Stress Testing and Financial Stability Policies

Papers by Jacobson *et al.*

Drehmann *et al.*

Nelson and Perli

Stress Testing and Financial Stability ***Policies***

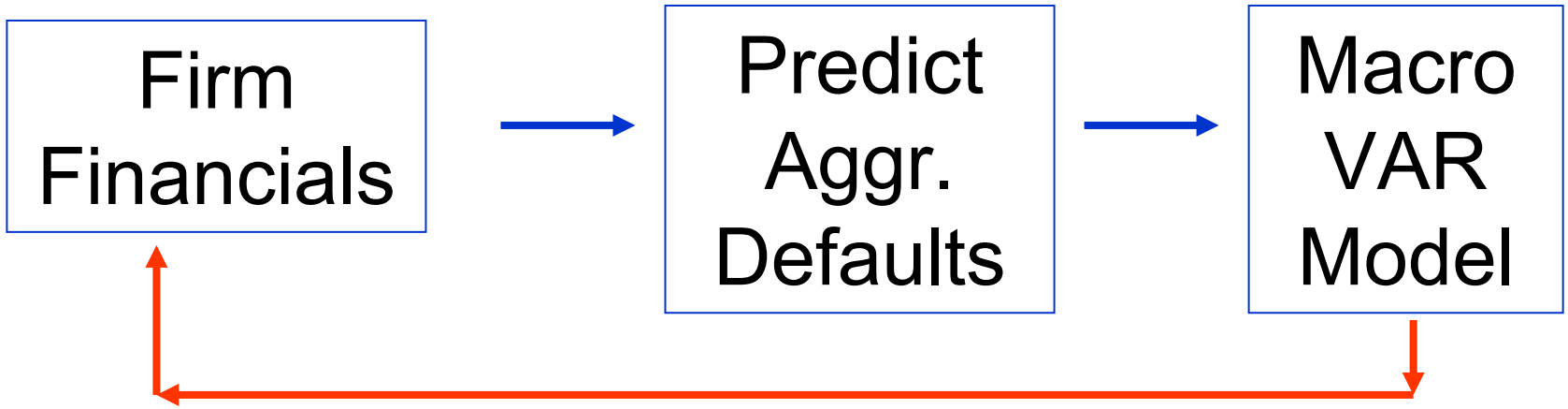
- What can policymakers do?
  - Add liquidity
  - Guarantee credit risks

- When should they do them?
  - Should policy be more or less aggressive when conditions are most uncertain?
  - Janet Yellen and Bill Brainard

Learned a lot from all three papers, which fit quite differently under the session's title.

What do they tell us about "Financial Stability Policies"?

Jacobson, Linde, Roszbach



Changes in Aggregate Defaults ≡
"Financial Stance"

Economy's response to shocks is state-dependent (nonlinear).

- One broad question: Why count the number of liquidations, as opposed to the
  - "Dollar" value of liquidations?
  - Concentration of liquidations in a small number of sectors?
- One specific comment re: housing prices.

Effect of Macro Announcements on the CRSP Value-Weighted Market Return and its Conditional Volatility

	Market Return	Volatility of Market Return
BOT	--	+27.4% *
CPI	-.136 *	--
Nonfarm Employment, Unemployment	--	+68.5% *
Housing Starts	--	+15.3% **
M1	-0.063 *	+33.4% *
M2	--	+25.5% **
Real GDP	--	- 22.6% *

Drehmann, Patton, Sorensen

Standard VAR as a linear approximation to the true model.

Enrichen a VAR by adding higher order terms.

Implied IRFs can be quite different from the linear case.

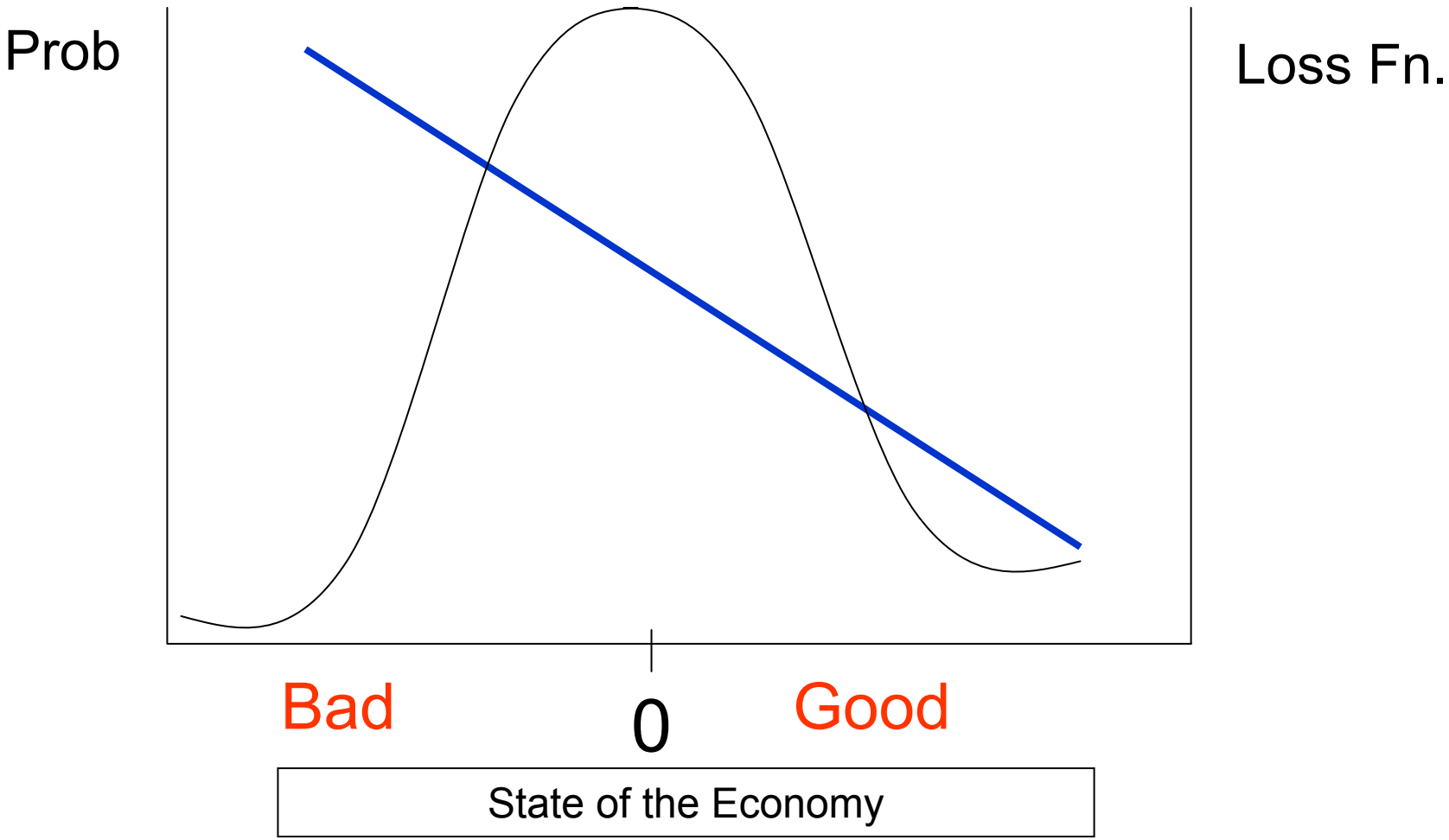
Particularly relevant for stress tests, which look for effects of extreme events.

- Key variable is # of corporate liquidations.

- Nearly all the VAR-estimated effects of 3σ shocks differ *insignificantly* from zero.

Implications for policy actions??

- Yet some of the "upper bounds" estimates are pretty large.


Prob
Loss Fn.
Bad
0
Good
State of the Economy

Stress Testing and ***Financial Stability*** Policies

What is this thing we are trying to predict/identify?

Nelson and Perli, page 1

"A financial system that is stable will also be resilient and will be able to withstand normal fluctuations in asset prices ….

Financial instability, on the other hand, can impede economic activity and reduce economic welfare."

Instability (or a crisis) seems to require a *shift* in normal behaviors.

- "available credit risk transfers are very limited, at any price."

vs.

- "credit risk is more expensive than it was last week"

“Instability” ➔ shifts between normal and unusual states.

These papers all have a contribution to understanding normal states.

Nelson and Perli come closest to a forecasting framework, which is required for taking policy actions.

But, can we predict such shifts?

- Far in advance?
  - Seems unlikely.
  - These are discrete changes from normal circumstances.
- Just as they are starting?
  - Maybe
  - Estimation risk and Brainard

Conclusion

I worry about the intense policy focus on financial stability.

- By definition, it's rare.
- We therefore run the risk of over-treating it.
- Over-treatment has nontrivial social costs
  - market assessments of risk
  - corporate governance
  - private risk mitigation