#### Feature Article:

# The 2009 Economic Landscape: How the Recession Is Unfolding across Four U.S. Regions

#### **Foreword**

With the intensification of financial market turmoil in the fourth quarter of 2008 came a new round of distress to the U.S. economy, making this not only one of the longest but one of the most severe U.S. recessions since World War II. Real gross domestic product (GDP) declined at an annualized rate of 6.3 percent in the fourth quarter, the most in any quarter since 1982. As of March 2009, the downturn marked its 16th month, making it equal to the longest period of uninterrupted contraction in the U.S. economy since the 1930s.

While events in the U.S. and global financial markets are powerful drivers of the recession that began in 2007, this economic downturn is unfolding in unique ways across the various regional economies. For example, most areas of the country are experiencing housing market distress, but some are seeing more severe deterioration in local housing markets than indicated by national averages. One analysis shows that more than half of all residential foreclosure filings in 2008 took place in 35 U.S. counties where 20 percent of the U.S. population lives. Similarly, while some 41 states saw payroll jobs decline in 2008, the remaining 9 states (and the District of Columbia) continued to report employment growth.

The following series of articles takes a closer look at the distinct way that this recession is playing out in four major regions of the country. The first article describes how the latest downturn is exacerbating long-term problems in the manufacturing sector of the Industrial Midwest. In the second article, we explore how formerly booming housing markets in Arizona, California, Florida, and Nevada have given way to a housing bust that has sharply reversed the momentum of the regional economy. The third article focuses on the impact of financial market turmoil on New York City and other financial centers along the East Coast, while the fourth article outlines why a number of states in the nation's midsection have fared better than most thus far because of their high dependence on energy and agricultural production.

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<sup>&</sup>lt;sup>1</sup> "Most foreclosures pack into a few counties," *USAToday*, March 6,

## Recession Adds to Long-Term Manufacturing Challenges in the Industrial Midwest

The manufacturing sector has long been a primary economic driver of the Industrial Midwest. This region, which comprises eight states in the north-central United States, is known for its durable goods manufacturing, a sector that includes the production of automobiles and other types of heavy machinery. The emphasis on manufacturing has posed challenges for the region as the sector has contracted. This article discusses manufacturing trends in the Industrial Midwest, particularly with respect to the troubled auto sector, and the economic outlook for the region.

## The Industrial Midwest Has Not Recovered from the Last Recession

The U.S. manufacturing sector has struggled throughout this decade. Historically, nationwide manufacturing-related employment has tended to decline a few quarters before the U.S. economy contracts and then recover in tandem with the broader economy. However, job growth in the U.S. manufacturing sector did not

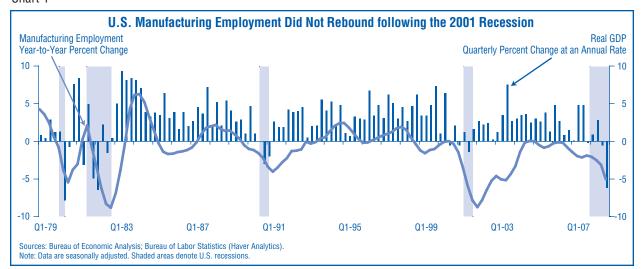
<sup>1</sup> In this article, the Industrial Midwest is defined as the region encompassing Indiana, Wisconsin, Michigan, Ohio, Iowa, Kentucky, Minnesota, and Illinois.

rebound after the 2001 recession, even while overall U.S. economic growth was strong (see Chart 1).<sup>2</sup>

These manufacturing weaknesses have had a disproportionate effect on the Industrial Midwest economy. In each state in the region, manufacturing employment as a percentage of total employment is higher than the nation's. Moreover, Indiana, Wisconsin, Michigan, and Ohio have the highest concentrations of manufacturing employment in the country.<sup>3</sup> Because of its reliance on manufacturing during a period of weakness in this sector, total employment in the region has yet to return to pre-2001 levels (see Chart 2).

Two long-term issues are adversely affecting manufacturing in the Industrial Midwest. First, over the past two decades, much of the region's manufacturing base has

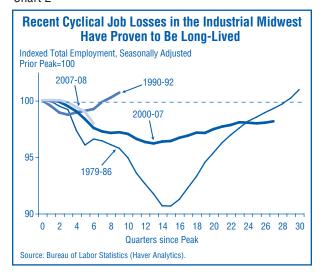
Chart 1



<sup>&</sup>lt;sup>2</sup> The trend of outsourcing may contribute to overcounting of manufacturing job losses. As manufacturers "purchase" a growing number of services, the value of which is ultimately embedded in product value, manufacturing employment levels may have simply shifted to service industry sectors. See "Is Manufacturing at a Crossroads?" *Chicago Fed Letter*, Number 204a, July 2004.

<sup>&</sup>lt;sup>3</sup> Bureau of Labor Statistics, December 31, 2008. Manufacturing concentrations are defined as durable goods manufacturing and wholesale trade jobs as a percentage of total nonfarm payrolls.

Chart 2

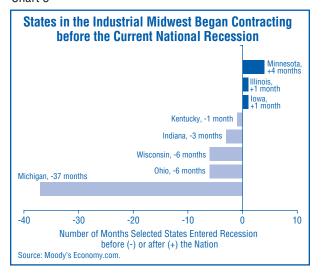


been lost to competition, both foreign and domestic. Second, technological improvements in U.S. factories have led to much higher productivity levels. These productivity advances have been brought about by capital investments that require fewer low-skilled workers.

More recently, the erosion of market share and structural cost problems at General Motors (GM), Chrysler, and Ford have led to large-scale restructurings and job losses. These challenges at U.S. automakers have contributed to the loss of more than 140,000 manufacturing jobs since 2005.<sup>5</sup> Hundreds of thousands of additional workers at auto assembly plants and auto parts suppliers could potentially lose their jobs during the current downturn.<sup>6</sup>

Auto sector layoffs have disproportionately affected Michigan, Ohio, and Indiana, the states most exposed to the troubled auto sector. These states were essentially in recession before the nation as a whole, with Michigan preceding the national downturn by more than three years (see Chart 3). Michigan is the state most heavily concentrated in auto manufacturing, with the most motor vehicle manufacturing jobs and the highest

Chart 3



number and proportion of direct and indirect jobs connected to motor vehicle parts production.<sup>7</sup>

## Employment Weakness Has Also Spilled into the Region's Housing Markets

Although the Industrial Midwest did not experience the significant home price appreciation of the post-2001 housing boom to the same degree as other regions, its residential real estate markets have still suffered. Existing home sales in the Industrial Midwest declined 33 percent from their second quarter 2005 peak, roughly in line with the nationwide decline. In 2008, home prices fell in all of the region's states, led by Michigan, where prices declined by more than 10 percent. Further, in half of the Industrial Midwest states, foreclosure rates are at or slightly higher than the national rate.

Weak housing markets have, in turn, adversely affected the region's construction industry. Construction employment was virtually unchanged across the Industrial Midwest from 2003 through 2006, while it grew more than 10 percent nationwide. Since 2006, the construction sector in the Industrial Midwest has declined by 7.7 percent, or 96,000 jobs.

<sup>&</sup>lt;sup>4</sup> Bureau of Labor Statistics. From 2002 to 2006, U.S. manufacturing multifactor productivity growth—the increase in the ratio of goods output to labor, capital, and other inputs—averaged 2.2 percent, well above the 30-year average of 1.4 percent.

<sup>&</sup>lt;sup>5</sup> The figure cited refers to job losses in the transportation manufacturing sector of the Industrial Midwest through 2008. These job losses have occurred mostly at auto parts suppliers and automakers.

<sup>&</sup>lt;sup>6</sup> See CAR Research Memorandum: The Impact on the U.S. Economy of a Major Contraction of the Detroit Three Automakers, Center for Automotive Research, November 4, 2008.

<sup>&</sup>lt;sup>7</sup> Contribution of the Motor Vehicle Supplier Sector to the Economies of the United States and Its 50 States, Center for Automotive Research, January 2007.

<sup>8</sup> National Association of Realtors, data available as of fourth quarter 2008.

<sup>&</sup>lt;sup>9</sup> Based on the Federal Housing Finance Agency Purchase-Only House Price Index.

<sup>&</sup>lt;sup>10</sup> Mortgage Bankers Association, fourth quarter 2008.

## The Industrial Midwest Faces a Potentially Long Road to Recovery

Employment in the Industrial Midwest has declined substantially during the current downturn, and the near-term outlook for **Detroit's** auto industry remains unclear. Automakers have been shrinking their businesses to match reduced market share. In addition, financial press reports and analytical studies indicate that hundreds of thousands of jobs are potentially at stake as Chrysler and GM continue to negotiate restructuring plans with the Obama administration's auto task force. Though foreign-based automakers with production facilities in the region might increase output to partially offset this gap, their new hiring likely would not fully absorb jobs shed by Detroit automakers.

Two other economic indicators also point to a prolonged path to recovery. First, the outlook for the metal fabrication and machinery manufacturing industries has diminished. These industries, which include companies involved in the transformation of metal into intermediate or final products and the production of machines used in industrial applications, provided some economic stability to the Industrial Midwest following the last recession. However, the weakening national economy has softened demand for their products. Nationally, investment in machinery and other fixed assets has slowed consistently since mid-2007, and fell 21 percent during fourth quarter 2008. 11 As a result, employment in fabrication and machinery manufacturing in the region declined 1.4 percent, or about 13,000 jobs, in 2008.

Second, contraction or slowing growth in the economies of U.S. trading partners will likely limit future export opportunities that had provided a counterbalance to the weakened auto sector over the past few years. Exports rose 13 percent and 11 percent, respectively, in 2006 and 2007, benefiting from strong foreign demand and a decline in the value of the dollar. However, the economies of foreign trading partners are now slowing or contracting and the decline in the dollar has reversed direction, returning to tradeweighted levels not seen since 2006.<sup>12</sup>

A more positive outlook for the region hinges in no small part on the success of federal government initiatives directed at stimulating the economy in general and the auto sector in particular. Spending on infrastructure projects should generate new jobs, while other provisions of the \$787 billion American Recovery and Reinvestment Act are intended to maintain existing jobs. However, most of the affected jobs will be outside of the manufacturing sector. While employment will likely continue to decline in the automotive sector, it is likely that fewer jobs would be lost under a governmentassisted restructuring than would occur otherwise. Over the long term, job growth is likely to become more dependent on emerging and expanding industries, such as those found in the energy, education, and health care sectors.

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<sup>&</sup>lt;sup>11</sup> Bureau of Economic Analysis; seasonally adjusted, annualized growth in real private nonresidential fixed investment.

<sup>&</sup>lt;sup>12</sup> The Blue Chip Economic Indicators consensus forecast as of December 2008 calls for a 0.1 percent decline in Canada's GDP in 2009 and only a 0.2 percent increase in Mexico's GDP. Growth in China, one of the fastest growing export markets, is expected to slow from 9.5 percent in 2008 to 7.6 percent in 2009, well below trend.

#### The Sand States: Anatomy of a Perfect Housing-Market Storm

The historic boom and subsequent decline in the nation's housing market has been a defining feature of the current recession. The housing downturn has been most acute in four states—Arizona, California, Florida, and Nevada—that had experienced some of the highest rates of home price appreciation in the first half of the decade. While these states are not all contiguously located, their similar housing cycles and abundance of either beaches or deserts have led some analysts to label them "Sand States." This article discusses the factors that led to an expanding housing sector in these states and the market imbalances that culminated in a sharp correction in home prices. The article also explores the ripple effects that the housing downturn has had on the local economies.

#### Rapid Population Growth in the Sand States Propelled Housing Markets

For many years, rapid population growth in the Sand States spurred higher than average rates of home construction. Favorable weather and relatively affordable housing are two factors that attracted retirees as well as younger families to these states. In the 1980s and 1990s, population growth rates in Arizona, Florida, and Nevada were between two and four times the national rate. Certain parts of California, such as the Riverside—San Bernardino metropolitan area, experienced similarly high rates of population growth. Rapid population growth continued into the early years of this decade. From 2004 to 2007, Arizona and Nevada ranked as the two fastest growing states in the nation, followed closely by Florida, which ranked ninth.<sup>1</sup>

The influx of new residents into Arizona, Florida, and Nevada also contributed to strong employment growth. Job creation in these states frequently outpaced the rest of the nation during the past few decades. From 2000 to 2006, these states repeatedly ranked among the top ten for job growth, far exceeding the national average. California generally reported job growth similar to the national average during this period, although the state was hit hard by the dot-com recession from mid-2001 to 2003.

## Affordability Mortgages Contributed to Housing Imbalances

During this decade, strong demand for housing, supported by a growing population and an expanding economy, contributed to growing housing market imbalances across the Sand States. Perhaps the best measure of the imbalances that accumulated in booming housing markets during this decade was the relationship between home prices and incomes. In the years leading up to the housing downturn, escalating home prices far outpaced income growth. For example, in 2003, housing in Nevada was considered relatively affordable, both in absolute terms and as compared to other states. According to one analysis, a family earning the median income in Nevada in 2003 could afford a home that was priced approximately 20 percent above the median house price in the state using traditional mortgage financing.<sup>2</sup> However, by late 2005, home prices had risen so much that a family earning the median income could only afford a home priced at 24 percent below the state's median price.

A combination of factors drove the housing sector imbalances in the Sand States to unprecedented levels. Under normal market conditions, strained affordability tends to limit housing demand because fewer households can purchase a home using traditional mortgage financing. However, in this cycle, new mortgage "affordability" products were commonly used to finance home purchases. Besides traditional adjustable-rate mortgages (ARMs), affordability products included *hybrid ARMs*, which have a low, fixed interest rate for several years followed by a market rate that is frequently much higher. Affordability products also comprised the so-called nontraditional mortgage products, which included *interest-only loans*, where amortization of principal was not required during the first few years of the

<sup>&</sup>lt;sup>1</sup> U.S. Census Bureau.

<sup>&</sup>lt;sup>2</sup> Moody's Economy.com Affordability Index. The calculation assumes a 30-year maturity and a down payment of 20 percent. It also assumes that the monthly principal and interest payments do not exceed 25 percent of the median family income. To interpret the indices, a value of 100 means that the family earning the median income can afford only 100 percent of the traditional mortgage payment of the medianpriced home, taking into consideration the 20 percent down payment.

loan; negative-amortization loans that offered initial payments well below the amount required to cover interest and amortize principal; and balloon payment loans, which typically required a large lump-sum payment at the end of the loan. Unlike subprime mortgage products that were designed for home buyers with limited or weaker credit histories, these nontraditional mortgages were marketed broadly and often used by first-time home buyers and investors who did not provide a down payment. In addition, originators of these products frequently did not require buyers to verify that their income could support the mortgage payments.

By 2006, nearly half of total U.S. originations of privately securitized affordability mortgages were made in the four Sand States alone. Moreover, the proportion of these mortgages originated in these states, including nontraditional mortgages, rose as home prices escalated. During 2002, these products accounted for roughly half of the privately securitized mortgage originations in each of the Sand States, comparable to the rest of the nation. By 2006, however, the proportion of these products had increased to 80 percent of privately securitized mortgage originations. Nationwide, the percentage was about 70 percent.<sup>3</sup>

The increased presence of speculators or investors in the Sand States also contributed to growing imbalances in the housing sector. Data from mortgage servicers indicate that nonowner, investor, and second-home mortgage originations increased noticeably in Arizona, Florida, and Nevada between 2000 and 2005.<sup>4</sup> Investor and second-home purchases tended to be more heavily concentrated in major metropolitan areas in these states, such as Las Vegas, West Palm Beach, Miami, and Phoenix.

Strong housing demand coupled with escalating home prices served as a dual incentive for builders to increase the supply of homes, arguably at a rate that exceeded short-term demand. New home construction started to accelerate in 2002, and, over the next three years, housing starts in these four states increased an average of 11 percent annually, or about twice the rate of increase elsewhere in the nation. Housing construction in the Sand States far outpaced annual growth in the number of households, which peaked at 1.6 percent in 2004 and 2005.

Labor market imbalances also arose as job growth became skewed toward the housing sector. During the height of the boom, construction employment grew 10 percent per year in these states, far outpacing growth in other industry sectors. During this time, construction jobs accounted for a disproportionate 25 percent share of new jobs, while representing less than 10 percent of total employment.

#### **Tipping Point: Imbalances Lead to Housing Collapse**

Ultimately, the housing boom in the Sand States proved to be mostly a mirage. The first signs of trouble came in the form of sharply decelerating rates of home price appreciation. Between 2003 and 2006, annual home price appreciation rates in these states had consistently exceeded the national average. Year-over-year house price appreciation in Nevada peaked in 2004 at 37 percent. In Arizona and Florida, appreciation peaked in 2005 at rates more than twice the national average. Since then, average home prices in the four states have declined between 27 and 38 percent from their peak.<sup>5</sup> Price declines have been most severe in metropolitan markets such as Phoenix and Las Vegas, which registered the largest percentage declines in the nation at 34 percent and 33 percent, respectively, during 2008.<sup>6</sup>

As home prices slumped, foreclosure activity rose at a startling pace. While this phenomenon was occurring across the nation, it was most pronounced in the Sand States. According to the *Mortgage Bankers Association*, the Sand States accounted for more than 40 percent of all mortgage foreclosures started in 2008, which is nearly double the share of mortgages held by borrowers in these four states (see Table 1). This disproportionate share of troubled mortgages in the Sand States was most acute among ARMs. In 2008, these states held 46 percent of the prime ARMs outstanding nationwide and 64 percent of foreclosures started within this mortgage category.

In fourth quarter 2008, foreclosure resales accounted for more than 55 percent of all California resale activity, almost three times the level of a year ago. Foreclosure resales were also prevalent in Las Vegas and Phoenix, where this type of transaction accounted for about 71 and 65 percent, respectively, of house and condominium resales.<sup>7</sup>

Data are from Loan Performance. Affordability mortgage products include ARM loans, interest-only loans, negative amortization mortgages, balloon loans, and hybrid ARMs. Affordability originations are measured as a percentage of privately securitized origination, first liens only.
In contrast, California had less investor activity during the period, likely because the median home price in the state was relatively high, resulting in a less attractive rate of return for potential investors.

<sup>&</sup>lt;sup>5</sup> Federal Housing Finance Agency, purchase-only index data through fourth quarter 2008.

<sup>&</sup>lt;sup>6</sup> S&P/Case-Shiller Home Price Index, data as of December 2008.

<sup>&</sup>lt;sup>7</sup> Data Quick Information Systems through <u>www.dqnews.com</u>. Las Vegas and Phoenix data are for February 2009.

Table 1

| The Sand States Account for a<br>Disproportionately High Share of<br>Foreclosure Activity |  |  |
|---|--|--|
|   | National Share of<br>Foreclosures<br>Started | National Share of<br>Mortgages<br>Serviced |
| California  | 19.2%  | 12.9%                                      |
| Florida   | 16.2%  | 7.8%                                       |
| Arizona   | 4.4%   | 2.7%                                       |
| Nevada  | 2.7%   | 1.2%                                       |
| Sand States Total:  | 42.5%  | 24.6%                                      |

Source: Mortgage Bankers Association.

Note: Data from first quarter 2008 through fourth quarter 2008. "Sand States" is the aggregate of California, Florida, Arizona, and Nevada.

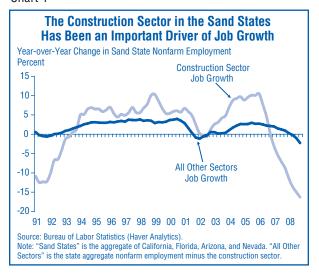
## Economic Conditions Remain Fragile as the Effects of the Housing Collapse Spread

Compounding the housing-sector problems in the Sand States, and elsewhere, has been the virtual shutdown of private mortgage-backed securities (MBS) issuance since 2007. MBS issuance had largely financed the subprime and nontraditional lending that fueled the boom. Total issuance of private MBS, which had topped \$1 trillion annually in both 2005 and 2006, fell precipitously thereafter, totaling just over \$50 billion in 2008. Meanwhile, the difficulties that market participants have had in valuing complex mortgage securities and the derivatives based on them have contributed to wider risk aversion in financial markets, which has reached historic proportions. For housing markets, particularly in the credit-fueled boom markets of these four states, these financial market disruptions are compounding what would in any case have been a steep and extended housing market downturn.

The housing market downturn in the Sand States is now having serious ripple effects on other parts of the local economy. Each of the Sand States lost jobs in 2008. The losses have been most pronounced in the construction sector, which has shed more than 450,000 jobs, or about 24 percent, between fourth quarter 2006 and fourth quarter 2008 (see Chart 1). In addition, job losses have spread to the financial services and retail trade sectors. Retail sales also have declined, particularly for home improvement, furniture, and electronics store sales, contributing to additional layoffs.

Although the Sand States entered this downturn with relatively low rates of unemployment, joblessness increased during 2008 to levels not seen since the 2001 recession. The unemployment rates for California, Florida, and Nevada ranked among the top ten in the

Chart 1



nation as of fourth quarter 2008. While Arizona's unemployment rate remained slightly below the national average as of fourth quarter 2008, it too rose markedly during the year. These rising unemployment rates are due primarily to widespread job losses and, to a lesser degree, to additional people entering the labor force in search of employment, including college graduates and retirees.<sup>8</sup> Also, rising unemployment claims are putting more pressure on already strained state budgets.

Nonetheless, a few positive, albeit very preliminary, signs may be emerging. The volume of home sales in Arizona, California, and Nevada improved during 2008 relative to year-ago levels. The increase in foreclosures sales is likely contributing to some renewal in sales activity. In addition, while a sharp decline in housing starts is eliminating construction jobs in the near term, it should eventually facilitate the return to a more stable housing landscape. Seasonally adjusted housing starts in the Sand States dropped 40 percent in 2007 and again in 2008. Also, despite the weakened housing and labor markets, population growth in Arizona, California, and Nevada was estimated to be above the national rate in 2008.9 This continued growth will be an important source of long-term housing demand that will eventually help bring a measure of stability to these troubled housing markets.

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<sup>&</sup>lt;sup>8</sup> California Employment Development Department.

<sup>&</sup>lt;sup>9</sup> U.S. Census estimates of state-level population growth between July 1, 2007, and July 1, 2008, the latest data available.

#### **Financial Sector Woes Pressure the Northeast**

The downturn in U.S. housing markets that began in 2006 was arguably the catalyst for the nation's ongoing recession. However, turmoil in the financial sector has contributed to further deterioration in the U.S. and global economies. Since 2007, a succession of financial market disturbances has heightened risk aversion and credit spreads, and has severely limited the availability of credit across certain sectors of the economy. These developments have placed enormous pressure on some classes of financial companies, particularly those that exist outside of the regulatory umbrella and those that depend on the ability to sell loans or issue debt on the open market.

The severity and duration of the recent distress has resulted in considerable job losses in the financial sector. Initially, job cuts were centered in residential-related financial employment, such as mortgage brokers, consistent with the nation's housing downturn. However, as financial stress permeated the capital markets, job losses became widespread across the financial industry. By fourth quarter 2008, employment in the U.S. financial sector had declined by 2.4 percent from a year earlier, the sharpest decline since World War II.<sup>1</sup>

#### Retrenchment in the Nation's Financial Sector Is Centered in New York

Contraction in the nation's financial sector is magnified in New York State and particularly New York City—the nation's financial center (see text box at right for the effects of financial sector contraction on other Northeast economies). Statewide, the contribution of financial jobs to total wages has increased in recent years. At its peak in 2007, wages from financial jobs accounted for 25 percent of statewide wages, considerably more than their contribution at the national level (see Chart 1).

In New York City, the economy ebbs and flows with fluctuations in the financial sector because the city has a large share of financial jobs. Indeed, the proportion of financial jobs to total employment in New York City is

#### Contraction in the Financial Sector Is Weighing on Other Northeast Economies

Financial employment is a major economic driver in other parts of the Northeast, including some cities in New England and metropolitan areas along the East Coast. Like New York, these markets are vulnerable to contraction in financial employment.

New Jersey, particularly the metropolitan areas around New York City, has a slightly higher concentration of financial employment than the nation. In fourth quarter 2008, New Jersey lost 12,500 financial jobs, about 4.6 percent, from one year ago. This rate of decline was nearly double the national rate and was the largest percentage decline for the state since first quarter 1991.

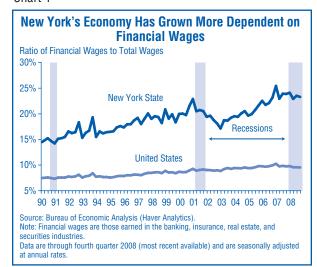
Boston, Massachusetts, and Hartford, Connecticut, also had high concentrations of financial sector employment at 7.2 percent and 11.7 percent, respectively, at year-end 2008. Employment in Boston's financial sector fell by 4.0 percent in fourth quarter 2008, the largest decline since fourth quarter 1991. Much of the decline was centered in commercial banks and securities firms, although real estate employment also reported job losses. Employment in Hartford's financial sector also continues to contract. During the fourth quarter, the area's financial employment declined 0.8 percent from one year ago.

The financial sector in Charlotte, North Carolina, is also contracting. This sector, which accounted for 8.5 percent of the metro area's total jobs in fourth quarter 2008 and 40.5 percent of the area's economic output in 2006 (the most recent data available), has been losing jobs since mid-2007. The rate of decline rose during 2008, reaching 5.4 percent in the fourth quarter.

Wilmington, Delaware, also shed financial sector jobs in the fourth quarter, although the rate of loss was less than that of the nation. Employment associated with credit card banking, which has a substantial presence in Wilmington, has been relatively steady over the past year.

<sup>&</sup>lt;sup>1</sup> Bureau of Labor Statistics.

#### Chart 1

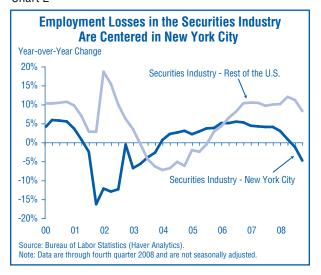


12 percent, or double the national share. Perhaps more important, wages in the securities industry, a key component of the city's financial sector, account for a disproportionate share of total wages paid in the city. Wages in the securities industry accounted for more than 25 percent of total wages paid in the city, but the industry itself accounted for only 5 percent of total jobs. Securities industry wages increased almost four times faster than wages in the rest of New York City between 2003 and 2007.<sup>2</sup>

As the disruption in financial markets persisted during 2008, job losses in New York City's financial sector continued to mount. The securities industry was particularly hard hit. During fourth quarter 2008, the city's securities industry lost more than 9,000 jobs, a 4.8 percent decline compared with one year earlier and the worst percentage decline since second quarter 2003 (see Chart 2).

Job losses in the city's securities industry will be amplified across other sectors of the economy. According to the *New York State Comptroller*, for every new job in the securities industry, three additional jobs are created in New York City and its suburbs. Conversely, losses in the securities industry will have a ripple effect across the area's economy. Estimates suggest that during the 2001 recession, this sector directly and indirectly

Chart 2



contributed to more than half of the private sector jobs lost in the city.<sup>3</sup>

In addition, the sharp downturn in New York's financial sector is negatively affecting state and local tax budgets. In fiscal year 2007–2008, tax collections from the securities industry accounted for almost 20 percent of total tax collections in New York State. The New York State Comptroller estimated that state tax collections from the securities industry, including business and personal filings, could drop by 38 percent in fiscal 2010.4

Job losses and reduced compensation in New York City's financial sector are also having a detrimental effect across real estate markets. Home prices in the New York City metro area declined by 9.2 percent on average in 2008. This year-over-year decline in home prices was the largest in the 22-year history of these data, slightly exceeding the previous high recorded in March 1991.<sup>5</sup> Still, New York City home prices fell much less during 2008 than in some other major cities, which saw double-digit declines.

New York City's commercial real estate market is also showing signs of weakness, particularly in **Manhattan**.

<sup>&</sup>lt;sup>2</sup> New York State Comptroller, *The Securities Industry in New York City*, November 2008. Data are as of 2007. The securities industry—a component of the broader financial industry—is composed of jobs classified as securities and commodities brokers, portfolio managers, and investment advisors. This sector accounted for more than one-third of financial jobs in New York City in fourth quarter 2008.

<sup>&</sup>lt;sup>3</sup> Ibid.

<sup>&</sup>lt;sup>4</sup> Ibid.

<sup>&</sup>lt;sup>5</sup> S&P/Case-Shiller Home Price Index. This index defines the New York metro area as the New York City metropolitan statistical area plus other counties in New York State, Connecticut, New Jersey, and Pennsylvania that are within commuting distance of New York City. Declines are calculated based on the year-over-year percentage change in home prices.

The financial sector occupies as much as 30 percent of Manhattan's office space. With intensifying pressure in the financial sector, office rents are dropping. The area's vacancy rates are also on the rise but remained below the national average at year-end 2008. However, a sizeable amount of office space is estimated to return to the market, which may further pressure rental and vacancy rates. Some estimates suggest that the percentage of available office space in Manhattan may soon rise to its highest level since 1996.

#### New York City's Financial Industry Has Been Resilient in Past Cycles

Forecasts suggest that job losses in New York City's financial industry will get worse before they get better. A March 2009 report by the *New York City Independent Budget Office* states that the city could lose 51,000 securities industry jobs through third quarter 2011, which would be a decline of about 27 percent from the 2008 peak.<sup>9</sup> Job losses of this magnitude would

exceed the number of securities jobs lost in the city during either the 1990–91 or 2001 recession. <sup>10</sup> In addition, job losses in New York City's overall financial sector are projected to reach 89,800. <sup>11</sup> According to the March report, job growth in the financial sector is forecast to resume in 2012 and 2013, but at a slow pace.

Although the near-term outlook for the financial services industry in New York City remains tenuous, the city's financial sector should recover as it has following every recession since World War II. During its long history, New York's financial sector has proven resilient and resurgent following periods of adversity.

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The authors would like to thank Norman Gertner, Regional Economist, Division of Insurance and Research, for his contributions to this article.

<sup>&</sup>lt;sup>6</sup> Grubb and Ellis Research, *Office Market Trends: New York City*, second quarter 2008.

<sup>&</sup>lt;sup>7</sup> Torto Wheaton Research, fourth quarter 2008.

<sup>&</sup>lt;sup>8</sup> David M. Levitt, "Banks Vacate Towers Pushing Empty NYC Space to Record," Bloomberg.com, February 26, 2008, <a href="https://www.bloomberg.com/apps/news?pid=newsarchive&sid=aSYcApYsh.Dw">www.bloomberg.com/apps/news?pid=newsarchive&sid=aSYcApYsh.Dw</a> (accessed on March 2, 2009).

<sup>&</sup>lt;sup>9</sup> New York City Independent Budget Office, Analysis of the Mayor's Preliminary Budget for 2010: IBO's Reestimate of the Mayor's Preliminary Budget for 2010 and the Financial Plan through 2013, March 2009.

<sup>&</sup>lt;sup>10</sup> FDIC analysis, quarterly data from the Bureau of Labor Statistics, and annual data from the Securities Industry and Financial Markets Association

<sup>&</sup>lt;sup>11</sup> David Belkin (senior economist, New York City Independent Budget Office), in discussion with FDIC staff, April 2009, regarding the *Analysis of the Mayor's Preliminary Budget for 2010* dated March 2009.

## How Long Can Energy and Agriculture Boost the Nation's Midsection?

The energy and agricultural sectors are important economic drivers for states in the center of the country. Extending from the oil patch of Texas, Louisiana, Arkansas, and Oklahoma, northward through the plains states and eastward to the Corn Belt, the states in the nation's midsection are not only rich in land and other natural resources, but also tend to rely heavily on these resources as drivers of economic activity. Booming commodity prices during the middle years of this decade have helped buoy the economies of these states, even while the rest of the country was moving toward recession. However, recent declines in many of these same commodity prices raise concerns about wider economic repercussions for these regions as the U.S. recession continues. This article describes how commodity industries drive the economies of the nation's midsection and evaluates their outlook after the commodity price boom.

## Energy and Agriculture Regions Do Not Always Follow the U.S. Business Cycle

Energy prices can have a profound effect on the national economy. In fact, since World War II, nearly all recessions were preceded by oil price shocks. These shocks adversely affect businesses and consumers, causing economic growth to slow. For example, around the time of the Iranian revolution in 1979, oil prices doubled within a year, contributing to the 1980 and 1981–82 national recessions. Similarly, the 1990–91 recession was precipitated, in part, by another doubling of oil prices in the months following the invasion of Kuwait and leading up to the first Gulf War.

Unlike the rest of the nation, oil-patch states tend to benefit from higher oil prices. In the early 1980s and early 1990s, higher oil prices helped these states grow even during national recessions. However, when prices collapsed during the mid-1980s, oil-patch states fell into their own regional recession. The lingering effects of the "oil bust" resulted in falling real incomes in the region. The subsequent loss of jobs, income, and output contributed to house price declines that created turmoil

in residential real estate markets and led to hundreds of bank failures.<sup>1</sup>

Like the energy sector, agriculture does not move in perfect tandem with the national economy, though influences from U.S. and global trends can be strong. For example, global economic conditions affect the demand for food, which helps drive agricultural commodity prices. In addition, large interest rate movements can have a profound effect on farmland prices. For example, in the early 1970s, strong demand for farm commodities caused farm incomes to rise rapidly. When combined with negative real interest rates, this favorable environment caused sharp increases in the value of farmland. In the late 1970s, however, soaring interest rates and changing conditions in global supply and demand brought the boom period to an end. The result was a significant decline in real farm incomes, a rapid and long-lasting decline in farmland values, and hundreds of farm bank failures in the 1980s.<sup>2</sup>

## Energy and Agriculture Boomed through Mid-Year 2008

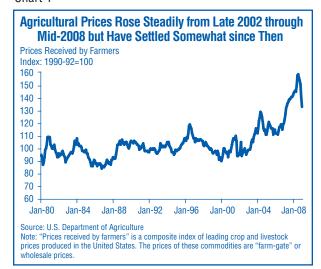
Current energy and agricultural conditions have, for the most part, played out independently of national economic trends. Despite the weakening U.S. economy, the health of the energy and agricultural industries has been very strong over the past several years. Crude oil prices quadrupled in dollar terms between 2003 and mid-2008, setting the trend for overall energy prices. This price inflation was an economic boon to oil-patch states.<sup>3</sup> During the five-year period ending in second quarter 2008, inflation-adjusted economic growth in these four states grew at an annualized rate of 3.6 percent

<sup>&</sup>lt;sup>1</sup> FDIC, *History of the Eighties—Lessons for the Future* (Washington, DC: FDIC, 1997): 291–336.

<sup>&</sup>lt;sup>2</sup> Ibid., 259–290.

<sup>&</sup>lt;sup>3</sup> While the energy discussion and analysis in this article focus on oil-patch states, it should be noted that Wyoming and Montana have characteristics similar to this region. Both states rely considerably on energy extraction and experienced employment growth above the national average during the period of high oil prices. Wyoming, in fact, had one of the most vibrant economies in the nation during that time.

#### Chart 1

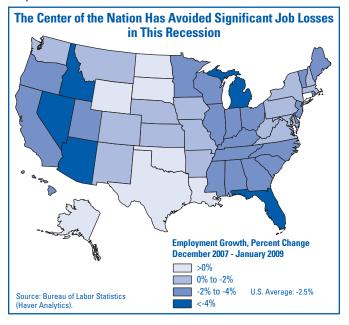


compared with 2.8 percent for the nation.<sup>4</sup> The biggest impact, however, was on real personal income, which grew at an annualized rate of 4.6 percent in the four oilpatch states compared with only 2.9 percent nationally. The region's oil and gas industry not only supports a large number of high-paying jobs in the mining industry itself, but also has strong, indirect multiplier effects on job growth in professional and business services, wholesale and retail trade, and financial activities.

The agricultural sector also has performed quite well over the past few years. A number of factors, including global economic growth and a weaker dollar, contributed to an extended period of rising prices for a broad array of agricultural products. Prices for these commodities generally began to rise in late 2002, and many reached new highs in the past two years before moderating in the second half of 2008 (see Chart 1). High commodity prices have led to record net farm incomes in three of the past four years and also have contributed to significant increases in farmland values.<sup>5</sup>

Ethanol production has also played an important role in both agricultural and energy markets in recent years. As the price of crude oil increased from less than \$26 per barrel in 2001 to more than \$133 per barrel in July 2008, ethanol became a viable and very profitable alter-

Map 1



native. Strong profitability, government mandates on renewable fuels that supported demand, and tariffs and subsidies that supported prices all led to considerable increases in ethanol output. Indeed, annual ethanol output in 2008 had grown by more than five times the levels of 2000.7 The growth in ethanol production, in turn, increased the demand for corn, the primary input in the production process, to a point where ethanol production is projected to use nearly 30 percent of the 2008 crop.8 As farmers planted more corn to meet the higher demand from ethanol plants, they reduced plantings of soybeans, which contributed to higher prices for this commodity as well. The result was record incomes for farmers and double-digit average annual increases in farmland values in corn- and soybean-producing states between 2003 and 2007.

The health of the energy and agricultural sectors, combined with relatively stable and affordable housing markets in the central United States, has caused the national recession to largely bypass the nation's midsection so far (see Map 1). The energy-rich oil patch was

<sup>&</sup>lt;sup>4</sup> Growth rates used in this paragraph were calculated by the FDIC using data from the U.S. Bureau of Economic Analysis and Moody's Economy.com.

<sup>&</sup>lt;sup>5</sup> For a detailed farmland analysis, see Richard D. Cofer, Jeffrey W. Walser, and Troy D. Osborne, "Do Record Farmland Prices Portend Another Steep Downturn for Agriculture and Farm Banks?" *FDIC Quarterly* 2, no. 4 (2008): 25.

<sup>&</sup>lt;sup>6</sup> Don Hofstrand, "Corn-Ethanol Profitability," *AgMRC Renewable Energy Newsletter*, Agricultural Marketing Resource Center, November/December 2008; and Bruce A. Babcock, Center for Agricultural and Rural Development at Iowa State University, statement before the U.S. Senate Committee on Homeland Security and Government Affairs, Hearing on Fuel Subsidies and Impact on Food Prices, 110th Cong., 2nd sess., May 7, 2008.

<sup>&</sup>lt;sup>7</sup> Renewable Fuels Association, Ethanol Industry Outlook 2009.

<sup>&</sup>lt;sup>8</sup> "World Agricultural Supply and Demand Estimates," U.S. Department of Agriculture, January 12, 2009.

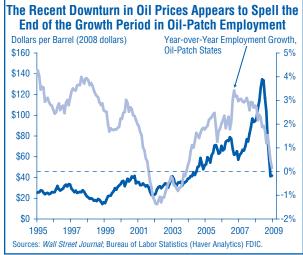
the only region that added jobs after the national recession began in December 2007, and Farm Belt states reported small job losses relative to the rest of the nation.

#### The Outlook for Energy and Agriculture Has Dimmed

Though the energy and agricultural sectors have provided insulation against recession for the central United States, these sectors have weakened considerably in recent months. The Energy Information Administration's (EIA) short-term energy outlook is projecting a long, severe global economic slowdown that will lead to further reductions in global energy demand and additional declines in crude oil and other energy prices.<sup>9</sup> The EIA projects oil prices in 2009 to average between \$40 and \$50 per barrel on a quarterly basis, but prices could plunge below \$30.10 Falling energy prices are now putting pressure on oil-patch employment growth (see Chart 2). This trend alone should not cause a repeat of the 1980s oil bust, as the region's economy has become increasingly diverse since that time, somewhat muting the impact of oil price movements.<sup>11</sup> However, when falling energy prices are combined with a severe national recession and a global financial crisis, a significant regional downturn cannot be ruled out.

Declining agricultural commodity prices are also of concern. A severe downward price cycle in agricultural commodities and land values that causes farm incomes and land values to fall could result in prolonged economic weakness among farm states. Aggravating the situation could be a rapid and significant consolidation in the ethanol industry, which was already showing weakness in mid-2008 because of overcapacity and low margins caused by high corn prices. Some of the largest ethanol producers delayed the startup of ethanol plants last year, and some analysts predicted that many small and medium-sized plants would shut down.<sup>12</sup> Deteriorating conditions in the ethanol industry will not only

Chart 2



weigh on crop prices, but are also likely to affect farmers and rural communities who have come to rely on the industry for high-paying jobs.

Though the economies in the nation's midsection continue to perform well relative to the nation, the downward trends in the energy and agricultural sectors may weigh on the region in the near future. Moderating commodity prices are likely to put a damper on the area's economic conditions, and the region may not only cease to be a source of economic strength but also could enter recession at a much later stage than the nation.

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<sup>&</sup>lt;sup>9</sup> Energy Information Administration, Short-Term Energy Outlook, December 2008.

<sup>&</sup>lt;sup>10</sup> Several leading analysts have discussed the possibility of oil prices falling below \$30 per barrel in 2009. One notable example is "Oil May Fall Below \$25 Next Year, Merrill Lynch Says," Bloomberg.com, December 4, 2008.

<sup>&</sup>lt;sup>11</sup> Stephen P.A. Brown and Mine K. Yucel, "Energy Prices and State Economic Performance," Federal Reserve Bank of Dallas, Economic Review, second quarter 1995.

<sup>&</sup>lt;sup>12</sup> "Too Much Ethanol?" Farm Industry News, November 1, 2008.