



*12 District headquarters  
of the Federal Reserve System*

## History shows regional patterns, offers insight for recovery

**A**lthough the United States as a whole feels the pain of this most recent recession, the sting varies from region to region.

“There are some exceptions, but the same regions typically suffer longer and deeper recessions,” says economist Chad Wilkerson. “Other regions not only fare better during recessions, but often have stronger recoveries from the downturn.”

Wilkerson, who is the Branch executive of the Oklahoma City office of the Federal Reserve Bank of Kansas City, recently researched the economic performance of the 12 Districts of the Federal Reserve System during the most recent recession, as well as the previous eight recessions. The Districts divide the country by geographic region; each has its own Federal Reserve headquarters, such as the Kansas City

Reserve Bank in the Midwest, as shown above.

“These historical patterns,” he says, “may offer insight to the shape of this recession, and, ultimately, the nation’s recovery.”

Wilkerson’s research shows the recession so far, while deep, has been fairly typical for many parts of the country, especially the Northeast and Midwest. For other regions, such as the Southeast and West, the downturn is clearly the worst in the past 50 years. Many of the differences among regions can be explained by the different industries within these areas, he says.

“These regional variations during recessions can largely be explained by industrial structure or by other special factors, such as overextended real estate sectors.”

Here’s a look at how the regions compare today and historically.

# Kansas City Fed creates Financial Stress Index

## Timing of entrance

Wilkerson analyzed quarterly employment data to identify regional business cycle peaks and downturns. This shows the U.S. economy entering into recession at the beginning of 2008. Regionally, though, some Districts began their descent earlier in 2007, while others stayed strong well into the second half of 2008.

By early 2009, all 12 Federal Reserve regions had entered the most recent recession. The Atlanta District was the first, followed by the Cleveland and Chicago Districts. The Kansas City and Dallas Districts entered last.

During the previous eight recessions, most Districts entered downturns at a different time than the nation. So it is not surprising that some Districts have performed much differently than others or the nation as a whole, Wilkerson says.

Particularly early or late entrances into the most recent recession can be linked to Districts' key industries, Wilkerson says. For example, the housing crisis began earlier and was deeper in Atlanta's District than any of the other 11 Districts, significantly reducing construction jobs there. The Cleveland and Chicago Districts have been hit hard by declines in manufacturing, which is heavily concentrated in those regions. However, sizable farm and energy sectors—and their high commodity prices—in the Kansas City and Dallas Districts benefited those economies during a good portion of the national downturn.

The U.S. economy is under significant financial stress.

"This stress has contributed to the downturn in the economy by boosting the cost of credit and making businesses, households, and financial institutions highly cautious," says Craig Hakkio, senior vice president and special economic advisor at the Federal Reserve Bank of Kansas City.

Hakkio and Bill Keeton, assistant vice president and economist, recently researched financial stress, including what it is, how it can be measured and why it matters. Their research also includes a new index of financial stress, the Kansas City Financial Stress Index.

"As financial conditions begin to improve, the various measures of financial stress that the Federal Reserve monitors may give mixed signals, and policymakers would benefit from a comprehensive index of financial stress," Keeton says. "This could also prove valuable down the road if the Federal Reserve needs to decide whether financial stress warranted special action."

Read Hakkio and Keeton's research "Financial stress: What is it, how can it be measured and why does it matter?" at [KansasCityFed.org/TEN](http://KansasCityFed.org/TEN).



PHOTO BY GARY BARBER

# Regional Comparison

12 Federal Reserve Districts (listed by headquarters city)	Timing of entry into most recent recession compared to U.S.	Historical job growth during recoveries and expansions	Some defining industries of the District	Entry for past 8 recessions compared to U.S.	Exit from past 8 recessions compared to U.S.
Boston	same quarter	similar to the nation	educational services; finance and insurance; health care and social assistance	2 early in 1 late in	3 late out 1 early out
New York	later	weaker than the nation	educational services; entertainment; wholesale trade	3 early in 0 late in	3 late out 0 early out
Philadelphia	later	weaker than the nation	educational services; utilities; manufacturing	7 early in 1 late in	4 late out 0 early out
Cleveland	earlier	weaker than the nation	manufacturing; management; health care and social assistance	6 early in 0 late in	3 late out 1 early out
Richmond	same quarter	stronger than the nation	federal government (civilian); military; construction	3 early in 0 late in	0 late out 1 early out
Atlanta	earlier	stronger than the nation	administrative and waste services; forestry and fishing; entertainment	0 early in 1 late in	0 late out 4 early out
Chicago	earlier	weaker than the nation	manufacturing; farming	6 early in 0 late in	1 late out 1 early out
St. Louis	same quarter	similar to the nation	farming; transportation; forestry and fishing	5 early in 1 late in	1 late out 2 early out
Minneapolis	later	similar to the nation	farming; utilities; health care and social assistance	2 early in 3 late in	2 late out 1 early out
Kansas City	later	similar to the nation	mining; farming; military	0 early in 6 late in	1 late out 5 early out
Dallas	later	stronger than the nation	mining; farming; construction	0 early in 5 late in	2 late out 3 early out
San Francisco	same quarter	stronger than the nation	forestry and fishing; real estate; accommodation and food services	0 early in 2 late in	1 late out 2 early out

Historically, mining has fared better than other industries in the early stages of a recession when energy prices often are temporarily high—much like when gas prices peaked at more than \$4 per gallon in the summer of '08. Manufacturing has typically entered recessions earlier than other industries, while the education and health care industries have fared better.

## Depth

Nationwide, more than two-thirds of the jobs created since the 2001 recession have been lost. By summer, the national unemployment rate reached 9.5 percent with many analysts predicting it hitting double digits before long.

The Atlanta, San Francisco, Cleveland and Chicago Districts have seen the steepest declines in employment. In contrast, employment in the Kansas City and Dallas Districts in early 2009 still was higher than a few years ago.

The same Districts tend to underperform (Cleveland and Chicago) and outperform (Kansas City and Dallas) the nation in recessions. This suggests similar factors, such as a District's industries, may contribute to the timing and depth of recessions, Wilkerson says.

"These defining industries are what make a region's economy most different from that of the nation as a whole," Wilkerson says. "Additionally, industries that are heavily concentrated in a particular District, whether it is oil in the Southwest or manufacturing in the upper Midwest, play a significant role in employment variation."

A few Districts have experienced recessions when the nation hasn't, which is usually related to declines in their defining industries, such as the agricultural or automobile sectors.

## Recovery

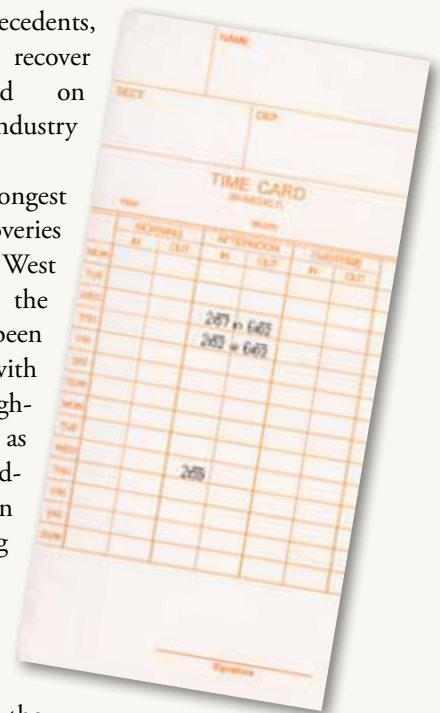
"Regions tend to recover more uniformly from deep recessions than from milder ones, so we may see somewhat of a simultaneous recovery nationwide," Wilkerson says. "Still,

based on historical precedents, some regions might recover more quickly, based on migration patterns or industry concentration."

Historically, the strongest growth during recoveries has occurred in the West and South, where the U.S population has been migrating. Regions with concentrations of high-skilled workers, such as in the Northwest, Mid-Atlantic and Mountain West, also have promising prospects for recovery.

However, some regional differences in this recession, such as housing markets in the Atlanta and San Francisco Districts, could affect the timing of recovery.

"The country's most recent recession, although painful, has been fairly typical for some regions," Wilkerson says. "This might mean these regions' recoveries will resemble those from past deep recessions, although the reported permanency of many recent layoffs could continue to dampen job growth in the near term."



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BY BRYE STEEVES, SENIOR WRITER

## FURTHER RESOURCES

### "RECESSION AND RECOVERY ACROSS THE NATION: LESSONS FROM HISTORY"

By Chad R. Wilkerson  
[KansasCityFed.org/TEN](http://KansasCityFed.org/TEN)

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**COMMENTS/QUESTIONS** are welcome and should be sent to [teneditors@kc.frb.org](mailto:teneditors@kc.frb.org).