Decreased Household Wealth

How the Housing Bust Led to National Economic Stagnation

by Dave Bieneman, Ph.D.

People in Illinois are typical of the nation as they hope for a recovery featuring a high level of economic growth. Most forecasts are projecting more sluggishness or even another recession; not the economic boom people desire. A review of recent economic data provides some insight into how the national economy has reached its current state and where it may be heading.

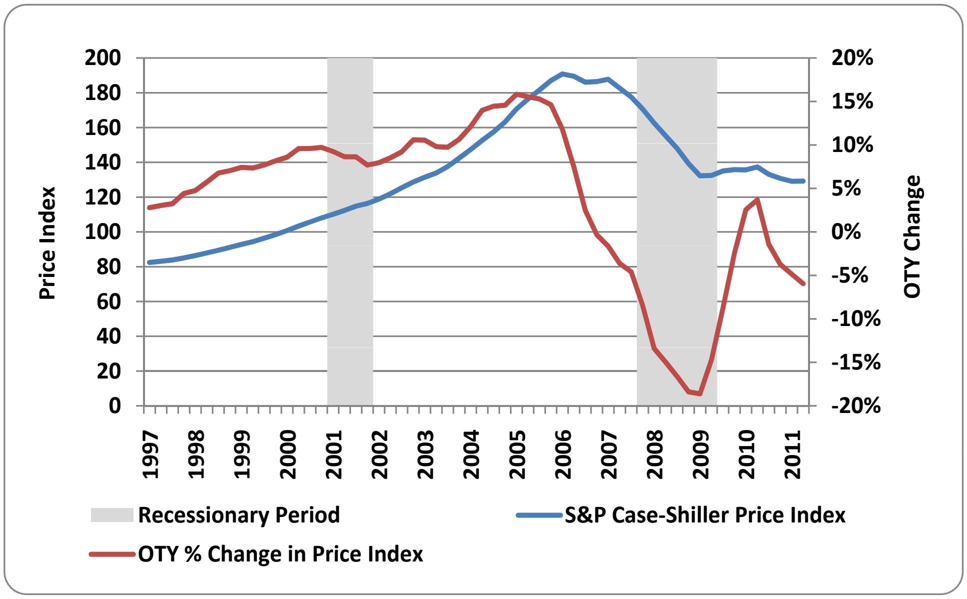
Decreased household wealth

The bursting of a bubble in the housing market played a major role in the development of the 2007-2009 recession. **Exhibit 1** *(next page)* shows that the national housing price index reached its peak in 2006. The over-the-year percentage change in the price index shows the rate of housing price changes.

The rate of price increases in the housing market started to fall in 2005 and then the rate of change became negative at the end of 2006. The annual rate of change stayed negative for 13 quarters, almost dropping to -20.0 percent at its lowest point. It went above zero percent for two quarters and has now fallen below zero for the last four quarters. As residential real estate market values decreased, household wealth fell along with it. In fact, according to the Federal Reserve System's Flow of Funds Accounts, the portion of national household wealth due to market value of real estate declined by almost seven trillion dollars just in the three-year period of 2007 to 2009.

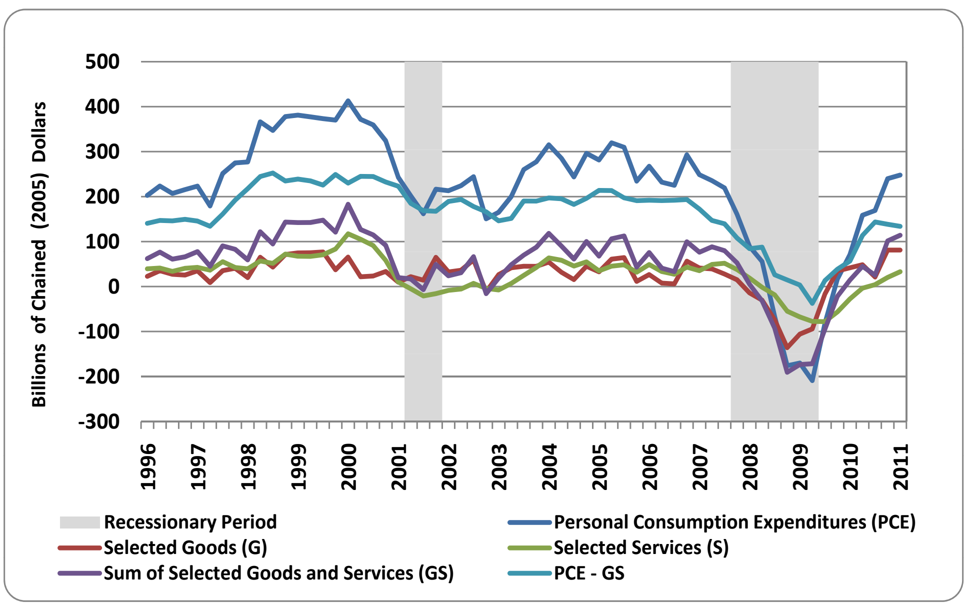
This decline was especially hard on the people whose home equity was the major portion of their household wealth. People who had other investments in their portfolio, such as stocks, saw those assets decline and then regain much of their value. That was not the case with the home values. In contrast, home values moderated in their rate of increase during the 2001 recession, but prices continued to climb during that period, thus having little impact on household wealth.

Exhibit 1. U.S. housing price values (2000 Q1=100)



Source: S&P Indices, Haver Analytics

Exhibit 2. Over-the-year changes in PCE and PCE components



Source: Bureau of Economic Analysis

Reduced consumer spending

The reduction in wealth that occurred during the Great Recession caused the average household to respond by cutting their spending on consumer goods. Personal consumption expenditures (PCE) measures consumer spending on goods and services, and has accounted for approximately 70 percent of Gross Domestic Product (GDP), or national economic activity since 2002. **Exhibit 2** is a chart of five series showing the over-the-year changes in PCE, and components of PCE. The first series is the over-the-year change in PCE and defined as "Series PCE." The second series is the over-the-year change in a sum of PCE component series of selected goods (defined as "Series G" and consists of motor vehicles and parts,

clothing and footwear, and food and beverages purchased for off-premises consumption). The third series is the over-the-year change in a sum of PCE component series of selected services (defined as “Series S” and consists of transportation services, food services and accommodations, and financial services and insurance). The fourth series is the over-the-year change in the sum of the selected goods and services (“Series GS”); and the fifth series is the over-the-year change in the remaining goods and services comprising PCE (which is the equivalent to the difference of PCE and GS and defined as “Series PCE – GS”). All of the selected goods and services included can be considered discretionary items on which consumers may easily vary the amount they spend as their income or wealth increases or decreases.

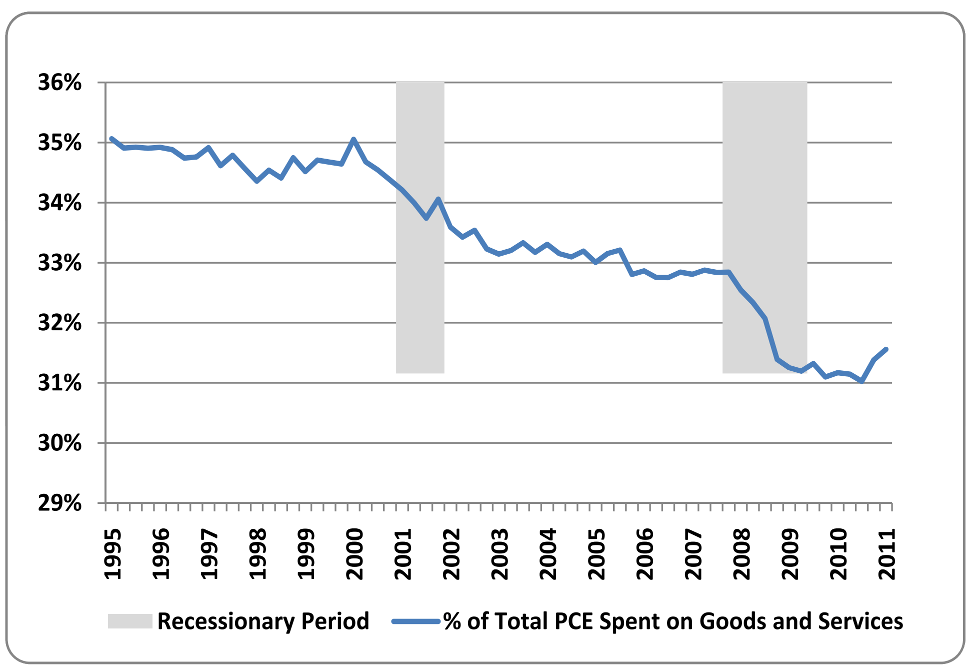
The drop in consumer spending resulted in a decline in the over-the-year change in PCE starting with the first quarter of 2007. It should be noted that the selected goods and services included in Series GS is responsible for almost all of the portion that is negative in over-the-year change for PCE when it drops below zero from the third quarter of 2008 through the third quarter of 2009.

Series “PCE – GS” includes goods and services that represent 65 to 69 percent of total PCE over the last 15 years. Series “PCE – GS” is negative for only one quarter (2009, quarter 2) as seen on the chart, but it should be noted that the series did fall below the trend of the over-the-year change in PCE. A closer look at the series on the chart shows that households cut back faster on their purchases of the goods in Series G than they did for services in Series S as Series G reached its bottom three quarters before Series S.

Although the over-the-year change in PCE slowed down and fell by about half during the 2001 recession, the amount of change stayed positive. Series G did start to decline before Series S, but Series G stayed positive in this period. Series S became slightly negative for about a year.

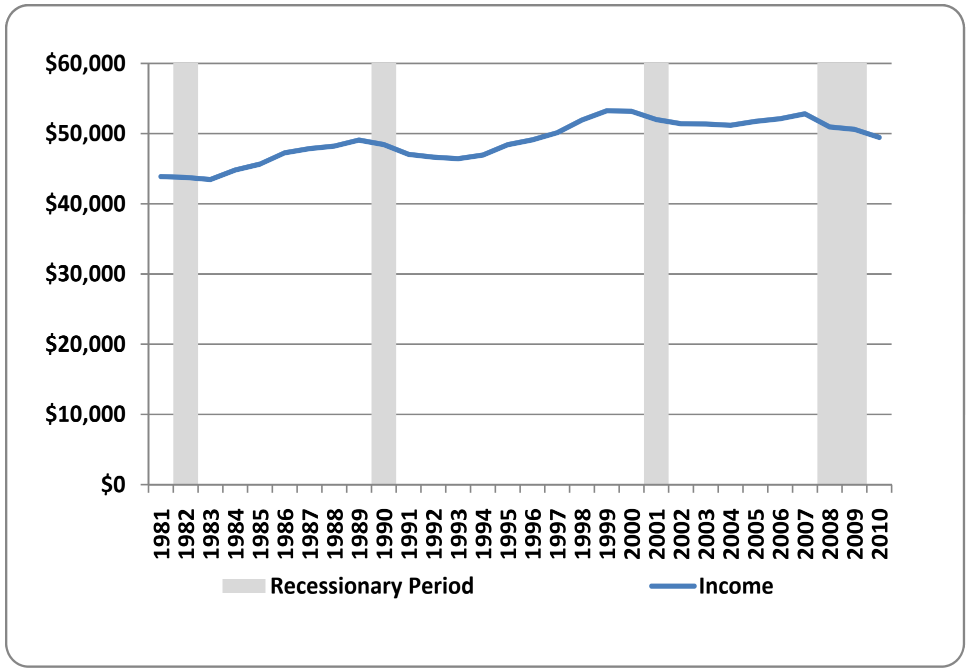
Exhibit 3 shows the proportion of total PCE that was spent on the selected goods and services between 1995 and the present. It began at 35.1 percent in the first quarter of 1995, decreased, and then rebounded to 35.1 percent in the first quarter of 2000. It then trended steadily downward through the end of the Great Recession to 31.0 percent in the third quarter of 2010.

Exhibit 3. Proportion of total PCE spent on selected goods and services



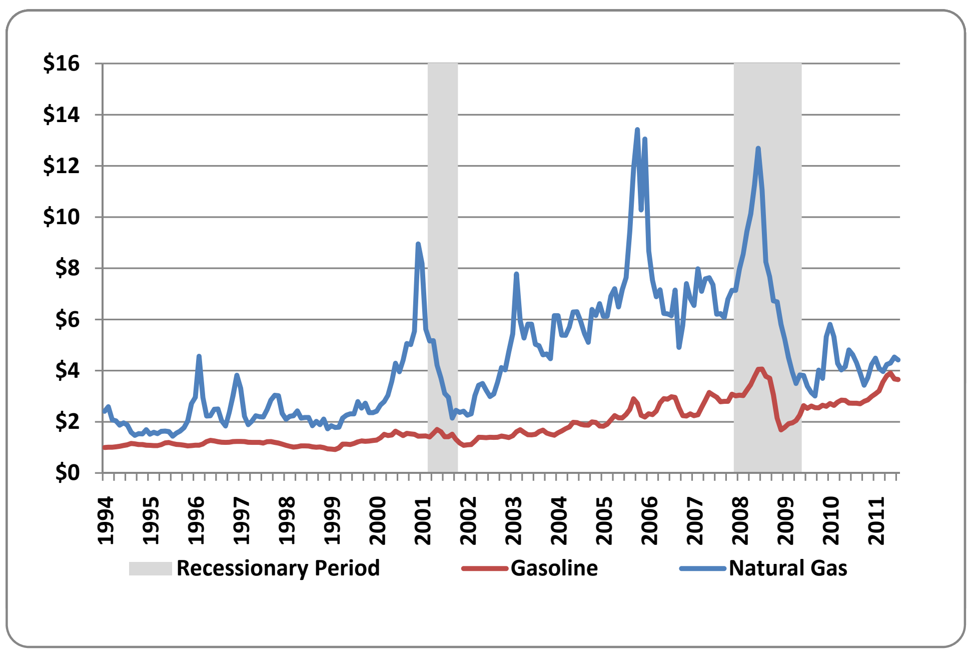
Source: Bureau of Economic Analysis

Exhibit 4. U.S. median household income



Source: Haver Analytics (2009 CPI-U-RS Adjusted Dollars)

Exhibit 5. Prices of gasoline and natural gas



Source: U.S. Department of Energy, Haver Analytics

The period spanning 2000-2011 covered two recessions, and the biggest rate of decrease in the proportion of these expenditures came during the Great Recession.

Lower household income

Median household income hit its peak in 1999 as seen in **Exhibit 4.** U.S. median household income dropped from $53,252 in 1999 to $49,445 in 2010, a decrease of 7.1 percent. As income and real estate values decreased, consumers cut back on discretionary spending.

Higher prices in the energy sector, as seen in the trends of gasoline and natural gas prices in **Exhibit 5,** also had a negative impact on the proportion of consumer spending on discretionary items.

Gasoline has steadily trended upwards since 2001 and although natural gas prices have declined since late 2008, they are still over twice as high as they were at the end of the 2001 recession.

As household wealth has recovered somewhat *(mainly through the stock market*) and pent-up consumer demand has risen, consumer spending has increased but has not returned to the trend line that PCE was following before the most recent recession. In fact **Exhibit 6** clearly shows that a new trend line was established since early in the Great Recession, and the new trend is significantly below the previous trend line.

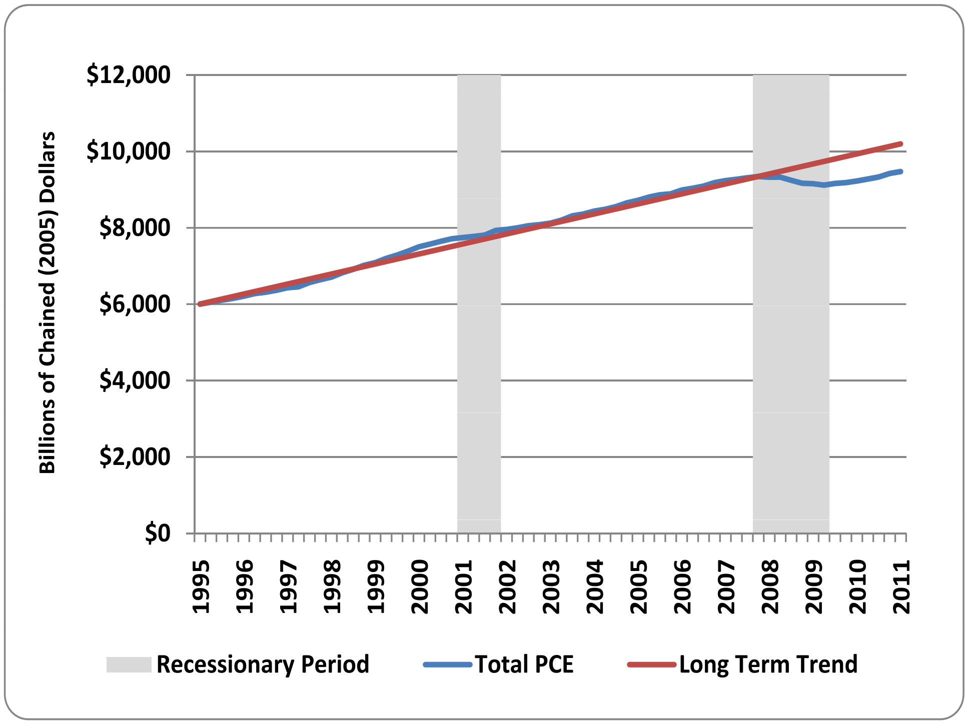
Lower labor demand

The decrease in consumer product demand negatively affected overall production, which in turn had a negative impact on the demand for labor in the economy. **Exhibit 7** shows the over-the-year percentage change in employment for both Illinois and the nation.

Three recessions (1990-1991, 2001, and 2007-2009) appear on this chart. In all three cases Illinois had larger negative growth (lower bottom) for over-the-year percentage change in employment than did the U.S. The bottom for both Illinois and the U.S. was more negative (lower percent value) in 2001 than in 1991, but it was much more negative (almost three times as much) in the 2007-2009 recession than it was in 1991 and 2001.

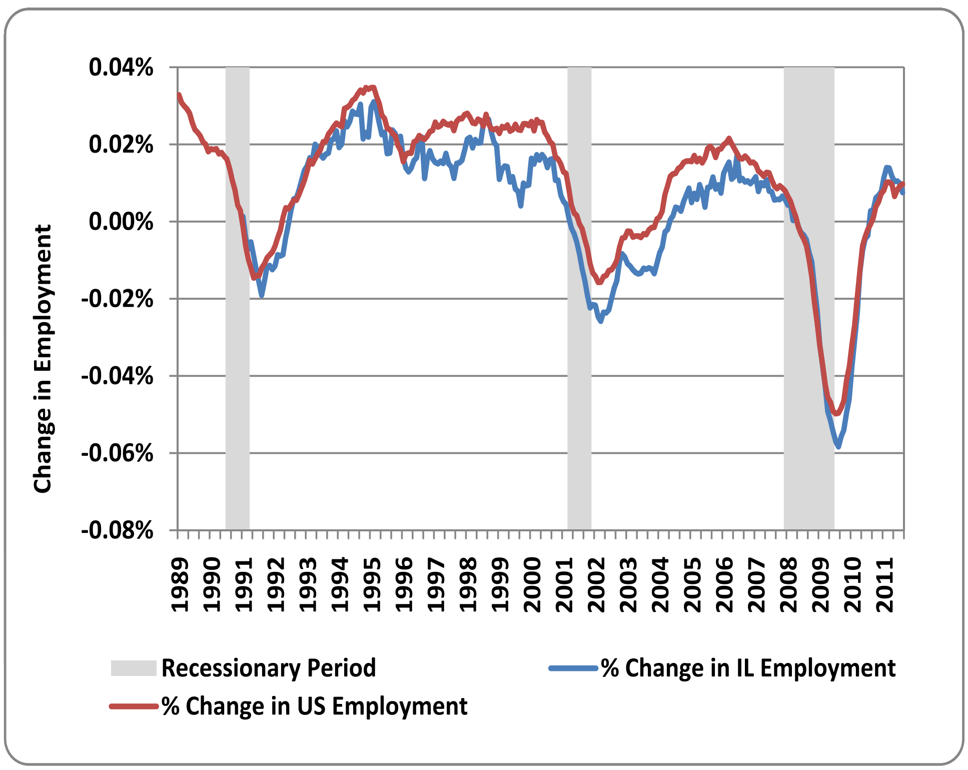
The over-the-year percentage change for recovery in employment is smaller after the 2001 recession than it was after the 1991 recession, and it appears that the over-the-year percentage change in employment for the recovery phase after the 2007-2009 recession will (especially for the U.S.) stay below rates seen after previous recessions.

Exhibit 6. Total Personal Consumption Expenditure



Source: Bureau of Economic Analysis

Exhibit 7. Percent over-the-year change of U.S. and Illinois employment



Sources: Illinois Department of Employment Security, Bureau of Labor Statistics, Haver Analytics

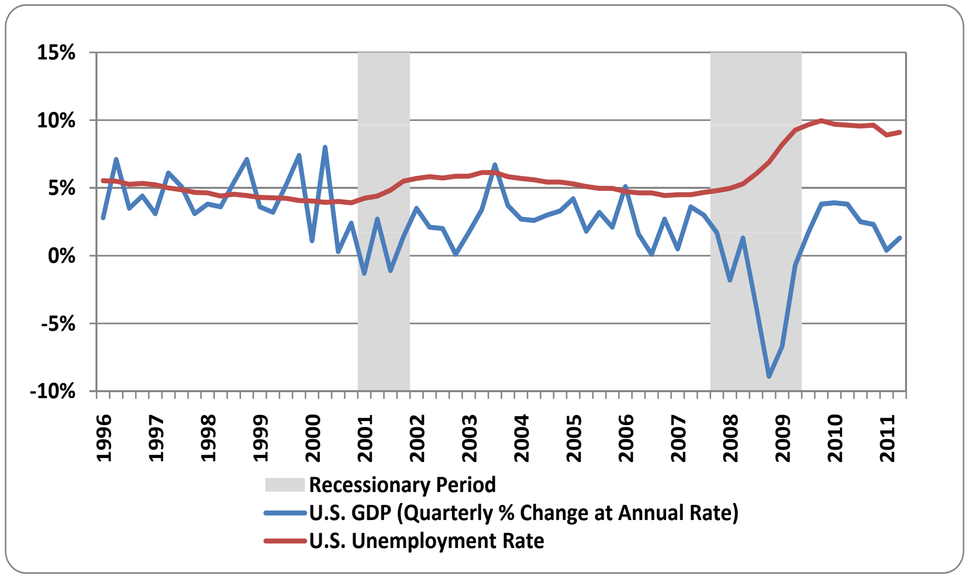
Exhibit 8 shows that the national unemployment rate turned upward with the start of the recession in December 2007 at the same time as the quarterly percentage change (calculated at an annual rate) in GDP turned downward.

It is interesting to note that the unemployment rate increased about three times as many percentage points when the recession began in 2007 relative to the 2001 recession. Similarly, the quarterly percentage change of GDP went back and forth around zero percent during the 2001 recession, whereas the quarterly percentage change in GDP dropped to a low of -8.9 percent during the 2007-2009 recession. This provides a clear picture of the severity of the most recent recession.

Factors affecting recovery

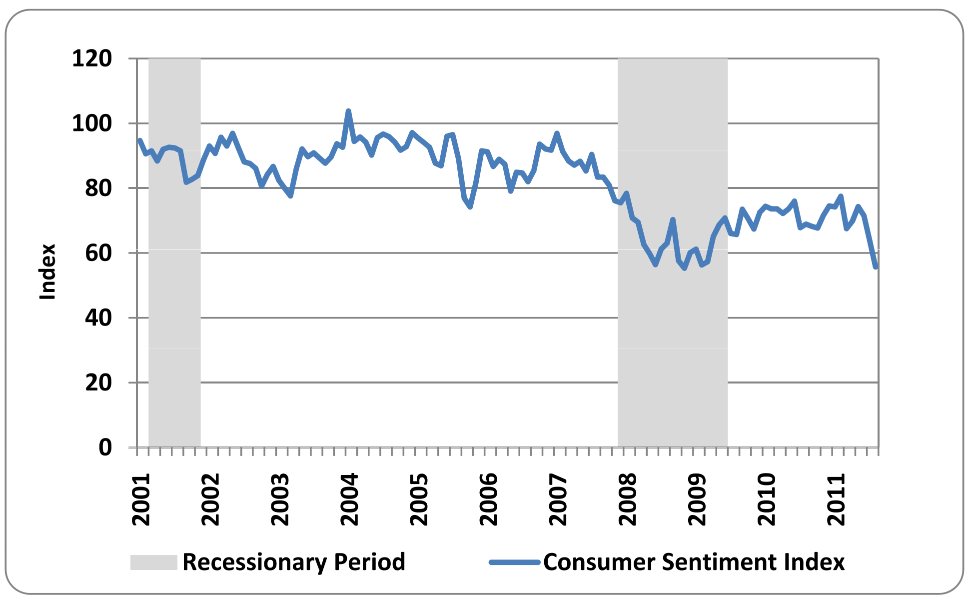
A lot of uncertainty remains in regard to the economic future. Some economists believe that housing prices have not yet hit bottom. As indicated in Exhibit 1, housing prices have remained relatively flat for the last two and a half years as measured by the Case-Shiller Price Index. Another recession would likely lead to further declines in housing prices and a corresponding drop in household wealth. Several other economic factors would also potentially dampen consumer spending. These include continued high oil and gas prices, a rate of inflation that offsets wage increases, the uncertainty of employment, and consumer expectations (also known as consumer confidence) for the economy.

Exhibit 8. Unemployment rate and quarterly percent change in GDP – U.S.



Source: Bureau of Labor Statistics, Bureau of Economic Analysis, Haver Analytics

Exhibit 9. Consumer Sentiment Index, University of Michigan (1966 Q1 = 100)



Source: University of Michigan, Haver Anyalytics

Exhibit 9 shows data for consumer sentiment since 2001. The August 2011 value for the consumer sentiment index is roughly equal to the lowest value measured during the Great Recession. It moved up slightly after the recession was over but never got upward momentum before sliding back down in the last few months of available data. In contrast, the index dropped a little bit during the 2001 recession but not too far. It eventually reached values higher than those prior to the recession as the index moved over 100 in 2004. It remained roughly between 80 and 100 until falling below 80 in 2007 where it has stayed ever since, recently dropping below 60.

Summary

Even though energy prices were rising steadily throughout the 2000s and the proportion of personal consumption expenditures spent on the discretionary goods and services (Series GS) was decreasing throughout the decade, a significant shift in the trend line for PCE did not occur until the Great Recession, which immediately followed a significant decline in the Case-Shiller housing price index.

The reduction in household wealth caused by the housing bust has put a new twist on the current recovery from the economic recession that is not typical of economic recoveries. In contrast to prior recessions, we are experiencing a reduction in household wealth stemming from a declining housing market rather than increasing housing activity. As a result, consumer spending – a key component of economic activity – is curtailed significantly. The housing bust also has severely hindered the ability of people to sell their house even if job opportunities were more readily available in another location. The excess inventory of housing has disabled the residential construction industry, which was the primary catalyst for an economic recovery in the majority of past business cycles.

For these reasons the probability of a strong economic recovery is low until the housing dilemma is solved.

The data have shown that the rate of employment declines have become more negative with each of the last three recessions and the rate of employment increases have been less positive in the recovery phase of the business cycle. In fact only about 20 percent of the jobs lost nationally since the Great Recession occurred have been recovered. The proportion of jobs recovered for Illinois since that period is about 28 percent.

Dave Bieneman is Manager of Economic Analysis for the Illinois Department of Employment Security

Impact of Housing Bust on Nation's Economy:

- **Nearly $7 trillion decline in household wealth from 2007 to 2009**
- **Reduction in average household spending on consumer goods**
- **Decrease in consumer product demand, causing decline in production and labor demand**
- **Excess housing inventory, which has disabled the residential construction industry**
- **Only a 20 percent recovery of jobs lost since last recession**