

Western New York ECONOMIC NEWS

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Previous issues of the *Western New York Economic News* have analyzed personal income data released by the US Department of Commerce for the upstate metropolitan areas of Buffalo-Niagara Falls, Rochester, Syracuse, Binghamton and Albany. Historic comparisons of personal income in the United States to the upstate economies led to a caution about the regional economic disruptions that will be associated with the continuing national economic decline. This issue attempts to identify the impact on Western New York of the national economic contraction that was already in evidence before the events of September 11. The long and short-term economic ramification of the attacks in Washington and New York City are yet to be played out, but the historic impact of economic upheaval on the Western New York economy may lead to an appreciation of the potential impact of these events on the local economy. The full text and supporting documents of the newsletter appear on the Internet under the address <http://www.canisius.edu/wnyeconomicnews>.

The National Economic Outlook

Final data for second quarter 2001 real GDP show the US economy growing at an anemic .3% annual rate. In the quarters between 2000:II - 2001:I, real GDP grew at an annual rate of 5.7%, 1.3%, 1.9% and 1.3%, respectively. There has been a gradual deceleration in national economic activity with the economy being essentially dead in the water during the second quarter of 2001. It seems unavoidable that the tragic events of September 11 will push the economy over the brink causing economic activity to contract during the third and fourth quarters. Several industries have been extremely hard hit following the terrorist attack as a result of a drastic fall in consumer confidence. Among these are the airlines, hotel, and tourism industries, which have all shed a significant number of jobs in the tragedy's aftermath. President Bush and Congress allocated \$5 billion to the ailing airlines as a result. Will this be enough to prevent bankruptcies in this industry? This is not likely to occur without significant improvements in the public's perception of airline safety, and a much higher level of consumer confidence. How long and how severe will the recession be? To answer this question it is informative to examine the duration and severity of recent recessions.

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The National Bureau of Economic Research is responsible for dating business cycles in the United States. In the following table, we show the NBER's dating and the duration of the eight national economic recessions that have occurred since 1950. Duration is measured from the peak to the trough of the business cycle.

Period of Recession	Duration in Months	Percent Decline in Real GDP
July 1953 – May 1954	10	2.7%
August 1957 – April 1958	8	3.0%
April 1960 – February 1961	10	1.6%
December 1969 – November 1970	11	0.6%
November 1973 – March 1975	16	3.0%
January 1980 – July 1980	6	2.2%
July 1981 – November 1982	16	2.4%
July 1990 – March 1991	8	1.5%

Warren Buffet, “the oracle of Omaha” has stated that the recession will be long in duration and severe in magnitude. Had the September 11 tragedy not occurred, we feel that it still would have been likely that a mild recession would have ensued during the remainder of 2001. There are two factors that lead us to this conclusion. The first is the meltdown in the equity markets prior to September 11. The ensuing negative wealth effect and has led to an erosion of consumer expenditures. This is important since consumers have kept the economy afloat over the past year. Secondly, gross private domestic investment has been contracting since the third quarter of 2000. Since consumption and investment account for more than 80% of GDP, a recession seemed likely before September 11. The uncertainty created by the events that have taken place since September 11, have further eroded consumer confidence, as was evidenced by the largest single monthly decline in retail sales on record in September. Combining the shock to aggregate demand that occurred on September 11 with an already shaky economy causes us to worry that the impending recession will be moderately severe. The length of the recession is harder to predict and depends upon how long it will take for business to return to normal. Any further shocks to the economy related to terrorist activity will have increased negative impacts on the potential for economic recovery.

The September unemployment rate has remained at the August level of 4.9%. This rate is a full percent above the unemployment rate of 3.9% experienced in September 2000. The unemployment rate has been under 4.5% since April 1998 and under 5% since July 1997. The economy shed 199,000 jobs in September. This job loss was larger than expected by most analysts and signals a significant slowing in the economy. The Consumer Price Index increased at a 2.7% rate from September 2000 to September 2001, moderating from its more rapid 3.7% pace over the period March 1999 to March 2000 <http://www.bls.gov>.

Hopefully, expansionary fiscal and monetary policy will offset the negative shock to aggregate demand that resulted from the September 11 disaster. The President and Congress are currently negotiating the size and timing of the stimulatory fiscal package. An injection through something like a reduction in the payroll tax will have a quicker impact than an investment tax credit, reduction in capital gains tax, or accelerated capital depreciation schedules of the same magnitude. Whatever the expansionary package, there will be some lag before its effects are fully felt.

Financial markets were closed for a period after September 11 given the proximity of the NYSE and other market infrastructure to the world trade center. Once opened, the equity markets dropped precipitously as investors fled out of stocks and into bonds and cash. The Fed did its job of maintaining liquidity by pumping massive amounts of reserves into the banking system. The Fed reduced its federal funds target from 3.5% to 2.5% in two separate moves of 50 basis points each on September 17 and October 2. Three-month Treasury bill yield dropped by more than 110 basis points from August while the ten-year Treasury bond yield dropped by 20 basis points, resulting in a significantly steeper yield curve. The equity markets have recovered their losses in the month following September 11. Clearly the Fed's quick action combined with anticipation of fiscal stimulus could be credited with returning the market to its pre September 11 level.

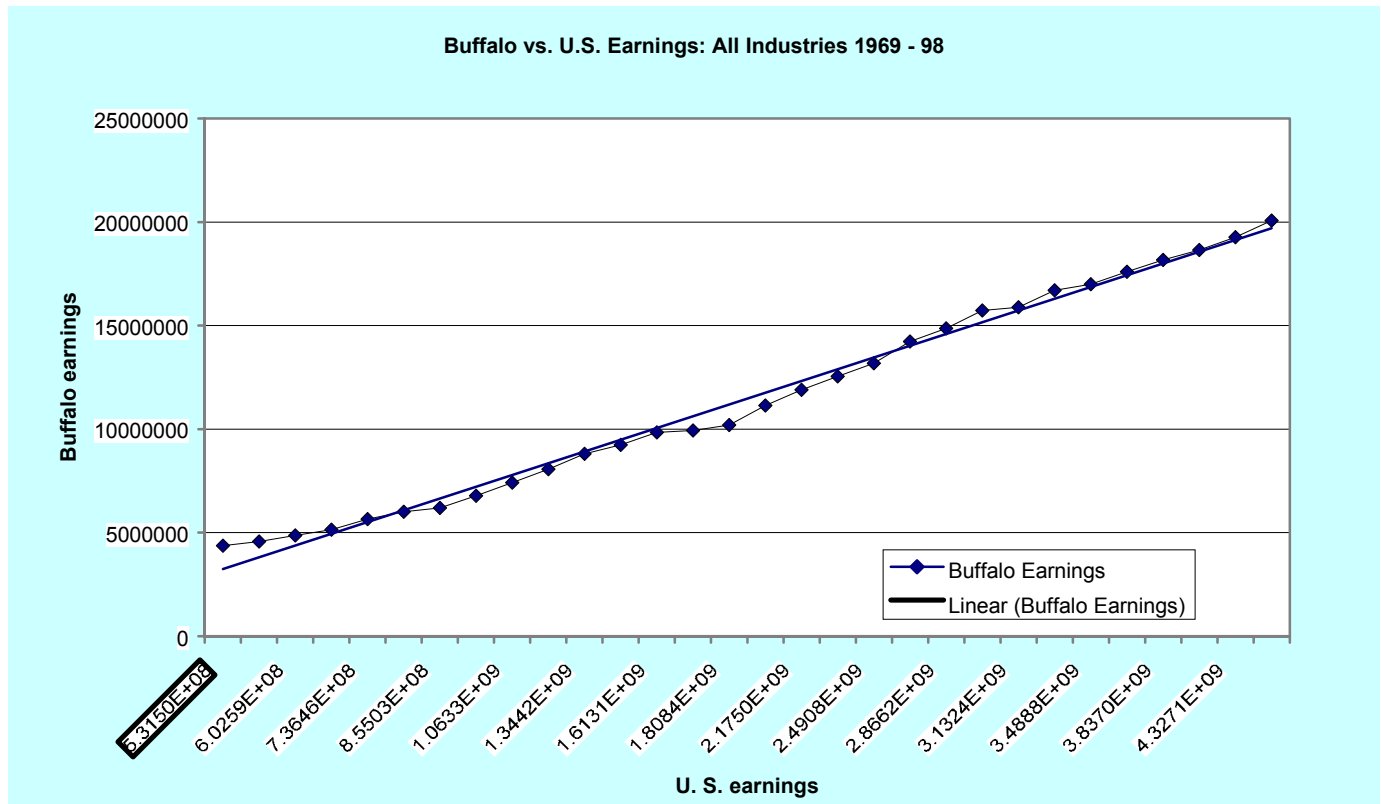
The Economic Outlook for the Buffalo Region

The historic relationship between economic downturns in Western New York and national contractions, as measured by The Conference Board's *Business Cycle Indicators*, was discussed in a recent issue of this newsletter Volume 4 No. 1. The growth rate of Buffalo area real personal income and US real personal income has been strongly correlated over the period 1982-99 (Pearson correlation coefficient = .91). Similarly, and not surprisingly, the relationship between earnings in the Buffalo metropolitan area and earnings in the United States are also closely related, as shown in Figure 1. Since 1969, each 1% growth in total earnings in the United States has been associated with a .89% change in total earnings from all industries in the local economy. The importance of this historic relationship is two-fold: 1) the Buffalo region continues to be closely tied to the U. S. economy; and 2) information about the changes in the national economy is known long before regional data become available and can be of value in forecasting changes in regional economy. Currently, the U.S. economy is most likely in a period of economic contraction. It will have an effect on the local economy. We will only know after the fact if the relationship will differ from the strong long-term linkage that has dominated the post World War II period.

As discussed in Volume 4 No. 1 of this newsletter, slowdowns in the growth of national income have historically been felt earlier and more intensely in the Western New York economy than on the national level. If past patterns hold, then during the current economic contraction, the Buffalo and Western New York economy will contract at an even greater rate than the nation as a whole, and recover less fully and at a slower rate

than the national economy. Typically, declining regions suffer when the nation enters a recession and firms close older plants that had been retained to provide extra capacity

Figure 1. THE RELATIONSHIP BETWEEN EARNINGS: U. S. AND BUFFALO MSA



during periods of economic expansion. A second period of contraction for an older regional economy occurs when firms decide to open new plants in growing regions during periods of economic recovery. This could help explain the Buffalo region's history of leading and lagging behavior around recessions.

The effects of recent national recessions on the earnings of workers in important local industries are presented in Tables 2 and 3. Local industries are seen as potentially sensitive to national business cycle activity, if they are more heavily concentrated than normal in the local metropolitan area. If an industry is a higher proportion of local earnings than the average for all metropolitan areas in the United States, it suggests that the activity is not being produced for the local population. If residents across all regions have similar tastes for the consumption of goods and services, then high concentrations of economic activity might indicate exportation of output from the region, as is true for traditional manufacturing sectors. A region can also specialize in providing

services to a national or international market, hosting finance, insurance or corporate headquarters functions. In a similar fashion, people may travel to benefit from a service provided in a region supporting a hospitality or tourism industry. Finally, federal or state governmental centers for activities like the military, administration, education or health care create higher than normal concentrations of regional economic activity. Table 2a lists the two-digit (SIC) industries in the Buffalo metropolitan area with location quotients (LQ's) greater than 1.2, which means the proportion of total local earnings in these industries are at least 20% higher than the national average. Table 2a shows the percentage change in earnings by industry over the course of the four recessions that have occurred in the Buffalo metropolitan area since 1969. The double dip national recessions between January 1980 and November 1982 were one long recession for the Buffalo region, and are shown as such.

TABLE 2a. CHANGE IN EARNINGS FOR LEADING INDUSTRIES IN THE BUFFALO MSA

Buffalo MSA Selected industries 1998 Buffalo LQ's >120%:	nominal earnings as a % of pre-recession levels from peak to trough 1969 - 71	nominal earnings as a % of pre-recession levels from peak to trough 1973 - 75	nominal earnings as a % of pre-recession levels from peak to trough 1979 - 83	nominal earnings as a % of pre-recession levels from peak to trough 1990 - 93
Miscellaneous manufacturing industries	147%	105%	138%	125%
Fabricated metal products	109%	106%	97%	106%
Rubber and misc. plastics products	133%	95%	119%	101%
Stone, clay, and glass products	n.a.	n.a.	n.a.	107%
Primary metal industries	80%	100%	51%	94%
Paper and allied products	93%	95%	95%	113%
Food and kindred products	103%	107%	129%	118%
Chemicals and allied products	94%	106%	115%	88%
Apparel and other textile products	101%	112%	120%	119%
Government and government enterprises	126%	119%	135%	109%

Industry patterns are presented for each recession. The percentages represent the change in nominal total earnings by industry over the period of economic decline. While these numbers are affected by the movement of workers into and out of the region, values less than 100% indicate reductions of earnings over the contraction. The decline in the nominal earnings levels in primary metals and chemicals over the Buffalo recession of 1990 to 1993 is a possible indicator of things to come. A value less than

100% in this table means that the decline in nominal earnings occurred in spite of the increase in wage rates. An average annual rate of inflation of 3.3% over the period 1990 to 1993 would imply substantial reductions in employment in those industries that had lower nominal earnings at the end of the recessionary period.

TABLE 2b. NATIONAL CHANGE IN EARNINGS FOR BUFFALO'S LEADING INDUSTRIES

All U. S. MSA s	nominal earnings as a % of pre-recession levels from peak to trough 1969 - 71	nominal earnings as a % of pre-recession levels from peak to trough 1973 - 75	nominal earnings as a % of pre-recession levels from peak to trough 1979 - 83	nominal earnings as a % of pre-recession levels from peak to trough 1990 - 93
Selected industries 1998 Buffalo LQ's >120% :				
Miscellaneous manufacturing industries	124%	123%	141%	115%
Fabricated metal products	101%	100%	106%	108%
Rubber and misc. plastics products	110%	121%	133%	116%
Stone, clay, and glass products	n.a.	n.a.	n.a.	112%
Primary metal industries	107%	110%	128%	111%
Paper and allied products	98%	108%	84%	107%
Food and kindred products	110%	105%	108%	103%
Chemicals and allied products	105%	103%	122%	116%
Apparel and other textile products	103%	118%	107%	104%
Government and government enterprises	105%	107%	126%	109%

Table 2b enables us to compare the Buffalo metropolitan area to the rest of the United States. For many industry groups the impacts of recent recessions have been less severe in other regions than in the Buffalo metropolitan area. The absence of most of the values below 100% suggests that earnings have been redistributed from Buffalo to other metropolitan areas within the United States during the course of recessions since 1969. If the historical pattern holds, the Buffalo area will suffer through plant closings, bankruptcies, and firm relocations during and after the current economic dislocation.

Table 3 highlights those industries that have fared the worst over the last four recessions when compared to what happened to those firms nationally over the same periods. Values less than 100% indicate those Buffalo industries that had lower percentages of their pre-recession levels than the national average for the same industries. Thus, in the 1990 to 1993 recession miscellaneous manufacturing (including autos), paper products, food, apparel, and government became more highly

concentrated in Buffalo, implying a relative redistribution to the region. Fabricated and primary metal, rubber, plastics, stone et al, and chemical products recovered less fully in Buffalo than in the rest of the country after 1990 -93, implying a redistribution out of the region. The nature of the current recession may not follow the patterns of the past, but it is possible that it continues.

TABLE 3. CHANGE IN EARNINGS IN SELECTED INDUSTRIALS IN THE BUFFALO MSA AS A PERCENT OF THE CHANGE FOR ALL U.S. METROPOLITAN AREAS

Selected industries 1998 Buffalo - LQ's >120%	change in earnings in Buffalo as a % of U. S. change peak to trough 1969 - 71	change in earnings in Buffalo as a % of U. S. change peak to trough 1973 - 1975	change in earnings in Buffalo as a % of U. S. change peak to trough 1979 - 1983	change in earnings in Buffalo as a % of U. S. change peak to trough 1990 - 93
Buffalo as % of change in U. S. earnings:				
Miscellaneous manufacturing industries	119%	85%	98%	109%
Fabricated metal products	108%	106%	91%	99%
Rubber and misc. plastics products	121%	78%	89%	86%
Stone, clay, and glass products	n.a.	n.a.	n.a.	96%
Primary metal industries	74%	91%	40%	85%
Paper and allied products	94%	88%	114%	106%
Food and kindred products	93%	102%	120%	115%
Chemicals and allied products	90%	103%	94%	76%
Apparel and other textile products	98%	95%	112%	114%
Government and government enterprises	120%	111%	107%	101%

CONCLUSIONS:

The general concern about the high probability that the nation is currently in an economic recession should cause the participants in the Western New York regional economy to take notice. Historically the industrial mix has had widely varying responses to declines in the national economy. The chemical, plastic and metal industries have been vulnerable during recent recessions. Miscellaneous manufacturing (basically auto related) may act as it did in 1990, recovering fully from the recession; or it might collapse as it did between 1973 and 1983. A repeat of the 1973–1983 oil price shock will probably lead to a similar level of local distress.

NATIONAL, STATE & LOCAL BUSINESS INDICATORS

	% change				
NATIONAL INDICATORS	2000:II	2000:IV	2001:I	2001:II	00:II - 01:II
Real GDP (billions of chained 1996\$) (1)(a)	9,229.4	9,303.9	9,334.5	9,341.7	1.2
US Personal Income (billions of \$)	8,271.0	8,519.6	8,429.7	8,714.6	5.4
	Sep-00	Jul-01	Aug-01	Sep-01	Sep-00 - Sep-01
Leading Indicators Index (1996=100) (1)(a)*	109.8	109.6	109.7	109.2	-.55
Consumer Price Index (1982-84=100) (2)	173.7	177.5	177.5	178.3	2.65
Exchange Rate Canadian/US \$ (3) (b)	66.6	65.2	64.5	63.3	-4.85
10 Year Treasury Bond Yield (%) (3) (b)	5.8	5.0	4.8	4.6	-1.20
3 Month Treasury Bill Yield (%) (3) (b)	6.0	3.5	3.4	2.3	-3.71
S&P 500 Stock Index (3) (b)	1436.5	1211.2	1133.6	1040.9	-27.54
Dow-Jones Industrial Average (3) (b)	10650.9	10522.8	9949.8	8847.6	-16.93
LABOR MARKET TRENDS (2)					
Nonag Civilian Employment					
US (1000's) (a)	132,046	132,499	132,365	132,166	.09
NY State (1000's) (a)	8,664.9	8,717.0	8,703.7	8,705.0	0.46
WNY (1000's)	559.4	554.6	554.0	557.6	-0.32
Unemployment Rate (%)					
US (a)	3.9	4.5	4.9	4.9	1.00
NY State (a)	4.5	4.4	4.6	4.8	0.30
WNY (c)	4.9	5.6	5.0		0.20
Ave. Wkly. Hours in Mfg. WNY	43.1	42.1	42.2	42.5	-1.39
Ave. Wkly. Earnings in Mfg. WNY (\$)	769.8	768.8	780.3	786.7	2.20
Ave. Wkly Hours in Mfg. US	41.3	40.8	40.7	40.5	-1.94
Ave. Wkly. Earnings in Mfg. US (\$)	606.5	598.1	607.5	613.5	1.15
WNY EMPLOYMENT BY SECTOR (1000's) (2)					
Construction and Mining	23.1	23.7	23.6	23.1	0.00
Manufacturing	86.1	84.0	84.0	83.3	-3.25
Transportation and Public Utilities	27.2	27.1	27.1	27.6	1.47
Wholesale and Retail Trade	130.1	129.8	129.8	130.1	0.00
Finance, Insurance and Real Estate	30.4	30.8	30.6	30.6	0.66
Services	174.1	172.6	173.1	174.6	0.29
Government	88.4	86.6	85.8	88.3	-0.11

(1) US Dept. of Commerce

(2) US Dept. of Labor

(3) Wall Street Journal

(a) Seasonally Adjusted

(b) End of month data

(c) Aug-00 – Aug-01 change