STEVENS POINT AREA
2007
ECONOMIC INDICATORS

1st Quarter 2007
presented
May 11, 2007

Presented by:
Central Wisconsin Economic Research Bureau
Randy F. Cray, Ph.D., Professor of Economics and Director of the CWERB
Scott Wallace, Ph.D., Associate Professor of Economics and Research Associate of the CWERB
Alexander W. Richter, Administrative Assistant
Patrick J. Rathsack, Administrative Assistant

Special Report: Unsteady Ground: The Rise of Economic Insecurity in America
H. Scott Wallace, Ph.D., Associate Professor of Economics
Randy F. Cray, Ph.D., Professor of Economics
Alexander W. Richter, Research Assistant
Patrick J. Rathsack, Research Assistant

TABLE OF CONTENTS

1947
AUBER
Association for University Business and Economic Research

Presentations and research activities of the Central Wisconsin Economic Research Bureau in Stevens Point are made possible by a generous grant from M&I Marshall & Ilsley Bank of Stevens Point. We wish to thank them for their continuing support.

CWERB - Division of Business and Economics
University of Wisconsin-Stevens Point
Stevens Point, WI 54481
715/346-3774 715/346-2537
www.uwsp.edu/business/CWERB

National and Regional Outlook

This is the first economic indicators report for the year 2007. Therefore, it seems appropriate at this time that we would want to examine the future prospects of the economy and how it may perform during the year. As a basis for my discussion, I will employ the results of a survey conducted by the Federal Reserve Bank of Philadelphia. The survey represents the consensus view of 49 professional forecasters.

The consensus view is that nominal GDP is expected to grow by about 5 percent during 2007 or expand to a mind staggering $13.9 trillion. When the GDP estimate is adjusted for inflation, our national output, or real GDP, is expected to grow by a respectable 2.8 percent and reach $11.7 trillion. Economists generally favor using the real GDP figure as it more accurately reflects the actual change in the well being of the country. Thus, despite the weak 1.3 percent annualized growth in first quarter GDP, the consensus view is that there will be no recession in 2007.

In greater detail, real expenditures on the part of households should reach $8.4 trillion or grow by a very respectable 3.2 percent over the course of the year. Relatedly, inflation adjusted residential construction is forecasted to contract by 10.3 percent, falling from $582.5 billion in 2006 to $522.4 billion in 2007. The consensus forecast clearly reflects the woes facing the domestic housing market.

A much brighter forecast is being made for nonresidential business investment. Business investment in factories, plant, and equipment is expected to grow by 5.6 percent in real terms over the year and will reach $1.38 trillion in 2007 compared to $1.31 trillion in 2006, a gain of about $70 billion. Linked to business investment is the change in finished goods inventory. Inventories are projected to decline from $46.4 billion to $32.9 billion or by 13.5 percent during 2007. In conclusion the consensus forecast is that business firms will once again pick up their pace in investments, giving the economy a healthy injection of spending. Federal and state and local government spending will increase by approximately 1.9 and 2.6 percent respectively, thus adding a modest shot in the arm to expenditures of goods and services. In real terms, the government sector of the economy represents about $2.05 trillion spent on final goods and services, or another way of looking at it, consumes about 17.4 percent of the nation's output of goods and services.

Due to the falling dollar and strong economic growth elsewhere in the world, forecasters project that net exports will improve from negative $617.8 billion to negative $591.0 billion in 2007, a net increase of nearly $27 billion. In other words the gap between exports and imports should contract by about 4.2 percent over the year.

Other important macroeconomic variables were also forecasted for year 2007. Corporate profits will grow by approximately 8.1 percent, a very respectable amount but lower than the double digit increases that we have become accustomed to over the past number of years. The monthly average unemployment rate is forecasted to rise slightly from 4.6 percent in 2006 to 4.7 percent in 2007. In addition, nonfarm payrolls will grow

by 1.2 percent during the year, rising from $135.4 million to $137.0 million. Lastly, interest rates are forecasted to rise slightly. For example, the three month treasury bill rate is expected to rise by .25 points to 4.98 percent by year end; and AAA corporate bond yields are expected to climb slightly from 5.59 percent to about 5.64 percent by year end.

Even though these forecasted amounts come from a blue chip panel of experts in the field of economic forecasting, the estimates are subject to substantial risks. The following threats to the forecast are well known and include the following: The subprime lending mess and the associated rise in bankruptcies; relatedly, the bursting of the housing bubble; energy prices and political uncertainty in the Middle East; the rising tide of U.S. protectionism; the fear that an emerging economy like China might overheat and destabilize the world's economy; and, last but not least, a Federal Reserve System so intent and focused on fighting inflation that it fails to provide enough liquidity to the economy and thus causes a recession. These and other unknown threats could have a great influence upon the accuracy of the 2007 forecast.

TABLE 1

NATIONAL ECONOMIC STATISTICS

	2006 First Quarter	2007 First Quarter	Percent Change
Nominal Gross Domestic Product (Billions)	$13,008.4	$13,632.6	+4.8
Real Gross Domestic Product (Billions of 2000 $)	$11,316.4	$11,549.1	+2.1
Industrial Production (2002 = 100)	111.2	112.5	+1.2
Three Month U.S. Treasury Bill Rate	4.50%	4.93%	+9.4
Consumer Price Index (1982-84 = 100)	199.8	205.4	+2.8

Central Wisconsin

The economic results for central Wisconsin were quite positive for first quarter 2007. Unemployment rates throughout the region were generally lower than a year ago. Total employment figures from the household survey suggest payrolls grew by 5.8 percent. Total industrial employment figures from the business firm survey suggest payrolls grew by 4.3 percent. Lastly, regional business executives were fairly upbeat about the prospects for their industry.

Unemployment rates, when compared to last year, were lower throughout the central Wisconsin region. Portage, Marathon, and Wood county unemployment rates fell to 5.4 percent, 4.6 percent, and 3.0 percent respectively in March 2007. Meanwhile, the labor force weighted unemployment rate for central Wisconsin contracted from 5.8 percent to 5.5 percent in our year over comparison. Unfortunately, the Wisconsin unemployment rate rose from 5.5 percent to 5.6 percent. During the same period the U.S. rate plunged from 4.8 percent to 4.5 percent.

More good news comes from the total employment figures listed in Table 3. Portage, Marathon, and Wood county employment grew by 5.8, 1.6, and 3.4 percent respectively over the past twelve months. Very importantly, central Wisconsin total employment expanded from 145.9 thousand to 150.5 thousand, or by 3.1 percent, over the same period. However, Wisconsin payrolls expanded by a scant 0.6 percent over the year and the nation added 1.8 percent to its' payrolls.

Industrial sector employment is displayed in Table 4. Nonfarm payroll estimates are generated from a sample of business firms. The estimate for total nonfarm employment suggests that payrolls in the three county area expanded by a very healthy 4.3 percent since last year. The only sectors not experiencing an increase in employment were manufacturing, down by just 0.4 percent, and trade, where payroll levels remained unchanged.

Sales tax distributions show that Portage County's collections were virtually unchanged from a year ago, rising by 0.1 percent. During the same period, Marathon County's sales tax collections fell by about 4.0 percent. Only Wood County's sales tax collections were above last year's total, rising by 4.3 percent. Thus, in the three-county area activity levels varied greatly and were somewhat lower in total than in the previous year.

The CWERB survey of regional business executives is presented in Table 6. This group of executive believes that national economic conditions have changed little over the past several months and that local economic conditions have improved modestly. When asked to forecast future conditions they felt that there will be a slight degree of improvement in national and local economic conditions. The greater amount of optimism expressed was reserved for the improvement in their particular industry. In other words, the survey groups offered a fairly optimistic assessment of their firms' economic prospects.

Figures 2 through 6, in this section of the report, present trends in the Wisconsin employment level, the unemployment level, the unemployment rate, the labor force, the average weekly manufacturing wage, and the employment trend in educational and health services from 2003 to first quarter 2007. The figures show how these important variables have changed in Wisconsin and give the reader a better appreciation of the recent economic history of the state.

TABLE 2

UNEMPLOYMENT IN CENTRAL WISCONSIN

	Unemployment Rate March 2006	Unemployment Rate March 2007	Percent Change
Portage County	6.0%	5.4%	-10.3
City of Stevens Point	7.3%	6.4%	-12.3
Marathon County	5.3%	5.0%	-4.6
Wood County	6.5%	6.3%	-3.0
Central Wisconsin	5.8%	5.5%	-5.2
Wisconsin	5.5%	5.6%	+1.1
United States	4.8%	4.5%	-6.1

TABLE 3

EMPLOYMENT IN CENTRAL WISCONSIN

	Total Employment March 2006 (Thousands)	Total Employment March 2007 (Thousands)	Percent Change
Portage County	37.4	39.5	+5.8
City of Stevens Point	13.3	13.7	+3.0
Marathon County	70.9	72.1	+1.6
Wood County	37.6	38.9	+3.4
Central Wisconsin	145.9	150.5	+3.1
Wisconsin	2,883.9	2,900.6	+0.6
United States	142,772	145,323	+1.8

* Percent change figures reflect data before rounding

TABLE 4

CENTRAL WISCONSIN EMPLOYMENT CHANGE BY SECTOR

	Employment March 2006 (Thousands)	Employment March 2007 (Thousands)	Percent Change
Total Nonfarm	146.3	152.6	+4.3
Total Private	126.4	131.1	+3.7
Construction & Natural Resources	5.0	5.4	+8.0
Manufacturing	28.4	28.3	-0.4
Trade	25.1	25.1	0
Transportation & Utilities	7.8	8.0	+2.6
Financial Activities	10.3	11.6	+12.6
Education & Health Services	21.3	22.9	+7.5
Leisure & Hospitality	11.1	11.6	+4.5
Information & Business Services	17.4	18.1	+4.0
Total Government	19.9	21.5	+8.0

TABLE 5

COUNTY SALES TAX DISTRIBUTION

	Sales Tax 2006 First Quarter (Thousands)	Sales Tax 2007 First Quarter (Thousands)	Percent Change
Portage County	$1,199.7	$1,201.2	+0.1
Marathon County	$2,713.6	$2,597.9	-4.3
Wood County	$1,069.5	$1,116.0	+4.3

* Percent change figures reflect data before rounding

TABLE 6

BUSINESS CONFIDENCE IN CENTRAL WISCONSIN

	Index Value	
	December 2006	**March 2007**
Recent Change in National Economic Conditions	54	50
Recent Change in Local Economic Conditions	54	55
Expected Change in National Economic Conditions	55	55
Expected Change in Local Economic Conditions	57	58
Expected Change in Industry Conditions	55	59

100 = Substantially Better
50 = Same
0 = Substantially Worse

FIGURE 1

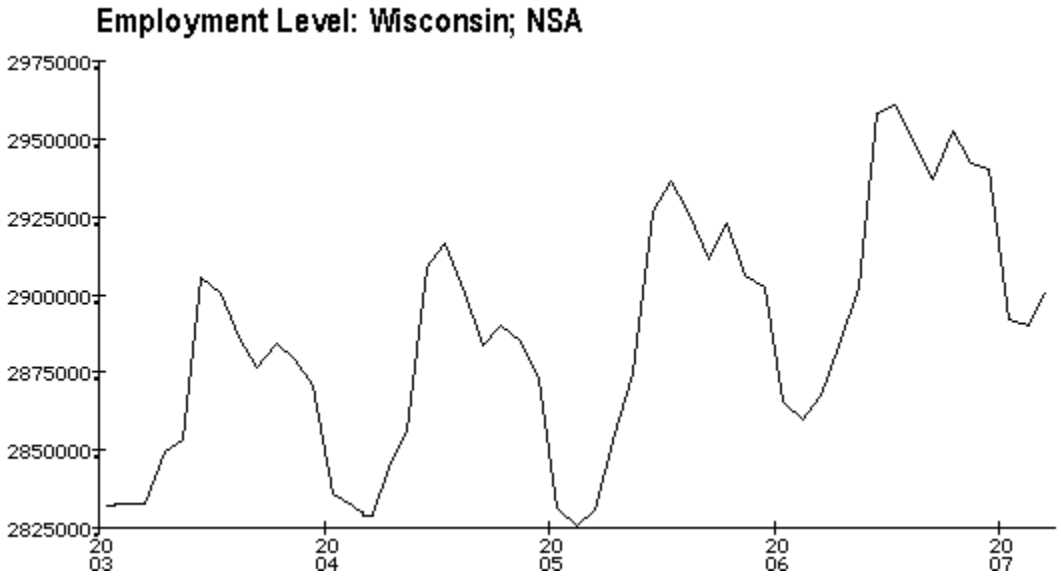

Employment Level: Wisconsin; NSA
2975000
2950000
2925000
2900000
2875000
2850000
2825000
2003
2004
2005
2006
2007

FIGURE 2

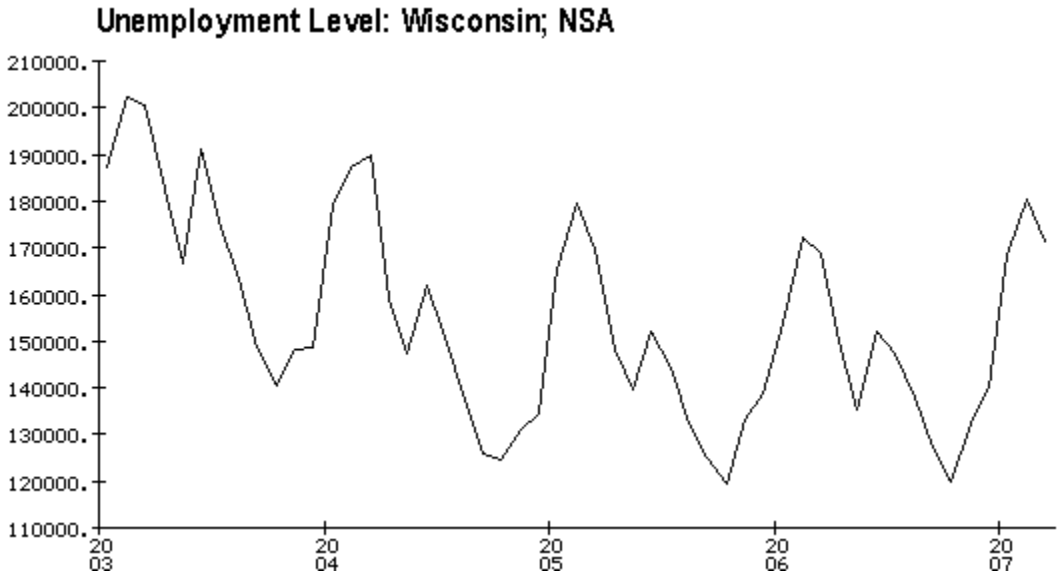

Unemployment Level: Wisconsin; NSA
210000.
200000.
190000.
180000.
170000.
160000.
150000.
140000.
130000.
120000.
110000.
2003
2004
2005
2006
2007

FIGURE 3

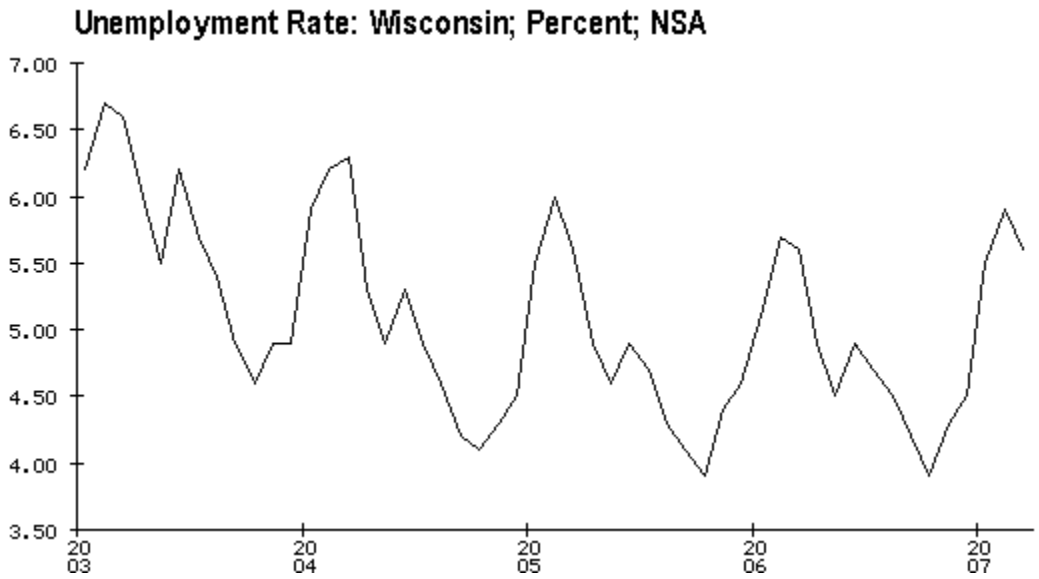

Unemployment Rate: Wisconsin; Percent; NSA
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
2003
2004
2005
2006
2007

FIGURE 4

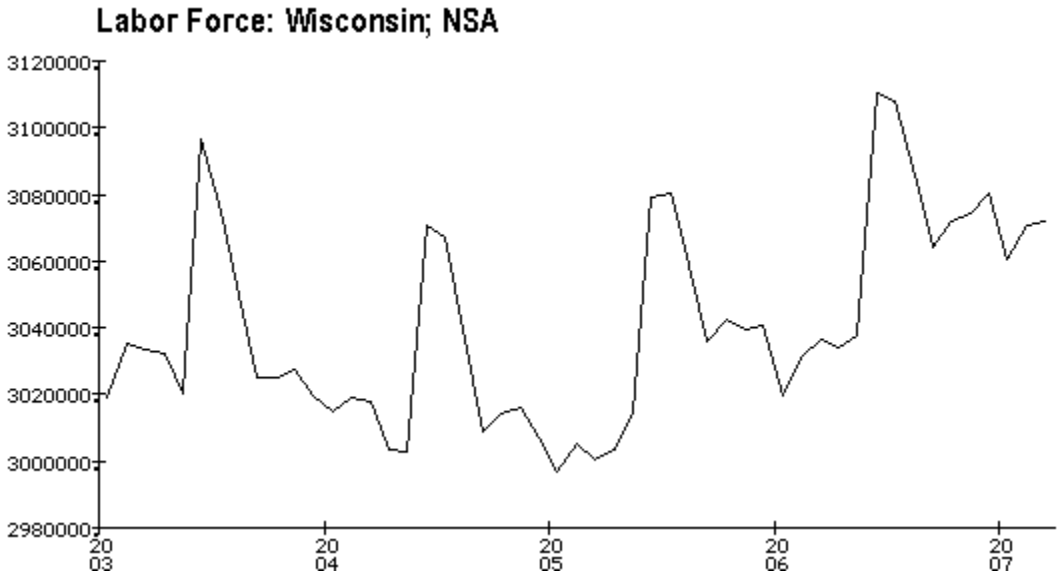

Labor Force: Wisconsin; NSA
3120000
3100000
3080000
3060000
3040000
3020000
3000000
2980000
2003
2004
2005
2006
2007

FIGURE 5

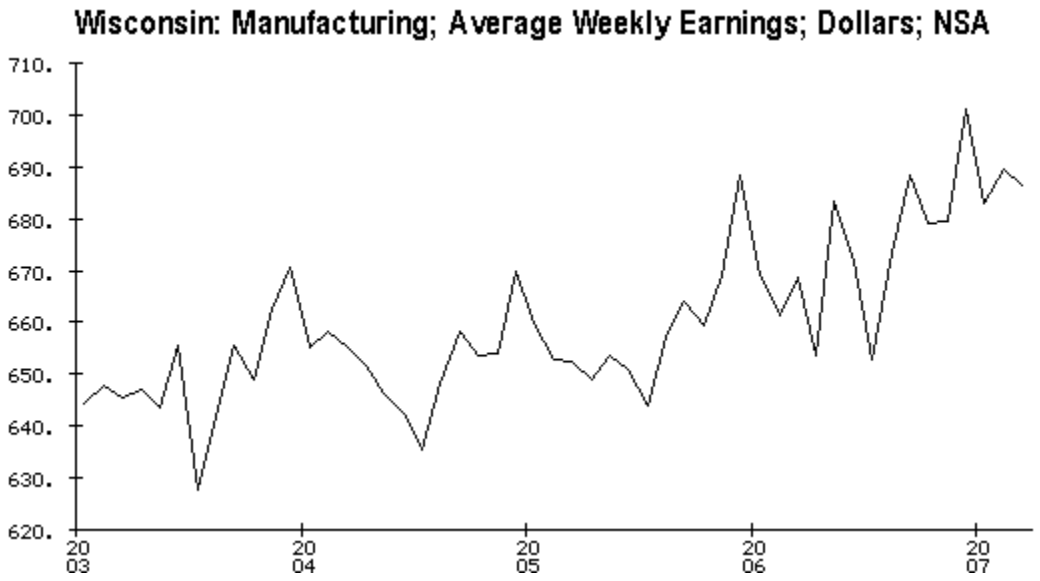
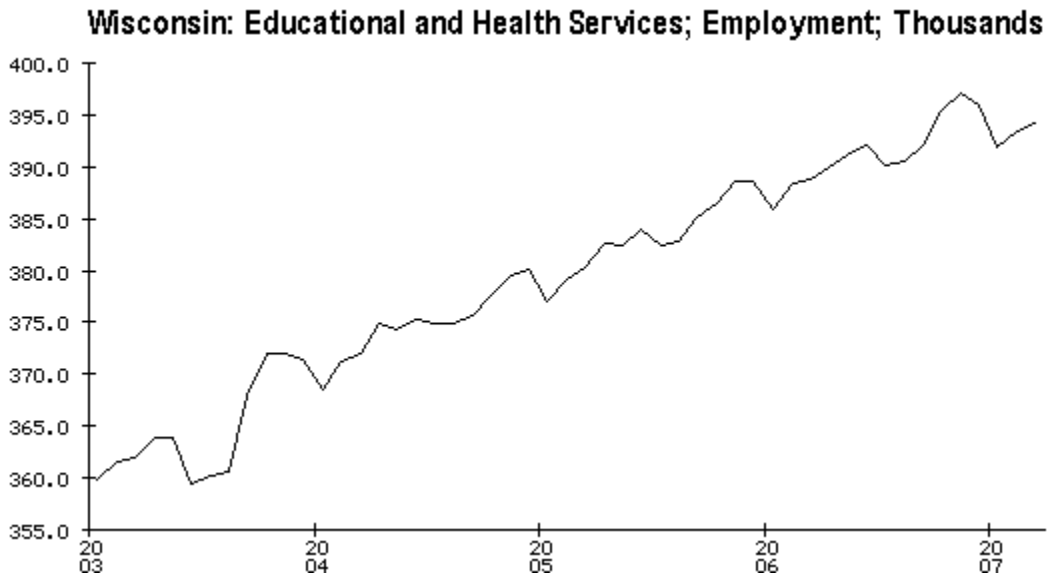

Wisconsin: Manufacturing; Average Weekly Earnings; Dollars; NSA
710.
700.
690.
680.
670.
660.
650.
640.
630.
620.
2003
2004
2005
2006
2007

FIGURE 6


Wisconsin: Educational and Health Services; Employment; Thousands
400.0
395.0
390.0
385.0
380.0
375.0
370.0
365.0
360.0
355.0
2003
2004
2005
2006
2007

The Greater Stevens Point-Plover Area

The results for first quarter 2007 are as follows. Nonfarm employment numbers for the county were much improved over last year's figures. Area merchants were slightly pessimistic about first quarter store and traffic levels. However, they were much more upbeat about future sales and store traffic. Help wanted advertising in the area was about 11 percent higher than a year ago. New public assistance claims have leveled out in the area, but the total caseload number remains well above last year's figures. Further, unemployment claims, both new and total, have stabilized in the area and are virtually unchanged from a year ago. Like at the national level, residential construction of new homes had fallen from last year's pace. However, residential alteration activity is well above last year's totals. Finally, nonresidential construction has been and still remains a solid component of this area's economic growth.

The nonfarm employment estimates presented in Table 9 are generated from a survey of business firms. Total nonfarm employment is estimated to have increased by a surprising 7.6 percent from last year. The only sectors who did not expand were manufacturing and trade. Even though manufacturing employment was unchanged, this too represents good news for the area. For a number of periods in a row, manufacturing experienced substantial declines in employment. Thus, it is good news to see the employment level in this sector stabilize. All the other sectors in Table 9 experienced healthy gains.

Retailer confidence in the Stevens Point area was subdued in first quarter. When the survey group of merchants was asked about total sales and store traffic compared to the previous year they felt that both were modestly below last year's pace. The survey group was much more optimistic about future sales and traffic. They indicated that matters would improve over last year's totals. Lastly, the survey group was generally more upbeat about the future than they were in December 2006.

The help wanted advertising index for the Stevens Point-Plover area shows an increase of 62 to 69 or an 11 percent expansion in job vacancies. Even though the help wanted index only captures a small portion of the available job openings in the area, it is nonetheless a very good barometer of the future direction of the area's unemployment rate.

Table 10 and 11 give us insight into the level of family financial distress in our county. New public assistance applications, on a monthly average basis, were, for all intents and purposes, unchanged from a year ago. Meanwhile, the total caseload figure rose by 16.8 percent over the past twelve months. This figure indicates that the last twelve months have been especially difficult for some area residents. New unemployment claims on a weekly average basis in Portage County contracted slightly from 229 to 223 or by 2.8 percent. In addition, total unemployment claims rose by 0.9 percent over the year. Thus, the unemployment claims data suggest a degree of stability on the unemployment front.

Residential construction figures are given in Table 12. The number of new permits issued fell by a substantial 42.4 percent, and the estimated value of this activity fell from $6.8 million to $5.0 million over the past year. This represents a substantial decline of 26.0 percent. Better news comes from alteration activity figures. The number of permits issued rose from 92 to 125 or by 35.9 percent since first quarter 2006. Of additional interest, the value of the alterations rose sharply from $776 thousand to $1.8 million.

Table 13 gives us nonresidential construction figures without percentage changes. This is due to the fact that this type of activity tends to be dominated by large projects. Thus, the percentages can change dramatically from period to period. The number of permits issued was 9 and they had an estimated value of $9.2 million in first quarter 2007. During the same time frame the number of business alteration permits was 44 and was estimated to have a value of $2.6 million.

Figures 7 to 10 pertaining to Portage County's employment level, unemployment level, unemployment rate, and labor force are presented to depict how these indicators have trended in the area from 2003 to first quarter 2007. The reader will gain a greater appreciation of the overall economic trends for Portage County.

TABLE 7

PORTAGE COUNTY EMPLOYMENT CHANGE BY SECTOR

	Employment March 2006 (Thousands)	Employment March 2007 (Thousands)	Percent Change
Total Nonfarm	33.0	35.5	+7.6
Total Private	27.5	29.0	+5.5
Construction & Natural Resources	0.9	1.0	+11.1
Manufacturing	4.4	4.4	0
Trade	5.8	5.8	0
Transportation & Utilities	1.8	1.6	-11.1
Financial Activities	4.0	4.6	+15.0
Education & Health Services	3.3	3.4	+3.0
Leisure & Hospitality	3.0	3.6	+20.0
Information & Business Services	4.4	4.6	+4.5
Total Government	5.5	6.5	+18.2

* Percent change figures reflect data before rounding

TABLE 8

RETAILER CONFIDENCE IN STEVENS POINT-PLOVER AREA

	Index Value	
	December 2006	March 2007
Total Sales Compared to Previous Year	47	44
Store Traffic Compared to Previous Year	42	42
Expected Sales Three Months From Now	50	56
Expected Store Traffic Three Months From Now	48	56

100 = Substantially Better
50 = Same
0 = Substantially Worse

TABLE 9

HELP WANTED ADVERTISING IN PORTAGE COUNTY

	Index Value	
	2006	2007
Stevens Point (March) 1980=100	62	69
U.S. (February) 1987=100	39	31

TABLE 10

PUBLIC ASSISTANCE CLAIMS IN PORTAGE COUNTY

	2006 First Quarter (Monthly Avg.)	2007 First Quarter (Monthly Avg.)	Percent Change
New Applications	270	269	-0.4
Total Caseload	5,173	6,044	+16.8

TABLE 11

UNEMPLOYMENT CLAIMS IN PORTAGE COUNTY

	2006 First Quarter (Weekly Avg.)	2007 First Quarter (Weekly Avg.)	Percent Change
New Claims	229	223	-2.8
Total Claims	1671	1686	+0.9

TABLE 12

RESIDENTIAL CONSTRUCTION IN STEVENS POINT-PLOVER AREA*

	2006 First Quarter	2007 First Quarter	Percent Change
Residential Permits Issued	33	19	-42.4
Estimated Value of New Homes	$6,803.1 (thousands)	$5,035.5 (thousands)	-26.0
Number of Housing Units	44	57	+29.5
Residential Alteration Permits Issued	92	125	+35.9
Estimated Value of Alterations	$776.3 (thousands)	$1,799.8 (thousands)	+131.8

TABLE 13

NONRESIDENTIAL CONSTRUCTION IN STEVENS POINT-PLOVER AREA*

	2006 First Quarter	2007 First Quarter
Number of Permits Issued	5	9
Estimated Value of New Structures	$2,586.9 (thousands)	$9,198.4 (thousands)
Number of Business Alteration Permits	44	44
Estimated Value of Business Alterations	$2,832.1 (thousands)	$2,638.2 (thousands)

* Includes Stevens Point, Village of Plover, and the Towns of Hull, Stockton, Sharon, and Plover.

FIGURE 7

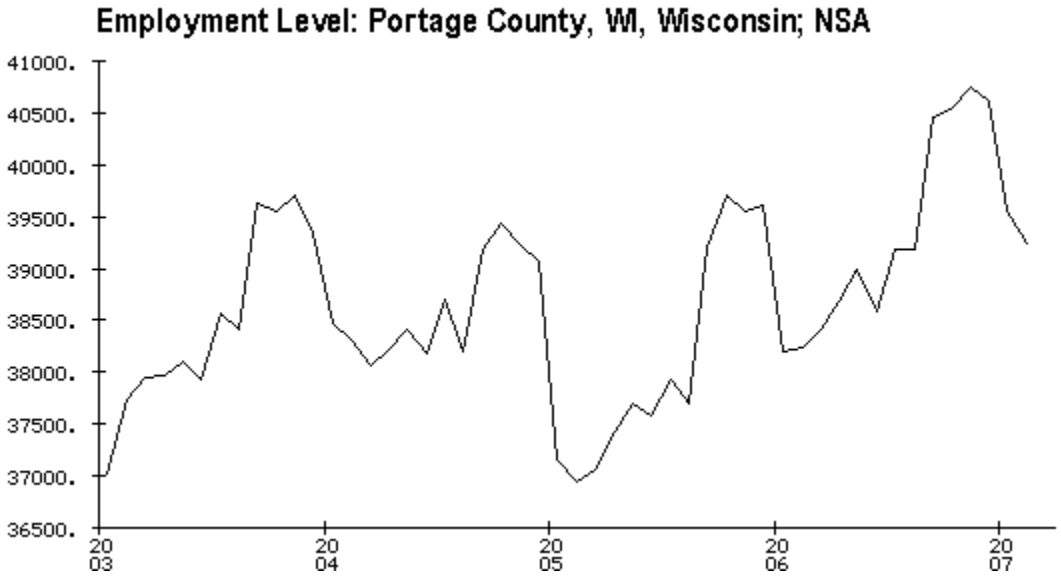

Employment Level: Portage County, WI, Wisconsin; NSA
41000.
40500.
40000.
39500.
39000.
38500.
38000.
37500.
37000.
36500.
2003
2004
2005
2006
2007

FIGURE 8

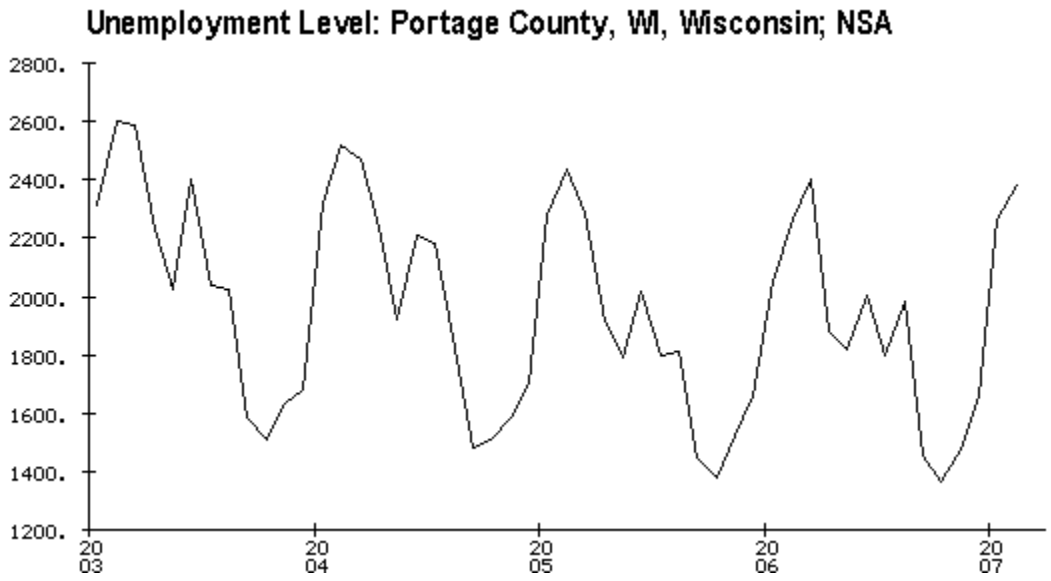

Unemployment Level: Portage County, WI, Wisconsin; NSA
2800.
2600.
2400.
2200.
2000.
1800.
1600.
1400.
1200.
2003
2004
2005
2006
2007

FIGURE 9

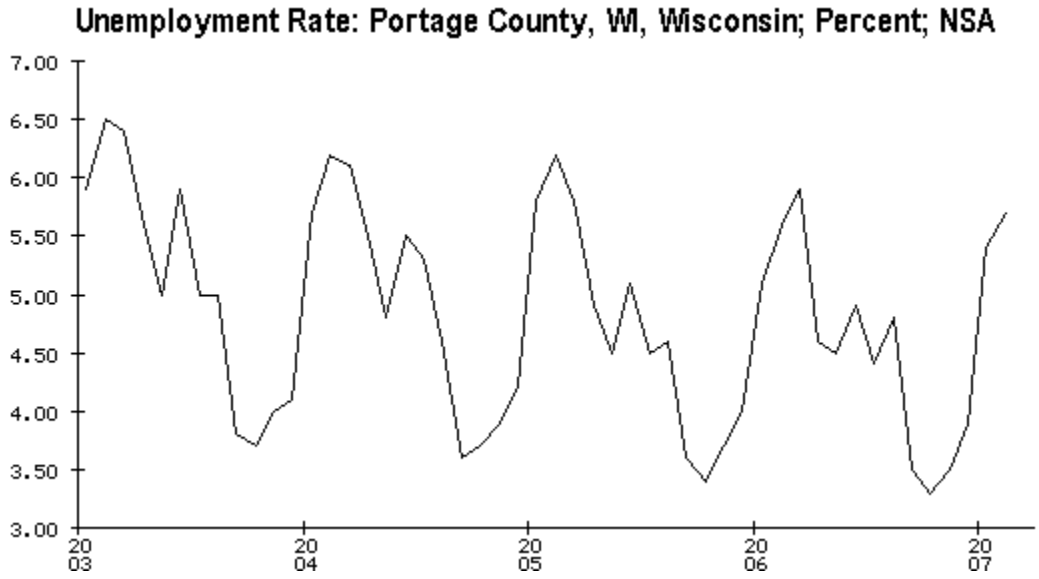
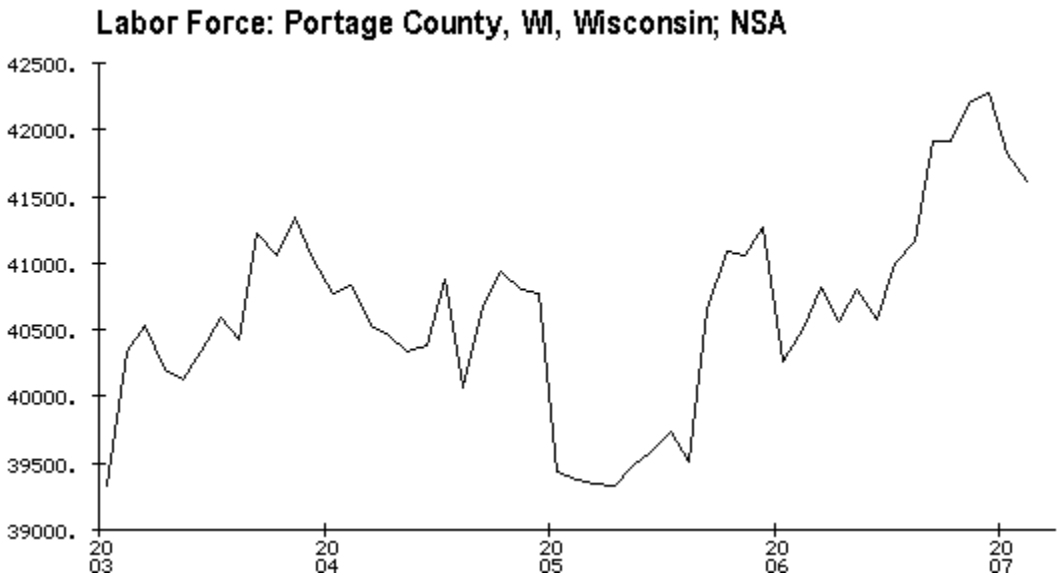

Unemployment Rate: Portage County, WI, Wisconsin; Percent; NSA
7.00
6.50
6.00
5.50
5.00
4.50
4.00
3.50
3.00
2003
2004
2005
2006
2007

FIGURE 10


Labor Force: Portage County, WI, Wisconsin; NSA
42500.
42000.
41500.
41000.
40500.
40000.
39500.
39000.
2003
2004
2005
2006
2007

Unsteady Ground: The Rise of Economic Insecurity in America

H. Scott Wallace, Ph.D., Associate Professor of Economics
Randy F. Cray, Ph.D., Professor of Economics and
Director, Central Wisconsin Economic Research Bureau
Alexander W. Richter, Research Assistant
Patrick J. Rathsack, Research Assistant
Division of Business and Economics
University of Wisconsin-Stevens Point[1]

Introduction

Spring has arrived in central Wisconsin as thoughts turn to the many outdoor activities that are forgone during the long winter months. Fishing, kayaking, and canoeing enthusiasts look forward to spending time on the Wisconsin River, a great resource for recreation. Experienced navigators of the river, however, are cautious in pursuing these activities. The image of a gently flowing river often masks strong and dangerous undertows that can capsize and pull boats underwater, which is especially pronounced near dam sites. The safe enjoyment of these activities requires that participants not be fooled by appearances.

In economics, looks can be deceiving as well. Aggregate measures of economic performance can give unwary observers a misleading and incomplete picture of the economy. For example, economists have recorded a dramatic decrease in macroeconomic volatility over the last two decades. Variability in real output growth and inflation has declined significantly since the mid-1980s. Recessions "have become less frequent and less severe" (Bernanke, 2004). Macroeconomists have designated this phenomenon "the Great Moderation." Yet, the stable macroeconomic conditions of the last twenty years have obscured a great deal of economic turbulence at the microeconomic level. There is substantial evidence to suggest that both businesses and households have experienced greater volatility over the same time period. The rate of job creation and destruction and of hires and separations has increased significantly. Today, for example, "[i]n any given quarter, about one in *twenty* establishments opens or goes out of business, and one in *thirteen* jobs begins or ends" (Brown, Haltiwanger, and Lane, 2006, 10).

This paper focuses on the increased economic insecurity faced by households and firms at the microeconomic level. It begins by examining the economic evidence of this increase in volatility. Then, the paper discusses the likely causes for as well as the economic implications of this change in volatility. Finally, the paper briefly introduces a couple of policy options to help people deal with its negative effects.

Economic Evidence

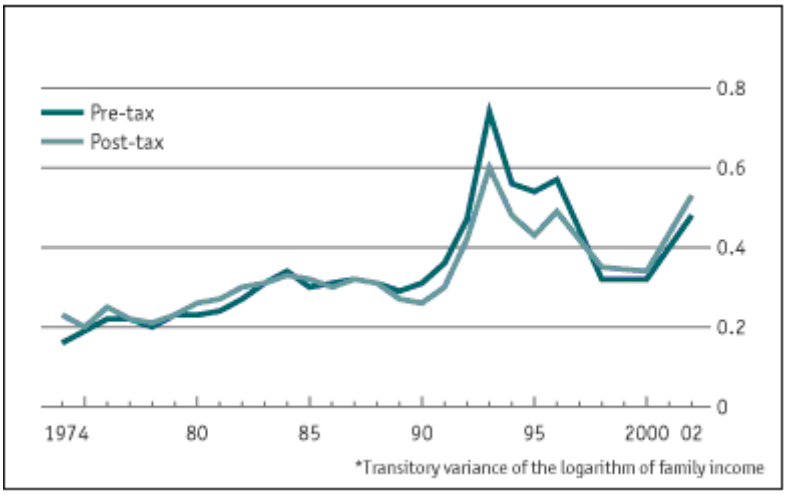
Since the mid-1990s, labor economists Robert A. Moffitt and Peter Gottschalk (1994; 2002) have attempted to gauge shifting levels of economic insecurity by analyzing changes in the variability of annual household income. These authors have relied on an

[1] The author wishes to thank Kevin Neuman and Elizabeth Martin for their input.

extended longitudinal data series known as the Michigan Panel Series of Income Dynamics (PSID). The PSID is a "longitudinal survey that has followed a sample of households from the civilian non-institutional population of the United States since 1968. Approximately 5,000 households were interviewed in the initial year of the survey and have been interviewed annually…" (Moffitt and Gottschalk, 2002, 69). By adding the children of the original sample to the survey, the PSID now includes over 7,000 families. On an annual basis, each household reports the yearly earnings for the previous year. From this data, Moffitt and Gottschalk have been able to measure changes in earnings instability faced by sample families. In doing so, the authors carefully separated "permanent" from "transitory" (or short term) movements in earnings.

"Skill-biased technical change" is an important cause of shifting wage patterns. "If new technologies tend to increase the productivity of highly skilled workers relatively more than that of less-skilled workers – a phenomenon that economists have dubbed 'skill-biased technical change' then market forces will cause the real wages of skilled workers to increase relatively faster" (Bernanke, 2007, 4). Yet, such changes do not fully capture the volatility of household earnings. "An increase in the price of 'skill,' for example, which is presumably determined by gradual movements in demand, implies that permanent earnings are affected; there is no reason to expect that such a price increase would cause wages to fluctuate more from year to year, nor is the fluctuation in the stock of skills likely to increase" (Gottschalk, Moffitt, Katz, and Dickens, 1994, 220). In assessing economic insecurity, these economists focused on calculating the "transitory variance in earnings" which measures short-term fluctuations in income. Unlike changes in permanent incomes, these short-term fluctuations are more unpredictable and therefore are an important cause of economic insecurity.

Figure 1
Fluctuation of Income around its Overall Trend Path*



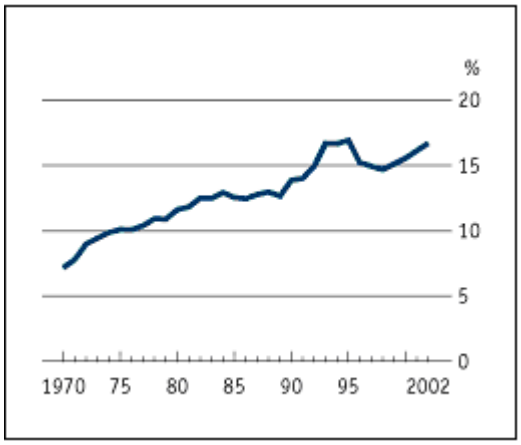
Source: Economist Print Edition, January 4, 2007

As shown above, the authors found that the transitory variance of family income increased slowly, starting in the late 1970s through the 1980s. It peaked in the early 1990s before beginning to decline in the mid-1990s. Recently, Jacob Hacker, a political

scientist from Yale University, has updated Moffitt and Gottschalk's analysis, adopting the same methodology and also relying on data from PSID. Hacker has found that earnings instability has been on the rise since the year 2000.

According to Jacob Hacker, the above figure fails to fully account for the increase in uncertainty that families face. In his recent book, *The Great Risk Shift*, Hacker finds that typical households experience much larger declines in incomes than they had in previous periods. "In the early 1970s the typical income loss was a bit more than 25 percent of prior income; by the late 1990s it was around 40 percent. For a family earning $42,000 (the median income for U.S. households in 1999), a 40 percent loss would mean an income drop of almost $17,000. And remember, this is the median drop: Half of families whose incomes dropped experienced even larger declines" (Hacker, 2006, 31). Using data from PSID, the figure below shows "what the chance of experiencing a 50 percent or greater family income drop is for an average person each year. The probability of a 50 percent or greater drop for an average person was just 7 percent in the 1970s. It's risen dramatically since, and while (like income volatility) it fell in the strong economy of the 1990s, it has recently spiked to record levels" (Hacker, 2006, 31-32).

Figure 2
Changes of Average Worker Facing a 50% or Greater Drop in Income over Time



Source: Economist Print Edition, November 25, 2006

A number of economists directly tie much of the rising income instability to increased volatility of firm performance during the same time period. Diego Comin, Erica Groshen, and Bess Rabin point to studies showing "that the volatility of firm-level performance, whether measured by the profit-to-sales ratio or the growth rate of sales, employment, or sales per worker, has experienced a prominent upward trend since at least 1970" (Comin, et. al., 2006, 1). Using the PSID, they examined wage volatility for workers who did not change jobs. This was done to isolate effects of changing firm performance on transitory variance of wages by eliminating the effects of wage fluctuations that result from changing jobs. "Using firm data from COMPUSTAT, [they] find rising volatility of firms' mean wages that mirrors the rise in volatility of firm performance and robust evidence that when firms experience more turbulence they pay

more volatile wages" (Comin, et. al., 2006, 32). In fact, the authors find that the rise in firm turbulence accounts for 60 percent of the rise in wage volatility.

Without the availability of reliable panel data, it is difficult to definitively determine the degree of economic turbulence experienced by Wisconsin households. Changes in overall employment, as reported monthly by the Bureau of Labor statistics, can be misleading. These "numbers, which are typically about net changes in hundreds of thousands of jobs, are just the tip of the employment iceberg, since literally millions of workers will have changed jobs over that period. Even though the numbers signal important changes in the level of economic activity, they're a little like reporting changes in the level of a lake, without information about the rivers that flow into and out of the lake" (Brown, Haltiwanger, and Lane, 2006, 11). Despite this problem, there are a number of indicators that suggest that households and firms in Wisconsin and our local area are experiencing greater economic insecurity today. According to a study by the *Wisconsin Taxpayer Alliance*, "[f]rom 1999 to 2005, Wisconsin's median household income fell 2.2% from $45,667 to $44,650 while the national median rose 13.8% from $40,696 to $46,326. "Wisconsin ranked 50th in the nation in household income growth during the period" (www.wistax.org). Though these numbers do not directly measure volatility per se, they do indicate increasing distress for middle income families.

Historically, a higher percentage of Wisconsin families have both parents in the workforce than the nation as a whole. The *Wisconsin Taxpayer Alliance* attributed much of the decline in median household income to a recent drop in the number of workers per household. "In 2000 both spouses worked in 59.5% of married couple families in Wisconsin, 8.2 percentage points above the national average of 51.3%. Over the next five years, Wisconsin's percentage fell to 58.8%, while the U.S. share rose to 52.1%, shrinking the difference to 6.7 points" (www.wistax.org). Even though the reasons for such high workforce participation rates are difficult to pinpoint, having both parents in the labor force can be a form of private risk-sharing. "The analogy here might be a stock portfolio. Rather than holding a single stock (the husband's earnings), the modern family holds two stocks (the husband's and wife's earnings) - and holding two stocks is never more risky than holding one" (Hacker, 2006, 91). In the fall of 2006, the *Wall Street Journal* published an article listing a number of interesting observations based on the *Census Bureau's American Community Survey*. According to this survey, 83.8% of all children under the age of six in Portage County have both parents in the workforce, the highest of any county in the United States (Lovely, 2006, D1). "The county, in the middle of the state, also has a high percentage of its adults in the work force (74.1%, compared with a national average of 65.4%). While the county's median family income is a bit higher than the national average, the population's educational level is a bit below average" (Lovely, 2006, D1). If the risk-sharing hypothesis is accurate, central Wisconsin households perceive their economic environment to be highly insecure.

Other measures strongly indicate that economic insecurity has increased for the citizens of Portage County. Instead of relying solely on aggregate employment figures (i.e. the level of the lake), this paper uses data collected by *Wisconsin's Department of*

Workforce Development to break down employment by industrial sector (i.e. the rivers that flow into and out of the lake). These figures are helpful in assessing changes in the composition in employment over time for Portage County. Variation in the composition of employment may be evidence of economic turbulence as laborers may be compelled to shift between sectors. Tables 1 and 2, seen below, compare Portage County employment figures for two time periods, from 1996-2000 and 2001-2005. For years 1996 to 2000, total employment in Portage County increased by 5.9% to 31,379. Though job growth was robust, the composition of employment across sectors was largely unaffected. Column three (under 2000 Employment) shows the share of total employment for the different sectors in percentage terms. Changes in shares of total employment for the 1996 to 2000 period are captured in column 4. With the exception of the financial activities sector, the shares of total employment among industrial sectors changed very little over the five year time period. Though far from conclusive, the absence of dramatic shifts in employment shares across sectors suggests that residents experienced a relatively stable economic environment for those years.

Table 1
Portage County Employment: 1996-2000

	Avg. Emp.	5-Year %Δ	% of Total	5-year Δ in % of Total
All Industries	31,379	5.9%	100.0%	-
Construction	1,044	7.2%	3.3%	0.0%
Education & Health Services	5,183	13.8%	16.5%	1.1%
Financial Activities	3,540	-7.6%	11.3%	-1.6%
Information	226	-19.6%	0.7%	-0.2%
Leisure & Hospitality	2,959	-0.8%	9.4%	-0.6%
Manufacturing	6,265	5.4%	20.0%	-0.1%
Natural Resources	725	7.7%	2.3%	0.0%
Other Services	1,266	27.5%	4.0%	0.7%
Professional & Business Services	1,456	19.2%	4.6%	0.5%
Public Administration	1,410	11.6%	4.5%	0.2%
Trade, Transportation, & Utilities	7,304	6.1%	23.3%	0.0%

Source: Wisconsin Department of Workforce Development

The numbers for years 2001 to 2005 as shown in Table 2 tell a different story. Total employment growth during this time period slowed to an anemic 0.3%. Much of the tepid growth can be attributed to the woes of the manufacturing sector which posted a staggering 21.6% decline in employment for the period. According to *Wisconsin's Department of Workforce Development*, food and paper manufacturing in Portage County was responsible for much of the decrease. This decline had a tremendous impact on the regional economy, given the area's heavy reliance on manufacturing. In 2005, manufacturing accounted for 14.6% of total employment for the county with its share of total employment falling 4.1% over the five years. It is particularly significant since much of the job loss in manufacturing occurred during a period of economic expansion for the nation, indicating structural rather than cyclical causes for the drop.

Table 2
Portage County Employment Data: 2001-2005

	Avg. Emp.	5-Year %Δ	% of Total	5-year Δ in % of Total
All Industries	31,644	0.3%	100.0%	-
Construction	1,118	13.0%	3.5%	0.4%
Education & Health Services	5,441	0.2%	17.2%	0.0%
Financial Activities	3,994	7.6%	12.6%	0.9%
Information	251	-17.7%	0.8%	-0.2%
Leisure & Hospitality	3,149	6.6%	10.0%	0.6%
Manufacturing	4,608	-21.6%	14.6%	-4.1%
Natural Resources	599	-11.7%	1.9%	-0.3%
Other Services	1,460	11.0%	4.6%	0.4%
Professional & Business Services	1,780	21.7%	5.6%	1.0%
Public Administration	1,431	6.6%	4.5%	0.3%
Trade, Transportation, & Utilities	7,813	4.3%	24.7%	1.0%

Source: Wisconsin Department of Workforce Development

Portage County wage and payroll data by industrial sector is provided in Tables 3 and 4 for the same time periods. These figures are useful in assessing the likely fluctuations in income workers experienced in the Portage County area. All the wage and payroll figures are calculated in 1996 dollars to capture changes in purchasing power over time. For the period 1996 to 2000, the average annual real wage for all industries increased by 5.3%. (This means that the purchasing power of the average wage increased by 5.3% over this time period.) All industrial sectors showed gains in real income. In 2000, manufacturing accounted for 23.9% of all payroll dollars, the highest share of any industrial sector. Manufacturing lagged only the financial activities and education & health services sectors in annual compensation, posting an average real wage of $32,362 in 2000. Though real wages in manufacturing rose by 3.4% over the period, this increase was small relative to the gains enjoyed by workers in other sectors, causing its share of total payroll dollars to fall by 0.6%.

Table 3
Portage County Wage and Payroll Data: 1996-2000

	Wages		Payroll	
	Avg. Annual	5-year %Δ	% of Total	5-year Δ in % of Total
All Industries	$27,211	5.3%	100.0%	-
Construction	$30,573	6.0%	3.7%	0.1%
Education & Health Services	$34,223	3.8%	20.8%	1.1%
Financial Activities	$36,201	10.6%	15.0%	-1.4%
Information	$26,585	1.8%	0.7%	-0.3%
Leisure & Hospitality	$8,470	7.5%	2.9%	-0.1%
Manufacturing	$32,632	3.4%	23.9%	-0.6%
Natural Resources	$26,170	10.9%	2.2%	0.1%
Other Services	$16,037	3.9%	2.4%	0.4%
Professional & Business Services	$26,530	10.3%	4.5%	0.7%
Public Administration	$24,992	4.9%	4.1%	0.2%
Trade, Transportation, & Utilities	$22,965	3.9%	19.6%	-0.2%

*Wage and Payroll figures presented in 1996 dollars
Source: Wisconsin Department of Workforce Development

The wage and payroll figures for years 2001 to 2005 paint a rather gloomy picture for Portage county workers. Purchasing power of the average worker declined sharply during this time period. Deflating wages to 1996 dollars, average annual wages for all industries in Portage County fell by 7.1%. The financial activities sector was the only bright spot with average annual real wages growing by 5.9% and its share of total payroll dollars increasing by 3.3% over this time period. All other industrial sectors endured declines in real wages. The trade, transportation, & utilities; educational & health services; and manufacturing sectors experienced substantial declines of 8.6%, 10.3%, and 7.3% in average annual real wages, respectively. These declines are significant because these three sectors accounted for 56.5% of total employment in Portage County in 2005. Additionally, manufacturing's share of total payroll fell by 3.9% over the time period, largely reflecting the sharp declines in manufacturing employment.

Table 4
Portage County Wage and Payroll Data: 2001-2005

	Wages		Payroll	
	Avg. Annual	5-year %Δ	% of Total	5-year Δ in % of Total
All Industries	$25,290	-7.1%	100.0%	-
Construction	$31,074	1.6%	4.3%	1.0%
Education & Health Services	$30,699	-10.3%	20.9%	0.6%
Financial Activities	$38,335	5.9%	19.1%	3.3%
Information	$25,238	-5.1%	0.8%	-0.3%
Leisure & Hospitality	$7,317	-13.6%	2.9%	0.1%
Manufacturing	$30,242	-7.3%	17.4%	-3.9%
Natural Resources	$21,597	-17.5%	1.6%	-0.3%
Other Services	$13,094	-18.3%	2.4%	0.0%
Professional & Business Services	$25,860	-2.5%	5.8%	1.4%
Public Administration	$24,147	-3.4%	4.3%	0.3%
Trade, Transportation, & Utilities	$20,993	-8.6%	20.5%	-2.3%

*Wage and Payroll figures presented in 1996 dollars
Source: Wisconsin Department of Workforce Development

The dramatic change in economic fortunes between these two periods indicates that many Portage County workers faced considerably greater economic insecurity after the turn of the century. Manufacturing workers experienced a significant amount of dislocation with the sharp fall in the number of manufacturing jobs from 2001 to 2005. The numbers also indicate that workers from most sectors had to adjust to substantial declines in purchasing power during these years. Much of the rise in economic insecurity can be attributed to the importance of the manufacturing sector to both the state and county economies. Wisconsin is second only to Indiana in terms of annual manufacturing payroll calculated on a per capita basis (www.statemaster.com). A rapid secular decline in manufacturing employment disproportionately impacts Wisconsin and helps to explain the state's poor performance in terms of income growth over the last several years.

Though not discussed in this paper, the appendix provides employment, payroll and wage data for the same time periods for both Wood and Marathon County as well. The

fall off in manufacturing employment was greater in Wood than either Portage or Marathon counties. The numbers suggest that Marathon County performed relatively better than Portage and Wood counties from 2001 to 2005.

Creative Destruction and Economic Turbulence

Economic insecurity, to a great degree, is a byproduct of the workings of a rapidly growing, well-functioning market economy. In market-oriented economies, competitive forces drive firms to create new products and develop new technological processes to attain and maintain an edge on their rivals. Businesses that fail to innovate often shrink or are driven from the market. These competitive pressures constantly act to disrupt the economic status quo, requiring an unending shuffling and reshuffling of economic resources. "Turbulence can result from new, more productive firms replacing old, less productive ones, even within the same industry. This process, which Joseph Schumpeter called 'creative destruction' means that jobs get reallocated from one set of firms to another and accounts for a large fraction of aggregate (industry) productivity growth" (Brown, Haltiwanger, and Lane, 2006, 4). Despite its disruptive nature, the process of creative destruction has been responsible for improving the standards of living of citizens residing in highly developed market economies. As Nobel Prize winner Edmund Phelps describes

> The main benefit of an innovative economy is commonly said to be a higher level of productivity – and thus higher hourly wages and a higher quality of life. There is a huge element of truth in this belief, no matter how many tens of qualifications might be in order. Much of the rise in productivity since the 1920s can be traced to commercial products and business methods developed and launched in the U.S. and kindred economies. (These include household appliances, sound movies, frozen food, pasteurized orange juice, television, semiconductor chips, the Internet browser, the redesign of cinemas and recent retailing methods.) There were often engineering tasks along the way, yet business entrepreneurs were the drivers (Phelps, 2006, A14).

Both the revival in productivity growth since the early 1990s and the rise in economic insecurity appear to be related. Important structural changes in the economy over the last 25 years have been largely responsible for creating an increasingly dynamic and competitive economy. The unleashing of competitive forces has spurred higher rates of creative destruction that simultaneously fuel economic growth and increase volatility. The following represent a few highly interrelated factors that account for rising productivity and concomitant increases in economic turbulence.

- Globalization
  By the late 1970s, the United States faced fierce competition from abroad. The revival of European and Japanese economies from the devastation of World War II and the expansion of trade with less-developed nations increased competitive pressures on American businesses. The significant fall

in global transportation costs with the introduction of container shipping also dramatically expanded the geographical extent of the market.

- Capital Formation
  Higher rates of investment spending since the early 1990s accounted for the increasing use of capital in production, including labor-saving technologies. Automation has both increased productivity and displaced workers, especially in the manufacturing sector.

- Technological Change
  Advances in communication and information technologies made possible the implementation of new supply chain methods by facilitating coordination among businesses and their suppliers. These technologies allowed businesses to lower costs by outsourcing non-core activities to specialized, independent firms. The internet sparked increased competition in many arenas by dramatically reducing customer search costs and by extending the geographical reach of firms. New technologies in steel production and electricity generation dramatically reduced the minimum efficient scale of production, leading to lower costs.

- Decline in Unionization
  Along with the decline in manufacturing came a fall in union membership. In 1977, 23.8% of all wage and salary workers were union members. By 2005, union participation had fallen to 13.7% of the labor force (www.trinity.edu/bhirsh/unionstats). The decline in unions had the effect of increasing labor both market flexibility and wage volatility.

- Deregulation
  Extensive deregulation in telecommunications, airlines, railroads, trucking, energy, financial and other industries exposed a significant portion of the economy to competition. "In 1977 fully regulated industries produced 17 percent of the U.S. Gross National Product. By 1988 this figure had been reduced to 6.6 percent" (Viscusi, et. al, 2000, 306). Competitive forces freed up economic resources for alternative uses by reducing many of the inefficiencies that arose during regulation.

- Changes in Corporate Governance
  The decades of the 1980s and 1990s witnessed a tremendous amount of business restructuring. In the 1980s, hostile takeover activity reduced excess capacity in mature industries and spurred a return to specialization by disassembling poorly performing conglomerates. In the 1990s, changes in executive compensation promoted "voluntary" restructuring of businesses. The use of stock options and other pay-for-performance schemes were successful in aligning managerial and shareholder interest. Active monitoring by large institutional shareholders and private equity firms also reinforced these trends (Holmstrom and Kaplan, 2001).

While stimulating economic growth, the combined effects of these factors forced changes in the employment relationship. subjecting employees to greater economic risk. Many of the institutional protections that traditionally shielded workers from volatility have disappeared. Implicit contracts between companies and workers that offer lifetime employment are increasingly rare in a world in which companies face greater competitive pressures that threaten their very survival. Companies are increasingly replacing "defined-benefit" pensions with riskier "defined-contribution" 401(k) plans. "Since 2000 the proportion of employers offering health coverage to their workers has fallen by nearly ten percentage points, and the proportion of employers that finance the full cost of coverage – once the norm – has plummeted from 29 percent to 17 percent for individual health insurance and from 11 percent to 6 percent for family health premiums" (Hacker, 2006, 139). This sea change in the sharing of risk between employers and their workers has prompted a number of public policy proposals. The next section briefly looks at two such proposals.

Public Policy Options

In a recent speech, Chairman of the Federal Reserve Ben Bernanke argued that new policy options need to be consistent with principles held by a majority of Americans. These principles include 'that economic *opportunity* should be as widely distributed and as equal as possible; that economic *outcomes* need not be equal but should be linked to the contributions each person makes to the economy; and that people should receive some *insurance* against the most adverse economic outcomes, especially arising from events largely outside the person's control" (Bernanke, 2007). In addition, policymakers need to consider the effects of these proposals on overall economic activity. With regard to providing insurance against economic volatility, the challenge for public policy is to provide greater security for workers without unduly diminishing the competitive forces that drive economic growth. In other words, how can we insulate workers from the vagaries of a market economy without slaying the goose that lays the golden eggs? Nobel-prize winning economist Michael Spence summarizes these concerns:

> Institutions and policies that retard the movement of people and resources will also retard growth, a fact that is true in advanced as well as developing economies. Such policies may nevertheless be justified on the ground of protecting people from the full effect of market forces. But such protections are best if they are transitory and not permanent, and generally it is better to protect people and incomes rather than jobs and firms. The latter approach impedes the competitive responses of firms in the private sector and, in the context of the global economy, becomes very expensive (Spence, 2007, A19).

New economic realities call for a rethinking of existing social insurance programs that are designed to shield workers from the full brunt of economic fluctuations. "Traditionally, unemployment was 'cyclical': workers lost their jobs when production contracted and were then re-employed in lines of work similar to their previous

employment when production re-expanded. Today, however, unemployment is increasingly likely to be 'structural' – persistent, perhaps even permanent, and ending only when workers accept a new job that often implies major cuts in pay, hours, or both" (Hacker, 2006, 68). Unemployment insurance programs created during the New Deal were developed to help workers deal with temporary downturns in economic activity. Yet these programs does not adequately address the problems of structural unemployment.

Economists Lori Kletzer and Robert Litan have proposed "wage insurance" to help workers cope with structural unemployment. The problem with current unemployment insurance is that "the payments under UI are limited, generally replacing a little less than 50 percent of the average worker's previous salary. However, the compensation payments do not help workers after they take a new job" (Kletzer and Litan, 2001, 2). Permanent dislocations often force workers to take lower paying jobs. As Kletzer and Litan explain "[w]age insurance would work as follows: eligible workers would receive some fraction of their wage loss – which could vary by age and tenure – for up to two years following the initial date of job loss, but would only be paid when workers found a new job" (Kletzer and Litan, 2001, 4). Unlike unemployment insurance payments which are received while unemployed, wage insurance provides incentives for dislocated workers to take new jobs at lower pay. It also provides incentives to take jobs that provide important on-the-job training to gain the critical skills necessary to adapt to the changing economic landscape. Proponents argue that such a program enhances labor market flexibility by facilitating the transition of workers to new types of employment.

The principle of equal economic *opportunity* singled out by Bernanke can inform change in another critical area in dealing with economic security: education. The level of educational attainment is a decisive factor in determining the level of economic insecurity. "Volatility is indeed higher for less educated Americans than for more educated Americans – slightly more than twice as high" (Hacker, 2006, 27). Greater access to educational opportunities at all stages of life is necessary for workers to update their skills to meet the shifting demands of employers. "Yet the fundamental way most people prepare to be productive citizens has not changed much. . . . Despite their longer life spans, most people stop formal education early on in life, much as they did a hundred years ago" (Rajan and Zingales, 2003, 303-04). According to David Wessel, the current education system is failing to adequately meet the growing demand for more educated workers. "The shortage is evident from this fact: Employers are paying the typical four-year college graduate [without graduate school] 75% more than they pay high-school grads. Twenty-five years ago, they were paying 40% more" (Wessel, 2007, A2). Unfavorable demographic trends combined with the leveling off of average years of schooling means that skill shortages are likely to get worse.

University of Chicago economists Raghuram Rajan and Luigi Zingales believe "there may be reason to rethink the entire structure of higher education, a system designed at a time when students typically left the university for a career with one employer. We need more modular degrees and lifelong admission to a university (at least for the general programs) – so that the student can pick and choose what she wants and when

she needs it" (Rajan and Zingales, 2003, 304). Technical and community colleges currently offer workers opportunities for improving their skills but four year schools need to be more creative in providing more flexible course offerings. In terms of providing financial support, job retraining initiatives are often inadequate and are only eligible to workers that already have suffered dislocation. Gene Sperling (2005) recommends that the government provide "preemptive retraining assistance" that would be available to workers before they lose their jobs. Such assistance can come in the form of a Flexible Education Account that gives workers a credit to cover a portion of their retraining expenses. The Flexible Education Account "recognizes that what most workers need is a great deal of new education or training in a concentrated period – a few times in any given decade or more in many cases. The Flexible Education Account gives workers a larger credit when they need training, but gives them the power to concentrate or spread out their resources over a decade as they see fit – not only if they are laid off, but also when they sense their jobs are at risk or simply want a promotion or job change"
(Sperling, 2005, 74).

Conclusion

The economic landscape today is very different than it was twenty five years ago. Timothy Sturgeon lists a few examples of the changes that have occurred over this time. "The largest single employer in the country is not General Motors, but a temporary employment agency called Manpower Inc. The largest owner of passenger jets is not United Airlines, or any other major carrier, but the aircraft leasing arm of General Electric. American automakers have spun-off their in-house parts subsidiaries and outsourced the design and manufacture of entire automotive sub-systems to first-tier suppliers" (Sturgeon, 2002, 454). Technology experts Andrew McAfee and Erik Brynjolfsson do not expect the rate of change to decline any time soon. They write, "because every industry will become even more IT-intensive over the next decade, we expect competition to become even more Schumpeterian" (McAfee and Brynjolfsson, 2007, R10). Such forecasts promise both high rates of economic growth and greater insecurity.

The crafting of the right type of policy to address economic insecurity is critically important. As stated above, policies need to "protect people and incomes rather than jobs and firms." Trade protection and industry subsidies harm consumers and can have long-term negative effects on economic growth by diminishing competitive pressures for change. It is crucial to get the balance right. Policies should cushion the blow of job dislocation and provide workers the skills to adapt to rapidly changing economic realities. In the absence of such responses, citizens will continue to have difficulty in adjusting to change. The alternative approach of protectionism is likely to result in economic stagnation that presents its own array of pathologies. Neither of these options is particularly appealing.

APPENDIX

Table 5

Marathon County Employment: 1996-2000

	Avg. Emp.	5-Year %Δ	% of Total	5-year Δ in % of Total
All Industries	66,447	9.6%	100.0%	-
Construction	2,999	15.4%	4.5%	0.2%
Education & Health Services	8,545	-3.2%	12.9%	-1.7%
Financial Activities	4,932	8.1%	7.4%	-0.1%
Information	664	-8.7%	1.0%	-0.2%
Leisure & Hospitality	4,724	10.3%	7.1%	0.0%
Manufacturing	18,936	11.9%	28.5%	0.6%
Natural Resources	781	20.3%	1.2%	0.1%
Other Services	2,086	16.5%	3.1%	0.2%
Professional & Business Services	4,040	6.2%	6.1%	-0.2%
Public Administration	2,206	4.5%	3.3%	-0.2%
Trade, Transportation, & Utilities	16,516	15.8%	24.9%	1.3%

Source: Wisconsin Department of Workforce Development

Table 6

Marathon County Employment: 2001-2005

	Avg. Emp.	5-Year %Δ	% of Total	5-year Δ in % of Total
All Industries	69,341	4.4%	100.0%	
Construction	2,968	-1.0%	4.3%	-0.2%
Education & Health Services	11,178	30.8%	16.1%	3.3%
Financial Activities	5,071	2.8%	7.3%	-0.1%
Information	894	31.1%	1.3%	0.3%
Leisure & Hospitality	5,235	10.8%	7.5%	0.4%
Manufacturing	18,551	-2.0%	26.8%	-1.7%
Natural Resources	814	4.2%	1.2%	0.0%
Other Services	1,971	-5.5%	2.8%	-0.3%
Professional & Business Services	4,110	1.7%	5.9%	-0.2%
Public Administration	1,751	-20.6%	2.5%	-0.8%
Trade, Transportation, & Utilities	16,799	1.7%	24.2%	-0.6%

Source: Wisconsin Department of Workforce Development

Table 7
Marathon County Wage and Payroll Data: 1996-2000

	Wages		Payroll	
	Avg. Annual	5-year %Δ	% of Total	5-year Δ in % of Total
All Industries	$26,294	5.1%	-	-
Construction	$32,499	5.1%	5.6%	0.3%
Education & Health Services	$30,412	3.8%	14.9%	-2.2%
Financial Activities	$37,334	14.4%	10.5%	0.7%
Information	-	-	1.0%	-0.5%
Leisure & Hospitality	$8,156	4.5%	2.2%	0.0%
Manufacturing	$30,816	4.4%	33.4%	0.4%
Natural Resources	$15,753	12.6%	0.7%	0.1%
Other Services	$14,883	4.6%	1.8%	0.1%
Professional & Business Services	$28,306	17.0%	6.5%	0.5%
Public Administration	$24,084	5.6%	3.0%	-0.1%
Trade, Transportation, & Utilities	$21,512	2.9%	20.3%	0.7%

*Wage and Payroll figures presented in 1996 dollars
Source: Wisconsin Department of Workforce Development

Table 8
Marathon County Wage and Payroll Data: 2000-2005

	Wages		Payroll	
	Avg. Annual	5-year %Δ	% of Total	5-year Δ in % of Total
All Industries	$26,720	1.6%	100.0%	-
Construction	$31,379	-3.4%	5.0%	-0.6%
Education & Health Services	$31,368	3.1%	18.9%	4.0%
Financial Activities	$36,598	-2.0%	10.0%	-0.5%
Information	$34,183	-	1.6%	0.6%
Leisure & Hospitality	$8,493	4.1%	2.4%	0.2%
Manufacturing	$30,574	-0.8%	30.6%	-2.8%
Natural Resources	$17,373	10.3%	0.8%	0.1%
Other Services	$13,866	-6.8%	1.5%	-0.3%
Professional & Business Services	$27,893	-1.5%	6.2%	-0.4%
Public Administration	$24,586	2.1%	2.3%	-0.7%
Trade, Transportation, & Utilities	$22,745	5.7%	20.6%	0.3%

*Wage and Payroll figures presented in 1996 dollars
Source: Wisconsin Department of Workforce Development

Table 9
Wood County Employment: 1996-2000

	Avg. Emp.	5-Year %Δ	% of Total	5-year Δ in % of Total
All Industries	43,746	0.6%	100.0%	-
Construction	1,755	8.8%	4.0%	0.3%
Education & Health Services	12,289	30.3%	28.1%	6.4%
Financial Activities	1,025	-5.8%	2.3%	-0.2%
Information	S	20.2%	2.2%	0.4%
Leisure & Hospitality	2,875	0.3%	6.6%	0.0%
Manufacturing	9,162	-6.9%	20.9%	-1.7%
Natural Resources	513	5.6%	1.2%	0.1%
Other Services	1,308	1.9%	3.0%	0.0%
Professional & Business Services	1,560	-5.6%	3.6%	-0.2%
Public Administration	1,794	-59.9%	4.1%	-6.2%
Trade, Transportation, & Utilities	10,514	5.8%	24.0%	1.2%

Source: Wisconsin Department of Workforce Development

Table 10
Wood County Employment: 2001-2005

	Avg. Emp.	5-Year %Δ	% of Total	5-year Δ in % of Total
All Industries	43,767	0.0%	100.0%	-
Construction	1,690	-3.7%	3.9%	-0.2%
Education & Health Services	14,580	18.6%	33.3%	5.2%
Financial Activities	1,123	9.6%	2.6%	0.2%
Information	1,150	20.9%	2.6%	0.5%
Leisure & Hospitality	2,789	-3.0%	6.4%	-0.2%
Manufacturing	6,590	-28.1%	15.1%	-5.9%
Natural Resources	559	9.0%	1.3%	0.1%
Other Services	1,118	-14.5%	2.6%	-0.4%
Professional & Business Services	1,934	24.0%	4.4%	0.9%
Public Administration	2,288	27.5%	5.2%	1.1%
Trade, Transportation, & Utilities	9,946	-5.4%	22.7%	-1.3%

Source: Wisconsin Department of Workforce Development

Table 11
Wood County Wage and Payroll Data: 1996-2000

	Wages*		Payroll*	
	Avg. Annual	5-year %Δ	% of Total	5-year Δ in % of Total
All Industries	$29,253	9.5%	100.0%	-
Construction	$33,513	10.1%	4.6%	0.4%
Education & Health Services	$35,511	10.4%	34.1%	8.0%
Financial Activities	$22,084	4.8%	1.8%	-0.2%
Information	-	-	2.0%	0.3%
Leisure & Hospitality	$7,942	5.3%	1.8%	-0.1%
Manufacturing	$37,999	4.0%	27.2%	-3.7%
Natural Resources	$27,301	-17.6%	1.1%	-0.3%
Other Services	$13,039	8.9%	1.3%	0.0%
Professional & Business Services	$37,520	19.1%	4.6%	0.1%
Public Administration	$25,341	12.5%	3.6%	-5.1%
Trade, Transportation, & Utilities	$21,902	8.5%	18.0%	0.7%

*Wage and Payroll figures presented in 1996 dollars
Source: Wisconsin Department of Workforce Development

Table 12
Wood County Wage and Payroll Data: 2001-2005

	Wages*		Payroll*	
	Avg. Annual	5-year %Δ	% of Total	5-year Δ in % of Total
All Industries	$30,351	3.8%	100.0%	-
Construction	$33,531	0.1%	4.3%	-0.3%
Education & Health Services	$38,114	7.3%	41.8%	7.7%
Financial Activities	$24,147	9.3%	2.0%	0.3%
Information	$26,007	-	2.3%	0.3%
Leisure & Hospitality	$7,630	-3.9%	1.6%	-0.2%
Manufacturing	$38,105	0.3%	18.9%	-8.3%
Natural Resources	$27,893	2.2%	1.2%	0.1%
Other Services	-	-	1.3%	-0.1%
Professional & Business Services	$33,078	-11.8%	4.8%	0.2%
Public Administration	$25,094	-1.0%	4.3%	0.8%
Trade, Transportation, & Utilities	$23,406	6.9%	17.5%	-0.5%

*Wage and Payroll figures presented in 1996 dollars
Source: Wisconsin Department of Workforce Development

REFERENCES

Bernanke, Ben. February 20, 2004. "The Great Moderation," Remarks by Governor Ben S. Bernanke at the *Meetings of the Eastern Economic Association*, Washington D.C.

_____. February 6, 2007. "The Level and Distribution of Economic Well -Being," Remarks by Chairman Ben S. Bernanke Before the *Greater Omaha Chamber of Commerce*, Omaha, Nebraska.

Comin, Diego; Groshen, E.; Rabin, B. 2006. "Turbulent Firms, Turbulent Wages?" *Federal Reserve Bank of New York Staff Reports*. February, no. 238, pp. 1-60.

Brown, Clair; Haltiwanger, J.; and Lane, J. 2006. *Economic Turbulence: Is a Volatile Economy Good for America?* Chicago: University of Chicago Press.

Gottschalk, Peter; Moffit, R.; Katz, L.; Dickens, W. 1994. "The Growth of Earnings Instability in the U.S. Labor Market," *Brookings Papers on Economic Activity*, **1994(**2): 217-272.

Gottschalk, Peter; Moffit, R. 2002. "Trends in Transitory Variance in Earnings in the United States," *Economic Journal*, **112**(478): C68-C73.

Hacker, Jacob. 2006. *The Great Risk Shift: The Assault on American Jobs, Families, Health Care, and Retirement and How You Can Fight Back*. Oxford: Oxford University Press.

Hirsch, Barry; Macpherson, D. 2006. "Union Membership, Coverage, Density, and Employment Among All Wage and Salary Workers, 1977-2005," Retrieved from http://www.trinity.edu/bhirsch/unionstats/

Holmstrom, Bengt; Kaplan, S. 2001. "Corporate Governance and Merger Activity in the United States: Making Sense of the 1980s and 1990s," *Journal of Economic Perspectives*, Spring, **15**(2): 121-144.

Industry Statistics > Total Manufacturing > Annual payroll (per $ GDP) by state. (n.d.) Retrieved http://www.statemaster.com/graph/ind_tot_man_ann_pay_pergdp-manufacturing-annual-payroll...

Kletzer, Lori; Litran, R. 2001. "A Prescription to Relieve Worker Anxiety," *The Brookings Institute*, Policy Brief #73.

Lovely, Erika. October 26, 2006. "America, Up Close and Personal," *Wall Street Journal*, Page D1.

McAfee, Andrew ; Brynjolfsson, E. April 28-29, 2007. "Dog Eat Dog," Wall Street Journal, Page R10.

Phelps, Edmund. October 10, 2006. "Commentary: Dynamic Capitalism," *Wall Street Journal*, page A14.

Rajan, Raghuram; Zingales, L. 2003. *Saving Capitalism from the Capitalists*. USA: Crown Business Press.

Spence, Michael. January 23, 2007. "Commentary: Why China Grows So Fast," *Wall Street Journal*, Page A19.

Sperling, Gene. 2005. *The Pro-Growth Progressive: An Economic Strategy for Shared Prosperity*. New York: Simon & Schuster.

State of Wisconsin: Department of Workforce Development. December 2006. "Portage County Workforce Profile."

Sturgeon, Timothy. 2002. "Modular Production Networks. A new American Model of Industrial Organization," Industrial and Corporate Change, **11**, 451-496.

The Economist, November 23, 2006. "Populism: Fanfare for the Common Man" pp. 29-30.

_____, January 4th, 2007. "Economics Focus: Shifting Sands."

Viscusi, W. Kip; Vernon, J; Harrington, J. 2000. *Economics of Regulation and Antritrust*. Third Edition, Cambridge: The MIT Press.

Wessel, David. April 19, 2007. "Lack of Well-Educated Workers Has Lots of Roots, No Quick Fix," Page A2.

Wisconsin Taxpayer Alliance. March 14, 2007. "Wisconsin Struggles in Key Income Measure," Retrieved from http://www.wistax.org/news_releases/2007/0702b.html