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# Research Report

## ECONOMIC RECOVERY? A comparison of indicators for utah and the united states since march 2001

## HIGHLIGHTS

- Nationally, the economy hit its low point in November 2001 and has been recovering since.
- By October 2003, all indicators except employment returned to pre-recession levels or higher.
- Corporate profits are now within the range that historically has seen firms begin to hire employees.
- In Utah, job growth has also been a concern. From Jan 2003-Jan 2004, the state added 11,600 jobs or 1.1%.Of those, 5,900 or 51% have been added in areas outside the Wasatch Front.
- The industries that have been adding the most jobs in Utah are education, health care and professional services.
- Unemployment rates, statewide and within the metropolitan areas, continue to decline from the highs seen immediately following the Olympics.

Utah Foundation is a nonprofit, nonadvocacy research organization. Our mission is to encourage informed public policy making and to serve as Utah's trusted source for independent, objective research on crucial public policy issues.

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4141 Highland Dr., Suite 102 Salt Lake City, UT 84124 (801) 272-8824 • www.utahfoundation.org In October 2003, the National Bureau of Economic Research (NBER), the entity responsible for dating economic recessions, released a statement saying the recession that began March 2001 had ended in November 2001.

This nine month recession lasted about the same length of time as the recessions of 1990-91 and 1957-58. Figure 1 details the length of recessions and recoveries since 1945. It shows that this cycle of recession and recovery is in its 31<sup>st</sup> month without employment rebounding to its pre-recession levels.

This report will examine key business and consumer indicators to determine how well the country is recovering. It will examine the impacts this recession has had on components of personal income. Additionally, this report will focus on comparing Utah economic indicators to national data. Where possible, there will be an emphasis on what is happening within Utah's metropolitan areas and counties. A concluding section will discuss federal government expenditures.

Figure	I:	Recessions	and	Recoveries	Since	1945
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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		
March 2001- November 2001	9	Not Yet Recovered		
Average Length of Recession	11.4	22.3		

\*Full recovery is defined as reaching the same level of employment as at the beginning of the recession. Source: National Bureau of Economic Research (NBER); Calculations by Utah Foundation.

## NATIONAL INDICATORS

When examining the health of the national economy, Utah Foundation used key indicators for the business and consumer sector, the indicators used in previous Utah Foundation reports on this topic. Figure 2 tracks the indexed change in business and consumer sector indicators since March 2001. Total non-farm employment is the area that has caused the greatest amount of concern, since very few new jobs have been generated in the economy over the last two years. While the graphs show that in October and November of 2002 employment briefly climbed to pre-recession levels, that growth was not sustained and since that point, employment has hovered around 0.99 of its March 2001 level. It needs to be pointed out that March 2001 was not the apex of employment. The economy continued to add jobs until June 2001. Therefore,

if non-farm employment were indexed to that point, jobs have not seen any period above 1.00 since then. The only other recession that experienced the same phenomenon was the 1973-75 recession, when non-farm employment returned to pre-recession levels for eight months, then declined for another thirteen months.

Employment is almost always the last indicator to recover to prerecession levels. Labor costs, including hiring and downsizing, usually are the largest expense for any business. Therefore, a company typically has to be confident an economic recovery is sustainable before it is willing to make the investment of more employees. In terms of the business indicators in this report, there is a relationship suggested between the recovery of corporate profits and employment. Historically, corporate profits needed to reach pre-recession indexed levels of somewhere between 1.09 and 1.18, and profits needed between one and six quarters of growth above the peak before employment rebounded. As Figure 2 shows, corporate profits for third quarter 2003 were at an indexed level of 1.16, and have now experienced four quarters above the peak. This suggests that employment should recover soon. Unless, of course, fourth quarter 2003 saw profits dip below 1.00.

Fixed investment by businesses, investment in land, buildings, computers, and equipment is another area of concern. This indicator dropped to a low of 0.92 in April 2002 and only reached 0.99 in the



last quarter of 2003. Fixed investment is a key indicator for gauging corporate willingness to "put down roots." A company that invests in medium to long-term assets rather than retaining large amounts of cash is one that is optimistic about the future economic growth of the community in which it finds itself.

The second graph in Figure 2 details the changes in the consumer sector indicators. This graph highlights the main driver of the current economic recovery, personal consumption. Due to low interest rates, many consumers have either refinanced high rate credit card debt or cashed out the equity in their homes, thus driving consumption. Consumption has been robust during this recession, despite personal income not rebounding to pre-recession levels until October 2003. Correlated to consumption is consumer sentiment. Despite the events of September 11, 2001, and another downturn in March 2003, sentiment has averaged 97 percent of pre-recession levels. This contrasts with 1990-1991, when sentiment averaged 88 percent of pre-recession levels.

Important to understanding the indexed growth in personal income is an understanding of its underlying components. The major components are: 1.) Wages and salaries; 2.) Dividends, interest, and rents (abbreviated DIR in the graphs); and 3.) Transfer payments. For the purposes of the graphs in Figure 2, the money received from transfer payments is removed. This is critical, because transfer payments are monies received by individuals from government programs such as unemployment insurance, social security, and welfare payments. During economic downturns, demand for these services increases, and the growth in this component of personal income can mask declines in the other two.

Wages and salaries are by far the largest component of personal income, and in order for income to return to pre-recession levels, wages must recover. As shown in Figure 3, during the fourth quarter of 2003, wages finally reached that peak nationally. Despite recent increases in the stock market, DIR has yet to achieve its pre-recession levels, while transfer payments have increased at a significant rate.

Comparing Utah's components of personal income to the national figures tells a similar story. Wages and salaries began rebounding over the summer of 2003, and by fall had exceeded their pre-recession levels, while DIR income leveled off. Transfer payments have reached a higher growth rate in Utah than nationally, indexed at 1.19 compared to 1.16 for the U.S.

#### UTAH INDICATORS

The above comparison of Utah's personal income to the nation provides a partial view of Utah's position in the economic recovery process. However, it isn't complete. One of the important insights provided by the personal income series about Utah is that the average Utahn is more dependent on wage and salary income than the average U.S. resident. In 2003, approximately 73 percent of Utah's personal income came in the form of wages and salaries, compared to 68 percent nationally. This higher dependence on wages means that fluctuations in the job market have a greater impact on Utahns.





From January 2003 to January 2004, 11,600 jobs were created in Utah, a growth of just 1.1%. Figure 4 details job losses and gains by sector. The state's manufacturing interests lost 800 jobs during this time, while health and education gained 3,700 jobs. Within these sectors, durable goods manufacturing saw the greatest losses (1,200 jobs eliminated), while non-durable goods gained 400 jobs. Health care created 3,300 of the 3,700 in the health and education sector. Perhaps the most interesting fact is where the job growth was located. The Salt Lake-Ogden metropolitan area accounted for a net of 4,100 jobs, and the Provo-Orem area gained a net of 1,600 jobs. This means that the bulk of the employment growth in the state (5900 jobs) occurred outside the Wasatch Front. This is shown in detail, by sector, in Figure 5.

Despite this rather modest gain in jobs, the unemployment rate in the state as a whole and in the metro areas has been fairly stable, and in historic terms, low. Utah's unemployment rate in December 2003 was 4.2 percent, similar to March 2001 when the recession began. The state's unemployment rate hit a high of 6.6 percent in February and June 2002, which is relatively moderate for a recession. Additionally, the impact of the Olympics must also be taken into account in these figures. In this light, the state's unemployment rate during the recession is lower than the figures tell. Figure 6 compares Utah's unemployment rate to the national average, and compares the metropolitan areas with the state as a whole. Again, the metro areas tell the most interesting story. The Provo-Orem area has been the most volatile, with rates starting the recession at 3.2 percent and hitting a high of 7.0 percent before declining to current levels of 3.3 percent. The Salt Lake-Ogden area followed a similar pattern.



This interesting paradox of low job creation and low unemployment has two possible explanations. One is the idea that many workers are "waiting out" the downturn before they come back into the workforce to look for employment. This would keep labor force growth at a lower rate, thus not overwhelming the slow job creation rate. Economists nationally have cited a trend toward self employment that also is keeping some workers out of the measured labor force.

The other explanation may be that Utah's labor force was temporarily expanded during the buildup to the 2002 Olympic Winter Games. After the games, many of these people went back to being full-time students, stay-at-home parents, retirees, or other non-participants in the labor force. Some workers may have also moved into the state during the years before the Olympics and then left the state after the games concluded. If this is the case, with these workers leaving Utah's labor force, the growth in the labor force slowed enough that even a slow rate of job creation was able to reduce unemployment.

Hiring and job creation hinge on two components: demand for goods and productivity of current employees. If a firm can find ways to produce more goods and services for the same cost, or even less, then it will delay hiring new employees. Once productivity reaches its peak and demand continues to climb, firms begin to hire. In Utah, quarterly productivity growth has been strong since the beginning of the recession. Indexed productivity in the fourth quarter 2003 was 1.13, or 13 percent above where it was at the beginning of the recession. This, coupled with the upturn in recent months of the Purchasing Managers Index (PMI) seems to suggest that staffing pressures may soon be felt, and employers will need more workers to meet demand.

The PMI is a leading indicator created by the Institute for Supply Management to gauge economic growth by surveying employees responsible for company purchases. These employees have a sense of supply and demand within their own firms. Since the needs of individual businesses often take time to make their way through the economy, the decisions a purchasing manager makes today will affect the economy's bottom line three to six months from now when the goods are delivered and payment made. When purchasing managers place orders for more goods and services, their suppliers must meet that demand. If productivity is already at a peak, those suppliers are likely to add more workers to meet the increased demand.

Figure 7 highlights the PMI for the United States, as well as the PMI for Utah and the other mountain states Colorado and Wyoming. The state-level detail is provided by Creighton University's survey of purchasing managers throughout the plains states and intermountain west. The index is calibrated so that a score over 50 means those surveyed feel the economy is expanding, while a score under 50 indicates contraction.

As Figure 7 indicates, the PMI for the US as a whole has been climbing since September 2003, while Utah's PMI hit a high during that month and has been tracking lower since then. Still, PMI has grown considerably in all areas since March 2003, when PMI hit its lowest point in this recession, excluding the US score immediately post-September 11<sup>th</sup>. This steady upward growth nationally seems to indicate a strong possibility for hiring to begin sometime between March and June 2004.

**Figure 7: Creighton University Economic Conditions** for Business Index 68 50 = Equilibrium 66 64 Mountain 62 60 58 56 54 52 50 48 46 44 42 40 38 36 34 32 30 Nov-01 Jue-01 Jue-02 Jue-02 Jue-02 Jue-02 Jue-02 Jue-03 Jue-04 Ju Source: Creighton University

However, within Utah's PMI there is cause for concern. While survey respondents still believe the economy is growing, this sentiment is less strong than earlier in the year. This might be the result of survey methods; a small sampling of a state has greater fluctuations than a large national sample, but the data also raises a concern that perhaps Utah's economy is different than the national economy, and those differences are the reason for the more pessimistic outlook. For example, if certain industry sectors, such as construction or computer manufacturing are concentrated more heavily in Utah than in other areas of the country, and those industries are still in a downturn, this may explain part of the difference between the US PMI and Utah's.

In Utah Foundation's February 2002 report, the authors compared Utah's non-farm employment sectors to national figures and created a matrix of location quotients. Location quotients are a simple way to determine if an industry sector is over or underrepresented in a state compared to the nation or in a locality compared to the state. From the data presented in the 2002 report, the authors concluded that Utah has a fairly diversified economy. In fact, Utah's dispersion of jobs among industries looks very similar to that of the nation.

Figure 8 provides the location quotients for employment in Utah at the county-level. The counties not included in the table are those that did not meet data disclosure standards. This means that more than five percent of the jobs in those counties were listed as "unclassifiable" by federal sources.

For those counties shown in Figure 8, two calculations were made to arrive at the location quotient shown. First, the jobs in each industry sector were divided by the total number of jobs in the county. This calculation was then repeated at the state level. For each county, industry percentages were then divided by the industry percentage for the state, thus creating a ratio. This ratio is the location quotient (LQ).

For each county, the LQ is an indication of how concentrated jobs are in a particular sector. An LQ of 1.00 means that the sector is as concentrated at the county-level as it is at the state-level. LQ analysis assumes that the larger entity (the state of Utah), has the ideal mix of jobs. The higher an LQ, the more dependent an area is on that industry, whereas an LQ less than 1.00 indicates that the particular industry is underrepresented. This, of itself, shouldn't raise alarm. When local areas try to position themselves as having expertise in a certain industry, it is more likely that other firms in that industry are also going to locate in that area. This build up is a positive to the local area when the

Industry Sector	Box Elder	Cache	Davis	Millard	Salt Lake	Summit	Uintah	Utah	Wa satch	Washington	Webe
Agriculture	ND	ND	ND	25.34	0.13	0.90	1.87	1.42	ND	0.45	0.34
Mining	ND	ND	ND	3.29	0.55	0.65	24.48	0.05	ND	0.64	NE
Construction	0.80	0.87	1.18	0.85	0.91	1.40	0.88	1.17	2.01	1.81	0.90
Manufacturing	3.67	1.82	1.05	0.34	0.87	0.30	0.17	1.11	0.50	0.59	1.37
Wholesale Trade	0.56	0.42	0.74	0.58	I.40	0.18	0.93	0.71	0.35	0.45	0.59
Retail Trade	0.80	0.95	1.07	1.06	0.92	1.17	1.04	1.08	1.03	1.42	1.09
Trans & Warehousing	1.44	0.56	1.14	0.41	1.26	0.43	0.91	0.42	0.62	1.42	0.4
Utilities	0.35	0.26	0.13	ND	0.93	1.08	2.93	0.62	2.28	0.30	0.56
Information	0.28	0.54	0.39	0.23	1.15	0.46	0.41	1.64	0.38	0.65	NE
Finance & Insurance	0.41	0.41	0.53	ND	1.46	0.43	0.29	0.57	0.54	0.58	0.72
Real Estate	0.31	0.48	0.80	ND	1.12	4.51	1.25	0.84	1.21	1.09	0.87
Prof & Tech Service	0.21	0.93	0.84	ND	1.18	0.67	ND	1.25	0.91	0.72	0.63
Management	0.50	3.12	0.41	ND	1.41	0.32	ND	0.53	0.83	0.15	0.29
Admin & Waste Serv	0.37	0.98	0.66	0.63	1.16	0.59	0.35	0.96	0.19	0.61	1.09
Educational Serv	0.84	1.10	0.98	1.07	0.69	0.58	0.67	1.50	1.03	0.65	1.02
Health & Social Serv	0.65	0.84	0.89	0.65	0.98	0.24	0.80	1.04	0.84	1.29	1.10
Arts, Entertain & Rec	0.57	1.22	1.46	0.90	0.92	8.59	0.57	0.70	0.47	1.56	1.1
Accomodation & Food Serv	0.76	0.84	0.87	1.03	0.92	2.57	1.10	0.91	2.39	1.47	0.89
Other Services	0.48	0.83	1.06	0.56	1.04	0.99	0.99	1.02	0.72	1.02	1.0
Public Administration	0.54	0.69	2.34	3.46	0.76	0.55	1.73	0.36	0.72	0.58	1.77
Difference high to low	3.46	2.86	2.20	25.12	1.33	8.35	24.31	1.59	2.20	1.66	1.43

ND - No Data

Highest Location Ouotient Lowest Location Quotient

Source: BLS CEW.

economy is growing or demand for that industry's product is high.

However, during a downturn, dependence on one particular sector can seriously hamper a local area's economy.

A current example of this phenomenon is with the textile manufacturing industry in the southern United States. As more companies either move overseas to take advantage of less expensive labor or simply shut their doors, a disproportionate share of people find themselves without work and without the skills necessary to find another job. For a whole town or county built around a defunct textile mill, this can have a devastating impact. Therefore, from an economic development point of view, while local areas should develop expertise in producing specific goods or services, a good balance of industries avoids economic hardship during downturns in specific sectors.

The metropolitan areas in Figure 8 enjoy a diverse mix of industry sectors. None of the counties in the metro areas has a single sector LQ over 3.00. In Davis and Weber counties, the public administration sector has the largest LQ, suggesting that Hill Air Force base, in conjunction with state and local government, has concentrated employment in that sector. In Salt Lake County, the financial sector has the highest LQ, although employment in wholesale trade and corporate management are close competitors. Utah County still shows strength in information services, which includes jobs in software development and internet-based applications. Consequently, while the technology sector has struggled during this recession, so has job growth in Utah County, which only managed to gain a net total of 300 jobs from January 2003 to January 2004. Still, information services did did not shed any more jobs as it had been during the prior year.

As was stated earlier, of the 11,600 jobs added to Utah's payrolls between January 2003 and January 2004, 5,900 were added outside the metropolitan areas of Salt Lake-Ogden and Provo-Orem, which encompasses the entire Wasatch Front. As Washington County continues to grow, it can be assumed that a portion of this nonmetropolitan area job growth is happening there. Washington County also has a diversified employment base. The construction industry has the highest LQ, given the growing population and the temperate climate that allows year-round building, as well as the proximity to Las Vegas. Washington County also has the highest concentration of health and social services jobs of any of the counties examined here.

The rural counties have less diversified industry sectors. Box Elder and Wasatch counties are in a better position than the others. They benefit from a relative proximity to the Wasatch Front, and experience job growth as the urban areas continue to expand. Both Wasatch and Summit counties are also dependent on travel and tourism to provide jobs. Cache County is perhaps the largest surprise. The educational services sector, which includes jobs at Utah State University and the two school districts in the county, only has an LQ of 1.10. Corporate management has the highest concentration in Cache County. Finally, Millard and Uintah counties are highly dependent on the traditional industries agriculture and mining.

These indicators give a rough idea of how well Utah has weathered the recent recession. While job growth has struggled due to both the recession and post-Olympic downsizing, unemployment has remained fairly low. Income from salaries and wages just recently rebounded to pre-recession levels. Income from transfer payment is still growing in the state, and at a faster rate than nationally, and this causes some concern that the state's economy hasn't yet fully recovered.

During economic recessions, it has been common practice for the federal government to step up its spending to counteract the downturns in business and consumer spending. While an infusion of federal government funds provides short term economic benefits, the longer term costs, such as deficit spending and overall government spending as a percentage of the Gross National Product (GDP), are concerns. These issues will be briefly examined in the next section.

#### FEDERAL GOVERNMENT SPENDING

Policymakers have been focusing a lot of attention on the fact that federal budgets have turned back to deficit spending, and the projections on the size of those deficits are anticipated to be quite large. There is also a concern about the costs of waging the war against terrorism and how those costs are impacting the budget.

Government plays an important role in times of recession. Not only does government provide income support to citizens who are struggling due to an economic downturn, but through public projects, can provide much needed stimulus to a weak economy. The problem comes if the federal government over-stimulates the economy. This causes inflationary pressures to build. Also, a country that is spending future revenues is placing the burden on future generations to pay off those debts, thus inhibiting future economic growth. As Figure 9 shows, federal government deficits deepen during the fiscal year in which a recession ends. These data points are indicated in the contrasting color on the graph. Figure 9 also shows that, according to projections, the federal government will continue deficit spending until 2014.





In light of these concerns, Utah Foundation examined federal spending since 1946. Figure 10 details federal defense and other spending since 1990, as well as spending as a percentage of GDP during the same time period. Inflation is accounted for in the graph. As shown, federal government spending in 2003 was at approximately the same dollar value as in 1990. However, as a percentage of GDP in 2003, it was much smaller. Federal government spending in 2003 was \$757 billion dollars and the nation's (GDP) was \$10.9 trillion. This means that federal government spending amounted to 6.9% of GDP, approximately the same level it was in 1995 while the post-war average of federal spending in 2003 accounted for \$497 billion dollars, or 65.6% of total federal spending, accounting for approximately the same percentage of the budget as in 1997 and 1998, and the post-war average is 75.1%.



What is troubling about federal government spending is the rate of growth. Both defense and non-defense spending grew by approximately 9.0% during 2002 and 2003, growth rates not seen since 1967. These growth rates matter when policymakers start projecting outward and assume these rates are sustainable. Historically, GDP has grown by an annual average of 3.0%, federal government expenditures by 2.3%, and defense expenditures by 2.1% in the post-war era. Therefore, in coming years, citizens can anticipate federal spending to contract, or at least the growth rate to decline significantly.

This is important for Utahns because much of the money funneled to Utah from the federal government comes in the form of spending on social programs. If federal spending declines, the funding of social programs faces a higher likelihood of being cut than defense program funding. In 2003, Utah state government received \$1.9 billion in federal monies, including capital projects funds. Of this, approximately \$908 million went to the Department of Health, and \$288 went to the State Office of Education. Overall in 2003, federal funds accounted for 25.9 percent of the state's ongoing and capital projects funding, and is now the single largest funding source for state government, surpassing the monies allotted from the General Fund and Uniform School Fund. Reductions in federal spending in future years may have serious consequences for state government operations. Additionally, the \$1.9 billion does not include funds that individuals receive from federal programs not administered by state agencies. An example of these types of funds would be Social Security payments to Utah residents. Taken together, reductions in federal spending would cause either a round of belt-tightening for the state, or increases in state taxes and fees to make up the shortfall.

#### CONCLUSION

Overall, the economy appears to be recovering, both nationally and within Utah. The indicators that spur employment growth-mainly corporate profits and consumer spending-are at levels that in previous recessions indicate job growth is around the corner. Utah's industry sectors continue to look more like the nation as a whole. This insulates Utah's job market from industry specific employment shocks, but it also means that where the national job market leads, Utah follows. Utah is no longer immune.

One factor of concern highlighted by the data is the continued growth of transfer payments monies to Utah. While much of this is probably the result of increasing costs associated with Medicare and Medicaid, not all of the increase can be explained by those two programs. Couple this with income from dividends, interest and rents to Utahns at levels still below those of March 2001, and income from salaries and wages at pre-recession levels, and many of the state's residents are still struggling.

Finally, increasing federal government deficits will have an impact on the long-term growth of the economy. However, federal spending has not yet reached levels that should be considered alarming. In the short-term, this spending can provide needed stimulus to the economies of Utah and the nation.

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