

POLICY POINTS

➤ POLICY POINTS BRINGS RELEVANT DATA TO TIMELY PUBLIC POLICY ISSUES IN ARIZONA

Arizona's Economic Performance Remains Subpar Relative to Historical Norms and the National Average

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Keying off of the "Fiscal Framework for Arizona" panel discussion at Morrison Institute for Public Policy's recent State of Our State conference, here is an analysis of Arizona's recent economic cycles relative to historical norms.

The national economic recession that lasted from the beginning of 2008 through mid-2009 was the longest and deepest since the Great Depression of the 1930s. Since the end of the recession, economic growth has been mediocre, particularly in the labor market. In Arizona, the recession also was the most protracted and severe, and the current economic recovery is by far the weakest, in the period since World War II. Moreover, Arizona's economy since 2007 has underperformed relative to the national economy; normally, the state's aggregate economic growth is much faster than the U.S. average except briefly during recessions.

An economic cycle consists of two phases: a growth phase (expansion) and a contraction phase (recession). Commonly, the expansion is split into two parts: the first consists of the recovery from the losses experienced during the last recession, while the second comprises economic production beyond the peak of the prior cycle. The official dating of national economic cycles is determined by the National Bureau of Economic Research (NBER). The dates of the turning points in the economy are based on a variety of economic measures, with gross domestic product (GDP) – the broadest economic gauge – given heavy weight.

State economic cycles may not coincide with the official national timing. No official dating of state economic cycles is available. In fact, it is not possible to replicate the NBER methodology for states since some of the data are not available by state and because state GDP is reported only annually. Earnings (conceptually, the indicator most similar to GDP), which is released quarterly on a seasonally adjusted basis for each state by the U.S. Bureau of Economic Analysis, is the most comprehensive measure available by state on a monthly or quarterly basis for a considerable number of years. For a time series analysis, the earnings data must be adjusted for inflation; the U.S. GDP implicit price deflator was used.

A long time series of monthly employment estimates are available by state from the U.S. Bureau of Labor Statistics. The estimates cover only nonfarm wage and salary employment. They do not differentiate between part-time and full-time employment or between high-paying and low-paying jobs. Even after seasonal adjustment, the employment estimates by state include significant month-to-month fluctuations that likely reflect data limitations rather than real changes in the economy. The quarterly earnings series has a lesser amount of "noise."

While employment is inferior to earnings as a gauge of economic performance, it is included in this analysis since the timing of an economic cycle, as well as the magnitude of the cyclical gains and losses, varies by indicator. In particular, improvements in employment and unemployment following a recession have lagged considerably behind the official end of the recession in recent economic cycles.

In this Policy Point, economic performance since the beginning of the last recession is compared to previous economic cycles nationally and in Arizona, primarily based on earnings and employment. The focus for Arizona is on the period since 1970. With the economy in Arizona still evolving and maturing through the 1960s relative to the national economy, economic performance in Arizona prior to 1970 is not particularly relevant as a comparison to recent conditions.



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The National Economy

In general, the last three economic cycles have been longer than the historical norm, due to a prolongation of the expansionary phase. In the first eight cycles after World War II, the median length of the expansion was 38 months. In the last three cycles, the expansion lasted 92, 120, and 73 months, respectively.

GDP and Earnings

On measures such as GDP and earnings, growth rates in the early stages of recent expansions have not been as high as in earlier cycles, but due to the length of the expansions, total percentage growth during the cycles of the 1980s and 1990s exceeded that of all but one of the earlier cycles. The total percentage gain during the 2001-07 cycle ranked in the middle of the cycles since World War II.

The overall economy maintained historical rates of growth in the last two cycles in part due to increases in productivity, which were particularly strong from the mid-1990s through mid-2000s. The productivity gains offset slowing employment growth, especially as measured by the wage and salary employment series.

The situation in the current cycle, which began in January 2008, is much different. In mid-2011 – 14 quarters into the cycle – economic production had not yet reattained the previous cyclical peak. The prior peak had been reached within eight quarters in each of the 10 previous economic cycles. The rate of growth since the end of the recession, while slower than in historical cycles, has been similar to that of the 2001-07 cycle and not much less than the 1990-2001 cycle. The length and depth of the 2008-09 recession is what distinguishes this cycle from earlier cycles.

Employment

As measured by nonfarm wage and salary employment, the recession and the recovery phase combined were completed in two years or less in each of the first seven cycles after World War II. Since then (beginning with the 1981-82 recession), the recession and recovery has taken progressively longer, almost entirely due to slower employment growth during the recovery. In the 2001-07 cycle, it took 46 months. In the current cycle, employment was still 5 percent below the prior peak 45 months later. Not only is the latest employment estimate (for November 2011) still less than during much of the 2001-07 cycle, it is lower than in the latter stages of the 1990-2001 cycle. For the first time since the 1930s, the level of employment in the current economic cycle is less than at the comparable point of the prior cycle.

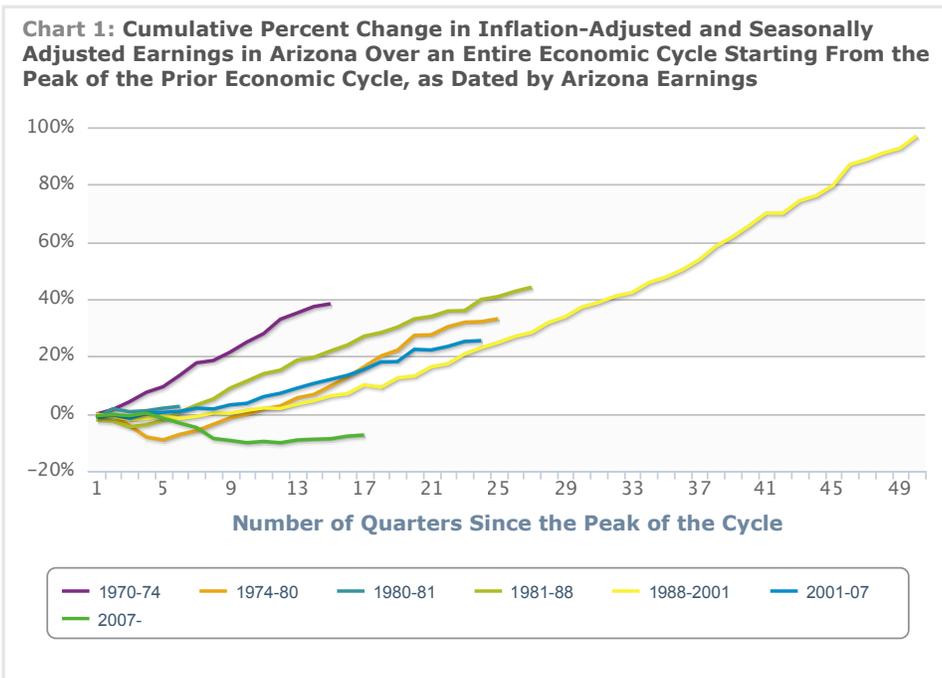
In particular, the pace of wage and salary employment growth has been slow since the 2001 recession. Employment continued to fall for nearly two years after the end of that recession. Though relatively strong employment gains occurred from late 2003 through early 2007, the average monthly gain during this period was 30 percent less than in the comparable period of the prior cycle. Despite the much larger economy today than in the past, the total increase in employment during the 2001-07 cycle was the least since the 1950s. After the end of that cycle, 8.75 million jobs were lost in the recession. Job growth since the trough has totaled only 2.5 million.

The employment-to-population ratio (E-P) provides additional perspective on the labor market. Through the 1990-2001 cycle, the E-P (as calculated using wage and salary employment) consistently was higher than at the same stage of the prior cycle. During the 2001-07 cycle, the ratio was below that of the prior cycle. In the current cycle, the E-P is considerably below that of the 2001-07 cycle. Though employment has been rising since early 2010, the E-P has hardly increased. Since the recovery began, employment growth has averaged 117,000 per month, but must accelerate to allow the E-P to rise and the unemployment rate to fall. In the last cycle, the monthly average gain during the heart of the expansion was 176,000; it was 250,000 in the cycle before that.

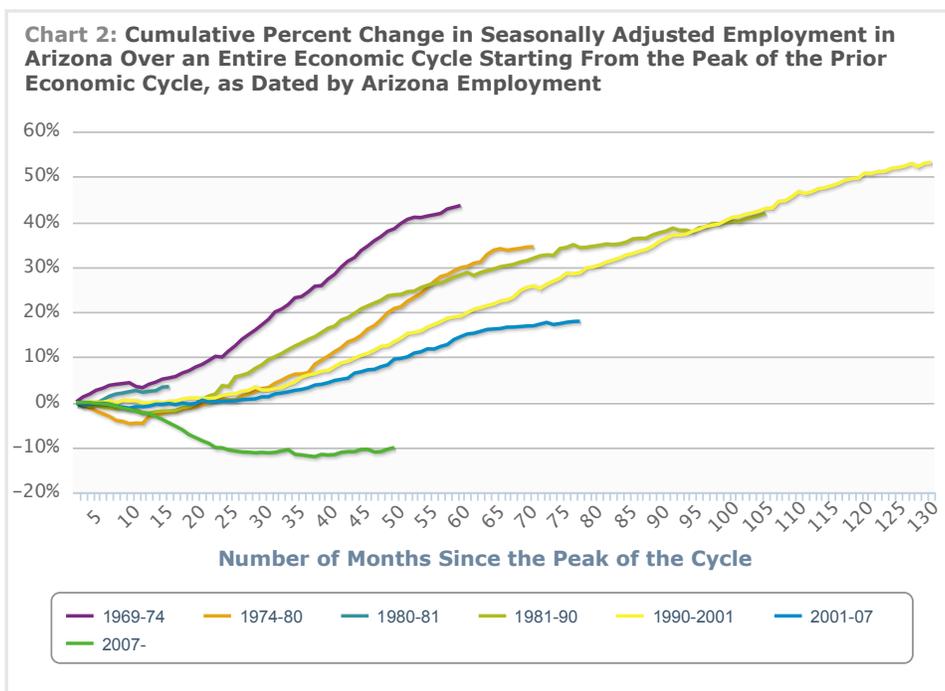
The Arizona Economy

The cumulative percent change in inflation-adjusted Arizona earnings since the peak of the prior economic cycle is shown in Chart 1 for each of the seven economic cycles since 1970. The timing of the cycles in this chart is specifically based on Arizona earnings. Chart 2 displays the economic cycles of nonfarm wage and salary employment in Arizona, with the timing based on the employment series.

The atypical nature of the current cycle is clearly displayed in both charts. The recent recession was longer and deeper than prior recessions. Only the 1974-80 cycle based on earnings had a decline nearly as large, but a strong expansion began as soon as that trough was reached, with the recessionary losses made up during the next five quarters. In the current cycle, the recovery has hardly begun, with earnings more than four years after the last cyclical peak still 7 percent less than at the peak. Employment remains 10 percent lower than at the prior cyclical peak.



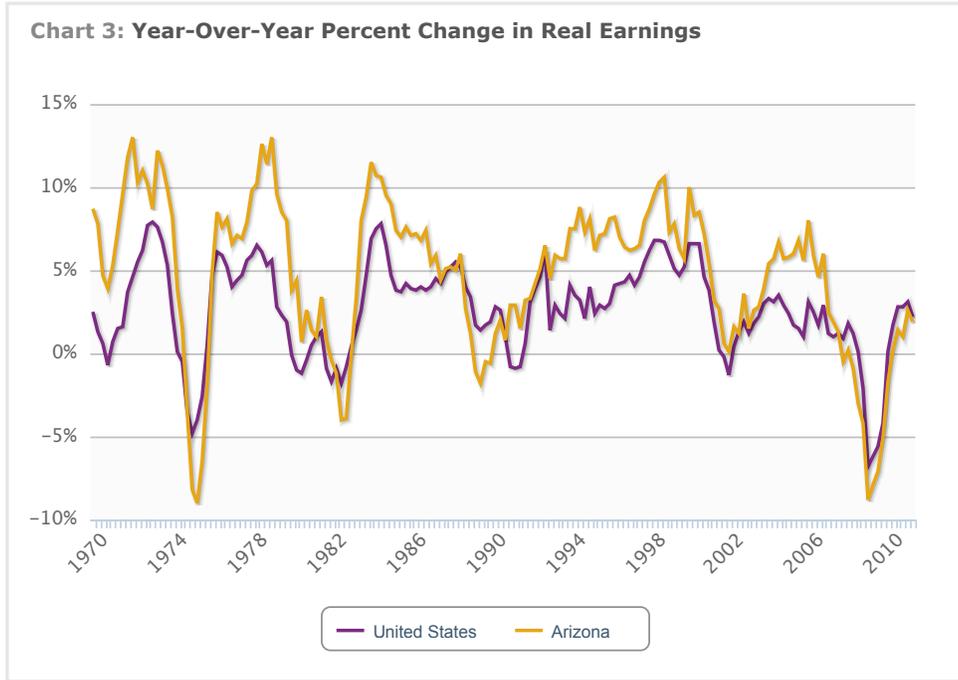
Source: Quarterly seasonally adjusted earnings and GDP Implicit Price Deflator from the U.S. Department of Commerce, Bureau of Economic Analysis.



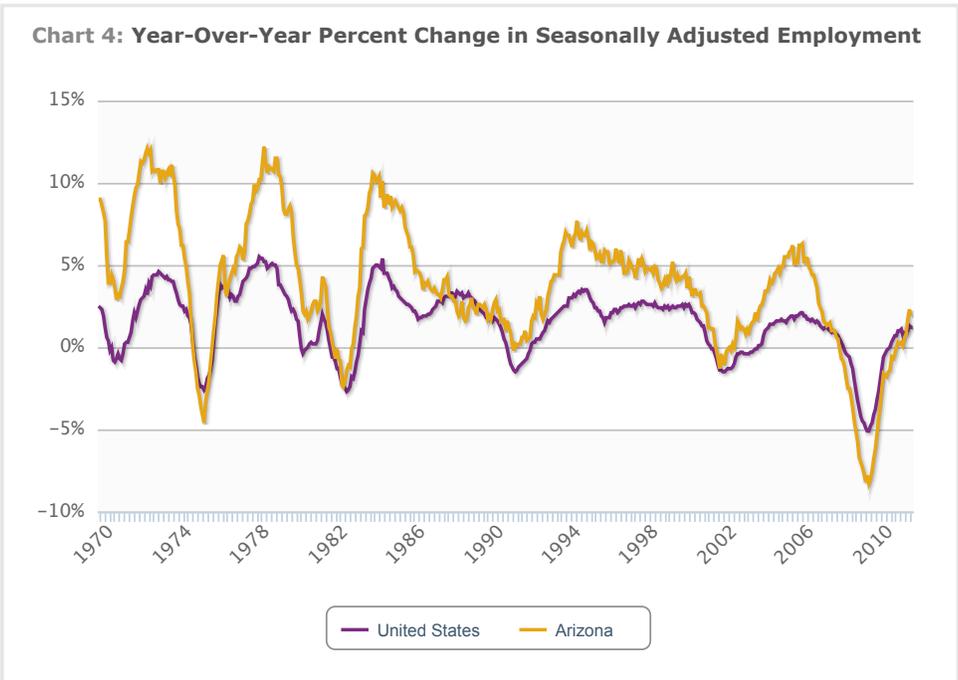
Source: Monthly employment data from the U.S. Department of Labor, Bureau of Labor Statistics

During economic expansions, Arizona’s economy typically grows much faster than the national economy, as seen in Charts 3 and 4. Arizona’s performance during recessions has varied, with some declines more severe than the national average and others not as deep. Even after recessions that were more acute in Arizona, the state’s year-over-year growth rate quickly rebounded to exceed the national average.

In the current cycle, however, the Arizona economy began to decline earlier than the national economy and continued to drop after the official end of the national recession. Arizona’s year-over-year growth continued to lag behind the national average until August 2011. Growth still is not significantly faster than the U.S. average. That leaves a large cumulative deficit still to be made up.



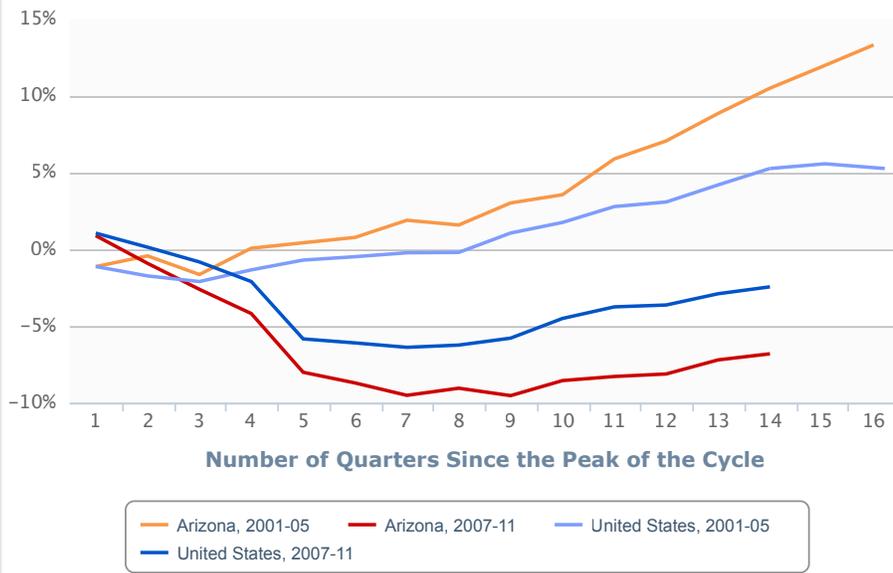
Source: Quarterly seasonally adjusted personal income and GDP Implicit Price Deflator from the U.S. Department of Commerce, Bureau of Economic Analysis.



Source: Monthly employment data from the U.S. Department of Labor, Bureau of Labor Statistics.

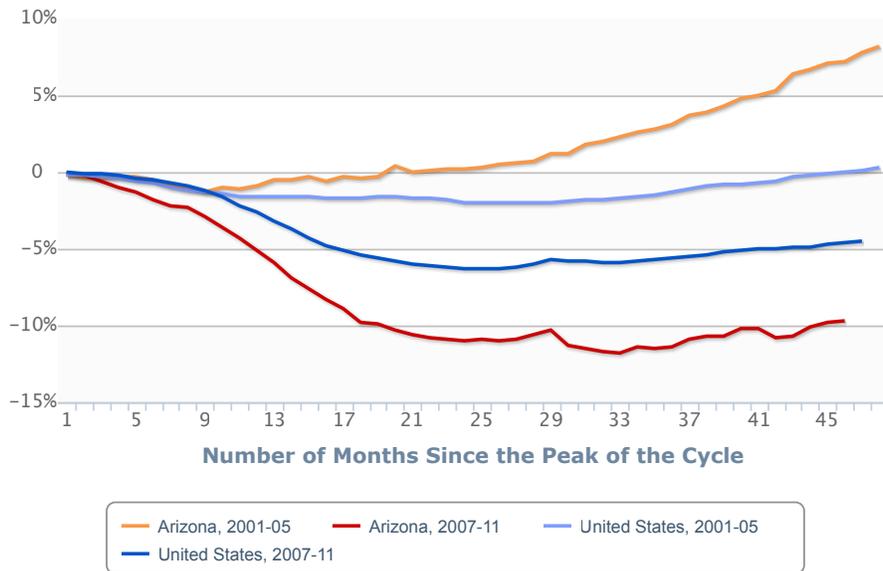
Charts 5 and 6 compare the cumulative change in Arizona to the national average for the last two economic cycles. The charts are limited to the first four years after the peak of the prior cycle; they are based on the NBER's dates for the national economy. The cycle that began in 2001 is generally representative of earlier cycles, with Arizona's growth rate not much different from the U.S. average during the recession, but accelerating more than the national average after the recession. The current cycle is a sharp contrast. Arizona's economy fell much more than the national economy during the recession and into the recovery period. The gap had barely begun to narrow as of fall 2011.

Chart 5: Cumulative Percent Change in Seasonally Adjusted Real Earnings Over an Entire Economic Cycle Starting from the Peak of the Prior Economic Cycle



Source: Quarterly seasonally adjusted earnings and GDP Implicit Price Deflator from the U.S. Department of Commerce, Bureau of Economic Analysis.

Chart 6: Cumulative Percent Change in Seasonally Adjusted Employment Over an Entire Economic Cycle Starting from the Peak of the Prior Economic Cycle



Source: Monthly employment data from the U.S. Department of Labor, Bureau of Labor Statistics.

Discussion

Based on the broadest economic measures such as GDP and earnings, national economic growth during the 2001-07 cycle was typical of the economic cycles since World War II. The pace of the recovery from the 2008-09 recession has been similar to that of the two prior cycles, though less than in earlier cycles. However, this average recovery comes after the longest and deepest recession since the Great Depression, leaving the current economy in the weakest state for this stage of the economic cycle since the 1930s.

The real estate bust clearly contributed significantly to the severity of the recession. Since the real estate cycle was much more severe in Arizona than the national average, this helps explain why the Arizona economy has done so much worse than the national economy in recent years. With imbalances still remaining in real estate markets, the bust continues to be a drag on the economy more than two years after the official end of the recession. Once the real estate problems are cleared, presumably a stronger period of economic growth will develop nationally and in Arizona.

The issues in the labor market, particularly as measured by wage and salary employment, are more extensive. Relative to measures such as GDP, the recent employment recession was deeper and longer, and the recovery since then weaker.

Like the stock market boom from 1995 to 2000, the real estate boom of the mid-2000s disguised underlying issues by creating jobs that were not sustainable in the longer term. Despite the real estate boom, job growth during the 2001-07 cycle was less than the historical norm. Concern has been expressed that many of the jobs lost during the recession were not due to cyclical causes. Instead, permanent shifts in jobs from the United States to other countries continue. While not a new phenomenon, the trend appears to be accelerating.

International competition facing American companies coupled with relatively high wage levels in the United States are driving this shift of jobs to other countries. This is not a trend that can be reversed, at least not without a substantial decline in the American standard of living. The solution is for more Americans to enhance their educational attainment and technical skills so that the United States can reassert its leading global role in innovation.