

Risk, uncertainty, and economic activity

“Over the years, the concepts of *risk* and *uncertainty* have often been used interchangeably in the popular press,” asserts Pablo Guerrón-Quintana, in an article titled “Risk and Uncertainty” (*Business Review*, Federal Reserve Bank of Philadelphia, first quarter 2012, pp. 10–18, http://www.phil.frb.org/research-and-data/publications/business-review/2012/q1/brq112_risk-and-uncertainty.pdf). “But,” he goes on to say, “economists have long distinguished between the two.” With that distinction in mind, Guerrón-Quintana presents “clear and simple definitions of risk and uncertainty” and goes on to discuss alternative measures of risk and the ostensible consequences of risk for economic activity.

Guerrón-Quintana defines risk as a situation in which we are faced with unknown outcomes but we know the odds of the unknowns. He likens risk to the flipping of a fair coin. The unknown outcomes are whether the coin will come up heads or tails. The known odds are 50:50 heads versus tails. The example of the coin is “precisely the essence of risk: We can describe the odds of the unknowns.”

By contrast, Guerrón-Quintana defines uncertainty as a situation in which, again, we are faced with unknown outcomes, but this time we do not know the odds of the unknowns. He likens uncertainty to the flipping of an unfair coin or, more precisely, the successive flipping of different unfair coins. The unknown outcomes are again whether the coin will come up heads or tails. But now the odds are not 50:50 heads vs. tails; in fact, the odds of whether the coin will

come up heads or tails are unknown.

From this definitional base, Guerrón-Quintana suggests four possible measures of risk and seeks to show, by way of examples, that they are compatible with one another and that they are consistent with empirical economic evidence. The four measures of risk are (1) disagreement among economic forecasters, (2) stock market fluctuations, (3) interest rate volatility, and (4) tax rate volatility. Guerrón-Quintana cites, respectively, forecasts of U.S. real gross domestic product growth from 1970 to 2010, volatility in the U.S. stock market from 1963 to 2011, interest rate volatility in Argentina from 1998 to 2004, and volatility in U.S. tax rates from 1970 to 2010 as evidence for each measure in turn and concludes that all of the measures “indicate that risk increases during periods of political and economic turmoil . . . [and] that risk in the U.S. was low during the late 1980s and the first half of the 1990s.” The article uses several charts to demonstrate the correlation between risk and political and economic turmoil.

Who was rained on the hardest?

In a recent *EconSouth* article, staff writer Lela Somoza analyzes the impact of the 2007–2009 recession on broad demographic groups. She compares the unemployment rates of men and women, young workers and older workers, and college-educated workers and people with less education. She also compares joblessness among Whites, Blacks, and Hispanics.

In “Who is the Most Unemployed? Factors Affecting Joblessness” (*EconSouth*, Federal Reserve Bank of Atlanta, first quarter

2012, pp. 7–11, http://www.frbatlanta.org/documents/pubs/econsouth/12q1_employment_recession.pdf), the author uses the terms “mancession” and “mancovery” to point out that men experienced the bulk of both the job losses from the recession and the job gains from the economic recovery.

The unemployment rate of men ages 16 and older peaked at 11.2 percent (in October 2009), while that of women ages 16 and older peaked at 9.0 percent (in November 2010). She attributes this more than 2-percent-age-point gap to the industries that were hit the hardest, typically male-dominated industries—construction, manufacturing, and professional and business services. Employment in the construction and manufacturing sectors fell 20 percent and 15 percent, respectively, from December 2007 to June 2009, the National Bureau of Economic Research-designated start and end dates of the recession. These sectors have experienced some recovery in more recent months.

All demographic groups were hit hard by the recession. In this recession as in previous ones, however, the effects of unemployment were unevenly distributed among major demographic groups. For example, workers with postsecondary education or training were less likely to be laid off and more likely to find employment during the recovery as the recovery brings about shifts in the demand for skilled workers and relatively few jobs for less skilled workers. As the author states, “A variety of factors, including education and industry concentration, mean that some groups will remain vulnerable to job losses.” Looking ahead, however, she notes that all groups are likely to benefit from an improving economy. □