



## Seven Questions about Recessions

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*The world economy is experiencing its most severe recession since the Great Depression. Two aspects of the current recession are notable: (1) it was preceded by sharp drops in asset prices and credit; and (2) it is highly synchronized. There has been a vibrant*

*research program studying the implications of recessions with such features. Based on the results of this research program, this article provides brief answers to seven commonly asked questions about recessions.*

### Question 1: What happens during recessions?

According to the National Bureau of Economic Research, which maintains a chronology of U.S. business cycles, recessions correspond to a significant decline in economic activity, lasting more than a few months, normally visible in production, employment, real income, and other indicators. Excluding ongoing recessions, there have been 122 recessions in the advanced countries since 1960 (Claessens, Kose, Terrones, 2008). These recessions are infrequent and short-lived events—on average, they lasted a year. Moreover, in a typical recession, real GDP falls from peak to trough by about 2 percent, but this number varies quite a bit across episodes. Some recessions are severe, reaching in some cases the status of depression—i.e., events with a real GDP decline exceeding 10 percent. Reflecting in part the great moderation of business cycles, recessions in the advanced economies have become less frequent and milder since the mid-1980s, although the current recession is likely to interrupt this trend (IMF, 2009).

As one would expect, the main components of aggregate demand typically decline following a similar pattern to that of output during recessions, albeit with important timing differences. While private consumption stagnates or falls slightly during a recession, private investment drops sharply and its recovery usually lags that of output. Recessions are also accompanied by a decline in international trade. Despite a drop in exports, the current account balance in the advanced economies typically improves during a recession mainly because imports experience a much larger decline than exports do. Asset prices and credit also fall in response to a weakening in economic activity. The timing of their recovery differs, however, across asset prices—with

equity prices typically preceding and house prices lagging the rebound in output. The unemployment rate typically rises before the onset of a recession but stays compressed more than a year after the recession ends.

### Question 2: Are globally synchronized recessions different?

Globally synchronized recessions, defined as those events during which half of the advanced countries are in a recession at the same time, are relatively rare. During the 1960–2007 period there were 37 such recessions bunched in three years (1975, 1980, and 1992) that coincided with global shocks. Globally synchronized recessions last longer and cost more than nonsynchronous ones—they last a quarter longer and result in more than two times larger cumulative output losses.

Globally synchronized recessions are associated with more severe contractions in industrial production along with greater job losses. Typical declines in house prices are also much higher during these episodes, despite the fact that housing is not an internationally tradable asset (Claessens, Kose, and Terrones, 2008). Lastly, global trade flows fall significantly, particularly when the United States is also in recession (IMF, 2009). For instance, during the 1975 and 1980 recessions, U.S. imports fell by more than 10 percent (compared with 3 percent in the other U.S. recessions), reducing global trade significantly. This implies that the exports of goods and services of the advanced economies also contract during a recession, thus contributing to the severity of these events. Moreover, when many countries experience a recession, they also go through episodes of credit contractions and declines in asset prices.

### Question 3: What happens during credit crunches and asset price busts?

There were 28 credit-crunch episodes—defined as sharp contractions in real credit—in the advanced economies during the 1960–2007 period (Claessens, Kose, and Terrones, 2008). These episodes last two-and-a-half years and are associated with a nearly 20 percent decline in real credit. Similarly, asset busts are substantial declines in the prices of houses and equity. There were 28 (58) house (equity) price busts during the 1960–2007 period. A housing bust usually lasts longer than an equity bust (four years for the former

compared with two-and-a-half years for the latter) but is associated with a smaller price decline (house prices tend to fall by 30 percent in a housing bust, while equity prices typically drop by 50 percent in an equity bust).

Credit crunches and asset busts have adverse effects on economic activity, investment growth, and unemployment. House-price busts, in particular, are associated with larger drops in investment and the rate of unemployment. Residential investment, for instance, declines by 6 and 12 percent during credit crunches and house busts, respectively.

#### **Question 4: What are the main features of recessions associated with severe financial market problems?**

Before answering this question, we need to determine if a specific recession is associated with a credit crunch and/or an asset price bust. A recession is associated with severe financial market problems if it started at the same time as, or after the beginning of, an ongoing credit crunch and/or asset bust. Clearly, this classification describes a “timing” association between the two events but does not imply a causal link.

Recessions associated with credit crunches or asset busts are not only longer but also deeper than other recessions. In particular, although recessions accompanied by severe credit crunches or house-price busts last only a quarter longer, they typically result in output losses two to three times greater than recessions without such severe problems in financial markets. Interestingly, recessions associated with credit crunches or house busts are slightly more costly than recessions with equity busts.

Why are recessions associated with crunches and busts longer and deeper? Financial market problems stemming from credit crunches and asset-price busts tend to prolong and deepen recessions through several channels. For example, sharp declines in asset prices can reduce the net worth of firms and households, limiting their capacity to borrow, invest, and spend. This in turn leads to further declines in asset prices (Kiyotaki and Moore, 1997). Banks and other financial institutions might restrict lending as their capital bases diminish during credit crunches, resulting in protracted and deeper recessions.

There are two main reasons why recessions associated with house busts are more costly than recessions associated with equity busts. First, housing represents a large share of household wealth and, consequently, price adjustments affect consumption and investment considerably more during recessions. Second, equity prices are more volatile than house prices, implying that the changes in house prices are more likely to have a larger permanent component than

do equity prices. This implies that households will adjust their consumption more to changes in house prices than equity prices (Carroll, Otsuka, and Slacalek, 2006).

#### **Question 5: Which financial variable is the most important one in affecting the cost of recessions?**

The cost of a recession is, of course, affected by a number of factors. First, as discussed in the previous questions, changes in credit and asset prices can have important implications on the severity of a recession. Second, prevailing economic conditions at the onset of a recession, global economic conditions, and oil prices can also be associated with different recession outcomes. Third, countercyclical policies might mitigate the cost of a recession.

The empirical evidence suggests, however, that changes in house prices are a key factor that influences the severity of a recession. For example, there is evidence that consumption and investment are very sensitive to movements in house prices, often leading to large changes in employment. This sensitivity is explained in part by the substantial wealth effects associated with movements in house prices and the presence of credit market imperfections and borrowing constraints tightly related to the collateral value. In addition, the presence of capital requirements based on mark-to-market accounting exacerbates the effects of credit shocks on global asset prices (Mendoza and Quadrini, 2009).

#### **Question 6: Can countercyclical policies help during recessions?**

Policymakers have, over time, tried to mitigate the costs of recessions. There is, however, a lively debate about the effectiveness of such policies. While some observers argue that these policies can help moderate recessions, some others claim that they can worsen the recession outcomes.

Recent work suggests that discretionary monetary and fiscal policies could help reduce the duration of recessions in the advanced economies. In particular, there is evidence that discretionary monetary policy is associated with shorter recessions. Discretionary fiscal policy does not have a significant impact on the duration of recessions. By contrast, in the case of recessions associated with financial crises, expansionary discretionary fiscal policies tend to shorten the duration of recessions. This finding is consistent with evidence that fiscal policy is particularly effective when agents face tighter liquidity constraints.

The evidence on the effects of policies on the amplitude of a recession is, however, less robust. Claessens, Kose, and Terrones (2008) report that fiscal and monetary policy

does not seem to have a significant impact on the depth of recessions. This finding could reflect several potential factors, including the coarse nature of the fiscal and monetary policy proxies they employ; lags on the policy effects, particularly with regard to fiscal policy; and several instances in which procyclical policies were in place to fight inflation. In summary, the evidence on the effectiveness of countercyclical policies during recessions is mixed, indicating a fertile ground for further research.

### Question 7: Can recessions end ahead of the resolution of problems in financial markets?

The lessons from the Great Depression and other episodes of financial crises suggest that restoring the confidence in the financial sector is key to ending a recession. Having said this, it is quite possible that output recovers ahead of the full recovery in credit and house prices growth.

Two approaches are employed to assess these timing differences across recessions and financial market problems (Claessens, Kose, and Terrones, 2008). The first one is to consider the durations of the individual episodes of recessions, crunches, and busts. The evidence suggests that credit crunches and house and equity busts last much longer than recessions do. The second approach is to examine how long it takes for credit and asset prices to bottom out after the end of a recession, when these episodes are associated with crunches or busts. In such episodes, output often recovers two (nine) quarters ahead of the trough observed in credit (house prices). Moreover, there is evidence that in the case of recessions associated with crunches, output recovers before the revival of credit growth. These findings are reminiscent of the “credit-less recoveries” found in the

context of the sudden-stops episodes in emerging markets (Calvo, Izquierdo, and Talvi, 2006).

This raises important questions as to what industries are more affected by these credit-less recoveries. Kannan (2009) finds evidence suggesting that the firms that are more reliant on outside funding are the most affected by tight credit conditions. This effect is often mitigated by other industry characteristics such as asset tangibility and output tradability. Interestingly, there is evidence that firms in industries with few tangible assets and less tradable products are highly vulnerable to tight credit conditions.

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