

Reflections on FSB's Report on Too Big To Fail

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FSB Panel, 4 September 2020

How have Banks responded post-GFC?

- Leverage, Size, Aggregate Risk, ...

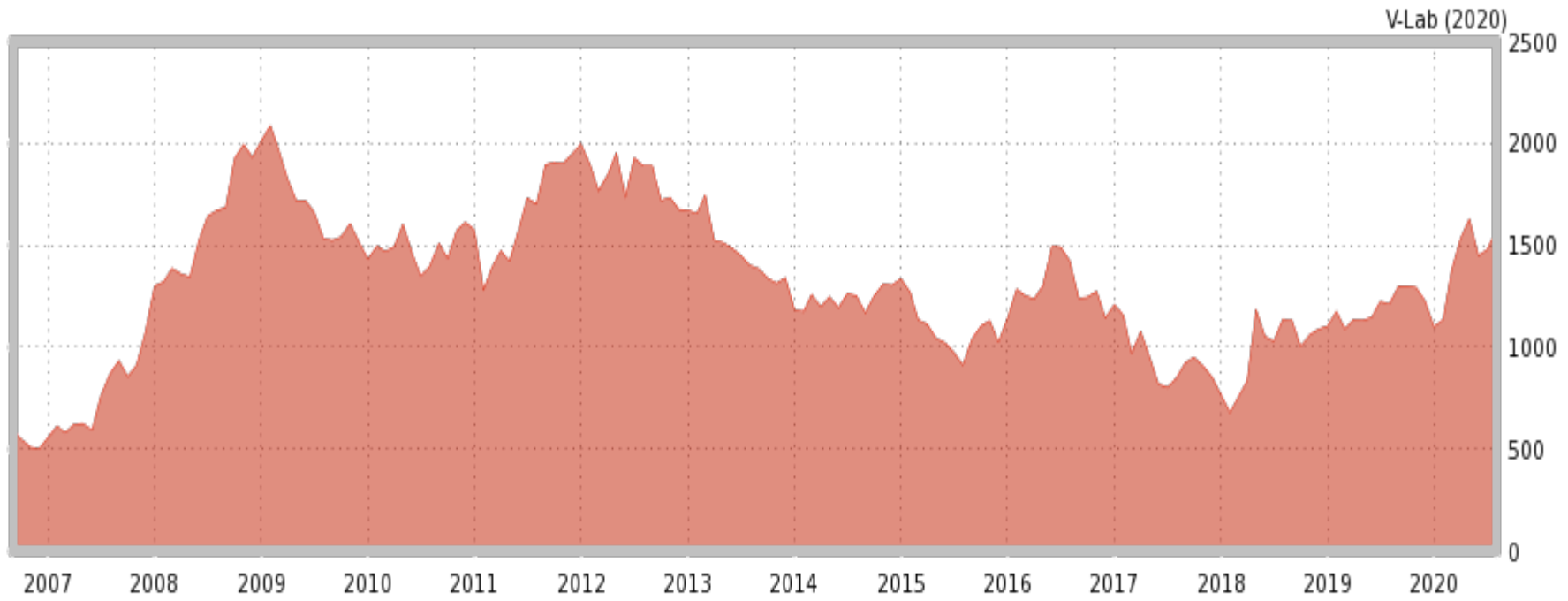
The Volatility Laboratory (Vlab): vlab.stern.nyu.edu/welcome/risk/ 

SRISK: the capital a firm would need to raise in the event of a crisis
(Acharya et al. (2010, 2012); Brownlees and Engle (2011))

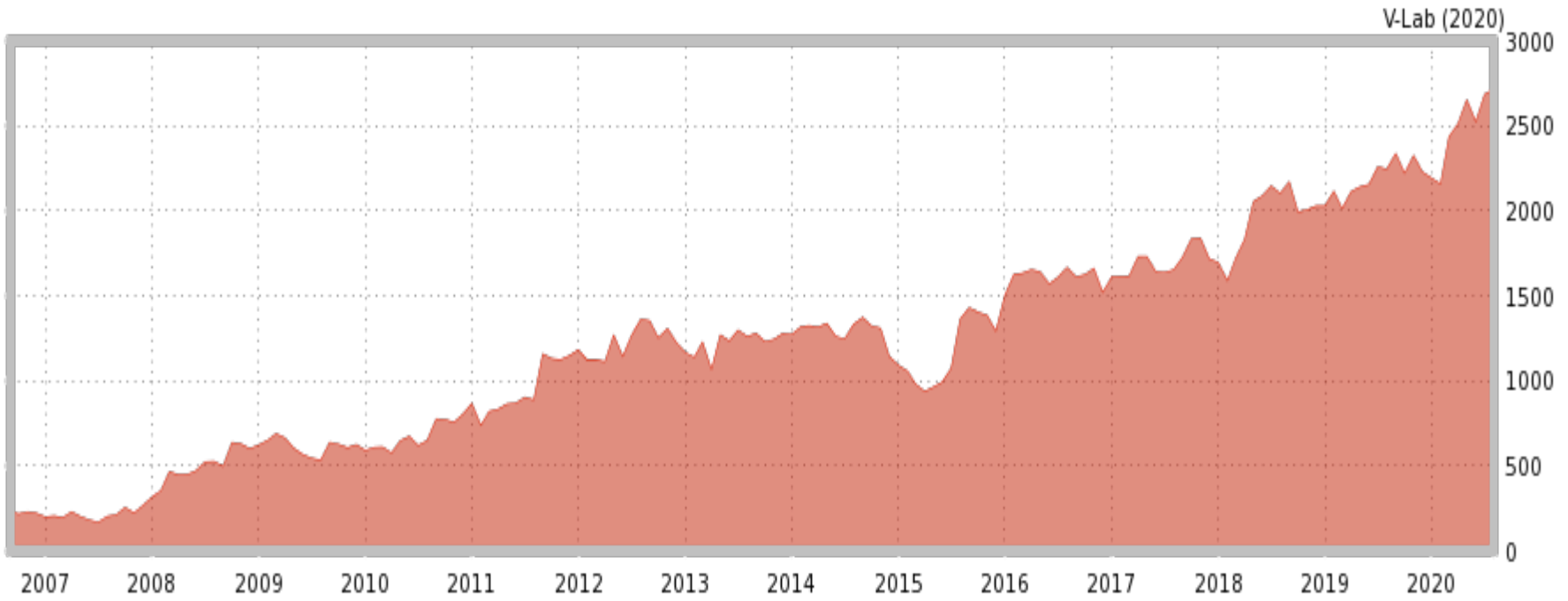
$$\begin{aligned} SRISK_{it} &= E_t [k(Debt_{it+h} + MV_{it+h}) - MV_{it+h} | R_{mt+h} \leq -40\%] \\ &= kDebt_{it} - (1 - k)(1 - LRMES_{it}) * MV_{it} \end{aligned}$$

where MV_{it} is the market value of equity of the bank, $LRMES_{it}$ is its long-run marginal expected shortfall, and k is the prudential capital ratio.

Europe



Asia



China and Japan are the Largest contributors To Asia's SRISK, China being more Important as an Incremental SRISK since 2008

SRISK
Capacity
makes
 $\Pr(\text{Crisis}) > 0.5$

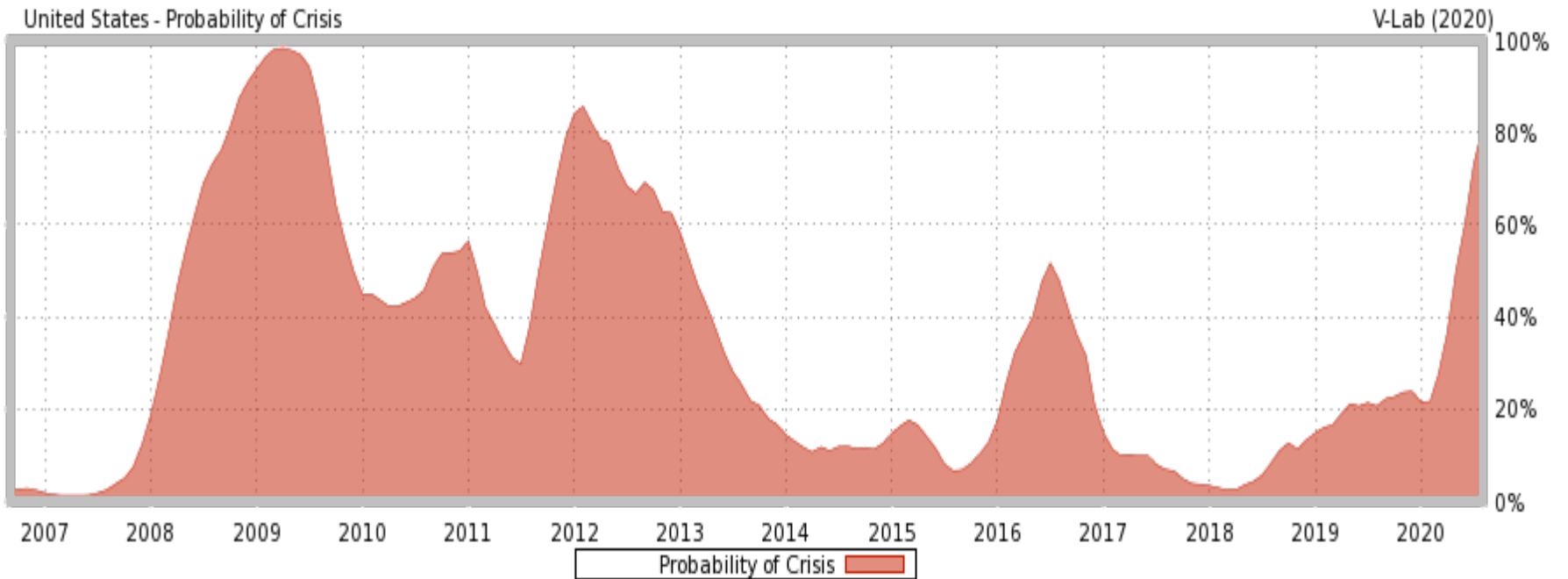
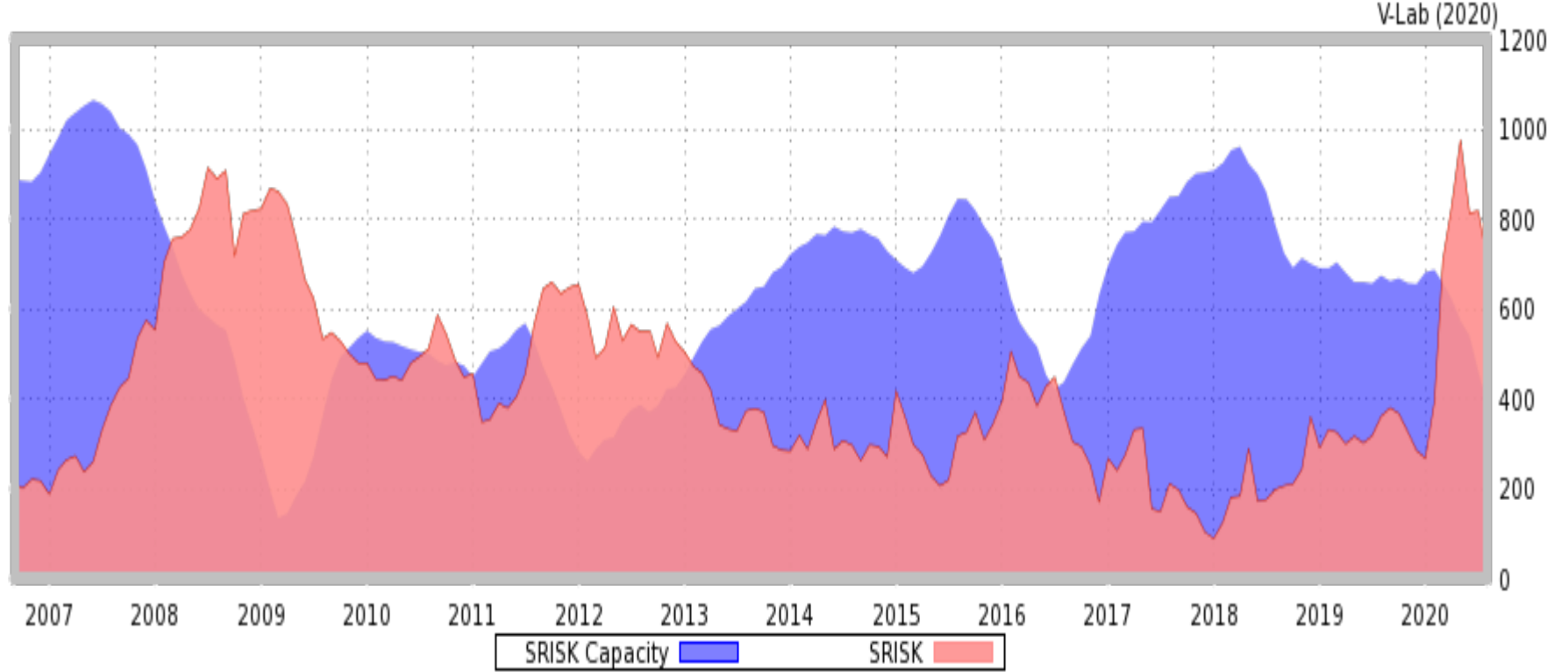
$\Pr(\text{Crisis})$ is
Estimated using

Romer and
Romer (2017)
Narrative-based
Indicator of

Credit Supply
Disruption

exceeding level of
4, which makes it

More than a
Minor Credit
Disruption



Shadow always touches the feet!

- Bank finance versus Market finance
 - Automatic stabilizer (deposit insurance) vs Demand for immediacy
- Market finance in a stress scenario
 - Rollover risk, Freezes
 - Too Systemic To Fail?
- Spillover to banks via contingent contracts (Acharya-Steffen, 2020)
 - Corporate “dash for cash”
 - Bank credit line drawdowns imply bank capital has contingent lock-ups...
- Central bank lender of last resort to banks
 - Is “shadow banking” and “market finance” increasingly a claim on the central bank “put” option in times of aggregate stress?
 - Moral hazard of extraordinarily large central bank balance-sheets!

References

- **"Capital Shortfall: A New Approach to Ranking and Regulating Systemic Risks"** (Viral V Acharya, Robert Engle and Matthew Richardson), 2012, *American Economic Review Papers and Proceedings*, 102(3), 59-64.
[Download PDF](#)
- **"[How Much SRISK is Too Much?](#)"** (Robert Engle and Tianyue Ruan), Working Paper, NYU Stern School of Business, 2018
- **The risk of being a fallen angel and the corporate dash for cash in the midst of COVID** (with Sascha Steffen), forthcoming *Review of Corporate Financial Studies*
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(Short version) [Download PDF](#), in [COVID Economics: A Real Time Journal](#)
(Video) [Short NBER presentation](#)