The NBER's Business Cycle Dating Procedure: Frequently Asked Questions

[The Business Cycle Dating Committee's general procedure for determining the dates of business cycles](#)

Q: What is the basic job of the Business Cycle Dating Committee?

A: The National Bureau's Business Cycle Dating Committee maintains a chronology of U.S. business cycles. The chronology identifies the dates of peak and trough months in economic activity. The peak is the month in which a variety of economic indicators reach their highest level, followed by a significant decline in economic activity. Similarly, a month is designated as a trough when economic activity reaches a low point and begins to rise again for a sustained period.

Q: What is a recession? What is an expansion?

A: The NBER's traditional definition of a recession is that it is a significant decline in economic activity that is spread across the economy and that lasts more than a few months. The committee's view is that while each of the three criteria—depth, diffusion, and duration—needs to be met individually to some degree, extreme conditions revealed by one criterion may partially offset weaker indications from another. For example, in the case of the February 2020 peak in economic activity, we concluded that the drop in activity had been so great and so widely diffused throughout the economy that the downturn should be classified as a recession even if it proved to be quite brief. An expansion is a period when the economy is not in a recession. Expansion is the normal state of the economy; most recessions are brief. However, the time that it takes for the economy to return to its previous peak level of activity may be quite extended.

Q: If the most recent peak was in February 2020, is it correct to say the recession started in February or in March?

A: The NBER chronology does not identify the precise moment that the economy entered a recession. For the purpose of measuring how long a recession lasts, the first month of the recession is the month following the peak in economic activity and the last month is the month of the trough in economic activity. For instance, the most recent peak month was February 2020 and the first month of the subsequent recession was March 2020. The first month of an expansion is the month following the trough and its last month is the month of the following peak. The most recent trough we determined was in June 2009. July 2009 was the first month of the subsequent expansion.

Q: How is the duration of expansions and contractions calculated from NBER turning point dates?

A: Suppose there is a peak in March and a trough in September of the same year. Because April counts as the first month of the recession and September counts as the last month of the recession, the duration of the recession is six months. If there is a peak in June of the following year, then the expansion would have a duration of nine months, with October of the previous year as the first month and June of the current year as the last month.

Q: What indicators does the committee use to determine peak and trough dates?

A: The determination of the months of peaks and troughs is based on a range of monthly measures of aggregate real economic activity published by the federal statistical agencies. These include real personal income less transfers (PILT), nonfarm payroll employment, real personal consumption expenditures, wholesale-retail sales adjusted for price changes, employment as measured by the household survey, and industrial production. There is no fixed rule about what measures contribute information to the process or how they are weighted in our decisions.

Q: How does the committee's quarterly chronology relate to its monthly chronology?

A: The committee makes a separate determination of the calendar quarter of a peak or trough, based on measures of aggregate economic activity over the relevant quarters. Generally, the peak or trough quarter contains the peak or trough month, but there are exceptions, with 2019:Q4 the most recent. The red highlights in the **Excel File** available on the NBER website indicate when the peak or trough month has been outside the peak or trough quarter. Two measures that are very important in the determination of quarterly peaks and troughs, but that are not available monthly, are the product-side and income-side estimates of real gross domestic product (GDP and GDI).

Q: How does the committee weigh employment in determining the dates of peaks and troughs?

A: Employment is one of the indicators we consider in determining the dates of peaks and troughs. For the business cycle peak in February 2020, the peak of payroll employment occurred in that month, coinciding with peaks in other monthly indicators such as real PILT. In the 2007–2009 recession, real GDP and real GDI gave mixed signals about the peak date, but a clearer signal about the trough date. Employment reached its peak in January 2008, one month after the business cycle peak in December 2007. We designated June 2009 as the trough based on other indicators, eight months before the trough in employment.

Q: How does the monthly behavior of real personal consumption expenditures (PCE) enter the committee's deliberations?

A: PCE accounts for a large majority of GDP, and estimates of real PCE are available monthly. However, declines in real PCE usually account for only a small part of the declines in real GDP during recessions. As a result, the behavior of PCE is often not highly informative about the monthly behavior of overall economic activity. In contrast to this usual pattern, the fall in real PCE accounted for a very large fraction of the decline in real GDP from the fourth quarter of 2019 to the first quarter of 2020. We therefore judged that the monthly behavior of real PCE was informative about this episode.

Q: How do the movements of unemployment insurance claims inform the committee's thinking?

A: The monthly estimates of employment produced by the Bureau of Labor Statistics (BLS) are a more reliable indicator of labor market developments than unemployment insurance claims, and so we normally place little weight on the claims data. However, we judged that the special circumstances of March 2020 caused the claims data to be unusually informative in this period. The monthly employment estimates pertain to the reference period containing the 12th of the month (for payroll employment, the pay period containing the 12th; for household employment, the week containing the 12th). In March 2020, the weeks ending March 21st and March 28th saw historically unprecedented levels of new claims for unemployment insurance, suggesting a collapse of employment between the reference week and the end of March. This provided further evidence that economic activity had declined sharply from February to March.

Q: How do the cyclical fluctuations in the unemployment rate relate to the NBER business-cycle chronology?

A: The unemployment rate is a trendless indicator that moves in the opposite direction from most other cyclical indicators. Its level in May 1948 was the same 3.5 percent as in February 2020. The NBER business-cycle chronology considers economic activity, which grows along an upward trend. As a result, the unemployment rate sometimes rises before the peak of economic activity, when activity is still rising but below its normal trend rate of increase. For example, the unemployment rate reached its lowest level prior to the December 2007 peak of activity in May 2007 at 4.4 percent and climbed to 5.0 percent by December 2007. On the other hand, the unemployment rate often continues to rise after activity has reached its trough. For example, in the recovery beginning in March 1991, the unemployment rate continued to rise for 15 months after the trough. And following the trough in June 2009, the unemployment rate continued to rise for four months, reaching a peak in October 2009.

Q: Isn't a recession a period of diminished economic activity?

A: Recessions and expansions refer to the direction of change in economic activity, not its level. The interval between the peak and the trough designates a recession, a period when economic activity is contracting. The subsequent period designates an expansion when economic activity is increasing. Because the level of activity in the trough month can be well below the level at the previous peak, the first few months or even years of an expansion can witness a level of activity that is below the previous peak. For example, following the trough in June 2009, one of the indicators, real personal income less transfers, did not exceed the level of the previous peak until December 2011. Another indicator, nonfarm payroll employment, did not exceed the level of the previous peak until April 2014.

Q: The financial press often states the definition of a recession as two consecutive quarters of decline in real GDP. How does that relate to the NBER's recession dates?

A: Most of the recessions identified by our procedures do consist of two or more consecutive quarters of declining real GDP, but not all of them. In 2001, for example, the recession did not include two consecutive quarters of decline in real GDP. In the recession beginning in December 2007 and ending in June 2009, real GDP declined in the first, third, and fourth quarters of 2008 and in the first and second quarters of 2009. Real GDI declined for the final three quarters of 2001 and for four of the six quarters in the 2007–2009 recession.

Q: Why doesn't the committee accept the two-quarter definition?

A: There are several reasons. First, we do not identify economic activity solely with real GDP, but consider a range of indicators. Second, we consider the depth of the decline in economic activity. The NBER definition includes the phrase, "a significant decline in economic activity." Thus real GDP could decline by relatively small amounts in two consecutive quarters without warranting the determination that a peak had occurred. Third, our main focus is on the monthly chronology, which requires consideration of monthly indicators. Fourth, in examining the behavior of production on a quarterly basis, where real GDP data are available, we give equal weight to real GDI. The difference between GDP and GDI—called the "statistical discrepancy"—was particularly important in the recessions of 2001 and 2007–2009.

Q: Does the concept of a double-dip recession exist in the NBER's business cycle chronology?

A: The NBER does not define a special category called a double-dip recession. Two periods of contraction will be either two separate recessions or parts of the same recession. The main criterion used to determine whether a downturn following one business cycle peak and apparent trough is a separate recession or the continuation of the earlier one is the duration and strength of the upturn after the initial trough. For example, our determination that the recession that began in 1981 was separate from the one that began in 1980 was based in part on the extent to which major economic indicators bounced back in late 1980 and early 1981. We do not apply fixed formulas in this and other determinations, but rather form judgments based on the underlying concepts of recessions and expansions and the goal of preserving historical continuity in the NBER business cycle chronology.

Q: Does the committee identify depressions as well as recessions in its chronology?

A: The NBER does not separately identify depressions in its business cycle chronology. The period between a peak and a trough is a contraction or a recession, and the period between the trough and the peak is an expansion. The term depression is often used to refer to a particularly severe period of economic weakness. Some economists use it to refer only to the portion of these periods when economic activity is declining. The more common use, however, also encompasses the time until economic activity has returned to normal levels. The most recent episode in the United States that is generally regarded as a depression occurred in the 1930s. The NBER determined that a peak in economic activity occurred in August 1929, and that a trough occurred in March 1933. The NBER identified a second peak in May 1937 and a trough in June 1938. Both the contraction starting in 1929 and the contraction starting in 1937 were severe; the one starting in 1929 is widely acknowledged to have been the worst in U.S. history.

Q: Has the committee ever changed a cycle date?

A: Since 1978, when the Business Cycle Dating Committee was created, there have not been any changes to previously-announced business cycle turning points. Prior to 1978, there were some revisions in turning points; see this **article** . We would change the date of a past peak or trough if we concluded that the date previously chosen was incorrect.

Q: Typically, how long after the beginning of a recession does the committee declare that a recession has started? After the end of the recession?

A: Our determination of the peak date in February 2020 occurred 4 months after that date, in June 2020. Earlier determinations took between 6 and 21 months. There is no fixed timing rule. We wait long enough so that the existence of a peak or trough is not in doubt, and until we can assign an accurate peak or trough date.

Q: Does the NBER keep a record of when it announced the determination of the dates of peaks and troughs prior to those given on the NBER's website?

A: The Business Cycle Dating Committee was created in 1978, and since then there has been a formal process of announcing the NBER determination of a peak or trough in economic activity. Those announcement dates and accompanying explanations are available **here**. Prior to the creation of the committee, the NBER made no formal announcements when it determined the dates of turning points.

Q: When did the NBER first determine its business cycle dates?

A: The NBER was founded in 1920, and published its first business cycle dates in 1929.

Q: When was the committee formed?

A: The committee was created by the President of the NBER in 1978. Robert Hall has chaired the committee since its inception.

Q: How is the committee's membership determined?

A: The President of the NBER appoints the members, who are experts in macroeconomics and business cycle research.