

Week 6 discussion 1

Analyze the concept of “stress test” as applied to financial institutions and create a better alternative for assessing the viability of a financial institution.

At its simplest, a stress test is a way of revaluing a portfolio using a different set of assumptions. The results of a stress test show the sensitivity of the portfolio to a particular shock. Stress tests can be useful because for most asset markets, the history of returns does not provide sufficient information about the behavior of markets under extreme events. Stress tests complement traditional models with estimates of how the value of a portfolio changes in response to exceptional but plausible changes in the underlying risk factors.

In individual financial institutions, stress tests have become widely used as a risk management tool to assess a variety of risks, including market risk (losses from changes in prices or yields), credit risk (losses from borrower defaults), and liquidity risks (illiquidity of assets and depositor runs). Gradually, the techniques have been applied in a broader context, with the aim of measuring the sensitivity of a group of institutions (such as commercial banks) or even an entire financial system to common shocks. However, most stress tests applied at the system level are really only performed on a subset of institutions and often ignore many of the complex institutional links that are inherent in any financial system. Thus, it may be more appropriate to describe stress tests of a financial system as “system-focused” stress tests, to acknowledge the limitations inherent in undertaking such an exercise. System-focused stress tests, as the name implies, have several important differences from portfolio-level stress tests used by individual firms. The ultimate intent of system-focused approaches is to identify common vulnerabilities across institutions that could undermine the overall stability of a financial system. The focus is also more macroeconomic in nature, because the analyst is often interested in understanding how major changes in the economic environment may affect the financial system as a whole. Another difference between system-focused and portfolio-level stress tests lies in the complexity and degree of aggregation. System-focused stress tests may involve aggregation or comparison of more heterogeneous portfolios, often based on different assumptions and methods of calculation. This requires adding or comparing different entities (“apples” and “oranges”) to a much greater extent than is the case for a single institution’s portfolio.