



## Exposing Biases in Reported Economic Data, and Why We are Headed to Hyperinflation

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We spoke with Mr. Williams on May 2, 2008.

**We’d like to begin with the GDP numbers. The government’s initial GDP report came out, showing 0.6% annualized growth in Q1 of 2008, or 2.5% year-to-year, both the same as in Q4 of 2008. Your analysis shows a very different number – -2.7% year-to-year. Can you explain the major adjustments that you make to arrive at this number?**

Over time we have developed a database and an analytical practice specializing in measuring the quality of government statistics, including how they are reported and manipulated. To get meaningful forecasts for our corporate clients, we need to know very precisely what to believe and what not to believe in the government’s reported numbers.

There are two types of manipulation we encounter. The first are very long term methodological shifts. These changes have not had much of an economic basis, and their effects over time have been fairly consistent and very deliberate in building biases into the reporting. As a result of these methodological shifts, GDP and employment are overstated (showing stronger growth) whereas, with reported inflation, the bias is on the downside (showing lower inflation numbers). As a result, the CPI is significantly understated as compared to how people actually experience inflation.

For a related discussion, see the [article](#) by John Mauldin in [Advisor Market Commentaries](#).

You can define these numbers any way you like. But the government’s numbers, over time, have increasingly diverged from common experience.



Most people don't believe what the government reports. Main Street is completely right in this respect.

The GDP for Q1 was reported at 0.6%. This is utter nonsense.

The second type of manipulation does not happen all the time, but it has been happening increasingly often recently, and it appears that it just happened with the reported GDP data. In this type of circumstance, short-term data are manipulated for political and/or financial market reasons, to show stability in the economy.

Those components of the Q1 GDP which are based on hard data were down. Retail consumption in Q1, as reported after adjusting for inflation, contracted 4.2% on a quarter-over-quarter basis. The corresponding number was 1.3% in Q4 of 2007. Housing sales declined by more than 30% on an annualized basis. Consumer spending, including housing, is 75% of the GDP. Industrial production and new orders for durable goods were both down on a quarter-over-quarter basis. Trade data, after adjusting for inflation, deteriorated, but somehow they improved in the GDP reporting.

The combined effect of this hard data should have been a 1Q GDP contraction.

The rest of the reported data are estimates, and not based on hard numbers. These include contributions from the service side of the economy, government spending and an inventory buildup. These guesstimated data showed improvement, enough to produce a reported GDP expansion.

I believe the estimated reported data were manipulated to overcome the poor results from the hard data, in order to report the GDP gain.

We place very little value on the advance report of GDP data, since it goes through two revisions before the final number is reported. The margin of error on advance GDP data is +/- 3% (as compared to the latest number after years of revisions). Therefore, the advance GDP of 0.6% could end up eventually anywhere between -2.4% and +3.6%.

We also do not try to estimate quarter-over-quarter GDP numbers. Instead, we look at year-to-year changes, which are much more stable. Quarterly numbers are made to look good for the public.



**Based on your analysis, when did the current recession begin, and what is your forecast for when it will end?**

Our numbers show GDP is -2.7% on a year-to-year basis, and that we have been in a recession since late 2006. We are in a structural recession, one which is particularly deep and protracted. At least in the last decade -- really since the 1990 recession -- official estimates of recession timing have been late in terms of the starts of recessions and early in terms of their ends.

On a more realistic basis, in terms of what businesses are feeling, we are entering the second dip of a double dip recession that began back in late 1999.

**Are there characteristics of the current recession that make it different and unique, as compared to previous recessions?**

The economy is in a severe inflationary recession, and the rate of inflation is accelerating. Our economy is also undergoing a structural change. The inflation is commodity driven, and reflects problems from a weak dollar and a rapidly growing money supply. There is very little the Fed can do to tame inflation or to stimulate the economy. It is not uncommon to have inflationary recessions. The Fed's primary goal is to keep our banking system stable and, in this respect, they have been successful so far. In 2002, Bernanke delivered a speech outlining how he could handle these circumstances, and he has followed this path.

The Fed cannot do much about inflation or the economy. If inflation is driven by a strong economy and consumer demand, it can be tamed by raising interest rates. But there is no obvious relief for today's commodity-driven inflation, at least from the perspective of the Fed.

The big problem in the economy facing government today is it cannot stimulate income growth through lower interest rates or otherwise. Lower rates will just encourage people to borrow more; it will do nothing to address the structural problems inhibiting consumer income.

I fault Greenspan for stimulating growth with financial bubbles, when we would not have had growth otherwise. His policies prevented the self-correcting actions the regular business cycle usually imparts, and he actually exacerbated long term consumer liquidity problems.

Since the 1970s, much of our manufacturing base has moved offshore, taking with it high paying jobs. Average real weekly earnings are lower



now by 20%, using the government's numbers. The effect is the average household has not been able and still is not able to keep up with the cost of living. This is despite a shift in family dynamics during the last several decades where families with one bread winner typically have become families with two more people having to work.

**Inflation adjusted consumer spending data was reported to be higher in March. Do you see a significant drop-off in consumer spending in the current recession? What are the particular biases to be careful about when looking at reported data for consumer spending?**

The most recent census bureau survey of household income, which is based on hard data, showed household income declining in recent years, net of inflation. This is a real problem for the economy. To have sustained economic growth, as measured by the GDP, we must have growth in personal consumption. For that we need growth in income, after adjusting for inflation. It is not there.

For households to maintain their standard of living, the only alternatives are debt expansion or liquidation of savings. Government and corporations have been living beyond their means as well. It has reached extremes, and consumers are tapped out. Home equity loans are not available. Short term fixes, such as the current stimulus package, cannot provide sustained growth. The underlying issues go back to job losses due to the transference of labor to offshore locations. It has taken decades to get there and now will take decades to stabilize.

Free trade was sold based on academic theory. Assume that two economies are running at full employment, each making different products more efficiently than the other. By opening trade between them, the combined system will be better. This assumes, however, that both economies are at full employment, but we have not been there for many years. The same is true with our trading partners. The result is manufacturing shifting to the low cost employer.

**Much of your analysis concerns reported inflation and the CPI. You are critical of several aspects of the reported data: the substitution effect ("let them eat hamburger"), geometric weighting, and hedonics. You estimate that the combined impact of these biases is to understate inflation by approximately 7%. Can you explain how you arrive at this number?**

One of the biggest factors affecting reported GDP is inflation. GDP is popularly reported on a seasonally adjusted, annualized, quarter-over-



quarter rate adjusted for inflation. But if the adjustment for inflation is artificially low, this increases the reported inflation adjusted GDP growth.

The inflation measure most widely followed is the CPI, which came into popular use with automobile labor contract negotiations following World War II. The idea was to take a constant basket of goods and measure the rate of change in prices. This worked into the late 1980s. Then, Alan Greenspan and Michael Boskin began claiming that CPI was overstating inflation, and that this overstatement was costing our government money. This was due to too-high, annual cost-of-living adjustments being made to social security payments, which were indexed to the CPI. In order to "correct" for this, without Congress taking a stance against Social Security, they introduced the concept of the "substitution effect." The substitution effect means that, if the price of steak goes up, then consumers will buy chicken instead. And if the price of chicken goes up, they will buy hamburger. Pretty soon they will buy dog food.

This changed the concept of the CPI, and represented a complete shift in philosophy away from the CPI measuring the cost of living needed to maintain a constant standard of living

It was the Clinton administration, however, that put the substitution effect into the numbers with something called "geometric weighting," which was intended to mimic the effect. Goods that went up in price automatically got a lower weighting in the basket of goods, and goods that went down in price got a higher weighting.

Without geometric weighting, today's 4.0% annual CPI would be 7.3%. The effects are cumulative, so Social Security recipients would be receiving roughly double what they now receive under a geometrically weighted CPI. But it is not just Social Security recipients that are affected; this affects pensions, wages, and labor contracts tied to the CPI. If you are on receiving end of what is getting adjusted you are losing out -- big time -- and vice versa.

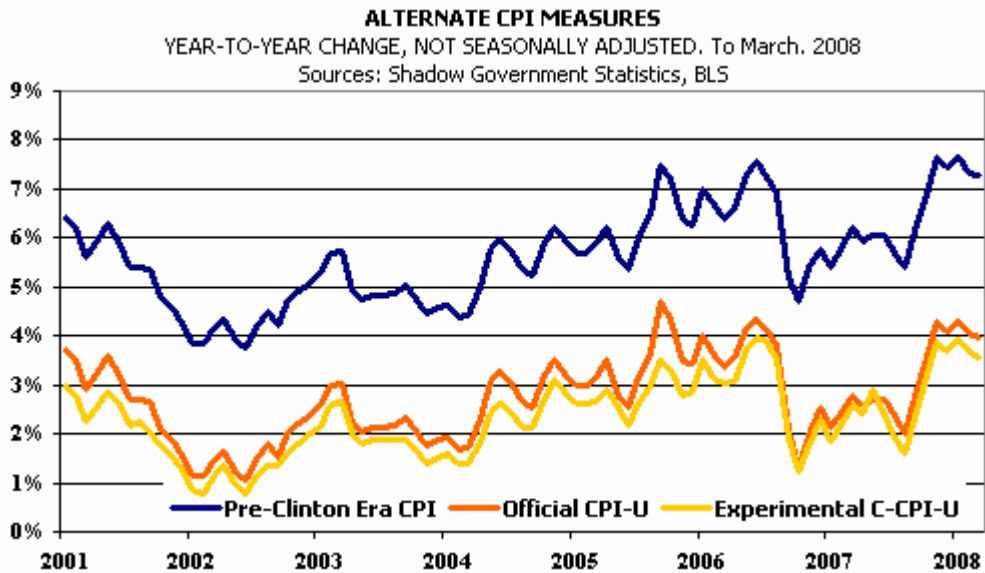
The problems with inflation reporting, however, are varied, and often are tied to how academic theory has a way of being out of touch with real world experience. For example, catalytic converters make the atmosphere cleaner. People must buy them as part of their automobiles. But our government does not count their cost in the CPI, because it is considered an improvement in quality. This effect is called hedonics. Any product can be affected, from washing machines and computers, to college textbooks. Yet, the average person does not recognize the



supposed improvement in their living standards. This has a very significant effect in the both the CPI and GDP numbers.

Geometric weighting is the bulk of the differential between reported CPI and what we consider to be the real rate of inflation, representing a 3.3% differential based on today's reporting, versus what it would be if you used the CPI reporting methodologies in place in 1990. If you back to go back to 1980 and use those methods in place then for calculating the CPI, today's annual CPI inflation would be 11.6%, which picks up the changes in hedonics and other factors such as housing costs.

The housing cost component of CPI is based on imputed home-owner equivalent rent. In other words, the government does not calculate the cost of owning a home; it calculates the amount of rent a homeowner would pay himself to live in his own home. Changes in that imaginary rent are not only are part of the CPI, but also the artificial rent is used in the GDP numbers, where the imputed rent is treated as income the homeowner receives (as imputed income for rent the homeowner pays himself). These are just examples of how far removed from real world experience key government numbers have become over time.



The graph above shows the pre-Clinton CPI (without geometric weighting), the officially reported CPI-U, and a measure introduced by the second Bush administration (C-CPI-U), which is an attempt to replace geometric weighting with a direct measure of the substitution effect.



**Another criticism you have of CPI reporting is the separation of core and total data. How should core data be properly reported?**

The Federal Reserve touts core inflation [the reporting of the CPI or other inflation measures excluding the effects of food and energy], which we consider to be a pure gimmick. It has no relation to anything meaningful. It was invented by Fed Chairman Arthur Burns, during the Nixon administration, as a way to avoid looking at oil price inflation. Over the short term, it is legitimate to consider the effects of short term volatility. But over a full year it is not appropriate – in fact it is absurd -- to take out the effects of food and energy inflation. Everyone consumes food and energy. Once you take out the expensive items, of course you end up with lower inflation. Shame on Mr. Bernanke for pushing this concept! It is part of the Pollyanna story being painted for Wall Street.

**You have also been critical of the reported employment data. Can you discuss these biases?**

The government's gimmicking of unemployment rates began in the 1960s. The popularly followed statistic is known as U-3, which was published on Friday, is today one of six levels of unemployment currently published by the Bureau of Labor Statistics. The broadest current measure, U-6, showed 9.2% unemployment in April instead of the 5.0% U-3 number. Under the Kennedy and Johnson administrations, the government created and implemented the concept of discouraged workers. These workers met the qualifications of being unemployed, but they had stopped looking for jobs because there were no jobs to be had. Nonetheless, they were counted in the broader unemployment measures of the time, which went up to U-8.

This accounting held in place until the Clinton administration, when discouraged workers were redefined so as to be included only those workers who had been "discouraged" for less than one year. That reduced the broader number of unemployed by approximately 4.5 million workers, and the number of reported unemployment measures was reduced from eight to the current six. Without these adjustments, we would have seen a broad unemployment rate in April of about 13.1%.

**How would you assess the actions taken by the Fed so far, with respect to the economy, and the options available for stimulating future growth?**

If Bernanke had not done what he did we would be in a 1930s-like situation now. There would have been a significant collapse of the banking system, including an implosion of the money supply. Bernanke is



still doing what he has to do. I expect he will keep the system afloat, but there is a cost. That cost is inflation.

The government stopped reporting the money supply statistic M3 in March of 2006, purportedly because it was too expensive to track and had no relevance. We still track it, because we believe the broadest measure of money supply is the best indicator of future inflation. M3 now is growing at 17%, the highest since 1959, which is when the Fed began these calculations. The closest historical parallel is when M3 hit 16.4% in June 1971, before Nixon closed the gold window and instituted wage and price controls. The current growth in the money supply suggests higher inflation towards the end of 2008.

Oil prices also are high enough to add significantly further to inflation over the next 6 -12 months. This is how long it takes to work its way through the other components of the system.

Based on oil, M3 and the still unfolding impact of a weak U.S. dollar, we will see double digit inflation, as reported in official CPI data, by early 2009. Due to the government's extreme fiscal improprieties, hyperinflation could show up as early as 2010 or as late as 2018. This is a large range, but people should be thinking about this now.

The economy likely will evolve into a depression, with a peak to trough swing of greater than 10%. We are currently down 5% since the last peak, according to our measurement. By the government's numbers, the worst post-World War II recession was in 1974, when the GDP was down 5% from peak to trough. We are about parallel to that, so far. I hope I am wrong as to the longer range outlook, but I do not see any way out.

Our overriding fiscal problem is the deficit created unfunded liabilities from Social Security, Medicare, and Medicaid. The combined effect of this is staggering, and it is the result of mismanagement by our government. The government's own GAAP-based financial statements show the circumstance to be beyond any practical containment. There are only three options for resolving this. The government can slash benefits severely, which is politically unfeasible. Otherwise the government ultimately can renege on its debt or print money to meet its obligations. Historically, bankrupt governments tend to opt for the money printing presses and hyperinflation.

Over the much shorter term, there will be heavy selling pressure on the U.S. dollar, which is bad news for the U.S. financial and Treasury markets that have been so heavily dependent on foreign capital for liquidity. As



liquidity is squeezed domestically rates could soar, or the Fed could buy Treasuries, monetizing the debt, which would lead to the early stages of the hyperinflation.

I do not see any way out of this, short of a friendly alien (as in extraterrestrial) invasion. A hyperinflationary depression is in the cards, and our political system will not resolve it.

People will go through extreme financial pain. Higher inflation is very bad for those on a fixed income.

Personally, I would look at holding some assets outside the dollar and in physical gold.

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