The National Bureau of Economic Research (NBER) has officially declared that the national recession started in April 2001, ending a 10-year expansion of the U.S. economy. The economy experienced a significant decline in the second quarter of 2001, and the tragic September 11th terrorist attack, the first one ever on the American homeland, delayed the recovery. However, Gross Domestic Product, after dropping 1.6 percent and 0.3 percent at an annualized rate in the second and third quarters of 2001, respectively, stabilized and managed to grow 2.7 percent in the following quarter.

The September 11th attack caused a significant loss of life and physical damage; but the U.S. economy, because of its size and diversity, proved resilient. For example, air transportation, the industry hit hardest by the attack, represented only 0.8 percent of total national output. In addition, the nation’s advanced technological infrastructure has shown tremendous capability to overcome major disruptions, sustain services and support business activities.

Still, the terrorist attack has had some significant ramifications for the economy: defense spending over the next few years will likely go up from the current 3 percent share of the nation’s total output; and society’s priorities will certainly shift to devoting more resources to domestic safety and security.

NBER has not declared a precise end to the 2001 recession. This paper discusses the economic changes on the state and national levels that had occurred through the first quarter of 2002.

**National Conditions**

*The 2001 recession is a shallow one.*

Gross Domestic Product (GDP), the broadest measure of the national economy, began contracting in the first quarter of 2001, even before the recession started. However, through three consecutive quarters of decline in 2001, GDP registered a total drop of only 0.6 percent. In contrast, GDP lost 1.5 percent during the 1990-91 recession.

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*Part II of this Study will contain more detailed analyses of the changes in wage and income distributions, using the OFM State Population Survey data.

**When the attack damaged phone lines, many people in the affected areas used cellular phone to communicate with the “outside world”; and many workers whose access to their workplace was severed could promptly set up an arrangement to work at home through Internet communications.*
This is a production/high-tech/investment-led recession. Aggregate industrial production and non-residential investment started declining three quarters before the beginning of the recession. By the first quarter of 2002 they had been reduced by 5.8 percent and 11.4 percent, respectively, far more severe than the GDP decline. Because high-tech sectors contributed substantially to growth in the second half of the 1990s, entering into the latest recession they were vulnerable to a hard correction. Semiconductor production had dropped 17.5 percent between the last quarter of 2000 and the third quarter of 2001.

The industrial capacity utilization rate is the ratio of actual production to capacity (or potential production level). That rate sank to 75 percent by the end of 2001, compared to the long-term average of 82 percent. As a result, business investment collapsed. Total nonresidential investment plummeted 10.6 percent in 2001.

Consumer spending has been relatively healthy. Consumption accounts for more than 60 percent of GDP, so nearly every past recession was accompanied by a decline in consumer spending. In the two years before the 2001 recession started, consumer expenditures rose at an annual rate of 4.0 percent. Consumer spending remained flat during the first three quarters of 2001, but bounced back in the following two quarters, averaging a 3.8 percent annual growth rate. This is the main reason why the recession is shallow, as consumption has cushioned the economic condition that has been suffering from cutbacks in business investment. Consumer spending was kept afloat during the recent recession due in part to special deals and discounts offered by automakers.

The housing market has been strong. Housing starts in the nation over the past 40 years averaged 1.5 million units a year; but during past recessions starts usually dropped to less than 1 million. However, housing starts did not decline this time, maintaining a level of around 1.6 million units. Low mortgage rates -- about 3 percentage points below the rates prevailing during the 1990-91 recession -- were the major reason. The bursting of the stock market bubble, low returns from other interest-bearing investment alternatives, and a robust trend in housing price appreciation together contributed to a shifting of personal investment toward housing.

Interest rates and inflation have remained low. Typically, inflation rates tend to increase during expansions as excess capacity in the economy is used up and the growing economy creates upward pressure on prices and wages. In order to keep inflation in check the Federal Reserve System usually increases the discount rate and the federal funds rate to slow down the growth in the money supply and reduce the growth rate of inflation. This leads to a fairly typical trend of increasing inflation rates being combated by increasing interest rates just before a recession. During recessions, the Federal Reserve System lowers interest rates to stimulate economic growth.
Reserve System normally eases up on the restrictions on the money supply causing interest rates to fall and borrowing to increase, stimulating the economy.

In the current recession, however, there is little room for the Federal Reserve System to invigorate the economy with lower interest rates since the discount has been at a historically low 1.25 percent since December 2001. Prior to the 1990-91 recession, the discount rate was steady at 7.0 percent but only about 3.5 percent before the 2001 recession. Other interest rates were also low going into the current recession. Conventional mortgage rates were slightly above 10 percent just before the 1990-91 recession compared to about 7 percent just before the 2001 recession. Likewise the bank prime rate was 10 percent just before the 1990-91 recession and 8 percent and falling just before the 2001 recession. Also, the interest rate on 6-month Treasury bills on the secondary market was almost 4 percent lower just before the 2001 recession compared to just before the 1990-91 recession.

The U.S. Consumer Price Index bounced around between 4.5 percent and 5.5 percent in the months just before the 1990-91 recession. By contrast, the U.S. CPI was around 3.5 percent and falling in the six months before the 2001 recession. The U.S. Implicit Price Deflator for Personal Consumption was also higher before the earlier recession. The U.S. IPD for Personal Consumption was 5.3 percent and 4.3 percent in the two quarters just before the 1990-91 recession, but only 1.9 percent and 3.2 percent in the two quarters just before the 2001 recession.

**Washington Conditions**

There is no official measurement and dating of recession conditions at the state level. Employment, a coincidental indicator of the national business cycles, is usually used to gauge the cyclical status of the state economy.

*Employment in Washington declined more severely than the national average.* While employment in the nation essentially remained flat in the first nine months of 2001, the number of jobs in the state declined more than 2 percent. In March 2002, Washington employment was 2.3 percent below the level a year ago, compared with a more moderate nationwide decline of 1.0 percent.
Unemployment rate rose, but more moderately than in the past recessions.
Jobless rates in the state averaged 7.5 percent in the past 30 years. The rate has generally jumped above the 10 percent level during recessions. In the 1990s, the state experienced significantly lower unemployment rates averaging 6.0 percent. Since reaching a level at par with the national average at the beginning of 1998, the state’s rate gradually rose, and accelerated after the recession started. By March 2002, a year into the recession, the state unemployment rate reached 6.8 percent, slightly more than 1 percentage point above the national average. The state rate during the 2001 recession is comparable to that in the 1990-91 recession, but much lower than the 12 percent jobless rate experienced during and immediately following the 1980-82 dual national recessions.

However, a contracting workforce accompanied the low state unemployment rate in the 2001 recession. The shrinking labor force resulted from two factors. First, some workers left for jobs available in other states. Second, some jobless workers were not counted as part of the labor force because they quit looking for work when job opportunities dimmed during the recession. Labor force growth in Washington started slowing down in 1999, due in large part to the job reductions in the aerospace industry. Subsequently, with worsening conditions in the general economy, the state labor force declined by 79,000 workers, or 2.6 percent, between 1999 and 2001.

Manufacturing, TCU (transportation, communication, and utilities), and construction industries were hit hard. A year into the recession, manufacturing employment dropped 9.2 percent. Substantial job losses occurred in durable-goods manufacturing including aerospace and other high-tech sectors. In the year following the first quarter of 2001, durable-goods manufacturing sectors excluding aerospace lost 17,700 jobs, or 11.4 percent. Job cuts in Washington’s aerospace industry started much earlier in the third quarter of 1998, totaling 34,300, or 30 percent, by the first quarter of 2002.

Construction employment in the state contracted 7.3 percent between the first quarter of 2001 and the first quarter of 2002. During that period, market vacancy rates for apartments, offices and industrial buildings soared and the rental rates slumped. Many
commercial building projects in different stages of the development pipeline – including a few already under construction – were put on hold. Public construction activities also dropped, as nearly all levels of government have been struggling with revenue and budget shortfalls. The only bright spot was housing construction, but that was overwhelmed by the weaknesses in other segments of the construction industry.

Along with the general economy, TCU employment in the state started declining in the first quarter of 2001. The difficulties facing the air transportation sector were exacerbated by the September 11th attack. In the mean time, substantial job cuts took place in the telecommunication industry, where profits and investment collapsed. Total TCU jobs in the state dropped 6.2 percent over the year.

**Service and trade employment declined.** Wholesale and retail employment suffered three consecutive quarterly losses, for a total of 19,000 jobs, before stabilizing in the first quarter of 2002. Service sectors lost 20,000 jobs over the year. Reductions in trade and services jobs have not occurred since the 1980-82 recession. Businesses services, a growth engine in the 1990s, saw its employment slide 13.3 percent.

**FIRE (finance, insurance, and real estate) is the only private industry that continued to grow during this recession.** The industry benefited from lower interest/mortgage rates, the flourishing housing market, and home refinancing. Employment growth even accelerated to 3.0 percent in 2001, from a mediocre 0.9 percent rate in the previous year.

**Real per capita income dipped in 2001.** Between 1997 and 1999, real per capita income in the state – which roughly reflects productivity growth and gains in “standard of living” – grew at a robust annual rate of 4.8 percent, much higher than the national average of 3.5 percent. A major contributor was the software industry, in which employees’ exercise of stock options took advantage of the booming stock market. In 1999, wages for all jobs in the state averaged $35,510. The average was substantially lower at $31,360 when software wages are excluded. Real per capita income growth in the state has been dropping since the first quarter of 2000, due to the stock market declines and the weakening labor market.

Total personal income is composed of labor earnings, DIR (dividends, interest, and rent), and transfer payments (retirement, medical, and income maintenance payments, etc.). Generally, labor-related earnings are the main
contributor to personal income growth. But as the economy plummeted, other income sources became more important. In 1998 and 1999, earning gains drove income growth. In 2000, growth of DIR and transfer payments overrode the earnings increase; and in 2001, transfer payments, which surged 7.1 percent, was the only income component that grew during that year. By the end of 2001, earnings, DIR, and transfer payments represented 69.7, 17.7 and 12.7 percent of total personal income, respectively; in comparison, the corresponding shares were 70.9, 17.5, and 11.5 percent, respectively, in the fourth quarter of 1999.

The “two Washingtons” reversed fortune. In the last 15 years, the name “two Washingtons” usually referred to the contrast between economic growth and prosperity in the Puget Sound metropolitan counties and the depressed conditions in the rest of the state. However, relative economic performance reversed during the recession. Unemployment rates in King, Pierce, and Snohomish counties soared, while total labor force contracted. On the other hand, the “other Washington” except Clark County, saw minor changes or even declines in unemployment rates, and the labor force remained stable after the recession started.

Change in Unemployment Rate, March 2001- March 2002

Implications for the Recovery

The 2001 recession is a production-side recession, led by unsustainable business capital investment and equity market bubbles. Consumer spending and the housing market remain relatively healthy so far. This suggests that the coming recovery will be a slow and weak one. Many factors that traditionally lead a recovery, such as a rebound in housing, growing sales of consumer durable goods, and lower interest rates were not significantly affected by this recession and thus cannot provide much stimulus needed for a vigorous rebound. The federal government is also unlikely to provide much stimulus to
the economy. The discount and federal funds rates are already at historical lows since the Federal Reserve System repeatedly lowered those rates in the months and years before the recession in an attempt to create a “soft landing” for the economy and avert a recession. It seems unlikely that the Fed will undertake further interest rate cuts given that the discount rate is already at 1.25 percent. There is little likelihood that additional fiscal stimulus is forthcoming from the federal government either. Federal income and estate taxes were cut at the beginning of President Bush’s term, but these are unlikely to boost economic activity now that they are expected. Also, the $5 trillion plus federal surplus has been replaced with modest deficits for the foreseeable future. This makes the possibility of any additional fiscal stimulus from the U.S. Congress and the President appear remote.

Consumer spending may falter in the near future as the stock markets continue to decline. The “wealth effect” of rapidly growing stock prices as well as generous stock options made consumers feel better off which led to more spending. Those two factors are no longer present. Indeed, the bear market may convince many consumers that it is time to be conservative and reduce expenditures. This would add another drag to economic recovery.

The recent dollar declines against major trading partners’ currencies may help U.S. manufacturing industries, but business capital investment holds the key to reinvigorating the economy. Judging by the current low capacity utilization rates and a weak prospect for corporate profits, business investment will grow at a very gradual pace.

Washington’s recovery is not likely to be any stronger than the national recovery. Washington’s economy benefited more than most state’s economies from stock option income and the bull market in hi-tech, software and dot com stocks. Stock option income is significantly lower, especially when compared to the late 1990s.

Also, it is unlikely that the aerospace industry in Washington will rebound significantly in the near future. Even before last September 11 most major air carriers were already in financial difficulty. Air travel has been slow to rebound since then and the financial aid offered by the federal government is unlikely to induce airlines to buy more aircraft.

Consistent with this perspective, the Economic and Revenue Forecast Council predicts about 6 percent per year growth in personal income for Washington in the 2003-05 Biennium, a relatively modest rebound by historic standards.
Washington Non-Agricultural Wage and Salary Employment  
(Seasonally Adjusted)  

(Thousands)  

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TOTAL  
2474.5  2566.6  2628.7  2696.8  2723.5  2652.0  

MANUFACTURING  
Durable Goods  
Aluminum  7.6  7.9  7.1  7.1  5.8  3.9  
Industrial Machinery & Equipment  26.0  27.1  25.0  25.3  25.4  22.0  
Electronic & Other Electric Equip.  16.4  18.2  18.5  19.4  21.3  16.3  
Transportation Equipment  112.1  127.2  122.6  100.3  100.8  92.2  
Aircraft and Parts  98.0  112.1  106.7  84.4  86.7  79.6  
Instruments & Related  14.4  15.1  14.8  14.5  14.6  14.0  
Nondurable Goods  109.4  108.9  107.8  109.0  106.6  99.6  

CONSTRUCTION  
134.3  140.1  149.7  160.7  160.0  148.3  

TRANSP., COMM. & UTIL.  
Transportation  87.4  89.7  91.4  93.2  94.7  88.4  
Communications  28.2  28.9  31.1  34.5  38.0  35.2  
Electric, Gas and Sanitary Services  16.3  15.3  15.4  16.3  16.5  16.4  

WHOLESALE & RETAIL TRADE  
Wholesale Trade  147.3  152.2  154.2  154.3  147.2  140.0  
Retail Trade  452.9  464.1  478.2  493.6  495.3  485.4  

FINANCE, INSURANCE & REAL ESTATE  
Finance  53.9  57.2  60.6  61.5  62.6  64.8  
Insurance  38.7  40.0  41.7  40.9  41.7  43.0  
Real Estate  33.0  34.5  35.1  35.5  34.8  35.4  

SERVICES  
Business Services  139.0  150.6  161.7  181.5  188.1  163.1  
Health Services  176.2  183.3  187.5  190.5  195.8  203.0  

GOVERNMENT  
Federal  67.9  67.6  68.2  67.9  67.5  68.7  
State  130.5  133.1  136.6  139.6  142.0  145.7  
State Education  68.9  71.3  72.6  74.7  76.1  78.6  
Local  254.9  262.2  265.7  271.9  290.4  299.8  
Local Education  135.9  139.5  141.2  144.2  147.6  151.2  

Sources: Economic and Revenue Forecast Council, Employment Security Department.