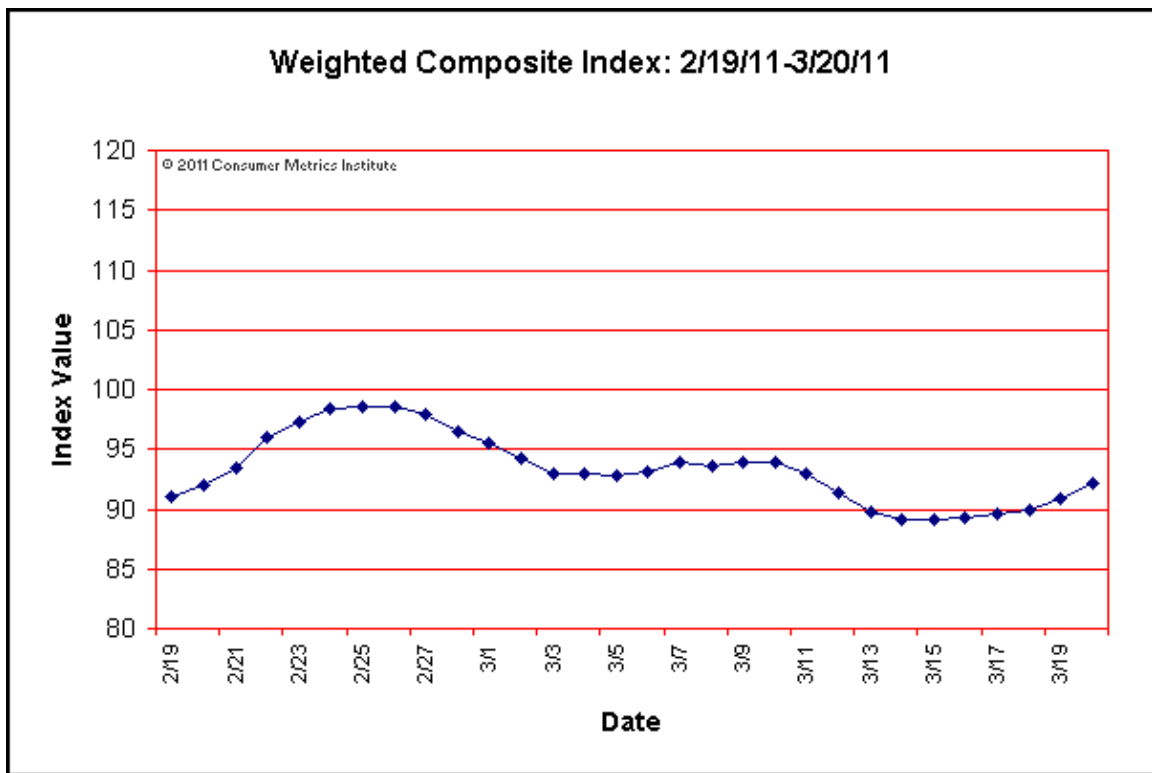


Consumer Metrics Institute Members News

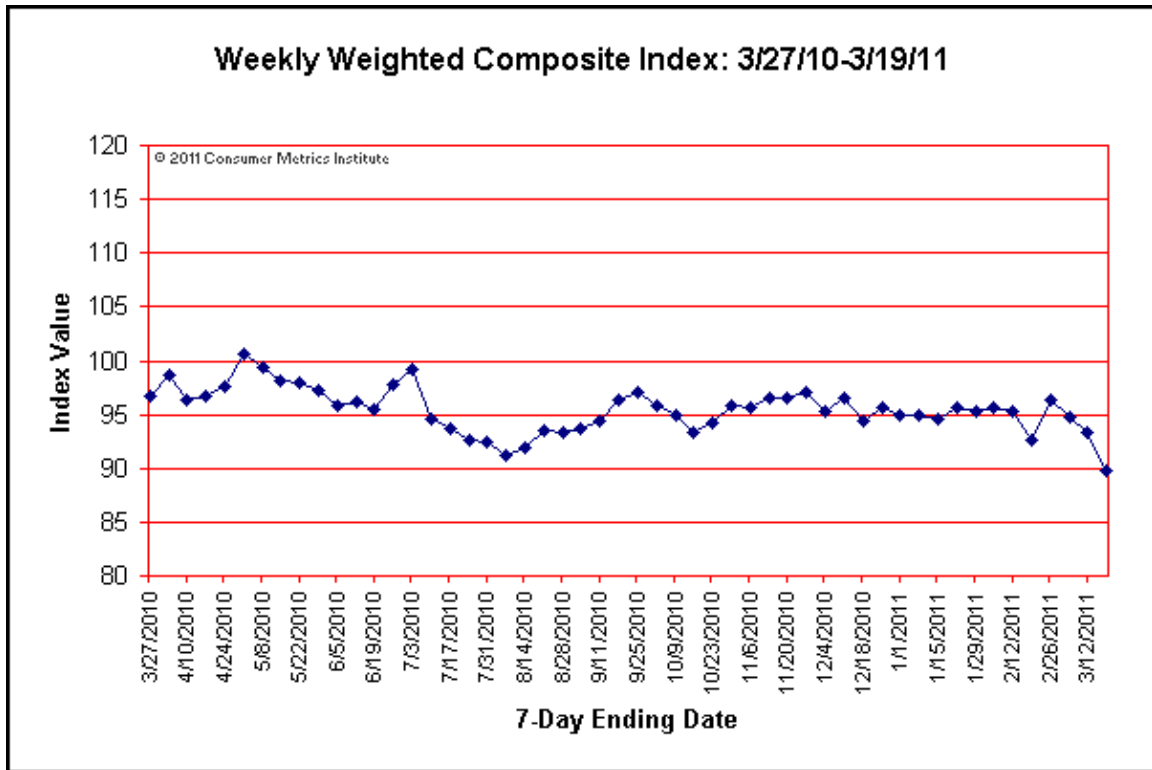
March 19, 2011: News and the Consumer, Bad Instruments and Chernobyl

During the past week we have again witnessed the extraordinary effect that major news events can have on "real-time" consumer demand for discretionary durable goods. On Monday March 14, 2011 our Weighted Composite Index set a new one-day record low of 89.06, surpassing the similarly news-impacted prior record low of 89.43 set on Wednesday November 5, 2008 (the day following the U.S. 2008 presidential election). We had witnessed a similar 10-day 5% dip in 2005 coincident with Hurricane Katrina (although at that time from a base level above 106), and we have no doubt that -- if our data went back to 2001 -- 9-11 would be the point of reference for scale and duration of such events.

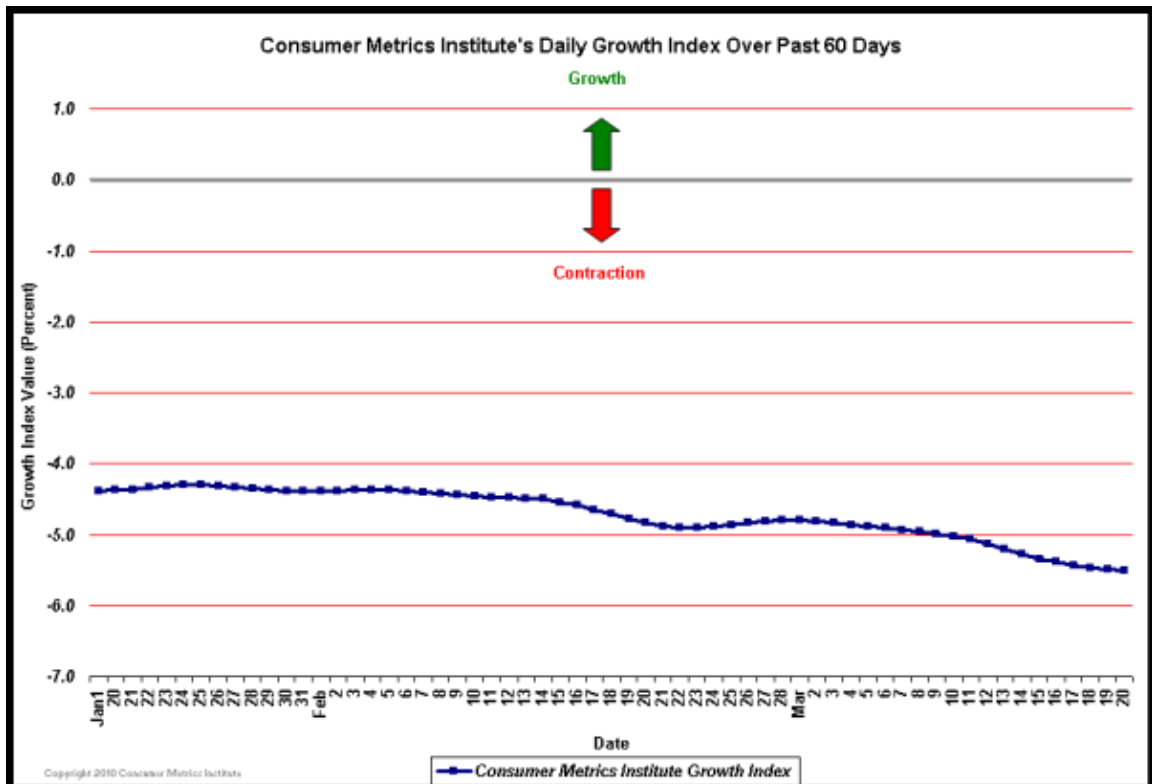
The tsunami induced downturn can be seen in the daily chart of our Weighted Composite Index:



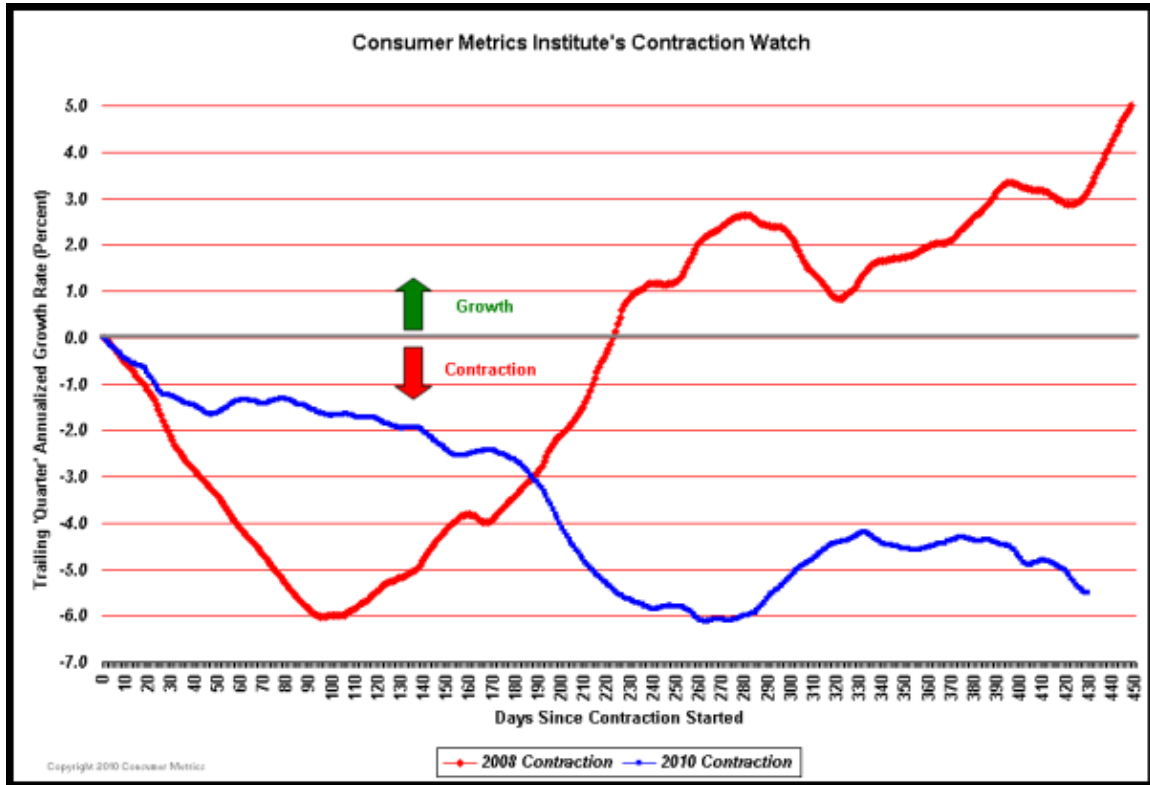
as well as the weekly chart:



and even in our 91-day trailing "quarter" Daily Growth Index, which had already turned lower again in late January before sharply accelerating that decline over the past week:



Again, our "Contraction Watch" (which follows the Daily Growth Index shown above and compares it on a day-by-day basis with the same index during the dip created by the "Great Recession") is perhaps the best way to visualize what has been happening with the consumers that we monitor, and that chart is still not showing any signs of a sustainable consumer driven "recovery":



When looking at the above charts there are two key points to remember:

- This depression of consumer demand in the U.S. is at this point a purely psychological effect -- caused exclusively by empathy or distraction. There have not yet been any major economic consequences that have washed-up on U.S. shores. Those will surely follow as global supply chain disruptions begin to take their toll.
- The renewed downturn in our data commenced in late January, nearly 6 weeks before the Sendai earthquake and tsunami. If this is a true "Black Swan," then when it flew in it joined a flock of already dirty birds.

The Quality of Instrumentation

The Consumer Metrics Institute was founded to provide econometric data that is more timely than

the data provided by the BEA, NBER and BLS. Timeliness was our initial focus, but we quickly realized that there are issues with most governmental data that transcend the delays and revisions that are inherent in their data sources.

Although many of the time series currently reported by the BEA have their origin in data initially prepared by Wesley Mitchell in 1937 for the second Roosevelt Administration, those processes and methodologies matured during the first two post-war decades -- roughly 1947 through 1965. The processes and models were fine-tuned to measure the things that mattered in a relatively stable and growth biased economy experiencing a peak level of industrialization -- an economy with only modest interventions by the Federal Reserve, persistent trade surpluses and as many Federal budget surpluses as deficits. Our problem is just this: the instrumentation package developed to understand that economy is still being used today to script monetary and fiscal policies that are orders of magnitude more invasive -- and to a vastly different post-industrial, debt plagued, import dependent and "financialized" economy.

If you subscribe to the premise that it is a fundamental duty of government to screw with the economy, then you had better make darn sure that your instrumentation package is measuring all the right stuff on a real-time basis -- and that you fully understand the full consequences of every knob you twist or button you push. Any physicist will tell you that the latter condition is impossible for even moderately complex systems, let alone an economy full of non-linearities and a hundred million households doing whatever they think is best for themselves.

A simple example of an instrumentation package is the gauge in your automobile that monitors your fuel supply. Prudent drivers will also independently use their "trip" odometer and a simple rule-of-thumb (e.g., 360 miles per fill-up) to monitor when they should consider refilling their tank. Those fuel gauges and experienced-based rules work very well under familiar driving conditions.

Here in Colorado we frequently see out-of-state vacationers run out of gasoline when nearing 10,000 foot elevations. Why? Their instrumentation package and their past experiences both fail them during an unremitting 50 mile ascent at altitude. The distance that they can travel on a tank of gas is far less than they might imagine (thin air, lower gearing and increased load conspire to increase fuel consumption by 20% to 40%), and rear-mounted in-tank fuel level sensors will show fuel levels that are higher than the true amount of fuel remaining. What worked well on flat terrain at sea-level fails miserably when subjected to alpine conditions.

Expanding on that analogy, we feel that the U.S. national economic instrumentation package has never been less suited to its task.

A glaring example is the current set of measures of U.S. employment. Setting aside for the moment political tampering, both the workplace survey and the household survey fail to adequately capture the highly dynamic nature of employment (or even "households" for that matter). It is probable that the workplace surveys completely miss the explosion of self-employed (by necessity) workers in this economy. Many people may have had to replace high-paying conventional corporate jobs with subsistence-level entrepreneurial endeavors. Are these people captured in the workplace surveys? Are they even adequately captured in the "Birth-Death" models used by the surveys to approximate the formation of new businesses? And, if so, are these people by any measure fully employed, especially if their wildest dreams are to have annual revenues that reach the U.S. poverty level? And -- reflecting on less traditional sources of employment data -- how many of them use ADP for their payroll needs?

And how many of the young "entrepreneurs" (especially those currently taking out student loans to cover the lapse in unemployment benefits) are captured in the household surveys? And what exactly is a "household" anymore?

Our premise is simply that the U.S. economy and social fabric is in a high state of dynamic flux, the scope of which has not been seen over the past 60 years. And given the severity of the recent recession and the unprecedented monetary and fiscal responses to it, the quality of the economic reporting available today is perhaps the lowest it has ever been. Our goal here is to provide some small remedy for that situation.

Chernobyl and the Economy

The recent nuclear emergencies in Sendai have drawn media comparisons to Chernobyl -- although the causes, character and harm (to-date) of the two events are vastly different. However, when reflecting on the lessons of Chernobyl, at the Consumer Metrics Institute we can't help but think about the economy.

The Chernobyl reactor design had several critical and counter-intuitive characteristics that, when coupled with an inadequately trained operating staff and a lax safety culture, resulted in a 100% man-made disaster:

-- The reactor used graphite to amplify the nuclear reaction and water to slow it down, meaning that the reactor increased power exponentially when a portion of the water coolant turned to steam -- leading in turn to more steam "voids" and more power in a dangerous feed-back loop. (Most other reactors, including those at Sendai, inversely use water instead of graphite to maintain the critical chain reaction, with the loss of water actually quenching the reaction rather than amplifying it -- until the loss of cooling becomes the more critical problem.)

-- At low power levels the reactor tended to accumulate a fission by-product, xenon-135, which acts as a neutron absorber and slows the reaction down even further. This accumulation of a reaction moderating gas at low levels resulted in the counter-intuitive situation where the reactor was actually less stable at low power levels than when operating at full power.

-- The seven meter long boron control rods used to shut down the reactor had 1.3 meters of graphite at their leading edge -- meaning that while being inserted the control rods actually increased the reaction rate while the first 1.3 meters of control rod was passing through the core. Again, a counter-intuitive situation where the "shut down" process would initially cause a surge of power before the reaction was quenched.

The accident occurred during an experiment to test a new emergency shutdown process that would provide an alternative source of power for the coolant pumps while the backup diesel generators (similar to those damaged by the tsunami at Sendai) came up to speed. As a consequence of scheduling delays the experiment was being conducted at 01:23 a.m. by night shift operators that lacked adequate training in the experiment itself, let alone full understanding of the operational characteristics of the reactor under abnormal conditions.

The reactor was running at dangerously unstable low levels of power when the experiment commenced, and the experiment itself -- when coupled with several operator errors -- put the reactor into a supercritical state. When the operators finally realized the severity of a number of warning signals -- signals that they had previously ignored -- they initiated an emergency "SCRAM" shutdown process. That process quickly moved 1.3 meters of additional reaction amplifying graphite through the reaction zone, flash vaporizing the coolant into a steam explosion, and 3 seconds later triggering a nuclear explosion roughly 1/1,000,000th the power of a WWII era atomic bomb.

Why is this story relevant to the current U.S. economy?

The Federal Reserve has been conducting experiments of unprecedented scale on a non-linear and often counter-intuitive economy. Indications are that their traditional means of controlling (e.g. stimulating) the economy no longer work. And recent experiments in quantitative easing have caused bond rates to move in counter-intuitive directions. This raises several relevant questions:

- Can too much liquidity cause the economy to become unstable (e.g. creating asset bubbles)?
- Can the Federal Reserve deflate those asset bubbles without harming most Americans?
- Is there some level of liquidity that generates a dangerously supercritical economy that can tip into either deflation or hyperinflation at the slightest exogenous shock?

The operators at Chernobyl did not fully understand that hitting the "SCRAM" button to shut the reactor down would ultimately be their death sentence. They simply did not understand the complexity of their situation.

Let's hope Mr. Bernanke fully understands his.

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