures muted, the Fed has plenty of leeway today to cut rates aggressively in order to avert a sharp slowdown.
- The intensely cyclical industrial and commodity sectors have a much lower weight in S&P 500 EPS than they did previously. When the dollar soared in 1984, the competitiveness of industrial America collapsed, causing S&P 500 EPS to drop 13% from the peak in Q4 1984 through the trough in Q1 1986. However, as we noted in “What Is the S&P 500?” thanks to changing industry representation, the “weightings of the S&P have changed dramatically over the last decade. Technology and financials have gained share (up 10% and 7%, respectively) at the expense of cyclicals (down 7%), energy (down 6%) and commodities (down 5%).” So classic “boom-bust” sectors such as cyclicals and commodities have a much smaller impact on S&P EPS than they used to. (And although technology earnings have been disappointing lately, that weakness has been due, in large part, to an inventory correction. But with the world economy in good shape and secular demand for high-tech equipment fundamentally strong, that inventory correction should be over fairly soon.)
- Today, there are relatively few excesses in key parts of the economy. Granted, the dot.com bubble burst, but that collapse is far from surprising. As we pointed out in “Net for Naught?” (May 10, 1998), it is normal for revolutionary new industries, ranging from autos in the early 20th century to biotech in the early 1990s, to spawn hundreds of companies with no viable business plan. The dot.com shakeout is a normal part of the process of discovering how the Internet can be integrated into the fabric of the U.S. economy.

By contrast, in 1990 all the sins of the debt-driven 1980s were weighing on the economy. The S&L crisis was at its peak. Many major corporations were weighed down by heavy debt. And banks had financed a real estate building binge that littered the American landscape with half-empty buildings. As this debt excess unwound, S&P 500 EPS dropped 23% from the peak in Q2 1989 through the trough in Q4 1991. Today, corporate balance sheets are in much better shape than they were at the start of the last decade, while banks have been more restrained in their lending.

The impact of the current economic slowdown on profits is likely to be more muted than in the past.

- Foreign economies remain relatively healthy. The importance of the rest of the world to U.S. corporate profits became apparent in 1998, when the effects of the “Asian contagion” caused S&P 500 EPS to remain flat from Q4 1997 through Q4 1998. In that period, global demand for everything from computers to crude oil was consistently weaker than expected, owing to the Asian financial crisis and its aftershocks in Russia, eastern Europe and Latin America. Today, all of the world’s major economic regions are enjoying positive (albeit modest) growth, and none appear to be on the verge of financial crisis.

UBS Warburg is forecasting that S&P 500 operating EPS will be flat in 2001, at \$57, with modestly negative growth in H1, renewed growth in Q3, and double-digit growth likely by Q4. And, as we noted recently, “while it is premature to make specific predictions for 2002, the simple math of easy comparisons and the commitment of the Fed (not to mention the tax-cutting Bush Administration) to avoid a recession would argue that even if 2001 earnings are surprisingly weak, there is a good probability of double-digit earnings growth in 2002” (see “Newtonian Investing,” January 1, 2001.)

Additional information available upon request.

UBS Warburg LLC, 1285 Avenue of the Americas, New York, NY 10019 Phone: +1-212-713-2000

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