

# **EXHIBIT 1**



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Economic Information Newsletter  
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## What Is a Recession?

February 2009

*"The economy is now in a recession...It will last longer and be deeper than the last two recessions, which lasted only 8 months from peak to trough. It could well be longer and deeper than the recession in the early 1980s that lasted 16 months."*

—Dr. Martin Feldstein, former president of the National Bureau of Economic Research

During the past year, talk of the current economic downturn has dominated U.S. and world newspapers, media airwaves, and the Internet. Economists closely scrutinized the declining economy, frequently debating whether the United States was in the midst of a recession. On November 28, 2008, the Business Cycle Dating Committee of the National Bureau of Economic Research (NBER) [announced](#) that the United States has indeed been in a recession since December 2007. Although the term "recession" is well known, and its negative connotations for the state of the economy are typically understood by the general public, the actual definition of a recession is less clear. Specifically, at what point is the economy officially in a recession, and how does the NBER determine this point? Or, in other words, what actually makes a recession a recession?

Since 1929, the NBER has mapped the U.S. business cycle, which is the up-and-down fluctuation in U.S. economic activity ([note 1](#)). Periods of economic growth are characterized as expansions, whereas times of economic contraction are considered recessions. Expansions begin when the economy has reached a trough (low point) in economic activity, and they end when the economy has arrived at a peak (high point). Recessions, on the other hand, occur when economic growth declines from a peak to a trough.

The NBER measures peak-to-trough declines in economic activity through a number of macroeconomic variables. While the [popular definition](#) of a recession is "two consecutive quarters of negative real gross domestic product (GDP) growth," the NBER does not strictly abide by this designation ([note 2](#)). Instead, the committee broadly defines a recession as a "significant decline in economic activity spreading across the economy, lasting more than a few months." The committee considers a wide range of indicators with particular emphasis on payroll employment and several measures of domestic production and income, such as gross domestic product, gross domestic income, and industrial production ([note 3](#)). A number of other monthly indicators are also considered, as the NBER focuses on recognizing broad trends across all sectors of the economy ([note 4](#)). Since peaks in [payroll employment](#) tend to coincide with peaks in the business cycle, it appears that the NBER places significant importance on employment.

Spotting the peaks and troughs of the U.S. business cycle often takes considerable time, as the NBER must wait until it can conclusively date the beginnings and ends of recessions. Revisions are usually made to most of the older data that are analyzed by the NBER, which means that the committee must look retrospectively at macroeconomic statistics. In short, previous estimates can change significantly ([note 5](#)). For the current recession, the committee took nearly a year to declare December 2007 as a peak in economic activity. This peak ended an expansion of 73 months, which began after a trough in economic activity that occurred in November 2001. Since World War II, recessions have lasted 10 months on average, which means that the current recession has already outlived the average historical time span. The longest post-WWII recession lasted 16 months, with the shortest recession taking six months ([note 6](#)). Although it is difficult to predict the duration of the current economic downturn, the NBER will certainly use its broad definition of recessions to mark the point when the United States reaches a trough in economic activity and enters its next expansionary stage.

By Douglas C. Smith, Research Analyst, Federal Reserve Bank of St. Louis

### NOTES

*The views expressed are those of the author and do not necessarily reflect the official positions of the Federal Reserve Bank of St. Louis, the Federal Reserve System, or the Board of Governors.*

## Recent Articles and Further Reading on Recessions

[“The Current Recession: How Bad Is It?”](#) by Charles S. Gascon, Federal Reserve Bank of St. Louis, *Economic Synopses*, 2009, Number 4 (posted on January 8, 2009).

Some economists believe that because of the contraction in the housing market and problems in financial markets, the magnitude of the current recession could be the most severe in decades.

[“The Recession in Perspective“](#) by the Federal Reserve Bank of Minneapolis Policy Study.

This web page places the current economic downturn into historical (post-WWII) perspective. It compares output and employment changes during the present recession with the same data for the 10 previous recessions since 1946.

[“What Is a Recession, Who Decides When It Starts, and When Do They Decide?”](#) by Brian W. Cashell, Library of Congress, *CRS Report for Congress* (posted on January 23, 2008).

This report outlines the NBER’s methods for dating the U.S. business cycle.

[“Man the Lifeboats!“](#) by Kevin Kliesen, Federal Reserve Bank of St. Louis, *Regional Economist*, January 2009.

A tumultuous turn of events rocked the U.S. economy last year. This article briefly summarizes the previous year’s economic happenings and takes a look at economic projections for the future.

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## Free Data Sources and Reports

**Data:** “Determination of December 2007 Peak in Economic Activity”  
**Description:** Official declaration of the current recession; includes Q&A section and website data sources  
**Published by:** Business Cycle Dating Committee, NBER  
**Location:** <http://www.nber.org/cycles/dec2008.html>

**Data:** NBER U.S. Business Cycles and Contractions  
**Description:** Shows the peaks and troughs of past expansions and contractions in the U.S. economy  
**Published by:** National Bureau of Economic Research  
**Location:** <http://www.nber.org/cycles.html>

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