ECON-4335: The Economics of Banking (Autumn-2014)
Suggested Solution of Question No: 1 of Problem Set 10

Qs 1: Stress Test:

A test designed to assess how well a system functions when subjected to greater than normal amounts of stress or pressure: *the biggest banks are getting a financial stress test to see if they can withstand a deep recession*. (Dictionary Definition).

Instead of doing financial projection on a "best estimate" basis, a financial institution or a Bank or its regulators may do stress testing where they look at how robust a financial instrument is in certain crashes, as a form of scenario analysis. It’s a type of risk measurement performed by the Financial Institutions or banks to measure the riskiness of an investment when its done or during the production periods of that investment.

But its of course a secondary measure of riskiness to protect each individual Banks investment after making any contract, for an example- if a bank X causes some risk spillovers on its counterparties, then the CoVaR exceeds the unconditional VaR. Such a risk spillover measure should be supplemented with stress tests scenarios. Usually VaR is used to measure the riskiness of any investment by an institution to other institutions but CoVar is used to measure the riskiness of many institutions at a time.

Iff when CoVaR exceeds the unconditional VaR of bank X of its internal risk measurement then Strees Testing required but its not true for all the financial institutions such as-

1. **Individually Systematic large Financial Institutions**: As it’s a very large in size and so many other institutions are highly correlated with it, No Govt. wants to let it fall as it can

cause a great recession of that economy. Stress test a good final measure to protect it (type of monitoring to protect it from collapse).

2. **Systematic as Part of a herd**: Not so large and significant but very effective on an economy as its number is so high. Not usual but some example can be found to employ monitoring body to measure the riskiness to protect this type of institutions.
3. **Non-Systematic Large**: These are not so large at all, they need the full micro-prudential regulation not macro-prudential.
4. **Tinies**: As they are unlevered, should have minimal conduct of business regulations.

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