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### Highlights

- The average length of recessions since 1948 is 11.6 months. However, it takes an average of 21.3 months for the American economy to fully recover from a recession.
- Utah's economy has diversified over the years, becoming nearly identical to the national economy, in terms of the size of various industries' employment.
- Utah is faring better than the nation as a whole during the current economic recession, but recent Utah job losses increased at a surprising rate.
- The tax most affected by this recession is the corporate franchise tax, as corporate profits have plummeted. Individual income taxes are growing, while sales taxes are flat.
- Evidence from past recessions shows that, even if the recession ends very soon, state and local revenues are likely to languish for many months, while the economy recovers to pre-recession levels.

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## Economic Recessions, Taxes, and Utah: Lessons Learned From the Past

During times of economic recession, it can be challenging not only to predict where the economy is heading, but even to understand the current state of the economy. It is difficult for citizens, business leaders, government managers, and policymakers to know how to respond when they aren't even certain how significant the problem is. This is currently the situation in America and in Utah. In Washington D.C., the Senate has been unable to agree on a stimulus package proposed by the President, with some members arguing that the economy has already turned around and others pressing for tax cuts and spending increases to provide an economic boost. Similarly, some state legislators are debating whether Utah is in recession, if any of the state's "rainy day fund" should be spent to balance the budget, and if some type of stimulus plan, such as accelerated bonding for highway construction, should be adopted.

Often, important lessons can be learned from the past. In this Research Report, Utah Foundation staff has reviewed each national recession since 1948, charting the behavior of key business and consumer indicators, hoping to provide some insight into how the American economy behaves during recessions. The current recession is also reviewed, showing its effects on Utah employment, other economic indicators, and tax revenues. Utah Foundation hopes that this information provides a valuable perspective that will help policymakers, businesspeople, and others make well-informed decisions as they face economic uncertainty.

### A Brief Background on Taxes

A major philosophy underpinning American democracy is social contract theory. Stated briefly, this theory argues that citizens willingly give up some of their rights to a government in return for desired services. This theory is the basic justification for taxation. Since taxes are the main source of revenue for governments, as demand for services increase, pressure builds for taxes to increase. Prior to the 1930s, the only major source of revenue for Utah was the property tax; however, spurred by the Great Depression, government programs began to grow within the state. In order to fund that growth, the types of taxes levied have multiplied. Currently the major taxes in Utah are on income (personal and corporate), sales, and property. Various additional taxes on specific goods (alcohol and motor fuels, for example) also bring in significant amounts of revenue.

While some taxes are created to encourage or discourage certain behavior (taxes on cigarettes and liquor, for example), their primary purpose is to generate revenue. Policymakers, therefore, try to keep three principles in mind when making tax policy. First, taxes should be adequate to provide services. Second, they should be flexible, meaning that the tax base and rate should be adjustable as needs change. Finally, a good

tax should be stable, meaning that it should be relatively easy to predict revenue flows generated by the tax.

However, the most stable of taxes are still affected by factors beyond the control of policymakers. Changes in demographic and economic cycles affect taxes. Predictably, when the economy is healthy, sales and income tax revenues increase; as the economy slows down, revenues from these taxes can stagnate or even decline. Partly to counteract large fluctuations in tax revenue, policymakers in Utah have created a diverse bundle of sources for tax revenue, both at the state and local level. Among the most stable taxes is the property tax, because it is based on valuation, which is less likely to be affected during minor economic downturns than incomes or consumption. One of the most volatile taxes is the corporate franchise tax.<sup>1</sup>

**On December 14, 2001, the Governor’s Office announced a shortfall of \$198 million in the current state budget. By January, legislative staff estimated the shortfall had grown to \$202 million.**

### What is a Recession?

According to the National Bureau of Economic Research (NBER), there have been nine national recessions (excluding the current downturn) since the end of World War II. The dates and length of each recession are listed in Figure 1. The commonly accepted definition of a recession is that gross domestic product (GDP) experiences two consecutive quarters of decline. Gross domestic product is the measure of goods and services that flow through the national economy. NBER has more exacting standards for determining economic contractions. By the agency’s definition a recession “is a significant decline in activity spread across the economy, lasting more than a few months, visible in industrial production, employment, real income, and wholesale-retail trade.”<sup>2</sup> The data used for analysis are monthly data, rather than quarterly, so one month of strong economic performance cannot mask two weak ones. Of the factors listed above, employment is the strongest indicator of whether the country is experiencing a recession.

The current economic recession, which officially began in March 2001, and was exacerbated by the terrorist attacks of September 11, 2001, shows the effects that economic changes can have on tax revenue. Compared to many states, Utah has not fared badly from the effects of this recession. One economist contends

that Utah, along with seven other states, is not in recession.<sup>3</sup> However, a look at revenue flows and falling employment in many key sectors of Utah’s economy indicates that we are experiencing an economic downturn. On December 14, 2001, the Governor’s Office of Planning and Budget announced that it was anticipating a shortfall of \$198 million in the current state budget. By January, legislative staff estimated the shortfall had grown to \$202 million. This reduction in expected revenue has put the Legislature’s budget negotiations at the fore of local news.

**Figure 1**  
**Recessions Since 1948**

Recession Dates	Months to Recession End	Months to Full Recovery
November 1948-October 1949	12	20
July 1953-May 1954	11	23
August 1957-April 1958	9	12
April 1960-February 1961	11	20
December 1969-November 1970	12	18
November 1973-March 1975	17	26
January 1980-July 1980	7	12
July 1981-November 1982	17	28
July 1990-March 1991	9	33
<b>Average Length of Recession</b>	<b>11.6</b>	<b>21.3</b>

Source: National Bureau of Economic Research (NBER) and Utah Foundation.

## Lessons Learned From the Past

The following sections analyze the national economic situation in each recession since 1948. Although it would have been valuable to specifically analyze Utah's performance during each of these recessions, much of the historical data is simply not available on a state-by-state basis. Nevertheless, examining the national trends is instructive, since Utah, like most states, usually follows the national economy through these cycles. By looking at a range of factors including employment data, economic diversification, corporate profits, and personal income and consumption, we have attempted to draw out the major trends in each recession in order to understand the potential effects of the current recession on Utah.

### The economy since 1945

The United States has enjoyed strong economic growth and maturity in the years since the end of World War II. Periods of expansion have become longer and economic downturns, when they occur, are shorter than those of prior years. The severity of recessions has also lessened since the time of the Great Depression, when one of every five working-age males was unemployed. Today, images of bread lines and bank runs are known only from pictures in history books. However, economic downturns still happen and while their effects might be mild in comparison to that of the Great Depression, they are still felt throughout the economy and quite markedly in state government coffers.

### Economic Indicators of Recession

In order to more clearly detail the effects of recessions on the economy, Utah Foundation has reviewed historical data series and compiled a set of indicators that allow comparison from one period to another. These series were chosen to adhere to the NBER definition above and also to highlight the cycle of economic growth and contraction. The series included in this report are listed below. All data are for the national economy and all dollar amounts have been expressed in real terms, adjusted to year 2000 dollars, using the consumer price index (CPI-U) as the deflator.

- **Indicator 1—Seasonally Adjusted Total Non-agricultural Employment:** These figures from the Bureau of Labor Statistics are a monthly series calculating employment by place of work. Seasonal adjustment removes fluctuations caused by weather, school starts and stops, and holiday employment.
- **Indicator 2—Real Personal Consumption:** From the Bureau of Economic Analysis National Income and Product Accounts (NIPA) tables. This series calculates the goods and services purchased by the personal sector.
- **Indicator 3—Real Gross Domestic Product:** This is the comprehensive measure of goods and services produced in the United States during a given time period.

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For many months after the recession is over, the economy remains worse off than it was before the recession. As we examine the current recession, observers must remember that even if the recession is declared “over” very soon, some of its effects will linger for many months.

- **Indicator 4—Real Personal Income minus Transfer Payments:** These figures from the Bureau of Economic Analysis show the amount of income received by individuals from three categories; salary and wages, dividends, interest and rent, and transfer payments. Personal income without transfer payments, or payments to individuals by federal or state governments for income maintenance, shows how well the economy is performing in creating income.
- **Indicator 5—Real Corporate Profits:** Data from the Bureau of Economic Analysis. Income is defined as the receipts that arise from current production less associated expenses. These receipts do not include investment income in the form of dividends and capital gains. This analysis used profit data from domestic industries, with inventory valuation adjustments.
- **Indicator 6—Real Fixed Investment:** Data calculating the amount of investment by both residences and businesses in land, equipment, buildings and other goods that have a long term return on investment. Data are part of the NIPA tables calculated by the Bureau of Economic Analysis.
- **Indicator 7-Consumer Sentiment:** Data regarding consumers’ confidence in the economy. This series is measured monthly by the University of Michigan and is available from 1978 forward.

To make these data comparable across each recession, each series was indexed to the start of each recession. The month denoted by NBER as the start of the recession was given the value of 1.00 for each indicator, and subsequent months were calculated as a percentage of the first month. Each graph continues past the end of the each recession until the point at which the economy has recovered to pre-recession levels. Employment was chosen as the determining variable of recovery, based on NBER’s assertion that employment is the broadest measure of economic growth. With all of the data presented for each recession, the economy is assumed to have returned to pre-recession levels when employment returns to its pre-recession level. The one exception to this was the 1973-75 recession when two indicators, fixed investment and personal income took longer to rebound. Thus the data continue until both are at their pre-recession level. By charting these data, a pictorial view of each recession can be drawn to explain the effects contractions have on the economy and how long it takes for various indicators to recover.

This highlights a very important point that is often misunderstood: the declared end of a recession is the bottom of the trough—where the economy has fallen to its lowest level in that cycle. For many months after the recession is over, the economy remains worse off than it was before the recession. This recovery time, the time it takes for employment to reach pre-recession levels, has averaged 21.3 months since 1948 (see Figure 1). This is nearly twice as long as the 11.6 months average length of each recession (from peak to trough). As we examine the current recession, observers must remember that even if the recession is declared “over” very soon, some of its effects will linger for many months.

## 1948-49 Recession

This recession started in November of 1948. It lasted almost a year, until October 1949, according to NBER. At the start of the recession, total non-agricultural employment in the United States stood at approximately 45 million. It declined to 42.8 million by the end of the recession in October of 1949. This was a loss of 5 percent, the largest decline of any recession. Employment did not rebound until June of 1950, eight months after the recession was over.

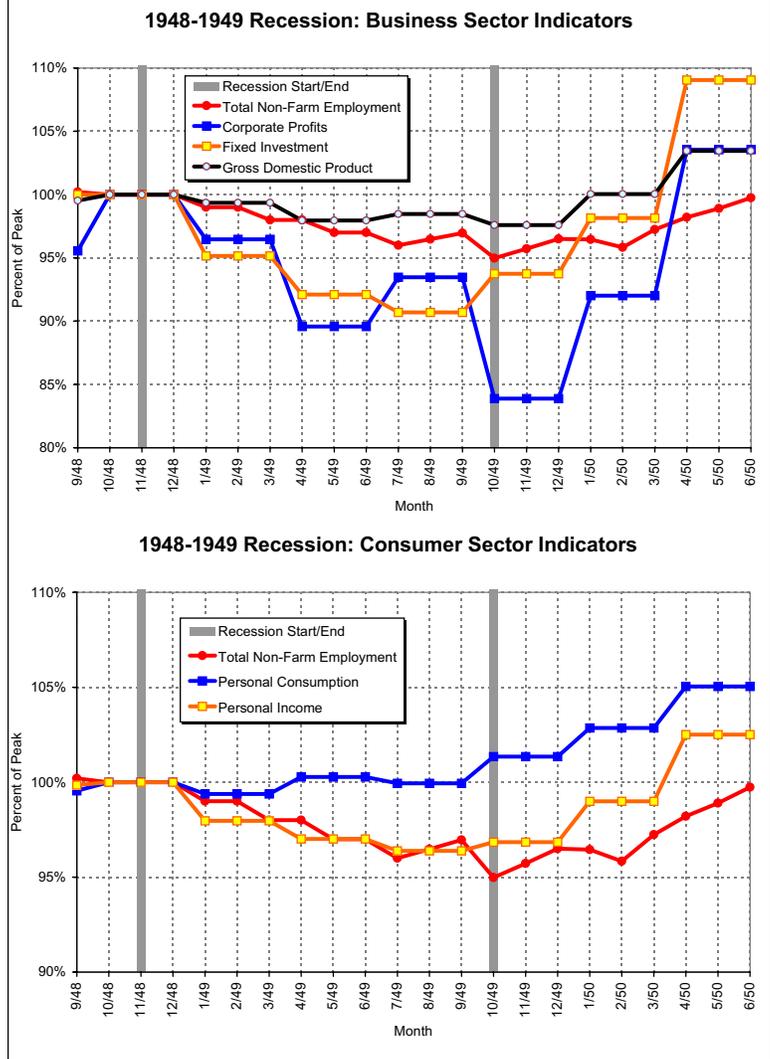
Along with employment, corporate profits and fixed investments suffered declines during this period. Corporate profits dipped to 84 percent of peak amounts during the third quarter of 1949, the same quarter that the recession ended. Fixed investments declined during the prior period to 91 percent of their pre-recession figure. This suggests that as profits fell, investment in both labor and capital declined as well. In order to return labor to its pre-recession level, corporate profits had to increase to 104 percent of their pre-recession level.

The only indicator not to decline significantly during this recession was personal consumption. After a small decrease at the beginning of the recession and another right before the end, consumption remained at pre-recession levels and then increased rapidly from October of 1949 to June of 1950, growing 4.2 percent during that time.

Two other factors that should be discussed in conjunction with this recession are the unemployment rate and inflation. Unemployment grew at a rapid rate. In November of 1948, the seasonally adjusted unemployment rate stood at 3.7 percent, by October 1949, it had more than doubled to 7.9 percent. It did not return to its pre-recession level until January 1951. Inflation, though, was less of a concern. After growing by an average of 8.1 percent during 1948, inflation actually declined in 1949, receding by 1.2 percent. In 1950, inflation grew at a rate of 1.3 percent.

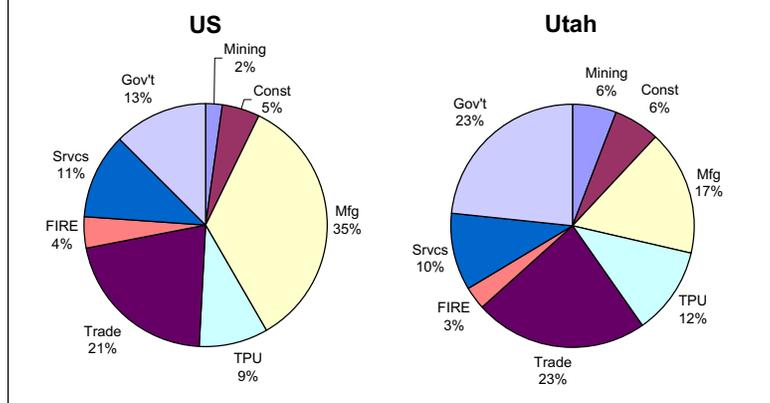
**Figure 2**

## 1948-49 Recession



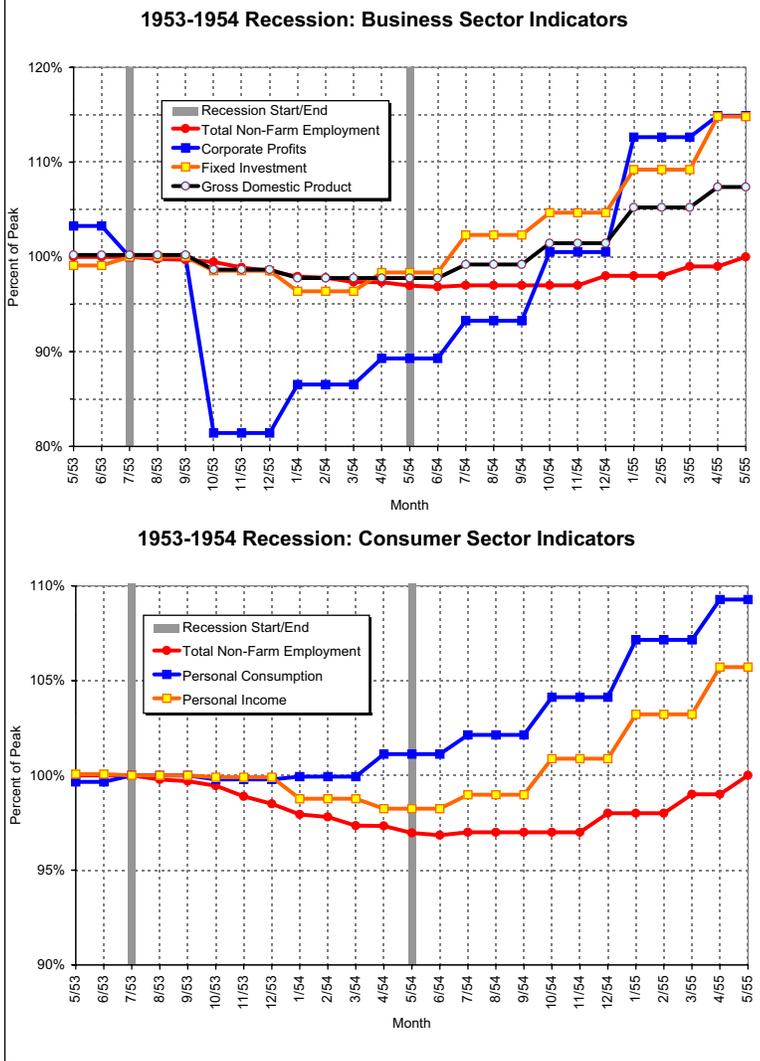
**Figure 3**

## U.S. and Utah Employment in November 1948



**Figure 4**

**1953-54 Recession**



**1953-54 Recession**

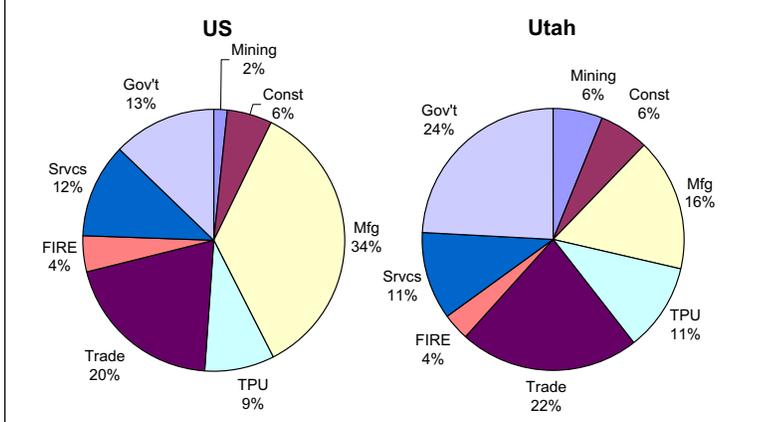
Dated from July 1953 to May 1954, this recession saw less drastic declines in all indicators. However, it took a longer amount of time for the economy to recover, and this was especially true with employment. Employment in July 1953 was approximately 50 million. This number remained fairly steady until October 1953, then it began to decline; at the end of the recession in May 1954, employment was 48.8 million, a decrease of three percent. Employment did not reach 50 million again until May of 1955, one year later. The unemployment rate was 2.6 percent in July 1953; by May 1954 it had risen to 5.7 percent. The national economy hasn't seen rates below three percent since. When employment reached pre-recession levels in May of 1955, the unemployment rate was 4.3 percent. However, when a rate below five percent is achieved, many economists consider the economy to be at full employment.

Corporate profits saw a sharp decline between third and fourth quarters 1953, declining to 81 percent of their peak value in July 1953. After one quarter in decline, they rebounded at a steady rate, achieving their pre-recession value by October 1954. Corporate profits had to grow to 115 percent of their value before employment reached its pre-recession value.

Personal income and personal consumption continued to grow during the recession. The gap between how much personal income grew versus spending growth was narrower than in the prior recession, indicating spending was more closely linked to income and less reliant on credit or reductions in savings. Inflation was almost nonexistent, growing an average of 0.8 percent in 1953, 0.7 percent in 1954, and declining 0.4 percent in 1955.

**Figure 5**

**U.S. and Utah Employment in July 1953**



## 1957-58 Recession

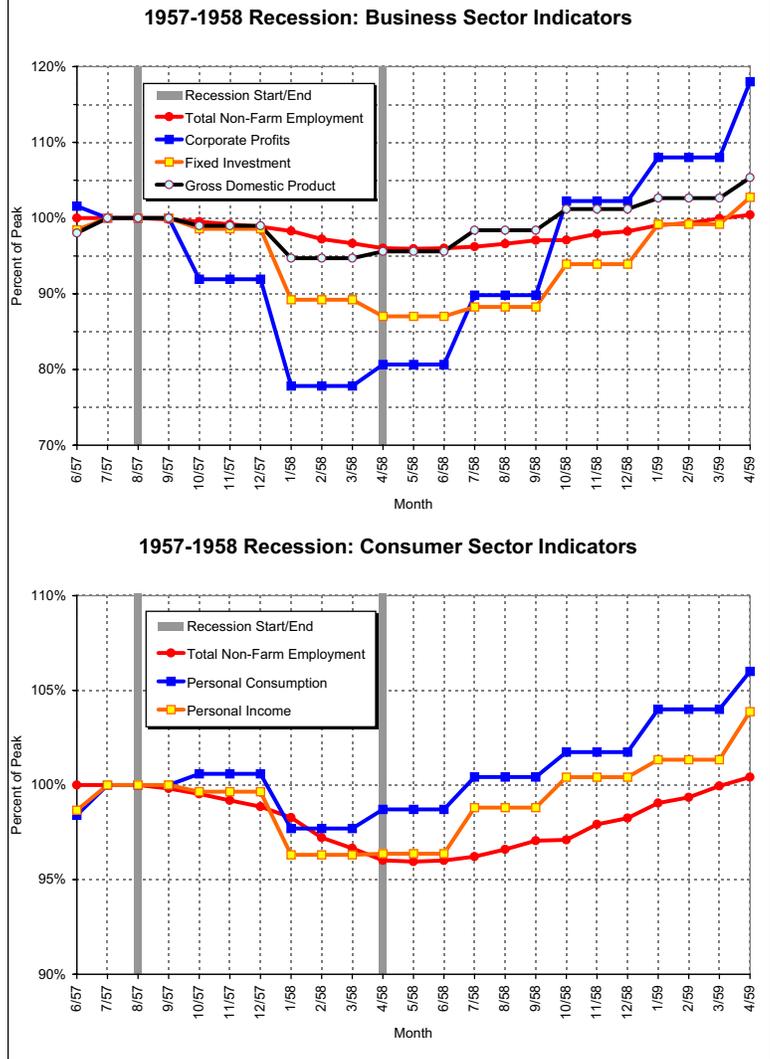
The recession of 1957-58 dates from August 1957 to April 1958. By the time the recession was declared, corporate profits had been declining at a fairly rapid rate. Profits bottomed out at 74 percent of their pre-recession value in January of 1958. Profits then proceeded to recover to 81 percent at the end of the recession. In April 1959, they were at 118 percent of pre-recession value.

Employment began to decline in November 1957, after a year of the number of employed remaining steady around 53 million, and did not rebound until March 1959. April 1958 saw employment at 96 percent of its pre-recession value. It stayed at this rate for three additional months before starting to grow in August 1958. Unemployment rates added to the average worker's concern. Unemployment began the recession at 4.1 percent and rose to 7.4 percent by April 1958. It continued to rise until August and then rapidly declined until it reached 4.8 percent in February 1960.

The gap between income and expenditures was at the narrowest levels of any recession during this period. However, they had been growing at the same rate prior to the recession. In the third quarter of 1957, one quarter after the recession began, consumption rose above pre-recession levels, while income declined. Inflation may have contributed to this, growing by 3.3 percent in 1957 and 2.8 percent in 1958. Prices of goods and services usually respond to inflation more quickly than wages. While the percent growth of inflation during these two years seems fairly modest, inflation rates over 2 percent had not been seen since 1951.

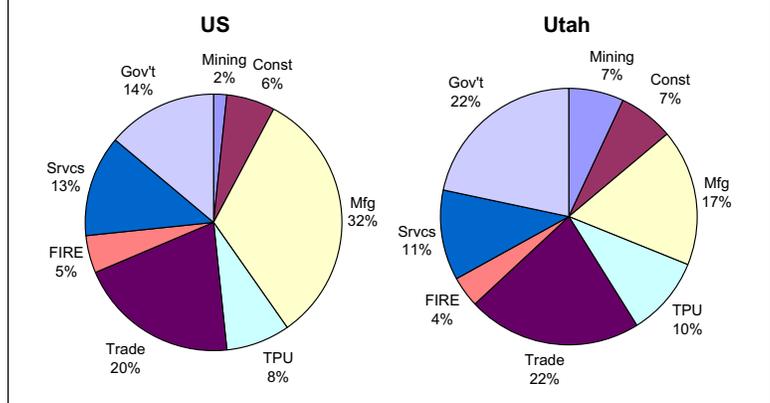
**Figure 6**

### 1957-58 Recession



**Figure 7**

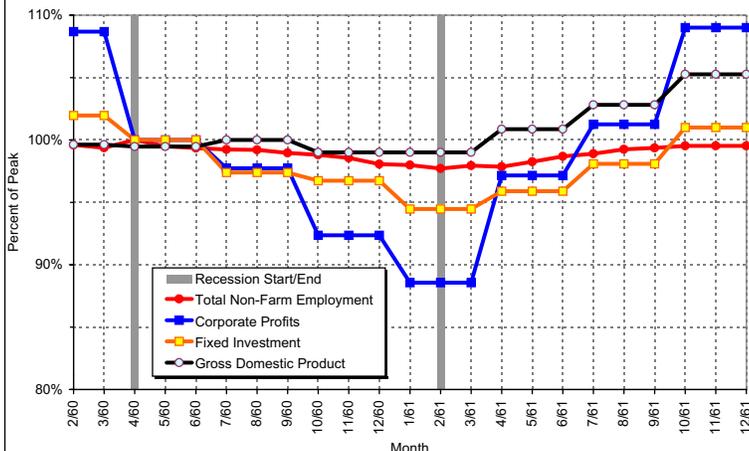
### U.S. and Utah Employment in August 1957



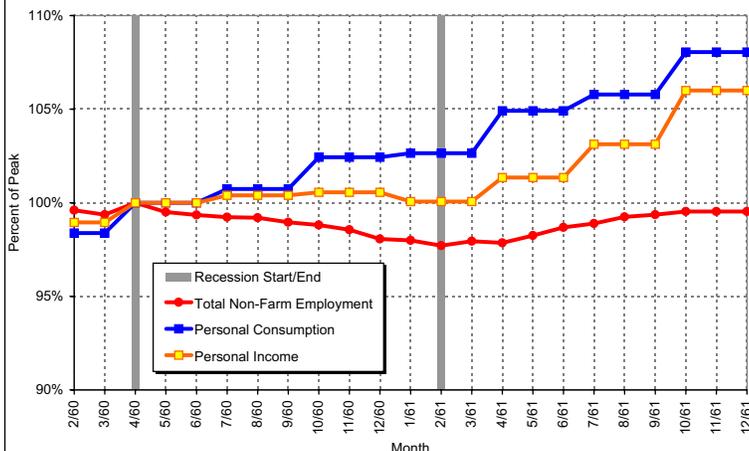
**Figure 8**

**1960-61 Recession**

**1960-1961 Recession: Business Sector Indicators**



**1960-1961 Recession: Consumer Sector Indicators**



**1960-61 Recession**

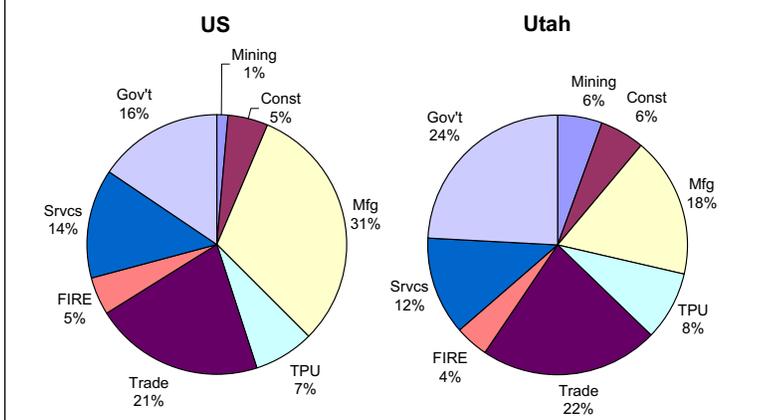
Unlike the prior three recessions, employment felt the recession almost immediately after its declaration in April of 1960. Employment fell in May to 99 percent of April's level and continued to decline until February 1961. Employment reductions were not as drastic in this recession as in previous recessions. Employment at its trough was at 98 percent of pre-recession levels. This was a loss of approximately 1.2 million jobs. Unemployment however climbed from 5.2 percent to 6.9 percent, indicating a number of new entrants into the labor force could not find jobs.

This recession was the first in which neither personal income or personal consumption fell below pre-recession levels. The gap between the two indicators grew during the recession indicating spending growth outpacing income growth. Inflation during this time remained stable, around 1.5 percent.

Corporate profits fell by the smallest amount of any recession to this point. Profits at their trough were 89 percent of their pre-recession value. Fixed investments behaved in a similar fashion, dropping to 94 percent of pre-recession levels. Taken together, these indicators suggest the 1960-61 recession was the most mild one the county had experienced since the Great Depression.

**Figure 9**

**U.S. and Utah Employment in April 1960**



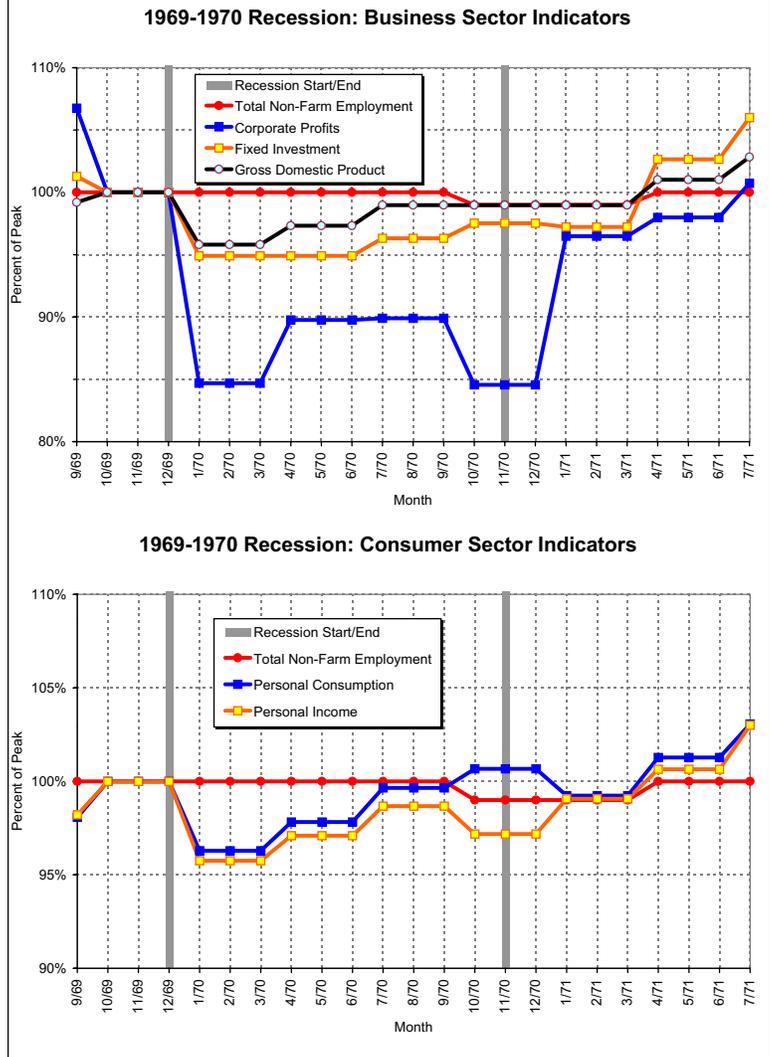
## 1969-1970 Recession

The 1969-1970 recession came after the longest post-war expansion the country had enjoyed to that date. Employment had grown from approximately 55 million in 1961 to 71 million in 1969. Unemployment was steadily decreasing, eventually reaching 3.4 percent for a period of nine months during 1968 and 1969. When the economy began to contract in December 1969, employment remained constant. It continued at its pre-recession level until the month prior to the end of the recession in November 1970. While it only dropped to 99 percent of December's figure, it took seven months for employment to regain that one percent loss, fully recovering in April 1971. Unemployment began the recession at 3.5 percent and ended it at 5.9 percent. However, it continued to hover between 5.8 and 6.1 percent until March of 1972.

Personal income and consumption continued to grow at similar rates, and the gap between the two was almost negligible, until October 1971, when income dropped and consumption surged. Since these events coincide with the drop in employment, an assumption can be made that unemployed workers were drawing on unemployment insurance and credit to make ends meet. Starting in 1966, inflation began to grow, reaching 5.7 percent in 1970, before tapering off. However, this rate would seem tame during the next two recessions.

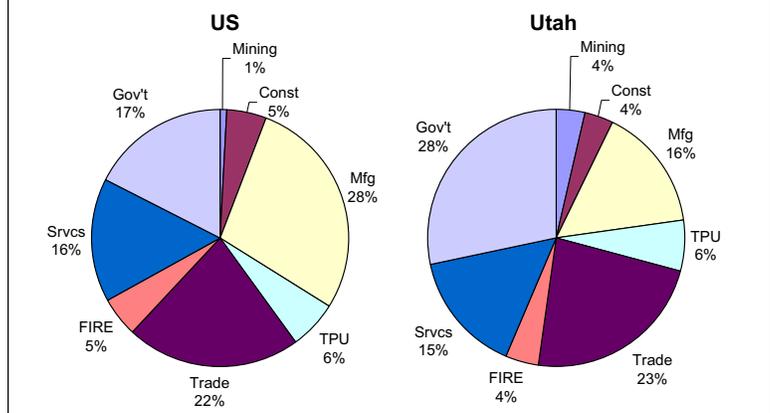
**Figure 10**

### 1969-70 Recession



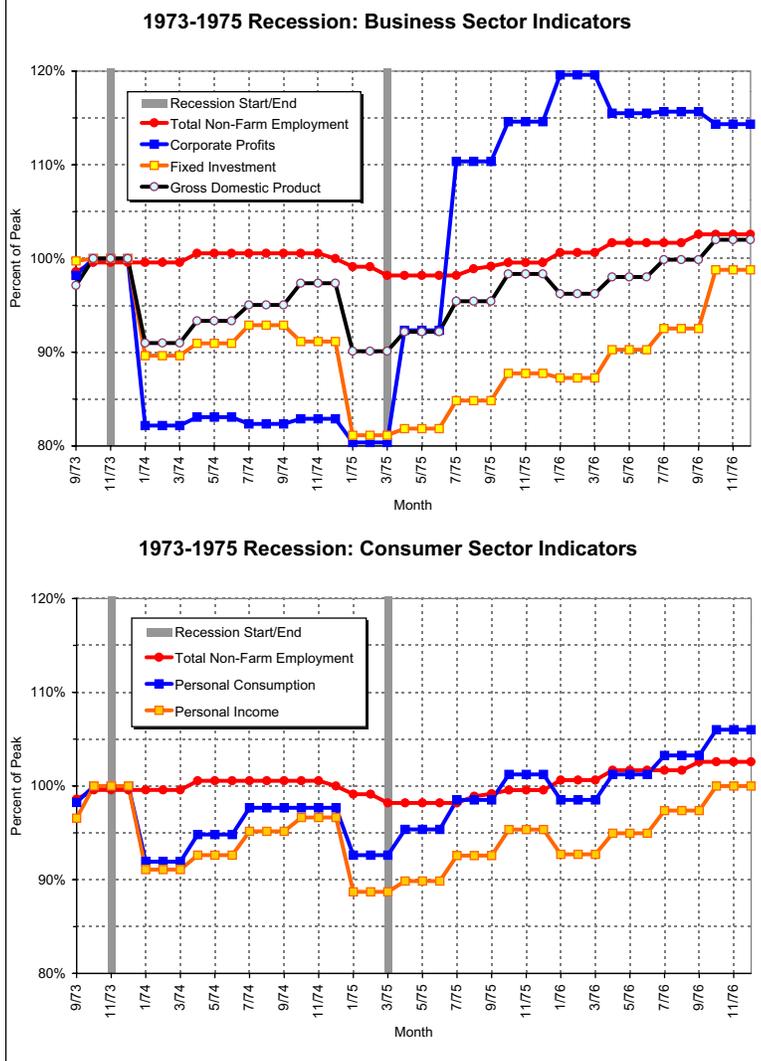
**Figure 11**

### U.S. and Utah Employment in December 1969



**Figure 12**

**1973-75 Recession**



**1973-1975 Recession**

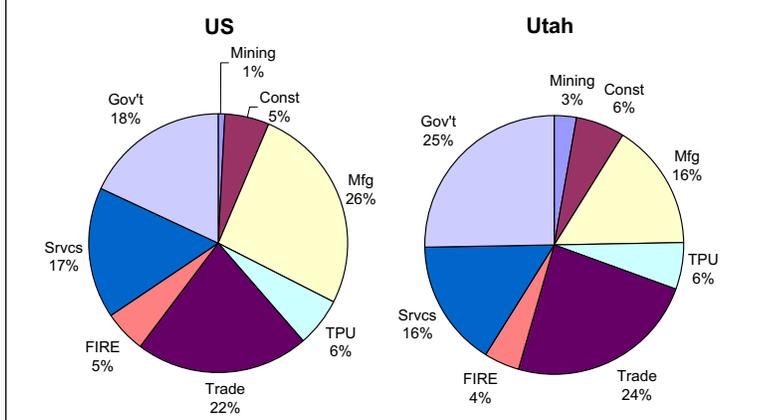
The recession of 1973-1975 was the result of the rapid increase in the price of petroleum products after the formation of O.P.E.C., the Organization of Petroleum Exporting Countries. Anyone who lived through the period cannot forget the gas rationing, long lines and introduction of fuel-efficient automobiles. As prices rose for these goods, inflation followed. Companies found it more difficult to maintain profits and began reducing their workforce. The US automakers saw their share of the American car market shrink as imports of fuel-efficient foreign autos increased. Manufacturing began to feel the squeeze of losing jobs to less expensive overseas labor.

Employment, from the beginning of the recession in November 1973 until December 1974, actually increased. In December of 1974, it decreased to its pre-recession level and then continued to fall past the end of the recession in March 1975. Employment finally rebounded to pre-recession levels and began to grow in November 1975. Unemployment, during this time grew at a prodigious rate. It started at 4.6 percent in November 1973; by November 1974 it had risen to 6 percent. After that, the rate accelerated. In March 1975, it had jumped to 8.6 percent and continued to grow to 9 percent in May 1975. Unemployment began to decline after that but remained at levels above 5.6 percent through the rest of the decade. This rapid rise in the unemployment rate without a corresponding reduction in employment suggests there were a large number of entrants into the labor force during the decade of the 1970s that were unable to secure employment. As this time period saw many baby boomers graduating from college as well as a large number of women previously at home joining the workforce, the data seems to bear this out.

Personal income and consumption both fell during this recession, due to the rapid increase in inflation rates. Income, at its trough, fell to 89 percent of pre-recession levels. Income also grew at the slowest rate

**Figure 13**

**U.S. and Utah Employment in November 1973**



of any of the indicators, except fixed investment. It took 20 months after March 1975 for personal income to regain the ground it had lost during the recession. Corporate profits and fixed investments fell dramatically, and while profits rebounded fairly quickly, fixed investment had only recovered 99 percent of its pre-recession value by November 1976, three years after the recession began. Most of these losses were due to the rapid increase in inflation. As inflation increases, the value of investments and income declines. In 1972, inflation was at 3.2 percent. In 1973, it grew to 6.2 percent. By 1974, inflation stood at 11 percent. It declined in 1975 to 9.1 percent, well above rates seen since the previous spike in 1947.

### 1980 and 1981-82 Recessions

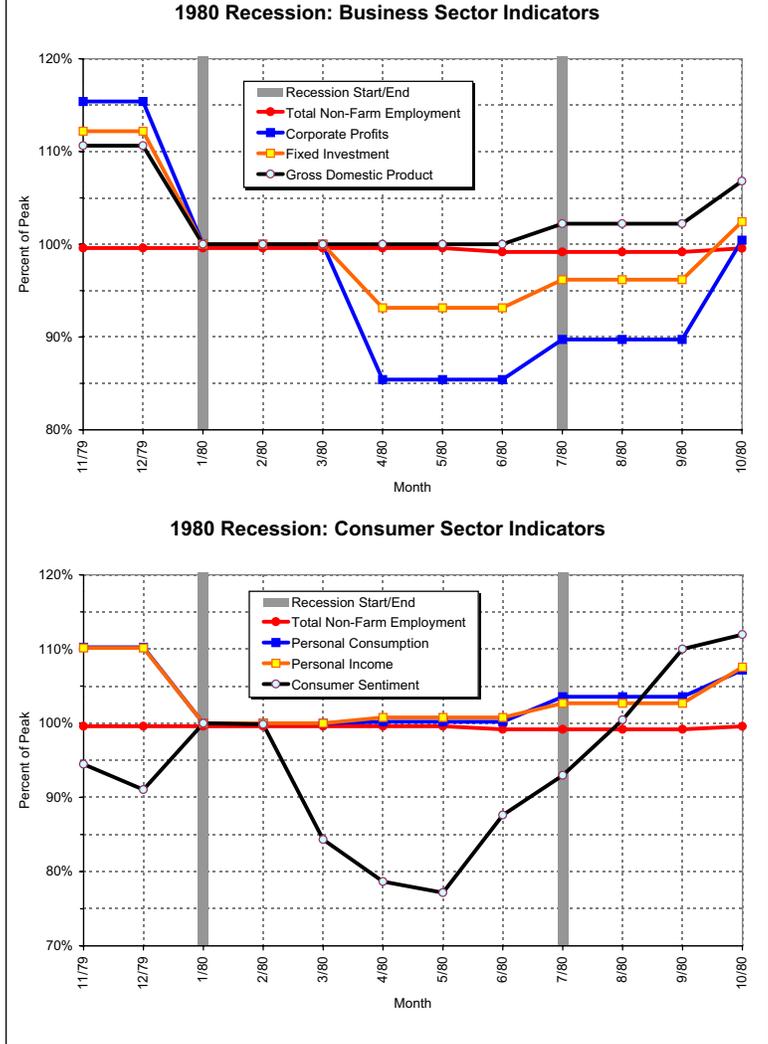
The early 1980s saw two recessions back to back. A brief downturn from January to July 1980 was followed by a second one a year later that lasted until November 1982. For the 36-month period from January 1980 to January 1983, the economy was in recession for 22 months. This time period also saw the first recession for which consumer sentiment data was available.

For the 1980 recession, the story told by the data isn't so much about the recession as it is about economic performance during the year prior. From January 1979 until January 1980, corporate profits steadily declined and then experienced a sharp drop off between December 1979 and January 1980. However, fixed income, personal income and personal consumption grew throughout 1979, only to abruptly drop with the advent of the new year. Employment grew in 1979 and through 1980 until June 1980. It then dipped until it managed in October to rebound to pre-recession levels. October 1980 also saw all other indicators rebounding to pre-recession levels. This was the shortest recovery period of any recession, lasting only three months after the recession was declared over. However, it would not be long until the next recession began.

The recession of 1981-1982 had a more

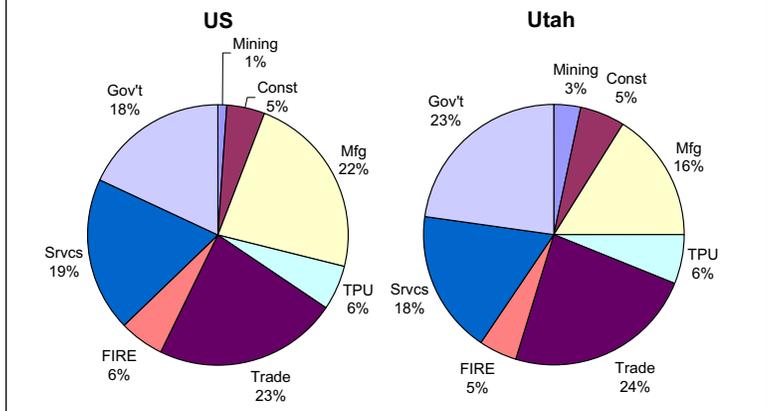
**Figure 14**

### 1980 Recession



**Figure 15**

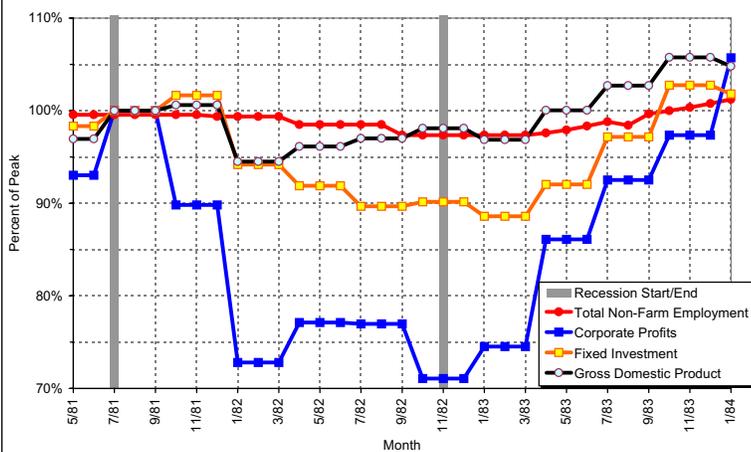
### U.S. and Utah Employment in January 1980



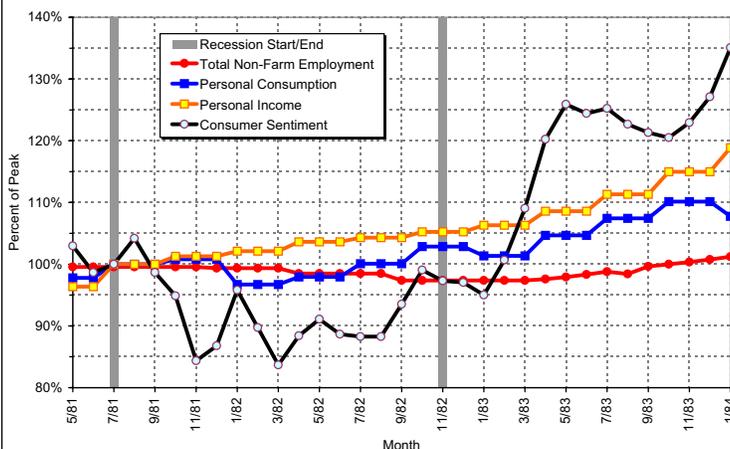
**Figure 16**

**1981-82 Recession**

**1981-1982 Recession: Business Sector Indicators**



**1981-1982 Recession: Consumer Sector Indicators**



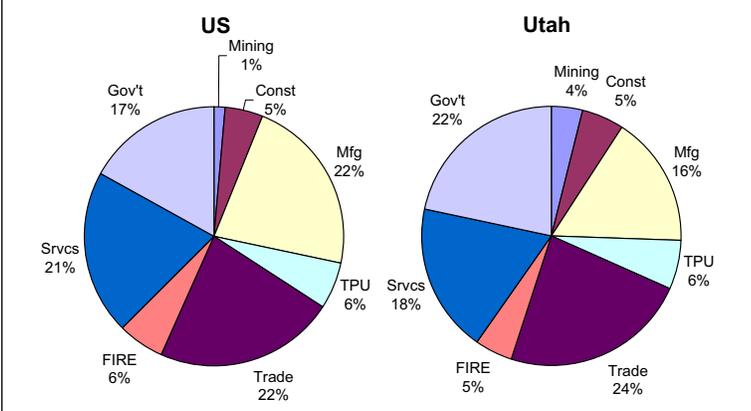
drastic affect on employment. The peak was reached in July 1981. Employment began to decline in December 1981 and continued until March of 1983, four months after the recession was declared over. It took until September 1983 for employment to recover to its pre-recession levels. Unemployment from the beginning of the 1980 recession grew from 6.3 percent to 10.8 percent. At 10.8 percent, almost one of every nine Americans were unemployed, the largest percentage since the end of the Great Depression. Additionally, this number reflects only those who were unemployed and seeking work, it does not count the discouraged workers who were no longer attempting to secure employment.

Corporate profits fell to their lowest level of any recession. High rates of inflation pushed profits to 71 percent of their pre-recession levels. Inflation rose from 7.6 percent in 1978 to 11.3 in 1979, 13.5 in 1980 and 10.3 percent in 1981. Rates continued to fall in 1982 and 1983, averaging 6.2 and 3.2 percent. The 1981-82 recession was the first time income growth outstripped consumption, possibly due to heavy consumer debt and spiraling inflation rates that cut purchasing power.

In 1978, a new indicator of economic health was started. The consumer sentiment survey is taken monthly by the University of Michigan and gauges consumers' opinions regarding the state of the economy. Viewing the data in conjunction with the data measuring actual movement within the economy tells an interesting story. While all the other indicators show a sharp decline between December 1979 and January 1980, consumer sentiment actually rose. The decline in sentiment did not occur until March 1980 and reached its trough in May 1980. As employment started to contract in June 1980, sentiment began rising and would continue until November 1980. After a sharp drop in December 1980, sentiment leveled out. It dropped again in November of 1981 and did not reach pre-recession levels until February 1983. It continued to rise rapidly as employment, personal

**Figure 17**

**U.S. and Utah Employment in July 1981**



income, and consumption began to grow throughout 1983. August 1983 brought a decline to sentiment and the next quarter saw a drop in consumption and fixed investment.

### 1990-1991 Recession

Perhaps the most striking feature of the 1990-1991 recession was the length of time it took to recover, especially for employment. The recession is dated from July 1990 to March 1991. However, employment did not return to pre-recession levels until December 1992, 21 months later. Unemployment grew from 5.5 percent to 6.8 percent during the time of the recession, which is a fairly small increase. However, after the recession was over, unemployment continued to rise, reaching 7.8 percent in July 1992. Rates did not return to pre-recession levels until December 1994. Within these number is the decline of the manufacturing sector that has been steadily losing jobs since the 1970s. Manufacturing continued to decline throughout the 1990s as service sector jobs, especially in high tech services, grew at rates to cover the losses.

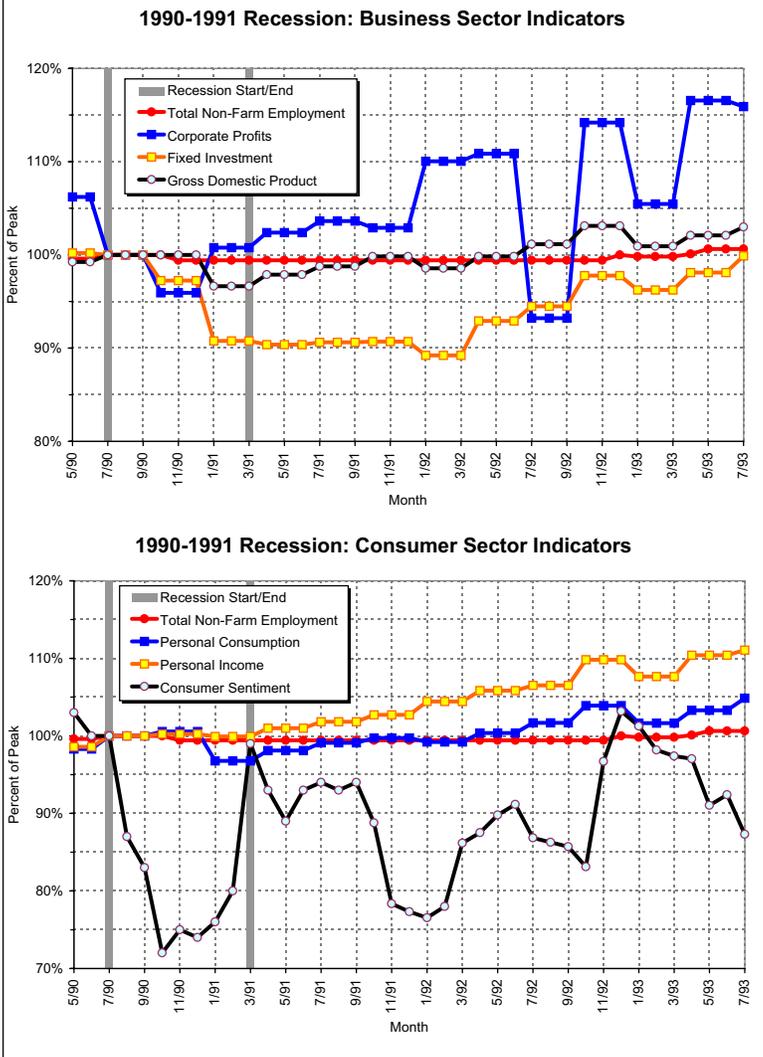
While employment recovered at a very slow rate, it was not the only indicator to struggle to recover. Personal consumption did not recover to pre-recession levels until October 1991, six months after the recession. Fixed investment was the slowest indicator to recover, not reaching pre-recession levels until July 1993. Inflation, which had reached a low of 1.9 percent in 1986, rose to 5.4 percent in 1990 and declined to 4.2 percent. It continued its downward path through the rest of the decade.

Corporate profits saw only a mild dip in the fourth quarter of 1990; one quarter after the recession began. After that, profits rose until another abrupt downturn in July 1992. However, downturns in profits did not last more than one quarter during the recession or recovery period.

Consumer sentiment remained pessimistic through the recession and recovery period, rising only one month above pre-recession levels. This unfavorable view of the

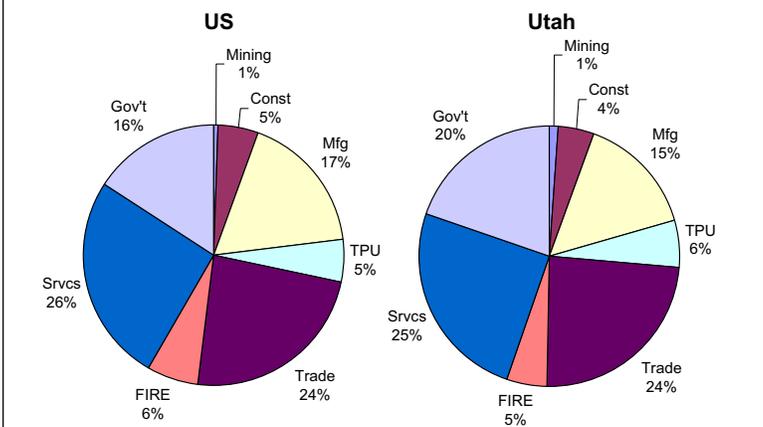
**Figure 18**

### 1990-91 Recession



**Figure 19**

### U.S. and Utah Employment in July 1990



**Figure 20**

**Major Characteristics of Past Recessions**

Recession	Characteristics of the Recession		
	Business and Investment	Consumer Sector	General Economic
1948-49	Decline in fixed investment, largest drop in employment	Decline in income, spending continued to rise	Large fluctuations in inflation, sharp rise in Unemployment
1953-54	Corporate profits decline, fixed investments decline less	Spending continued to rise while a small decline in income	At peak unemployment at lowest levels ever, inflation negligible
1957-58	Corporate profits & investment both decline	Decline in income & spending mirror employment	Inflation higher but not growing rapidly
1960-61	Investment declined but not as sharply as profits	While employment declined, income & spending continued to grow	Inflation declined, unemployment rose, new entrants to labor force couldn't find jobs
1969-70	Profits dropped; employment remained stable	Income & consumption dropped significantly	Inflation between 5 & 6% no large fluctuations
1973-75	Profits dropped first followed by sharp decline in investment	Income & consumption fell and grew at the same rate until end of recession	Inflation grew rapidly and was around 9 to 11 percent
1980	Profits dropped more sharply than investment	Income & consumption remained stable while sentiment fell	Inflation at highest levels ever, unemployment at 7 percent
1981-82	Profits fell to 70% of peak levels, investment fell but remained strong	Income never fell, consumption experienced a brief decline	Unemployment at highest levels ever
1990-1991	Profits rose, investment dropped off sharply	Sentiment drove spending	Inflation and unemployment falling

economy coupled with sluggish consumption contributed to the long recovery period for employment.

**Summary of Past Recession Impacts**

Each recession had a unique set of characteristics that triggered the contractions and a unique set of remedies. Generally, the recessions of the immediate post war period were caused by rapid expansion and unsustainable employment growth.<sup>4</sup> The recessions of the 1960s were the contractions of a maturing economy as it began to shift from a manufacturing to service-based economy. The recessions of the 1970s and early 80s were caused by spiraling inflation rates and subsequent monetary policy. Consumers and their decision to decrease their rate of consumption drove the recession of 1990-91.

To trace all of the causes of a recession is difficult; there are too many factors. However, most factors can be grouped into three categories originating in the business and investment sector, with consumers, or with general overall economic problems, such as inflation. Figure 20 is a broad analysis of where each recession falls in the above categories, explaining what

the dominant forces were within each category of causes.

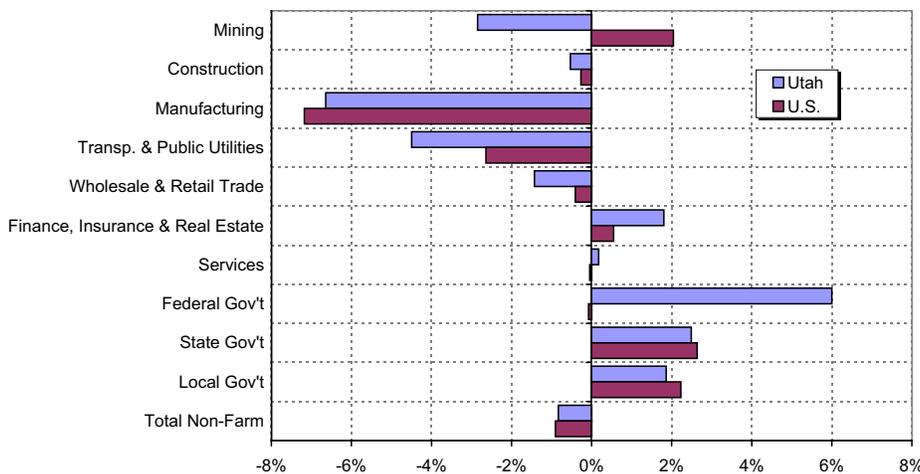
**The Current Recession**

Last fall, NBER declared that a recession began in March 2001. The expansion that led up to that date was exactly 10 years, making the longest peacetime expansion in U.S. history.

Like most of the recessions examined in this report, this one was preceded by declining corporate profits, which began falling in July 2000. Fixed investment began declining right as the recession started. The decade of the 1990s brought strong increases in fixed investment, as companies adopted new technology and geared up to serve the demands of a long economic expansion. Productivity also increased at healthy rates. These two factors have led to an increase in excess production capacity in the U.S. economy, which is slowing the need for additional business

**Figure 21**

**Utah and U.S. Employment Changes**  
*Not Seasonally Adjusted, Jan. 2001–Jan. 2002*



Sources: U.S. Department of Labor, Bureau of Labor Statistics; Utah Department of Workforce Services.

investment and exacerbating a decline in the the manufacturing sector.

This recession has not brought dramatic employment changes, and consumer sector has fared well. For the first time since the 1970s, personal consumption rose significantly faster than personal income in the third quarter of 2001. This was likely due to a surge of nationalism as the President called on Americans to continue spending to boost the economy. Special financing for automobile purchases induced many to buy new vehicles, boosting consumption significantly.

Consumer sentiment was holding steady until the terrorist attacks of September 11, 2001, which caused a steep plunge. However, consumer sentiment has rebounded rapidly, and now stands at a higher level than the economic peak of March 2001.

Unemployment has risen steadily during this recession, growing from a seasonally adjusted 4.3 percent in March 2001 to 5.6 percent in January 2002. So far, these are mild unemployment rates for a recessionary period.

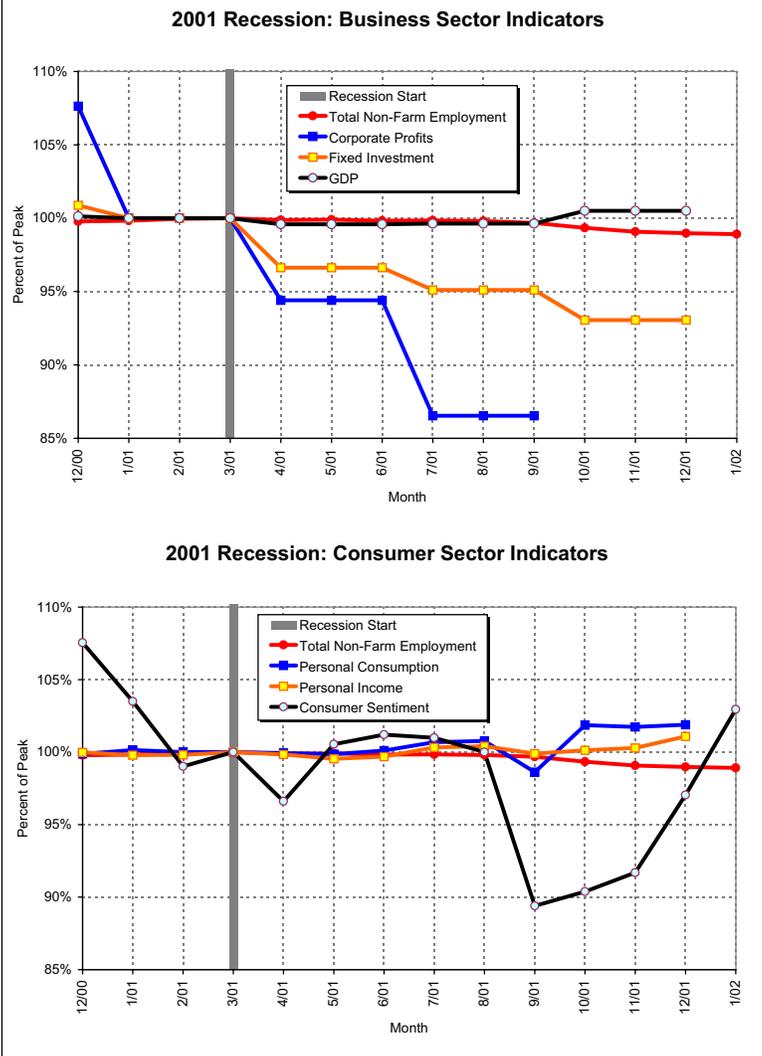
### Specific Employment Impacts in Utah and the United States

Many analysts have observed that the sector most impacted by this recession is the manufacturing sector. Employment in the manufacturing sector in the United States decreased 7.18% from January of 2001 to January 2002 (not seasonally adjusted). The other sectors showing losses nationally over this time period were transportation and public utilities (TPU) at -2.64%, trade (-0.41%), and construction (-0.27%). The services and federal government sectors had negligible decreases. Finance, insurance and real estate (FIRE) grew at a rate of 0.54% in 2001, while mining and state and local government employment grew at rates above 2%.

Comparing employment between Utah and the national economy suggests that while some elements of Utah's economy are mimicking national trends, others are

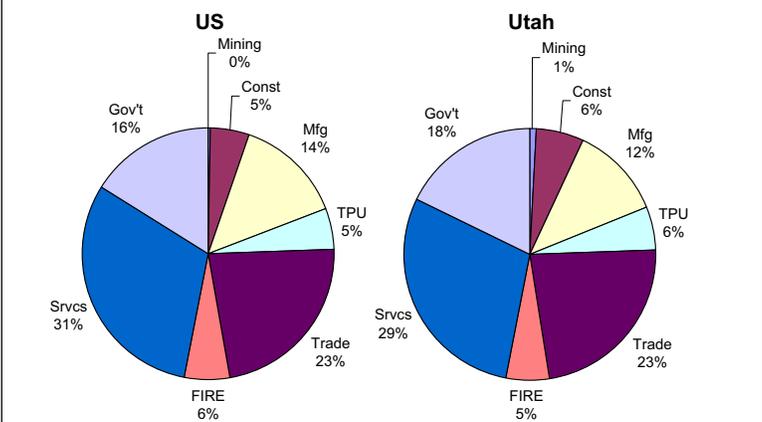
**Figure 22**

### Current Recession Beginning March 2001



**Figure 23**

### U.S. and Utah Employment in March 2001



**Figure 24**

### Location Quotients of Utah Industries

1-Digit Industry	Location Quotient
Mining	1.61
Construction	1.24
Manufacturing	0.88
Transportation and Public Utilities (TPU)	1.04
Trade	1.01
Finance, Insurance and Real Estate (FIRE)	0.97
Services	0.94
Total Government	1.1

Source: Calculated by Utah Foundation from Bureau of Labor Statistics and Department of Workforce Services data.

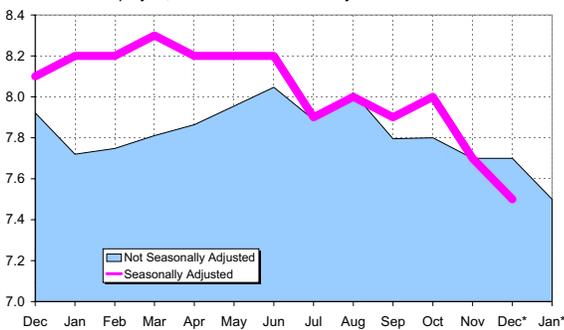
significantly different. Manufacturing and construction employment is falling at rates similar to the U.S. Additionally, while the service sector grew in Utah over the last year, the growth rate was an equally negligible 0.16%. The remaining private sectors show stark differences between Utah's economy and the national economy. Trade decreased three times faster than nationally, and employment in the TPU sector fell at a rate that was almost 2% higher than the national rate. On the positive side, Utah employment in the FIRE sector grew at a rate more than double the national rate. Utah posted a nearly 3% loss in mining, even as that sector grew nationally. Utah's state and local governments expanded, but at a slower pace than the nation. Federal government employment in Utah skyrocketed, while it diminished nationally.

**Figure 25**

### Utah Employment By Sector

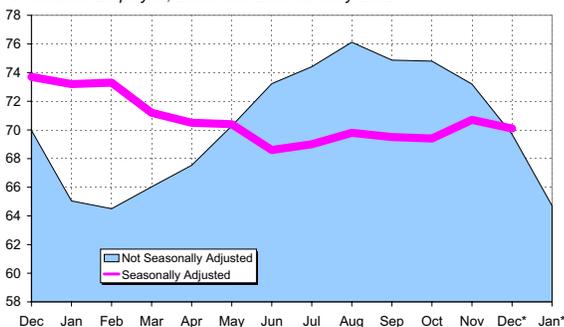
#### Utah Mining Employment

Thousands Employed, December 2000-January 2002



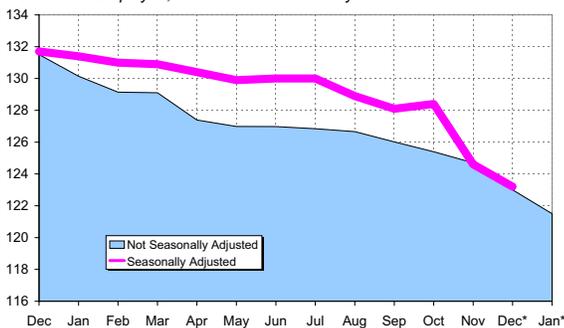
#### Utah Construction Employment

Thousands Employed, December 2000-January 2002



#### Utah Manufacturing Employment

Thousands Employed, December 2000-January 2002



\* Dec. 2001 and Jan. 2002 figures are preliminary.  
Sources: Utah Department of Workforce Services; U.S. Department of Labor, Bureau of Labor Statistics.

These employment growth and loss figures do not show the relative size of each sector in the U.S. or the Utah economies. Two tools can help put each of these sectors into context regarding their importance to Utah's overall economy: one is to view the pie charts, showing Utah employment next to U.S. employment. The pie charts shown for each recession in this report show that Utah's economy has diversified over the decades and is now very similar to the national economy.

Another tool is to calculate location quotients for each sector. A location quotient is a simple calculation dividing the local proportion of an industry by its national proportion. For example, if manufacturing were 20 percent of Utah's employment but only 10 percent of national employment, Utah's location quotient for manufacturing would be 2.

Location quotients help analysts to quickly understand whether a state or locality is more or less dependent on a particular industry than the national economy. If the quotient is at 1.0 then the local economy is identical to the national average. If the location quotient is over one, then the area is more dependent on that sector than the nation as a whole is. If it is below one, then the local economy is less dependent than the national economy on that sector. Figure 15 shows Utah's location quotients for major industries as of 2001.

### Utah's Recent Employment Trends

The graphs in Figures 25 through 27 show in more detail Utah's employment situation. It is instructive to see when most of the job losses or gains occurred in order to understand if the Utah economy is getting better or worse. Most of these graphs show that job losses in Utah have accelerated in recent months.

Mining employment has declined significantly in the past year in Utah. Although these losses can affect individual communities noticeably, the mining industry is a small and shrinking portion of Utah's economy.

Construction job losses are of great concern, because this is a sector that grew tremendously during the 1990s, and construction seems to be a strong driver of overall economic growth for Utah. Recent declines in the construction sector are more significant in Utah than in the nation as a whole. A decline in the economy due in part to a decline in construction jobs has been anticipated by local economists as infrastructure expansion for the Olympics has been completed. However those assumptions were not set against a recession. Seasonally adjusted employment in the construction industry was one of the few sectors to register growth in the national economy from December 2000-2001, but in Utah, seasonally adjusted employment in the construction industry fell almost 5%.

Job losses in the manufacturing industry have been slightly lower for Utah than they have been for the rest of the country. Manufacturing is one of the industries with a smaller presence in Utah than in the rest of the country, and this may be cushioning the recession's impact on the Utah economy.

Utah transportation and public utilities (TPU) employment is being affected in much the same way as it is nationally. It has experienced a sizable decline. There are two reasons that this sector has been hit so hard. First, as manufacturing has declined there has been less of a need for the transportation of goods, thus contributing to a decline in the transportation sector. Second, TPU includes communications industries, and the telecommunications sector was in decline since prior to this recession.

As a further result of the slowdown in manufacturing, employment in the trade and service sectors has declined. Relative to the declines in other industries (manufacturing, mining, construction and TPU) the declines in service and trade employment seem minor. However, while Utah is not overly dependent on these industries (as measured by location quotient) they account for more than 50% of total employment in Utah. This means that relatively small fluctuations in percentages affect many more people than in smaller industries. Between January 2001 and January 2002, Utah's Department of Workforce Services has found that 8,900 jobs have been lost due to the economic downturn, and 3,500 of these jobs have come from the trade sector. This means that 2/5 of the recent unemployment in Utah can be traced back to the trade sector.

**Figure 26**

**Utah Employment By Sector**

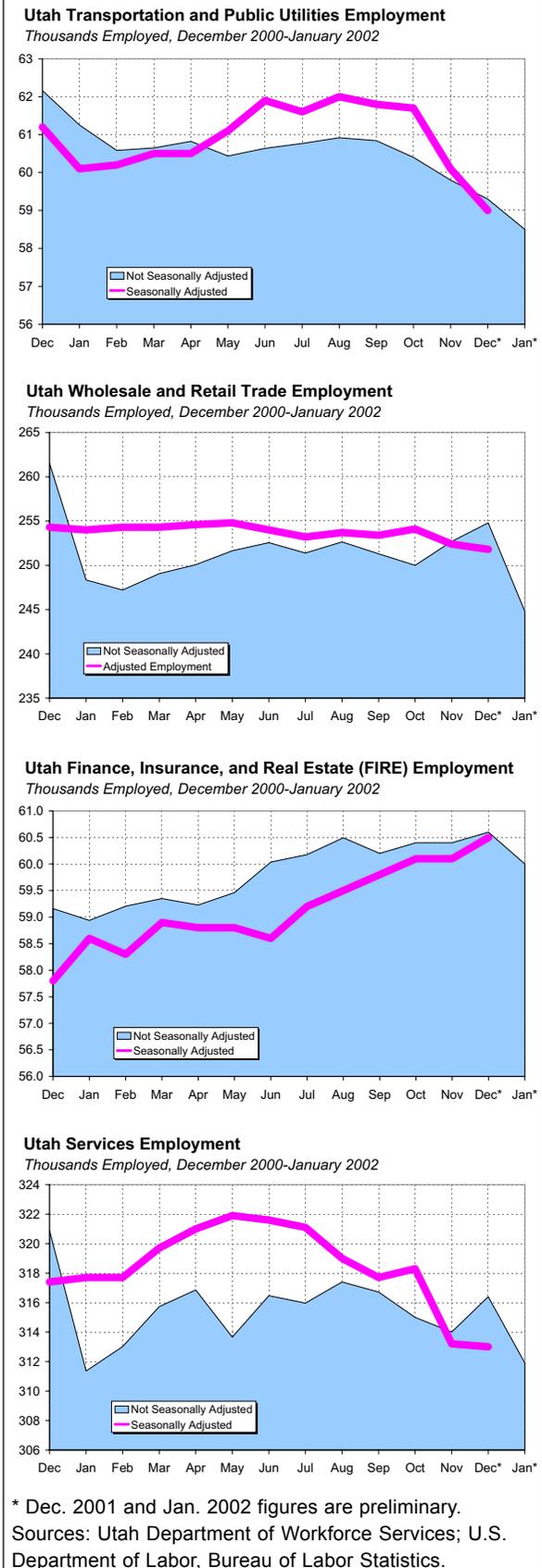
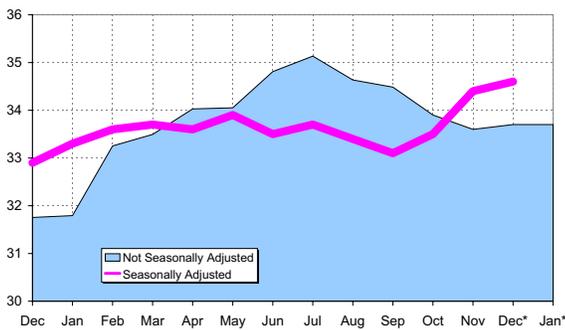


Figure 27

## Utah Employment By Sector

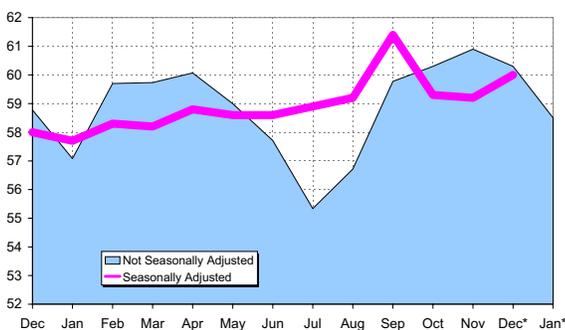
### Utah Federal Government Employment

Thousands Employed, December 2000-January 2002



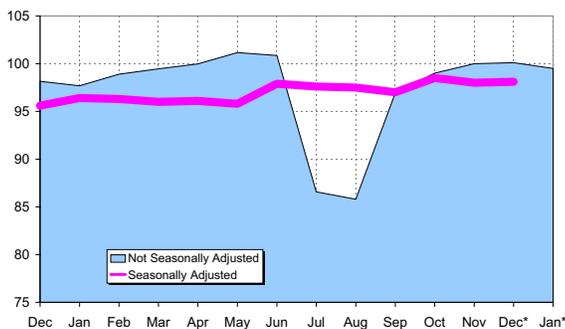
### Utah State Government Employment

Thousands Employed, December 2000-January 2002



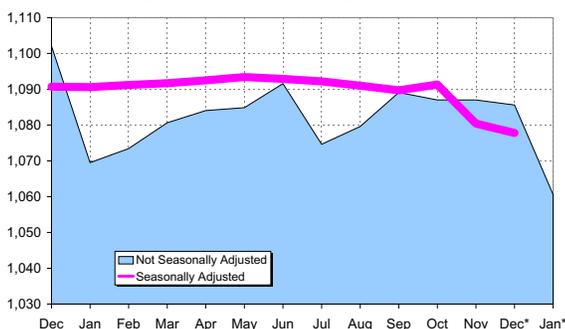
### Utah Local Government Employment

Thousands Employed, December 2000-January 2002



### Utah Total Non-Farm Employment

Thousands Employed, December 2000-January 2002



\* Dec. 2001 and Jan. 2002 figures are preliminary.  
Sources: Utah Department of Workforce Services; U.S. Department of Labor, Bureau of Labor Statistics.

Employment in the service sector showed a slight increase in unadjusted terms from January 2001 to January 2002. The increase of .05% translates to roughly 500 jobs in the service sector. This rate has been fluctuating as the December 2001 unadjusted numbers showed a decline of 1.43% over the prior year, which translated into more than 4,000 fewer jobs in the service industry than had existed the previous year. Since it is probable that this slight raise in employment in the service sector is related to preparation for the Olympics, there is a possibility that this brief rebound in the service sector could be followed by a sharp decline in service sector employment. Additionally, even a small percentage decrease would affect a large number of people and a large portion of the economy.

Two industry areas where Utah is faring better than the nation are finance, insurance and real estate (FIRE) and government. FIRE is growing on the national level, however the growth rate pales in comparison to Utah's growth rate (0.63 versus 2.63%, respectively). Low interest rates have aided the growth in FIRE. This, coupled with Utah's stronger position compared to the national economic downturn has amplified the growth rate of FIRE in Utah.

Utah has also seen significant growth in governmental employment. While Utah has followed national trends in terms of growth on the state and local government levels, its 6% increase in federal government employment is significantly higher than the slight drop in federal government employment nationally.

## Impact of the Recession on Taxes

Utah's state and local governments utilize many revenue sources, including taxes, fees, fines, and transfers from the federal government. However, the overwhelming majority of revenue collections come from a small handful of taxes. State government relies primarily on individual income taxes, sales taxes, motor vehicle fuel taxes, and corporate franchise (income) taxes. Local governments rely primarily on the property tax and the local portion of the sales tax.

Recessions impact state and local government revenues in many ways. As economic growth slows or even turns negative, tax bases can shrink. As has been shown in this report, each recession is unique with different economic sectors being affected at different rates. Based on Utah Foundation's understanding of the current recession, the following sections provide our assessment of risk for Utah's major taxes.

**Individual Income Tax.** The current recession has slowed personal income growth, but income is continuing

to grow, with preliminary 2001 income at 4.9% above 2000 income. However, much of that growth came in the earlier part of the year, with the last half of 2001 slowing until December, when growth returned.

This growth is reflected in positive income tax growth for Utah, compared to the prior fiscal year. However, although individual income tax receipts are up \$30 million over the same period last year, the budget was based on a \$44 million increase for the same period, leaving a shortfall from expected revenues.

The current recession looks similar to several past recessions in which personal income did not fall significantly. If this holds true, Utah's revenue from individual income taxes could be a stabilizing influence on public finance. Although it will certainly grow slower than in recent budgets, this tax is not likely to shrink.

**Sales and Use Taxes.** Sale and use taxes are naturally regressive. Those with lower household incomes will pay a higher percentage of their income towards these taxes, especially in those states, like Utah, where sales tax is levied against staple items, such as food. In times of recession, when consumers scale back on spending, revenue from sales and uses taxes will slow or drop. However, the taxation of food may moderate the revenue loss, although it also probably makes the tax more regressive at times when luxury items are not purchased but purchases of staple items must continue. During fiscal years 1999 and 2000, the General Fund received 90.7 and 93.2 percent of its revenue from state sales and use taxes. While revenue was up a scant 0.8% during the first half of fiscal year 2002 over 2001, it fell \$35 million short of the \$755 million anticipated. If the recent rise in personal consumption continues, this tax may rebound. The second half of the fiscal year will see a bonus of revenue from sales and use taxes during the Olympics, but that is already built into the budget. The next several months will show whether the estimates of this bonus were accurate.

**Transient Room Tax.** A significant portion of local sales taxes is generated by taxation of hotel rooms. This portion is known as the transient room tax. The events of September 11<sup>th</sup> and the subsequent downturn in tourism have had great economic impacts, especially on those states that levy taxes on lodging. New York, California, Florida, and Hawaii are all anticipating reductions in transient occupancy and room taxes. Utah, because of high occupancy rates during the winter games, will not experience as deep downturns in this tax. However, as other Olympic venues have experienced in the past, there is always a post-Games lull in hotel bookings. This in turn slows growth of the transient tax. While this particular component of sales and use tax might show some growth for fiscal year 2002, local government leaders should be concerned with what fiscal year 2003 will bring. If travel and tourism has not rebounded, transient occupancy and room taxes will certainly bring less revenue than anticipated. Also, the Olympics had the effect of adding rooms to the state's inventory. Properties were built, remodeled and expanded to meet the demand of the games. However, that capacity will not leave

**The current recession looks similar to several past recessions in which personal income did not fall significantly. If this holds true, Utah's income tax could be a stabilizing influence on public finance. Although it will certainly grow slower than in recent budgets, this tax is not likely to shrink.**

once the games are over. The challenge of how to fill them will also influence the collection of room taxes.

**Corporate Franchise and Income Tax.** Perhaps the best indicator of economic health of a state's economy is the corporate franchise and income tax. These taxes are levied on all the income of corporations doing business within the state. The revenue from these taxes goes into the uniform school fund, as do all income taxes within Utah. During fiscal year 2000, corporate income tax revenue comprised 9.3 percent of the uniform school fund. Revenues from this tax, and its percentage of the overall fund, were down from 1999 figures, when corporate income taxes brought \$180 million in revenue and made up 10.8 percent of the fund. The first half of fiscal year 2002 shows an even more marked decline. Revenues through December 31 stood at \$37 million. This is half the amount that state coffers received during the same time in 2001, when corporate income tax revenue was \$75 million. This is troubling for two reasons. First, school budgets are going to be adversely affected by that large of a drop in revenue. Second, a struggling company must make cuts in order to stay in business. Usually the first cuts made are in personnel, as wages and salaries make up the largest part of any corporate budget. Higher unemployment within the state will lead to a greater demand for state services, while at the same time leaving less in the state budget to handle the increase in demand.

From the data reviewed on past recessions, we know that when the current recession is ended, there is likely to remain a delay before corporate profits rise back to previous levels. Therefore, the decline in corporate tax revenues is likely to persist into the coming fiscal year.

**Motor Fuel Tax.** During a recession, motor fuel taxes are affected in three ways. First, a decrease in tourism leads to fewer out of state visitors that are contributing to revenues without making large demands on state services, beyond use of the roadways. Jet fuel purchases are also affected by a decrease in tourism. The four no-fly

days following September 11<sup>th</sup> exacerbated this. Second, when economic times get difficult, individuals often make the decision to purchase fuel-efficient vehicles and sell the large SUV that only gets 10 to 12 miles per gallon. Thus, when they stop at the gas pump, a tank can be filled for

The first half of fiscal year 2002 shows an even more marked decline in corporate franchise tax collections to half the amount that state coffers received during the same time in 2001.

**Figure 23**

**Utah State Tax Revenues**  
*FY 2002 Compared to Budget and FY 2001*  
*(Millions of Dollars)*

Major Tax Sources	FY 2002 Adopted Budget	FY 2002 Jul-Dec Expected Revenues	FY 2002 Jul-Dec Actual Revenues	FY 2002 Jul-Dec Diff. From Expected	Percent Diff. From Expected	FY 2001 Jul-Dec Actual Revenues	FY 2002 Jul-Dec Diff. From FY 2001	Percent Diff. From FY 2001
Sales And Use Taxes	\$1,497.85	\$755.31	\$719.61	-\$35.70	-4.7%	713.55	\$6.06	0.8%
Individual Income Tax	\$1,841.76	\$867.95	\$853.30	-\$14.65	-1.7%	823.6	\$29.70	3.6%
Corporate Franchise Tax	\$197.18	\$81.42	\$37.12	-\$44.30	-54.4%	75.05	-\$37.93	-50.5%
Beer, Cigarette & Tobacco	\$61.00	\$30.37	\$30.30	-\$0.07	-0.2%	30.73	-\$0.43	-1.4%
Insurance Premium Taxes	\$59.01	\$27.36	\$22.99	-\$4.37	-16.0%	24.7	-\$1.71	-6.9%
Severance Taxes	\$36.00	\$14.76	\$18.90	\$4.14	28.0%	18.29	\$0.61	3.3%
<b>General &amp; USF Funds</b>	<b>\$3,692.80</b>	<b>\$1,777.18</b>	<b>\$1,682.22</b>	<b>-\$94.96</b>	<b>-5.3%</b>	<b>1,685.92</b>	<b>-\$3.70</b>	<b>-0.2%</b>
Motor Fuel Tax	\$252.17	\$129.46	\$123.23	-\$6.23	-4.8%	128.4	-\$5.17	-4.0%
Special Fuel Tax	\$80.90	\$41.80	\$44.41	\$2.61	6.2%	41.36	\$3.05	7.4%
Motor Vehicle Regis. Fees	\$27.00	\$12.55	\$13.37	\$0.82	6.5%	12.34	\$1.03	8.3%
<b>Transportation Fund</b>	<b>\$360.07</b>	<b>\$183.81</b>	<b>\$181.01</b>	<b>-\$2.80</b>	<b>-1.5%</b>	<b>182.1</b>	<b>-\$1.09</b>	<b>-0.6%</b>

Source: Utah State Tax Commission

considerably less and consequently, tax revenue declines. Finally, the trucking industry is a large contributor to fuel tax collections. Semis and tractor-trailers require enormous amounts of fuel. During a recession, trucking is one of the first industries to suffer. With a slow down in purchases and inventories, fewer trucks are needed to transport goods. Fewer trucks require less fuel, which leads to smaller revenues. Comparing the first half of fiscal year 2002 to the same period in 2001, there has been a 4 percent decrease in revenue from motor fuel.

## Overall Tax Situation

Figure 28 shows the changes between fiscal year 2002 and 2001. It also shows the difference between the amounts budgeted for collection during 2002 and how much revenue has been realized. The information contained therein leads one to believe that while the economy might not be struggling as much as was previously thought, there is still cause for concern. Utah has a short term advantage that other states do not enjoy: the 2002 Winter Games are providing revenue that the state would otherwise not have. However, no one is certain how long the economic lull after the games may last and how the national economy will fare. Recent employment statistics for Utah showed a surprising acceleration of job losses in January. Hopefully, these losses will not continue in the coming months.

**While the economy might not be struggling as much as was previously thought, there is still cause for concern.**

## Endnotes

<sup>1</sup> For a more detailed discussion of taxes in Utah and their purpose, along with a historical perspective of Utah's taxes see *Financing Government in Utah: A Historical Perspective*; Utah Foundation, 2000.

<sup>2</sup> Robert Hall, Chair et al, "The NBER's Business-Cycle Dating Procedure Report", National Bureau of Economic Research, January 2001.

<sup>3</sup> Steven G. Cochrane, "The U.S. Regional Outlook," in *The Dismal Scientist* (online at [www.economy.com/dismal](http://www.economy.com/dismal)), Jan. 23, 2002. Cochrane is a Senior Economist at Economy.com.

<sup>4</sup> Leon Keyserling, et. al., *The "Recession"—Cause and Cure: In Perspective of Our Long-Range Problem*, Conference on Economic Progress, 1958, p 26.

This Research Report was prepared by Janice Houston, Senior Research Analyst, Sara Sanchez, Research Analyst, and Stephen Kroes, Executive Director. The authors are available for comments or questions at (801) 288-1838 or by email at [janice@utahfoundation.org](mailto:janice@utahfoundation.org), [sara@utahfoundation.org](mailto:sara@utahfoundation.org), or [steve@utahfoundation.org](mailto:steve@utahfoundation.org).

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