

# **Economic Forecast for 2009**

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## 2009 Economic Forecast

### National Economic Conditions

Although the economic recovery that existed after the 2001 recession has had its share of ups and downs, it is now all but certain that the US is currently in a recession. Although the current conventional wisdom suggests that the current economic malaise is ‘the worst since the Great Depression’, the evidence suggests otherwise. The current recession is shaping up to be much more severe than the 1990-91 recession but not as severe as the 1953-54 recession.

There are actually two distinct definitions of recession. The first is two or more consecutive quarters of negative economic growth in real gross domestic product (GDP). By this definition, using the data that is currently available, the US will have entered a recession in the 3<sup>rd</sup> quarter of 2008. However, the National Bureau of Economic Research is the official arbitrator of the starting and ending periods of economic declines and recoveries. They use a broader measure which states that a recession is a sustained decline in economic activity. They look at statistics other than just GDP and also consider the depth of the decline in these activities. Over the past 10 recessions that the US has experienced, there is an average of 2.6 months from the time when employment peaks to when a recession is declared to have begun by the NBER. (It is standard procedure to show recessions in a graph as gray shaded. The predicted recession will be light pink shaded.) Figure 1 shows that employment peaked at 146,647,000 in November of 2007 and currently stands at 144,285,000—a decline of almost 2.4 million jobs or about 1.6%. If past history holds, the recession would have begun by February of 2008. Figure 2a shows how monthly employment is changing relative to the local peak in employment in this and in the past two recessions. The line begins to dash when the recession is officially declared by the NBER. As the reader can see, employment is currently falling, but that the decrease in employment was not as severe as in the past two recessions until November of 2008. Figure 2b shows the current recession in relation to two different post Great Depression recessions. The 1953-54 recession was the most severe in terms of employment losses while the 1957-58 recession was the most severe in terms of output losses. In the first quarter of 1958, real GDP fell at a seasonally adjusted annual rate of 10.4% while job losses in the 1953-54 recession reached over 3.5%. Neither of these thresholds have been broken yet in the current recession.

Further evidence of the current recession and its depth is found when examining the month to month change in personal income. Over the past 7 economic recoveries the month to month percentage change in real personal income has become negative approximately 18.9% of the time. During the past recessions, and the 3 months preceding a recession, there is negative month to month percentage change in real personal income growth an average of 46% of the time. Using this metric and considering that the recession began in February of 2008, monthly real personal income growth has been negative 63% of the time. On a broader scale, monthly personal income has fallen on a year to year basis only 8.6% of the time during expansions (this falls to 3.2% of the time if we exclude the 11 month period of expansion that separated the recessions of 1980 and 1981-1982). However, during recessions, this year to year decline in monthly personal income occurs on average in 39% of the recession months. Once again, if we assume a recession began in February of 2008, we see yearly declines in monthly personal income 62.5% of the time.

One of the more obvious, though not the only reason, for the current recession is the decline in housing values. Housing prices increased at an unsustainable rate, but not historically unprecedented rate, in the early part of the current decade (see figure 3). The real seasonally adjusted median price of housing was increasing at rates as high as 15% per year in some months prior to the housing collapse. These rates of growth are high and eventually unsustainable but are not as high as the peak of 19.3% reached in November of 1987. Housing prices have increased at an average rate of 1.58% since 1964 and at a rate of 5.2% during times of sustained housing appreciation while they have declined 4.9% on average during times of sustained housing depreciation. Since the housing price bust we have seen declines in the median price as large as 13.5% but this price decline is not as severe as the nearly 20% decline in July of 1970. Currently the ratio of the median housing price to the median household income has fallen 10.5% from its high of 2005. In order for it to return to its historical average of 4.0, the ratio has to fall another 11.6% (see figures 4 and 5). At its current rate of correction, the housing market should bottom out in the summer of 2010. Unfortunately, it takes a larger percentage increase to return to a peak than it took to get to a trough. For example, if a stock was priced at \$100 and fell 25% to \$75, it would take an increase of 33% in the stock price to return to the \$100 level. With this in mind, the bureau is predicting that national median housing prices will not return to the peak they attained until sometime between 2016 and 2018. Figure 6 shows the long run trend in housing prices and the two most recent housing price bubbles. The first bubble shown occurred in early 1983 and reached a high of \$220,000 in inflation adjusted prices in 1990 before bursting. It took 13 years for inflation adjusted prices to return to the 1990 levels (Time 1). By this time the second bubble was already beginning to form and reached a high of almost \$285,000 before bursting. In short, the country is looking at a lost decade in housing wealth appreciation that began in 2007 (Time 2). Of course, in other markets such as California, Nevada, and Florida this time frame is longer due to rates of housing appreciation that were above the national average.

Figure 7 examines the seasonally adjusted annual rate of consumption. Recall that consumption is the largest component of GDP and comprises approximately 70% of GDP. The initial estimates of the percentage change in real consumption is disturbing. (It should be remembered that the estimates for the 3<sup>rd</sup> quarter of 2008 are still estimates and are subject to revision). Real consumption has fallen at a 3.7% seasonally adjusted annual rate in the 3<sup>rd</sup> quarter of 2008. Compared this to the steepest decline of -2.8% in the 1990-91 recession and to a 1% increase in the 2001 recession. Of course, this decline in consumption can be directly tied to the steep decline in consumer sentiment. As the reader can see, there has been a significant decline in consumer confidence in the past year. In fact, consumer confidence fell to a reading of 61.2 in July of 2008—the lowest level since December 1979. Figure 9 below shows the year over year percentage change in consumer sentiment. In June of 2008, consumer sentiment had fallen 34% from its reading in the previous year. Since consumers are buying less goods and services, especially relatively more expensive durable goods, we also see declines in orders for durable goods. During the last recession, the index of new orders for durable goods fell from a high of 150.4 in June of 2000 to 121.5 with the start of the recession in March of 2001. This is a 19.1% decline in new durable good orders in less than 8 months. For comparison, new durable good orders are down 10.5% from their new local maximum of 133.5 in September of 2006 to the start of the recession in February of 2008. Counting back 8 months, as in the previous recession, we see that durable good orders are only down 2.3% (7.3% if we count from July 2007). Although this the general decline in new durable good orders is obvious it also seems to indicate that the slide towards recession is not as steep as previous recessions.

It is with all of this in mind that the Bureau of Economic Research is predicting that employment will continue to fall to a low of 142,700,000 before beginning to increase in late 2009. This means that the economy will have shed 3.947 million jobs in the course of the recession or a total decline of 2.6%. Employment at the end of 2009 is predicted to stand at 144,600,000 a loss of nearly 2 million jobs from the employment peak. We can see that in the previous recessions, employment fell by its largest amount, 1.5% from the peak between the 13<sup>th</sup> and 15<sup>th</sup> month of employment decline. However, the time to return to the previous peak employment level took longer in the 1990-1991 recession than in the 2001 recession. It took a full 36 months for employment to return to its peak in the 1990-91 recession whereas it only took 30 months in the 2001 recession. Figure 11 shows the year over year percent change in employment for the US. Currently, year over year employment increases on average 1.5%. An examination of the graph shows that this peaked in December of 2006 at 2.2% and has been declining ever since. In fact, year over year employment growth became negative in March of 2008 and currently stands at -0.7%.

There has also been a disturbing rise in initial unemployment claims and a corresponding rise in the unemployment rate. Initial unemployment claims have increased significantly over the past few months. Figure 12 shows the four week moving average of IU claims over the past 2 years. As the reader can see, the four week moving average of IU claims was fairly steady at a rate of approximately 320,000 per week. By the last week of 2007, this had increased to 344,000 and has been increasing ever since. Similarly, the unemployment rate is currently at 6.7% and is predicted to increase to 7.7% in 2009 before falling slightly toward the end of 2009 to 7.4%. Currently there are 10,331,000 people unemployed. Our models show that this will increase to close to 12,000,000 as people who are currently employed lose their jobs and as new entrants enter the workforce. This is shown in figure 13 where the red dash is the predicted unemployment rate.

Exports are expected to grow only 1.1% in 2009. This is compared to the compound average annual growth rate of 7.4% per year in exports for the past 10 years. This is due to recession of America's main export markets and the strengthening of the dollar in recent months. Sixty percent of our exports are destined to ten countries which include Canada, Mexico, China, Japan, Germany, England, South Korea, the Netherlands, and France.

Figure 15 illustrates the percentage change in real GDP at a seasonally adjusted annual rate. As the reader can see, in the 3<sup>rd</sup> quarter of 2008, real GDP has fallen at a -0.5% rate. Although these numbers are much smaller than in past recessions, such as the 1990-91 recession (-3.0%) and the 2001 recession (-1.4%), the reader should remember that 3<sup>rd</sup> quarter GDP numbers are subject to further revision by the government. The Bureau is predicting that the 3<sup>rd</sup> quarter GDP numbers will come in at a final revision of -0.8% and that GDP will also fall in the 4<sup>th</sup> quarter of 2008 at a seasonally adjusted annual rate of negative 1.8%. Currently we are effectively seeing no growth in GDP in the first quarter of 2009 with only a small increase in GDP beginning in the 2<sup>nd</sup> quarter of 2009. It appears that GDP will return to more 'normal' levels of between 1.8% and 2.4% by the 3<sup>rd</sup> quarter of 2009 and finally at a level of between 2.1 and 2.8% in the 4<sup>th</sup> quarter of 2009.

Finally, it should be noted what impact the recent stimulus in the form of tax rebates had on the economy. This analysis, although not in-depth per se, indicates that the tax rebates were ineffective at their stated goal of spurring aggregate demand in the economy as confirmed by

figure 16. The bump in Disposable Personal Income is from the tax rebate checks. As the reader can see, there was no change in consumption from the stimulus checks that were issued earlier this year indicating that they were completely ineffective. Economists recognize that temporary backward looking rebate programs aimed at economic stimulus, such as the one earlier in 2008, do not work. Only long term stimulus, such as cuts in marginal tax rates or more permanent changes in government spending will provide the desired effect. Alternatively, the government could choose to do very little to try and stimulate the economy and let the forces of supply and demand continue to readjust and return the prices of assets, such as houses, to their true equilibrium value.

### **Missouri Economic Conditions**

The Missouri economy continues to under perform the national economy in almost every metric of comparison. Figures 17 and 18 compare real personal income and GDP between the United States and Missouri. As the reader can see, real personal income in Missouri has not been growing as fast as the rest of the nation. In fact, currently, real personal incomes in the US are 48% higher than in 1993 while they are only 34% higher in Missouri. Similarly, US nominal GDP has grown 112% since 1993 while nominal gross state product in Missouri has only grown 93%. Further evidence of the poor performance of the Missouri economy can be seen in figures 19-20b. Figure 19 displays an index of the US and Missouri employment with employment in January 1990 set equal to 100. Prior to the 2001 recession, employment in Missouri was growing faster than the nation. Since the end of the recession, employment in the nation has continued to rise while employment in Missouri has never fully recovered from the high achieved in December of 2000. The large 'bowl' between late 2000/early 2001 and late 2006/early 2007 shows how deep and prolonged the last recession was on employment in Missouri.

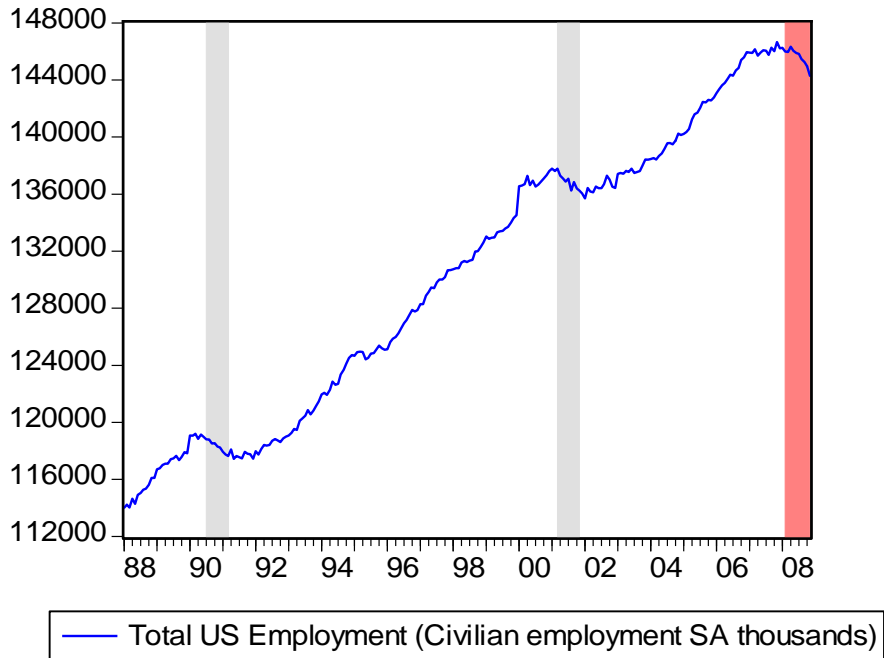
Figures 20a and 20b examine this relationship in the year over year percentage change in employment. The rate of employment growth in Missouri has bounced back and forth from exceeding and falling behind the rate in the nation. This is until the 2001 recession where the rate of employment growth in Missouri has never exceeded that in the nation. In fact, at the current time, employment in Missouri has already declined 2.3% versus a national decline of 1.6% in employment over this same time last year. Figures 21a and 21b illustrate that most of the decline in employment can be attributed to the major metropolitan statistical areas (MSA) of Kansas City and St. Louis. (Employment data from the Kansas side of Kansas City Kansas and the Illinois side of St. Louis are excluded) Most of the growth in employment in Missouri has been occurring in the smaller MSAs of Springfield, St. Joseph, Columbia, Joplin, and Jefferson City. In fact the rural regions of Missouri, those counties not included in either the Kansas City, St. Louis, or other smaller MSAs of Missouri, have experienced faster employment growth than the major MSAs. (It should be noted that since the 2001 recession this rural employment growth appears to have stalled) Employment in St. Louis is only 5% higher today than it was in January of 1990 while employment in Missouri as a whole is 15% higher. In contrast, employment in the other MSAs has grown 32% while rural employment is approximately 25% higher. The one bright spot is the unemployment rate in Missouri which has only recently been higher than the rate in the United States.

We are predicting that employment in Missouri will fall from the March 2007 peak of 2.889 million jobs to 2.792 million jobs—a loss of approximately 97,000 jobs during the current

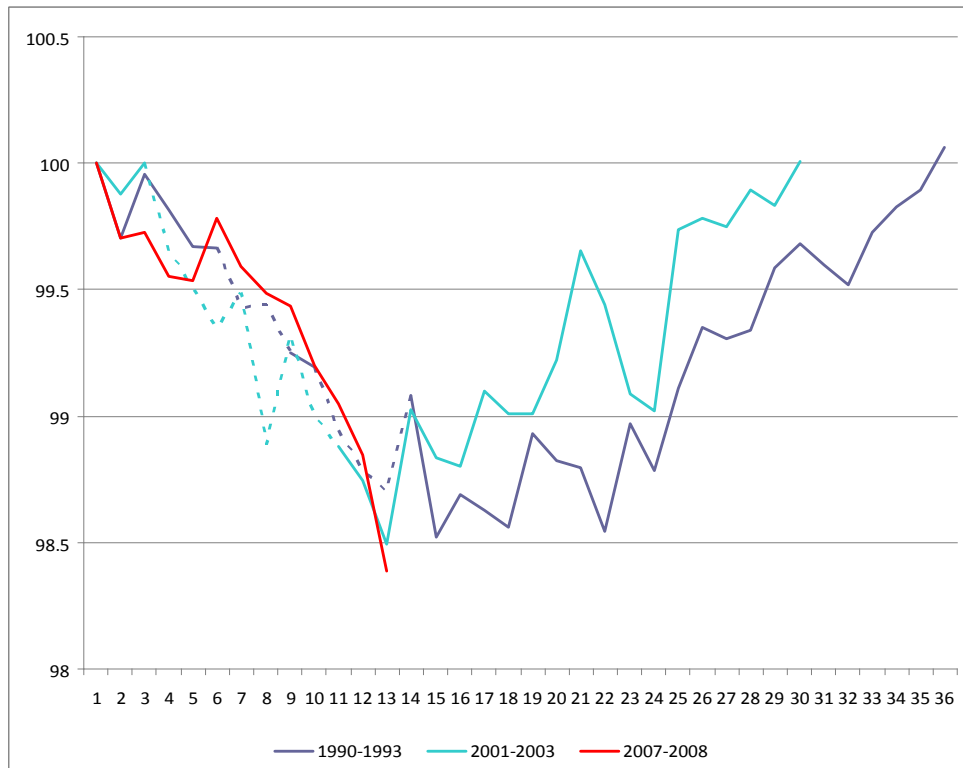
recession and that the unemployment rate will rise to a seasonally adjusted 7.5% in Missouri during the upcoming year.

Due to the fluid nature of the current economic situation, the Bureau of Economic Research will update its forecast throughout the year should economic conditions begin to deviate significantly from their predicted path.

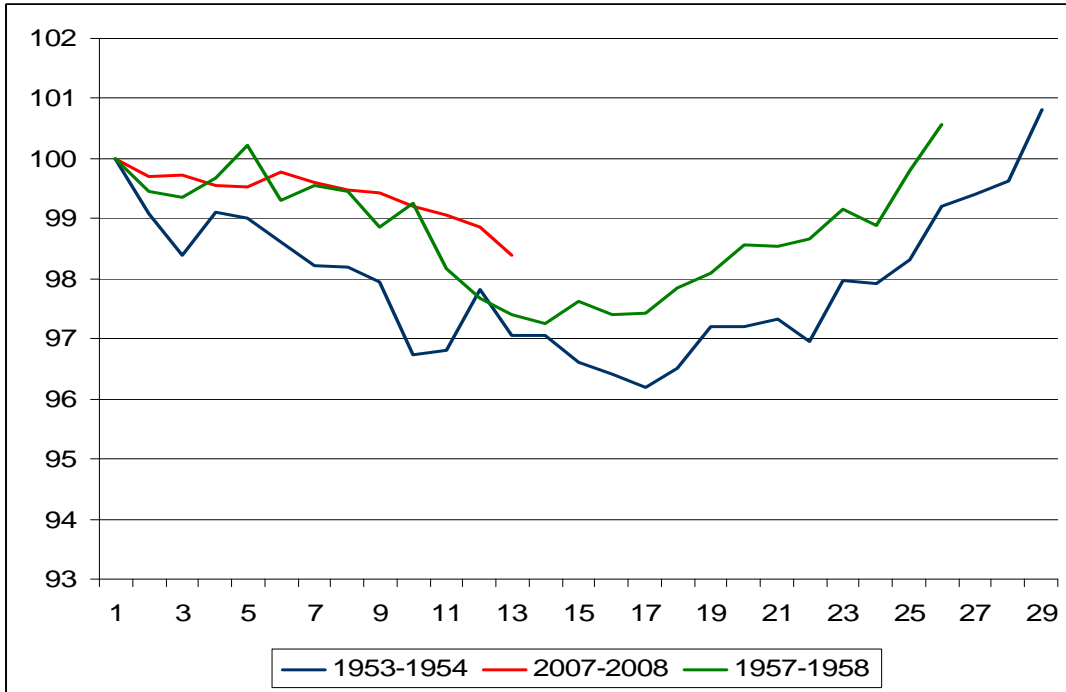
**Figure 1. US Employment**



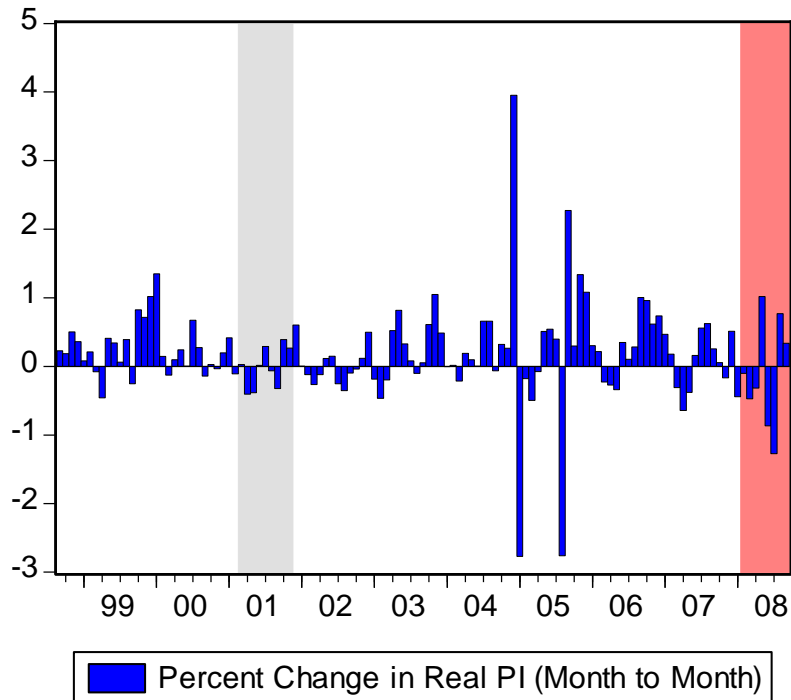
**Figure 2a. Employment Recession Index  
(Employment in Peak Month = 100)**



**Figure 2b. Employment Recession Index**  
**(Employment in Peak Month =100)**

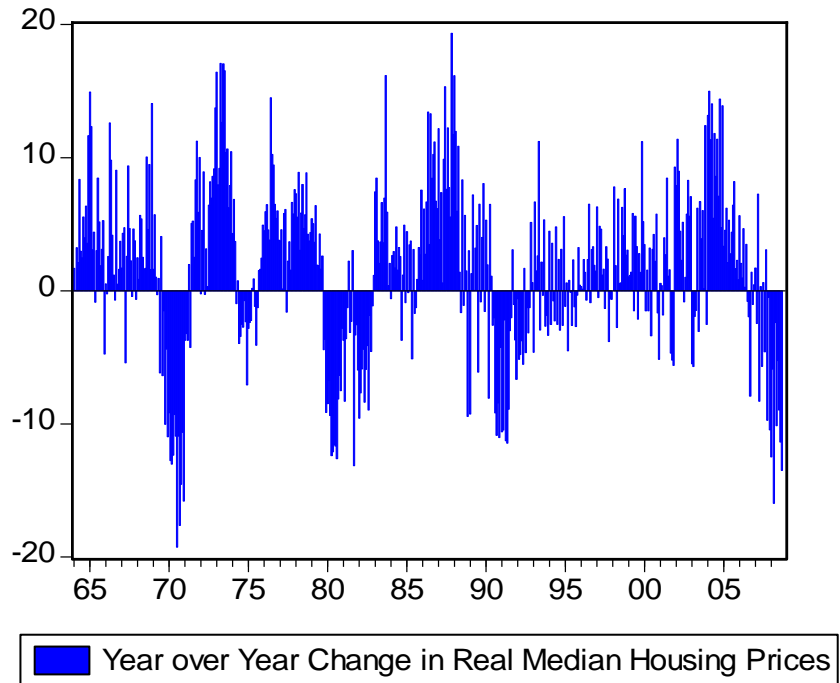


**Figure 2c. Percent Change in Real Personal Income (Month to Month)**

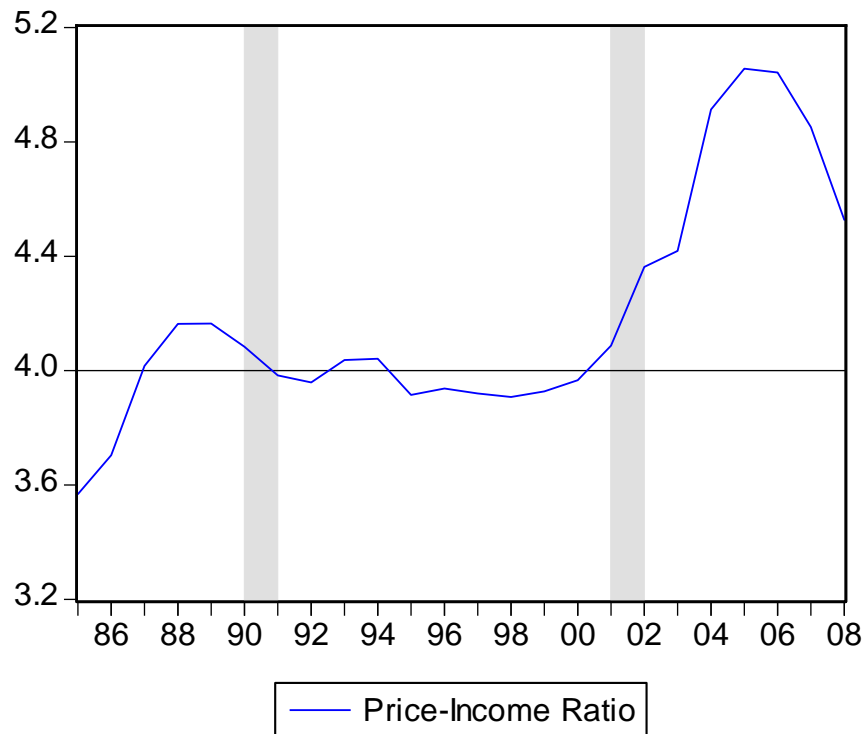




**Figure 3. Year over Year Percent Change in Real Median Housing Prices**



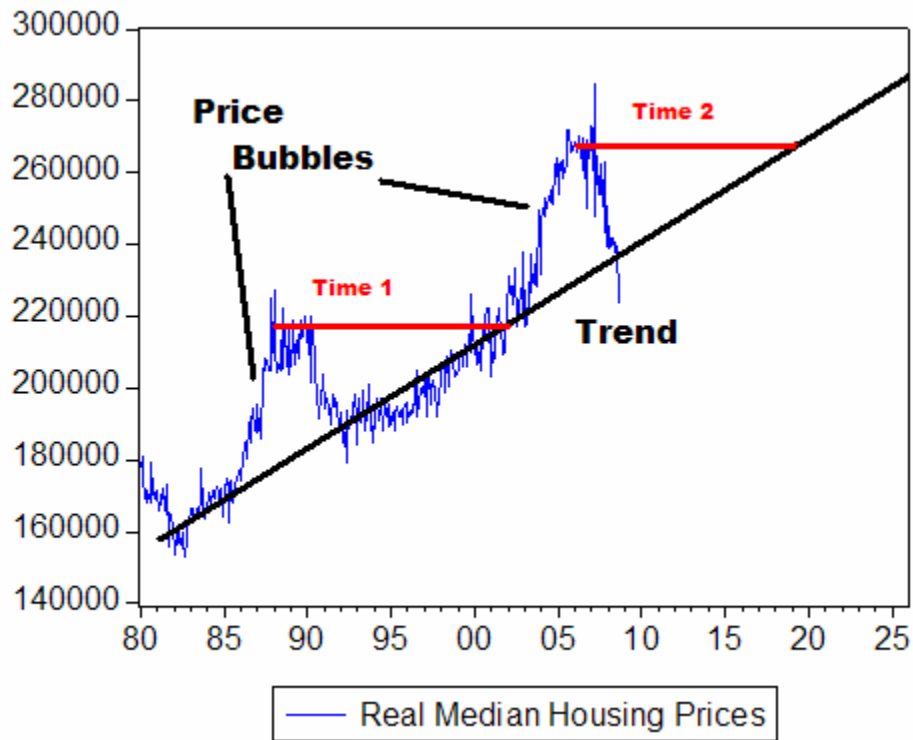
**Figure 4. Ratio of Median Housing Price to Median Income**



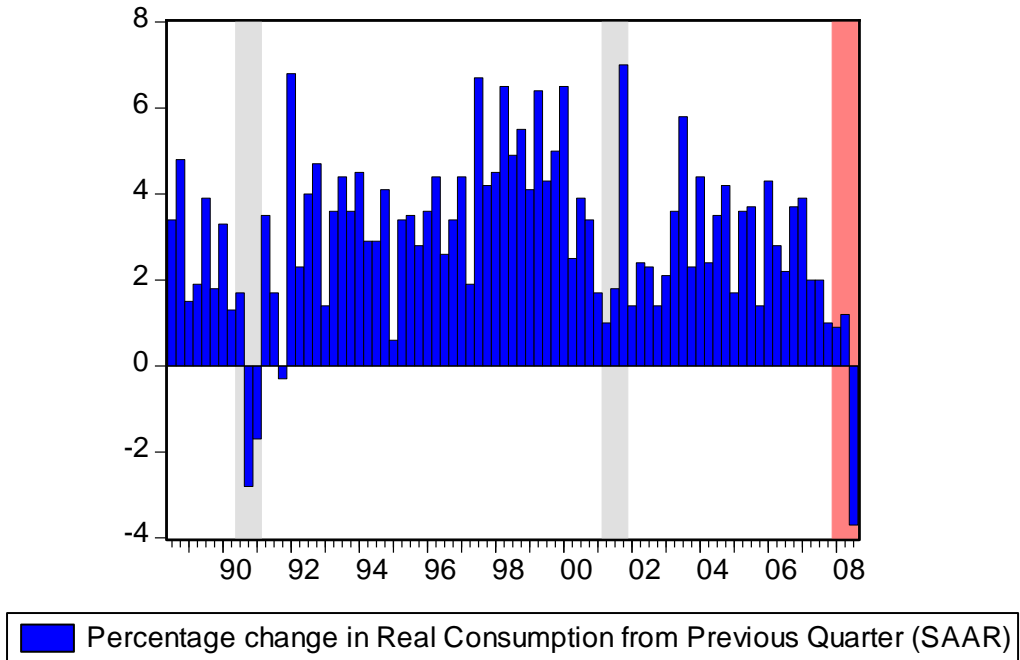
**Figure 5. Real Median Housing Prices (Seasonally Adjusted)**



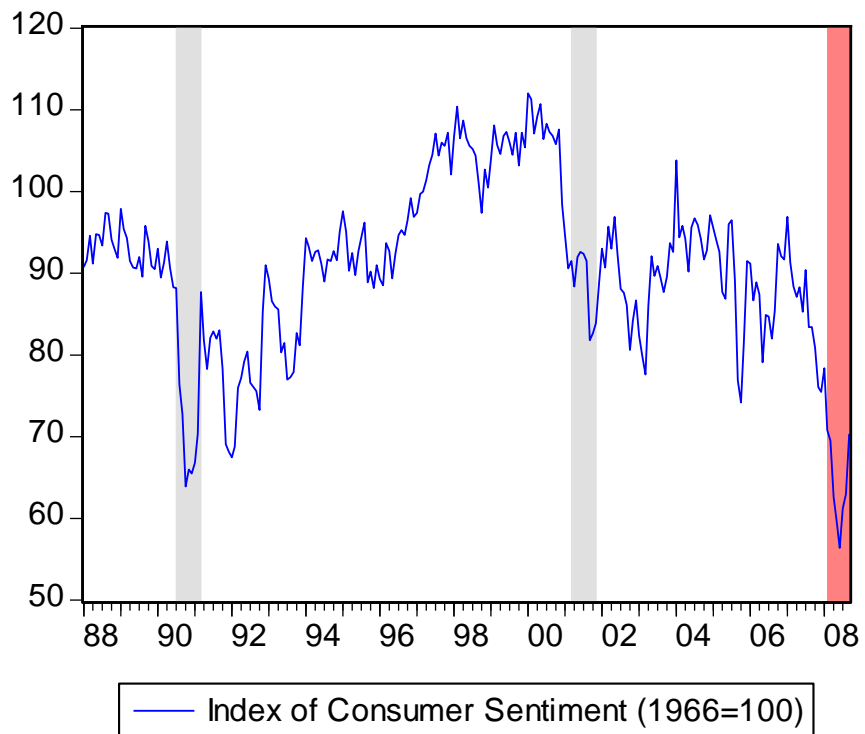
**Figure 6. Long Run Housing Prices**



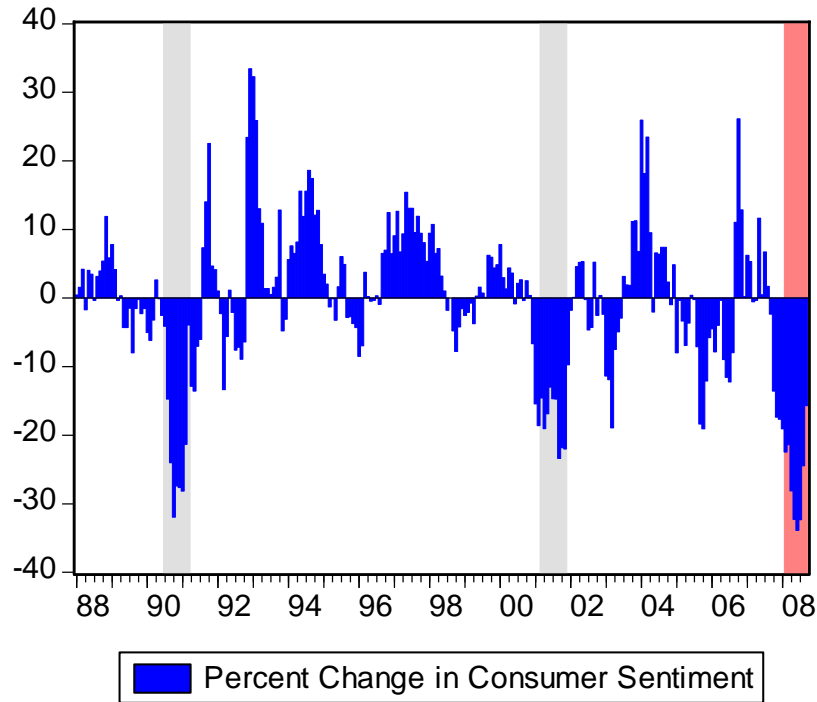
**Figure 7. Percentage Change in Real Consumption from previous quarter (SAAR)**



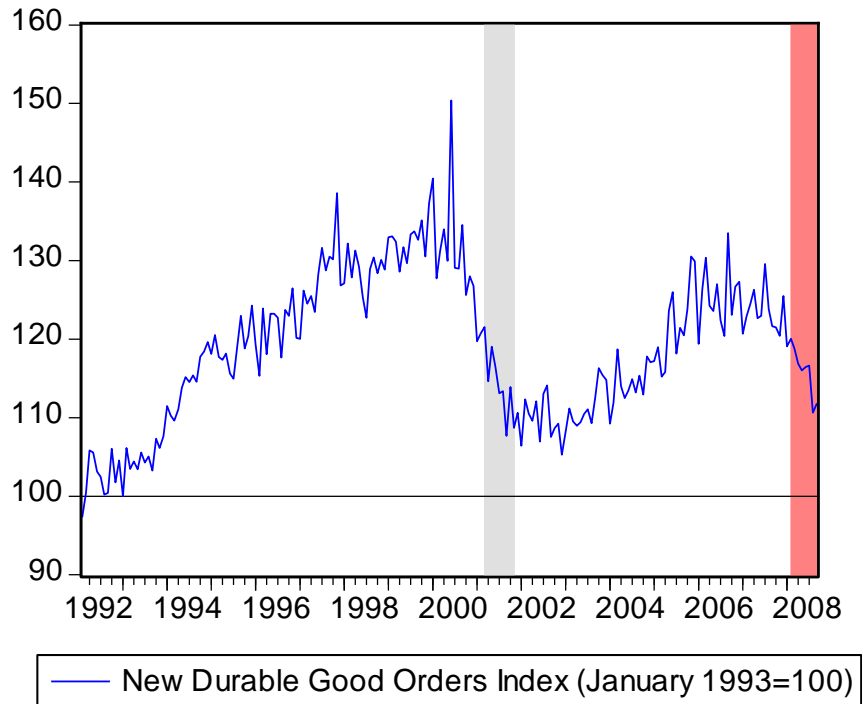
**Figure 8. Index of Consumer Sentiment**



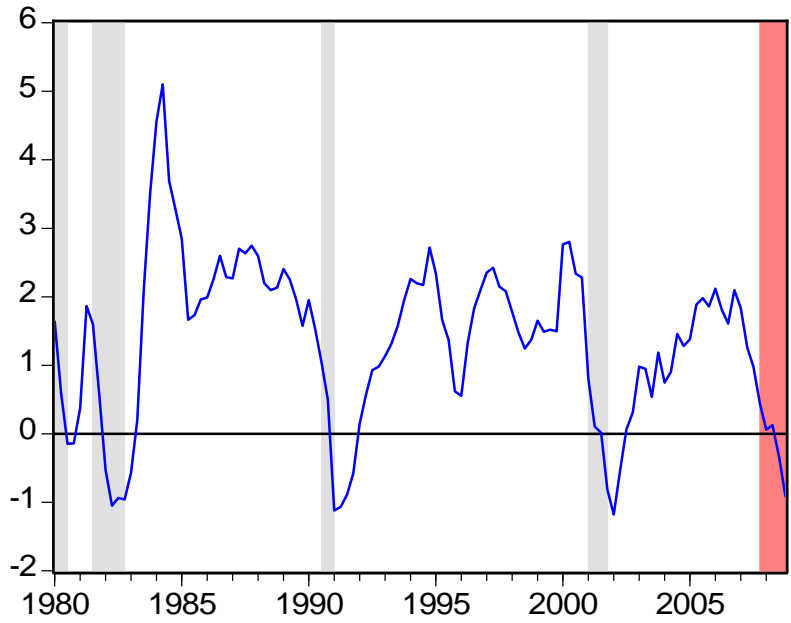
**Figure 9. Percent Change in Consumer Sentiment (Year over Year)**



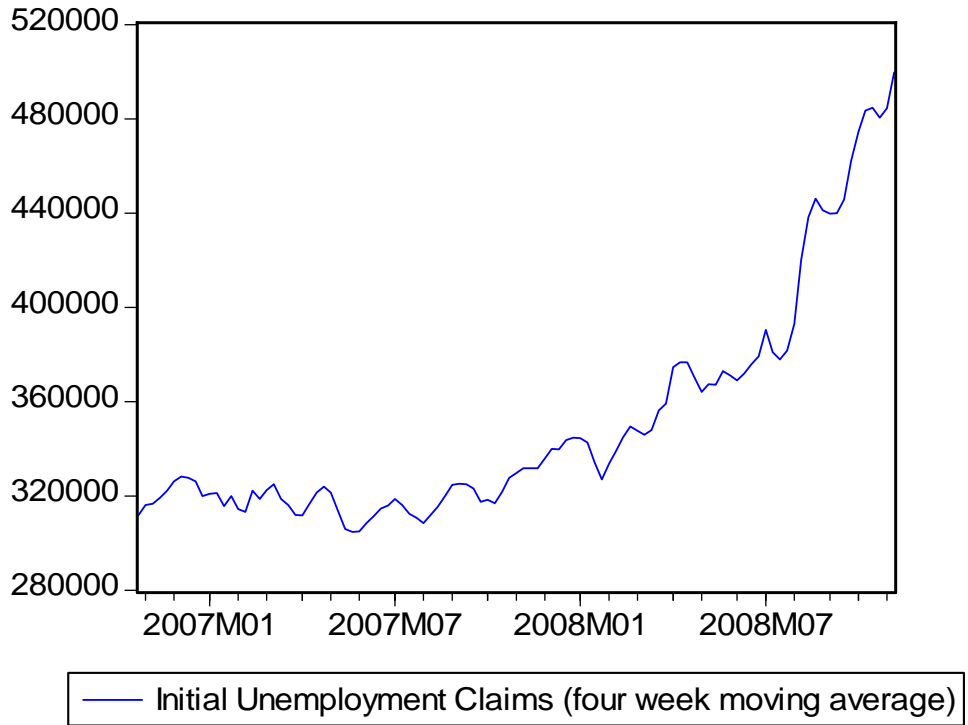
**Figure 10. Index of New Durable Goods Orders January 1993=100**



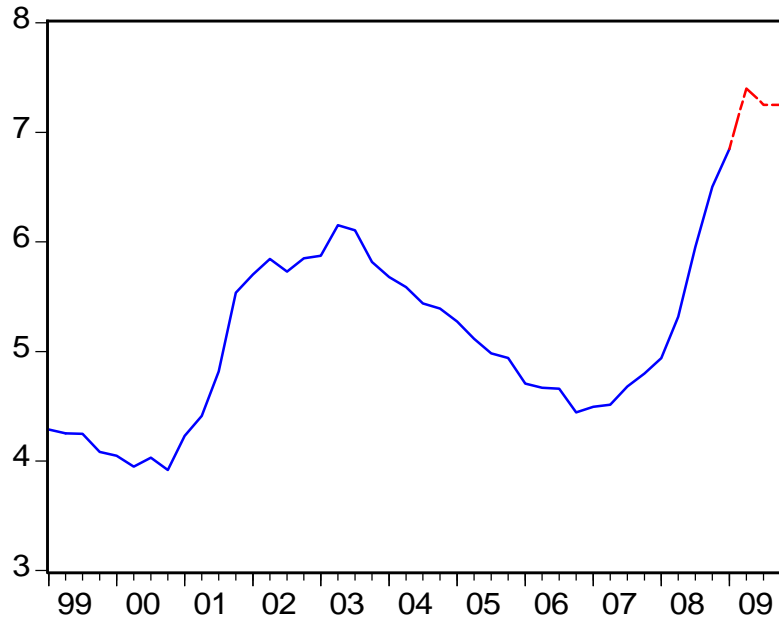
**Figure 11. Percent Change in US Employment (Year over Year)**



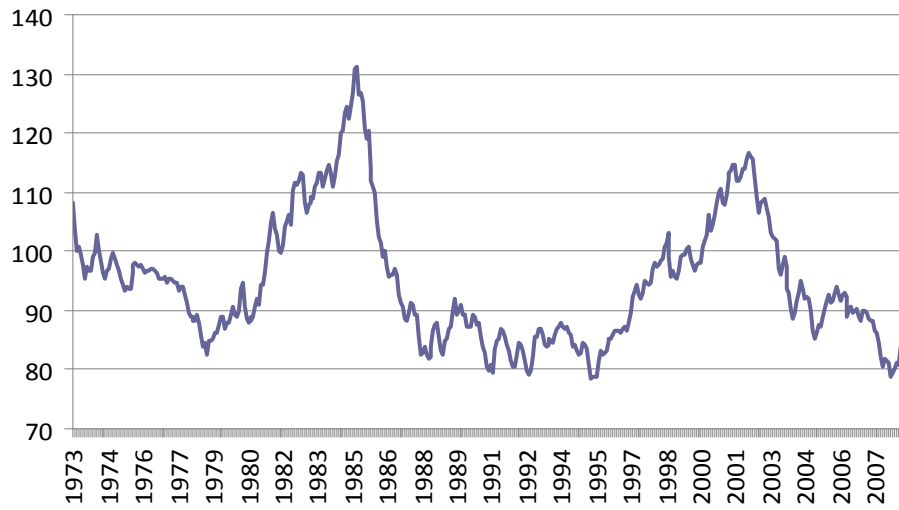
**Figure 12. Initial Unemployment Claims (Four week moving Average)**



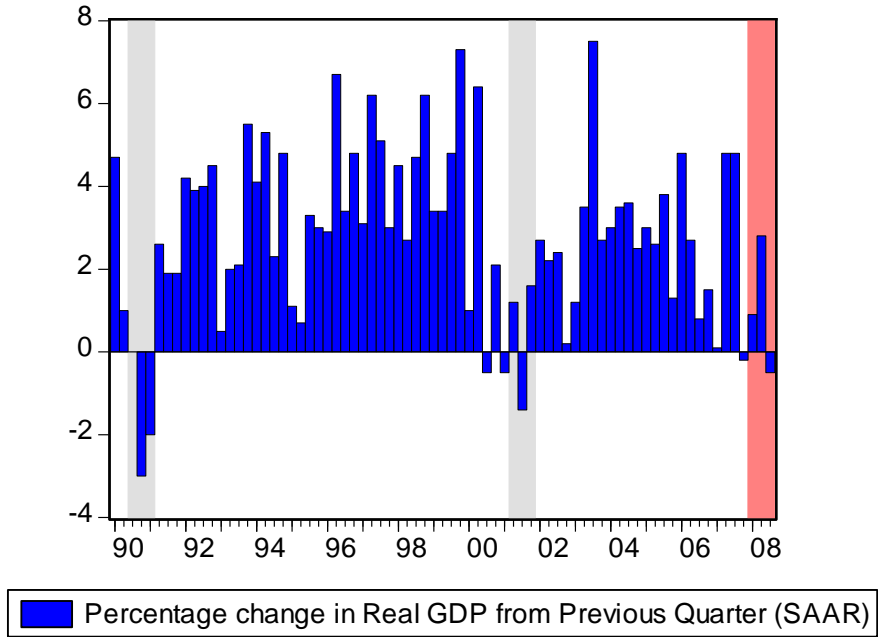
**Figure 13. United State Unemployment Rate**



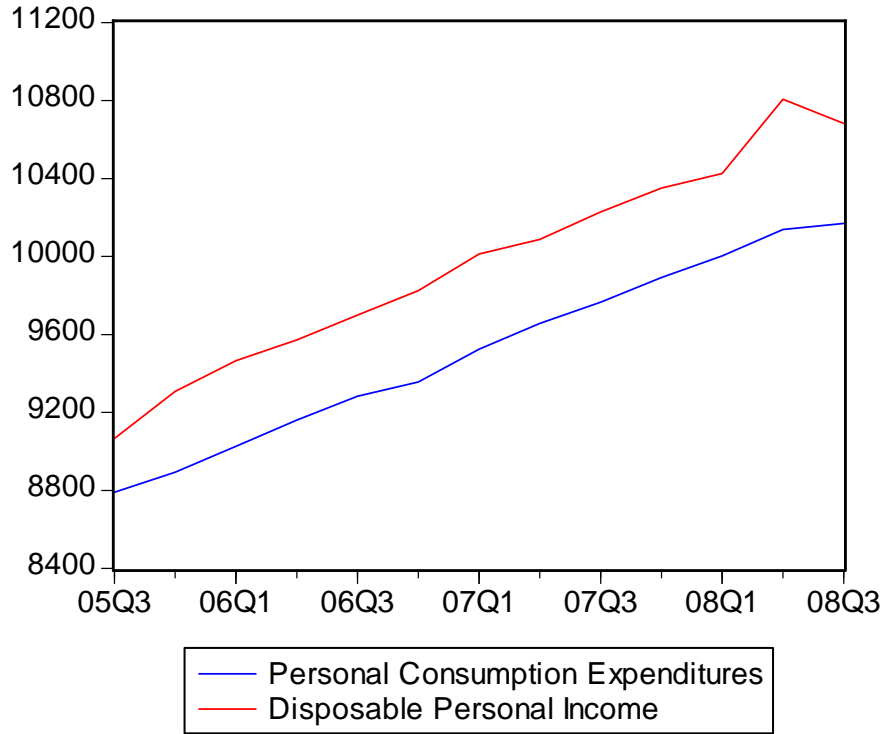
**Figure 14. Real Major Currencies Exchange Rate Index  
(March 1973 = 100)**



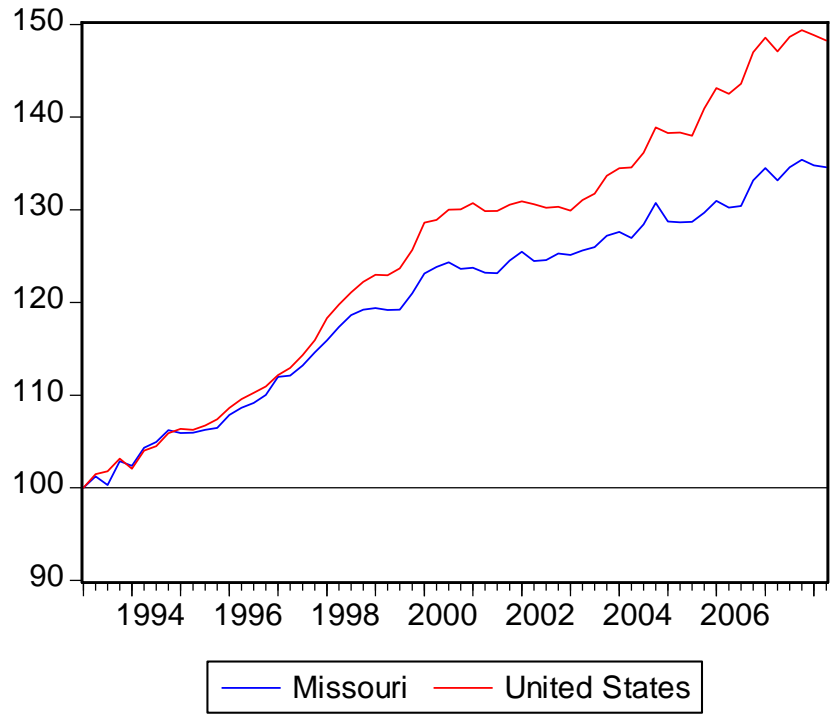
**Figure 15. Percentage Change in Real GDP  
(Seasonally Adjusted Annual Rate)**



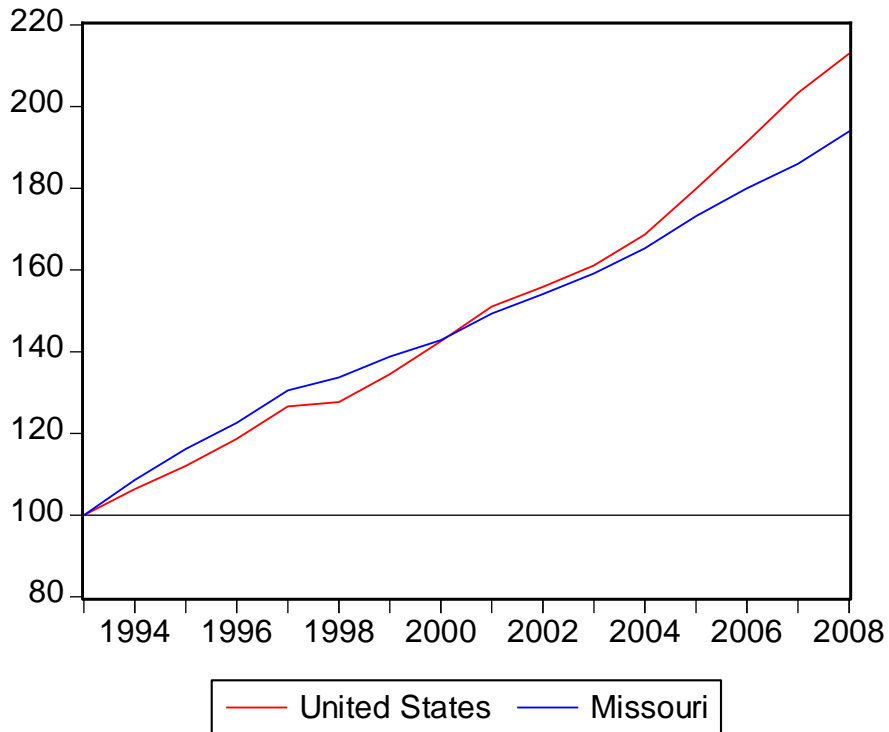
**Figure 16. Impact of the 2008 Tax Rebate Stimulus Package**



**Figure 17. US and Missouri Real Personal Income (1993:1 =100)**

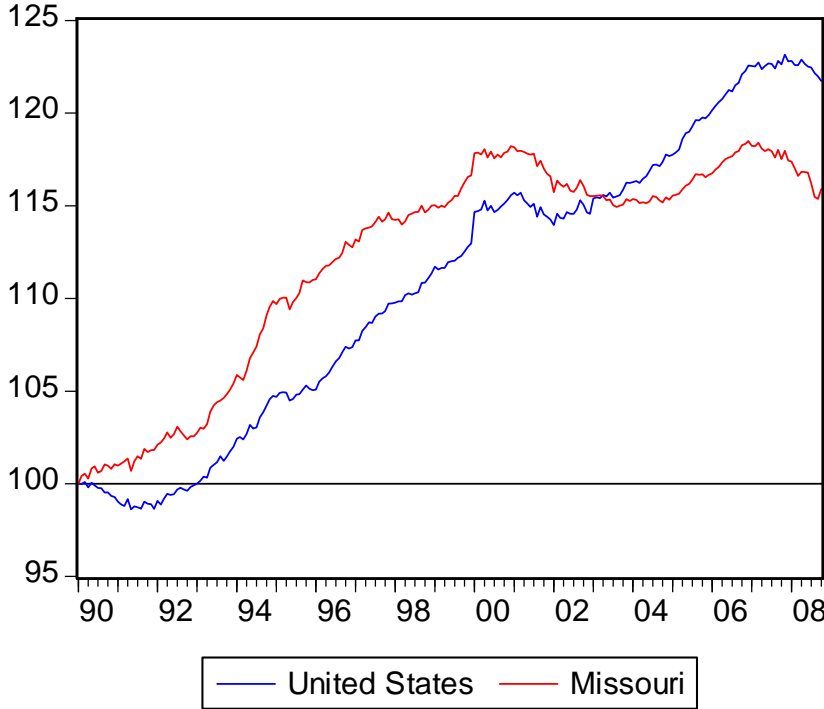


**Figure 18. US Nominal GDP and Missouri Nominal GSP (1993=100)**

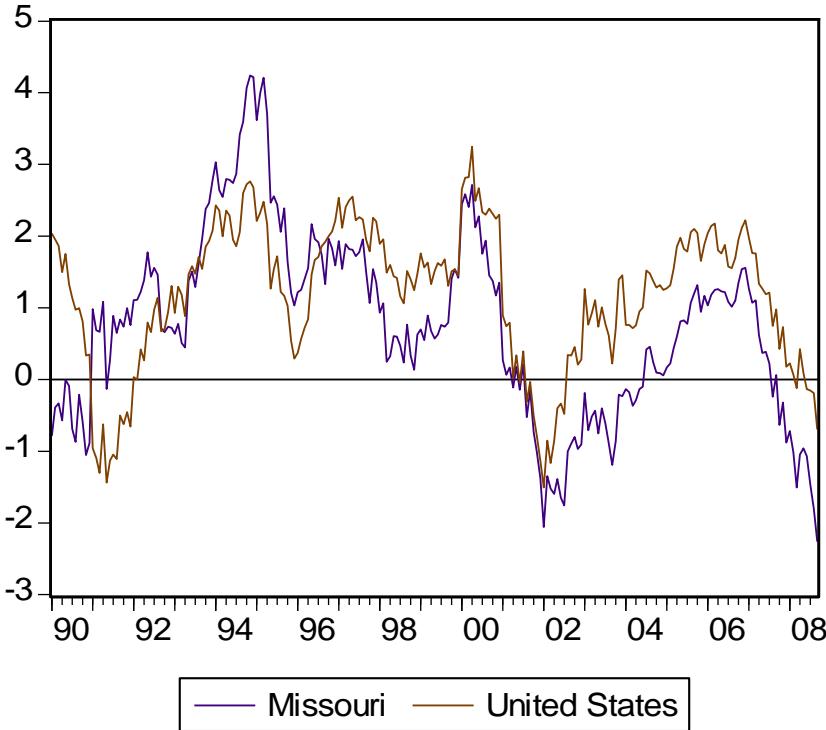




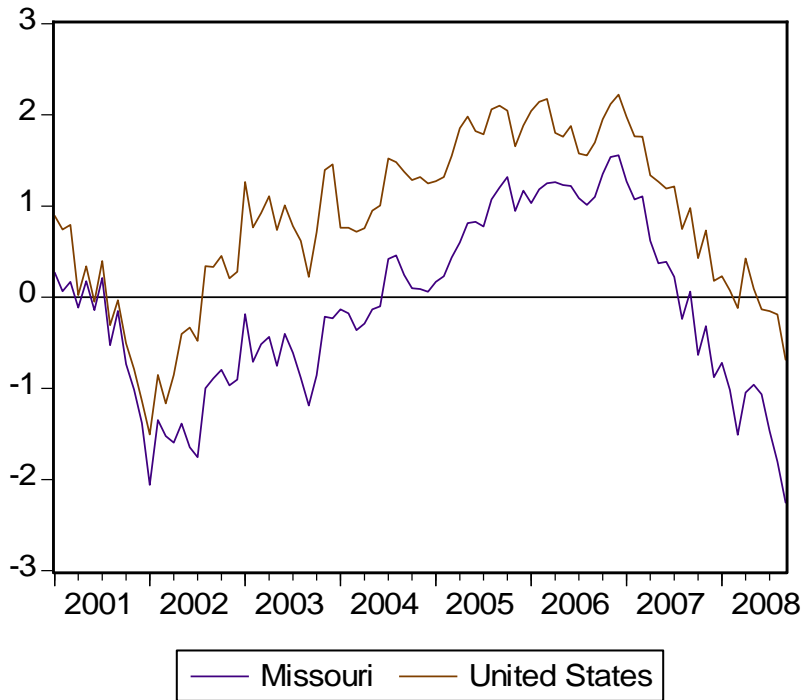
**Figure 19. Employment Index (Jan 1990 =100)**



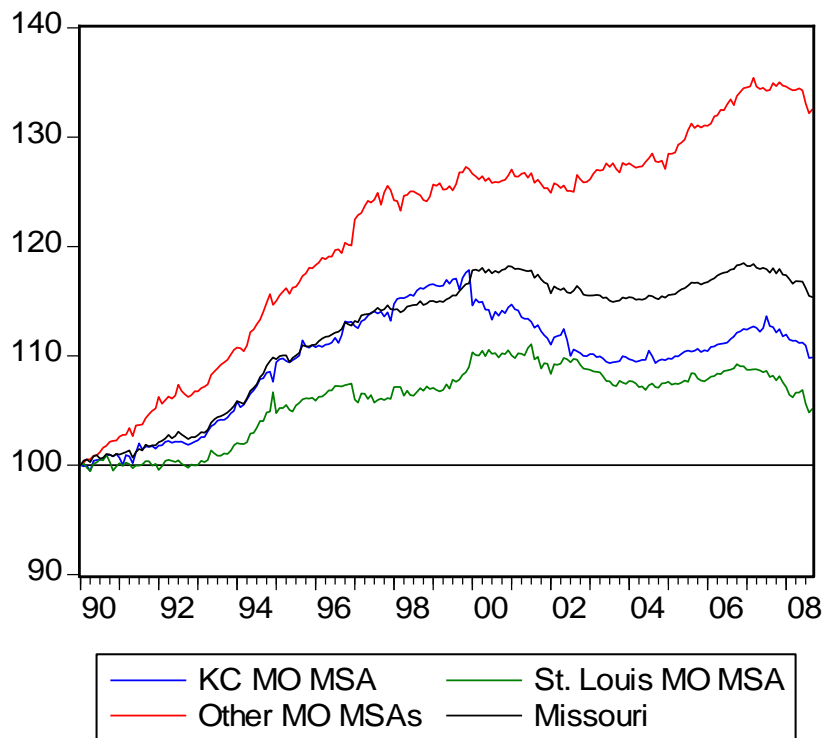
**Figure 20a. Year over year Percentage Change in Employment**



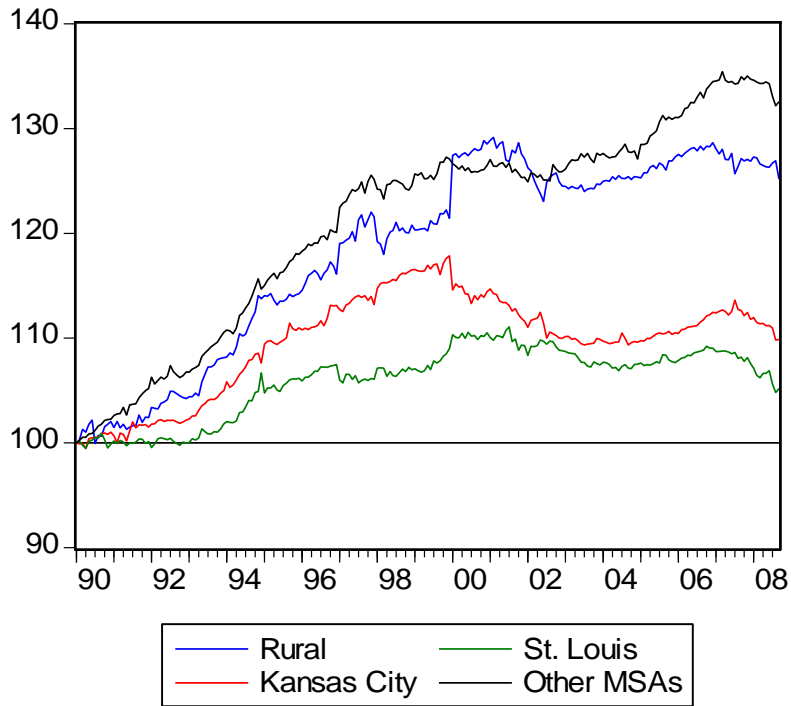
**Figure 20b. Year over year Percentage Change in Employment**



**Figure 21a. Employment Index for Selected Areas of Missouri (Jan 1990=100)**



**Figure 21b. Employment Index for Selected Areas of Missouri (Jan 1990=100)**



**Figure 22. Seasonally Adjusted Unemployment Rates**

