



BANK OF ENGLAND

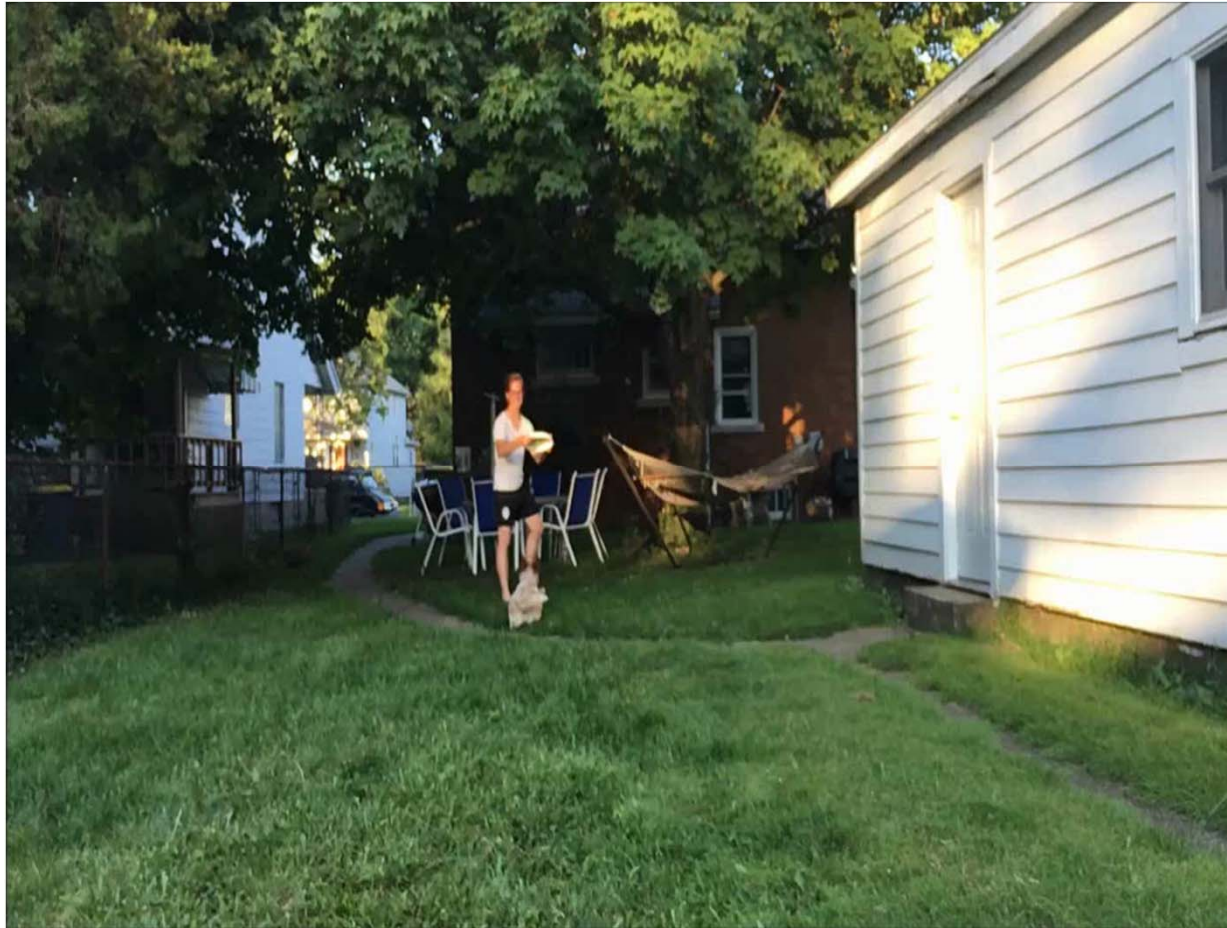
Rethinking Financial Stability

Andrew G Haldane

Rethinking Macroeconomic Policy IV

12 October 2017

The Dog and The Frisbee

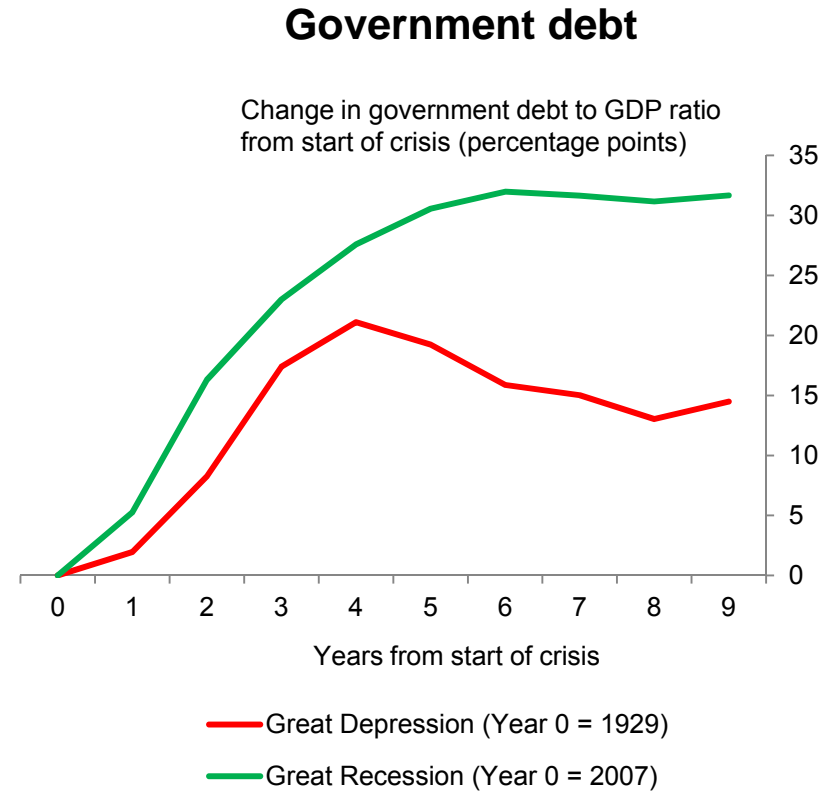
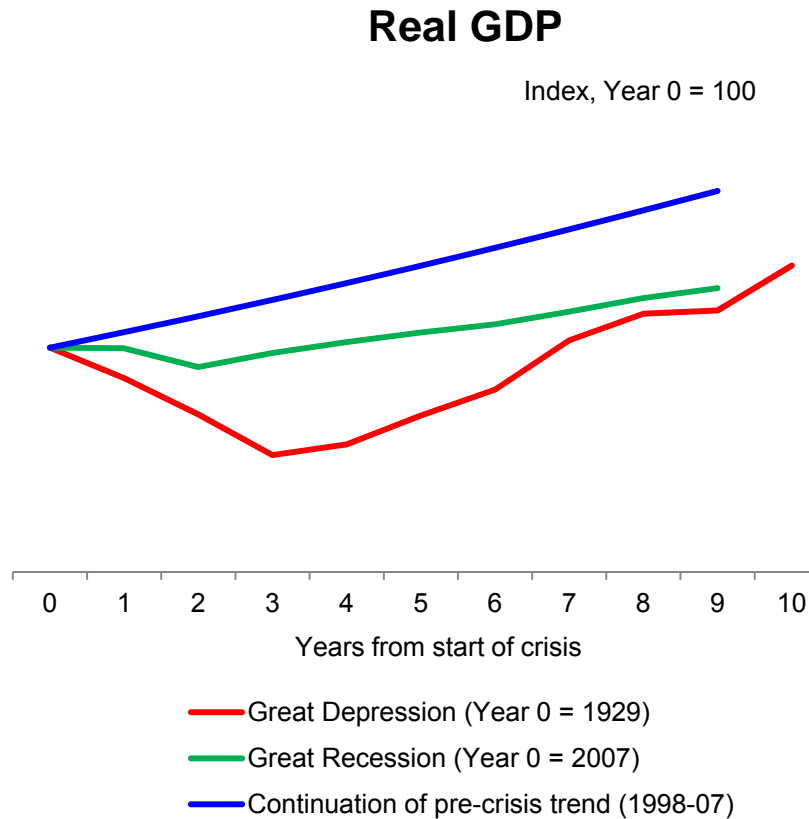


Source: YouTube



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Costs of Crisis – Recessions Compared



LHS chart shows PPP-weighted average for underlying indexed series for UK, US, France and Germany. RHS chart shows PPP-weighted average for UK, US and Germany for Great Depression and UK, US, France and Germany for Great Recession.



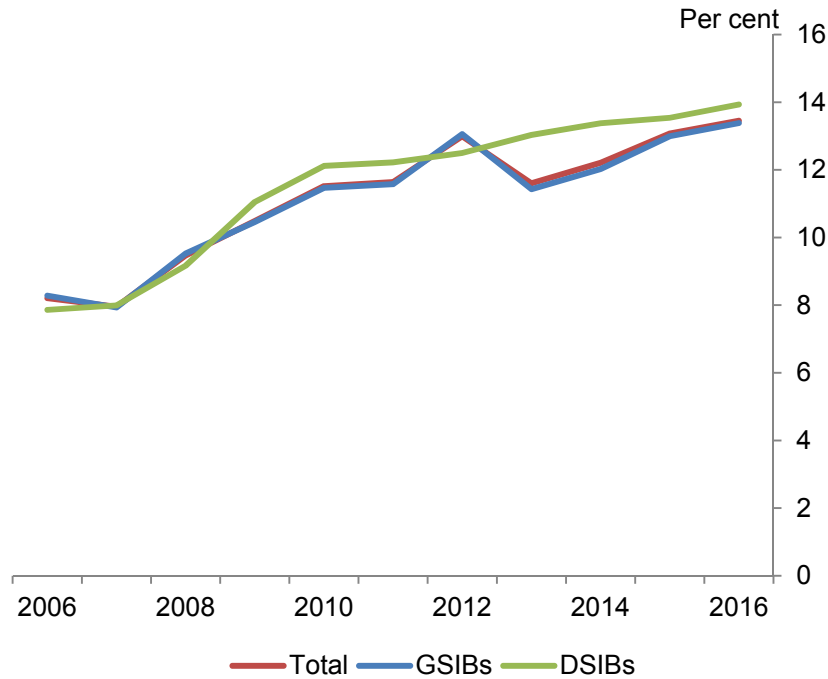
Rethinking Regulatory Reform

- **Micro-prudential**
 - Quantity and quality of risk-weighted capital requirements (RWCR)
 - Leverage Ratio (LR)
 - Liquidity Coverage Ratio (LCR)
 - Net Stable Funding Ratio (NSFR)
 - Resolution/Total Loss-Absorbing Capital (TLAC)
- **Macro-prudential**
 - Countercyclical Capital Buffer (CCyB)
 - Systemic capital requirements
 - Comprehensive stress-testing
 - Shadow-banking
- **Governance, pay, clearing, accounting, insurance**

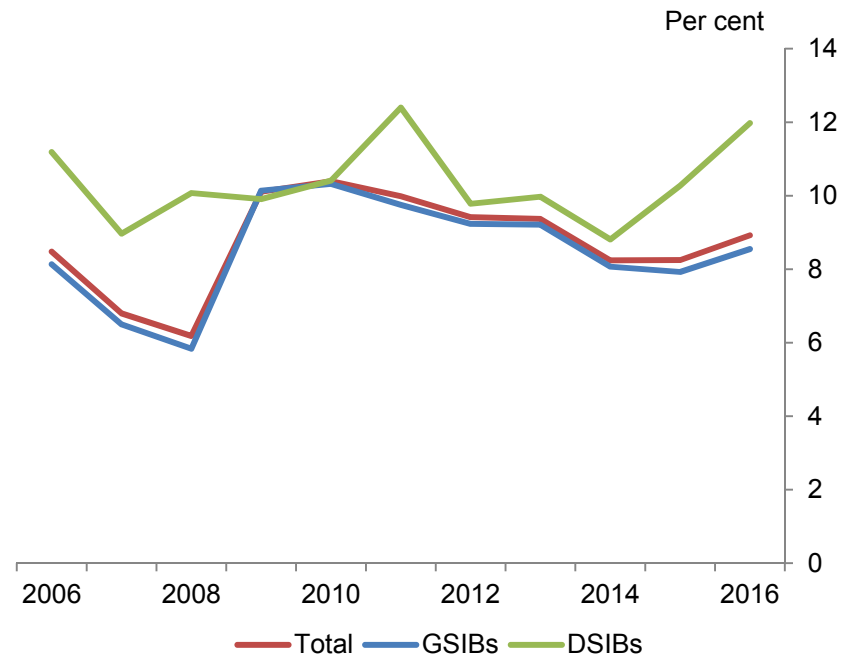


Higher Capital, Higher Liquidity

Tier 1 capital ratios

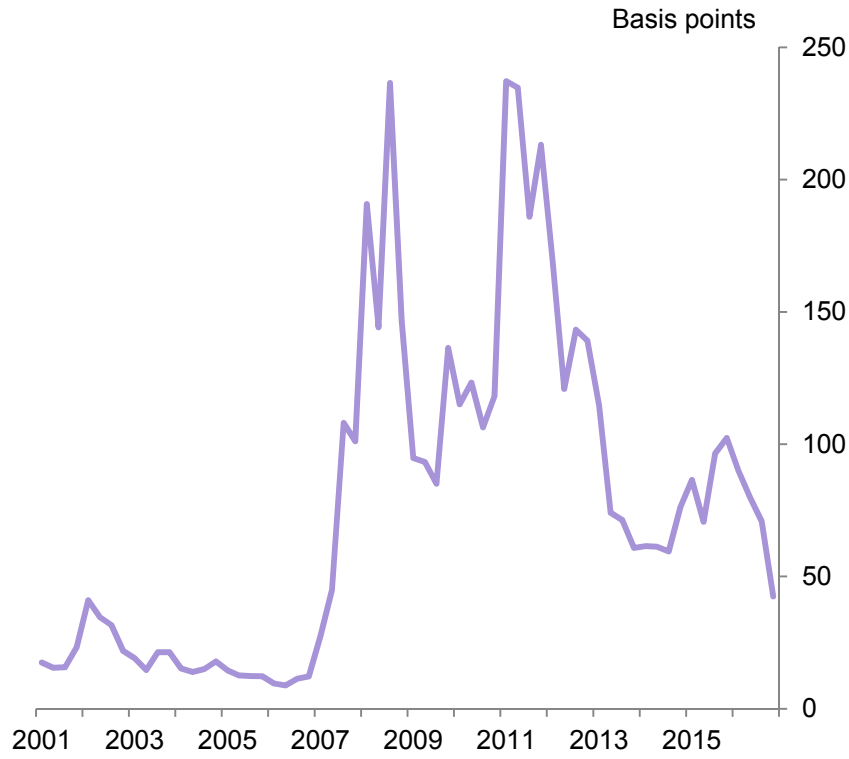


Liquid asset ratios

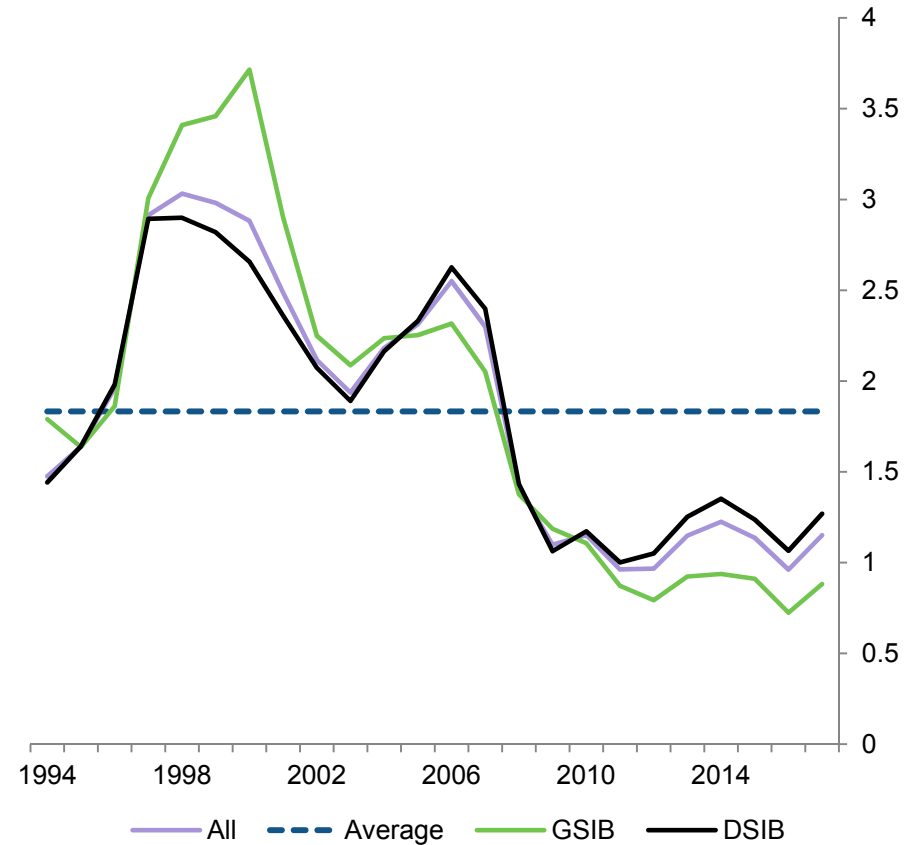


Lower Risk, Lower Profitability

CDS spreads for G-SIBs



Price-to-book ratios



High Enough?

- Equating marginal social costs and benefits of higher capital
- Basel Committee's Long-Term Impact (LEI) in 2010 study suggested "optimal" capital ratios of 16-19%
- Based on Tier 1 capital ratios, 20 of the 30 GSIBs fall short; 105 of the 169 DSIBs
- What have we learned since about marginal costs and benefits?



New Research on Costs and Benefits

	Impact on optimal capital:
<i>Benefits:</i>	
Likelihood and severity of crises	↑
Impact of capital on probability of crises	⇒
Impact of capital on severity of crises	↑
Impact of TLAC and resolution regimes on prob. and severity of crises	↓
<i>Costs:</i>	
Impact of capital on credit conditions and growth	⇒
Impact of capital on market liquidity in normal conditions	↓

□



New Research on Costs and Benefits

Impact on optimal capital:

Benefits:

Likelihood and severity of crises



Impact of capital on probability of crises



Impact of capital on severity of crises



Impact of TLAC and resolution regimes on prob. and severity of crises



Costs:

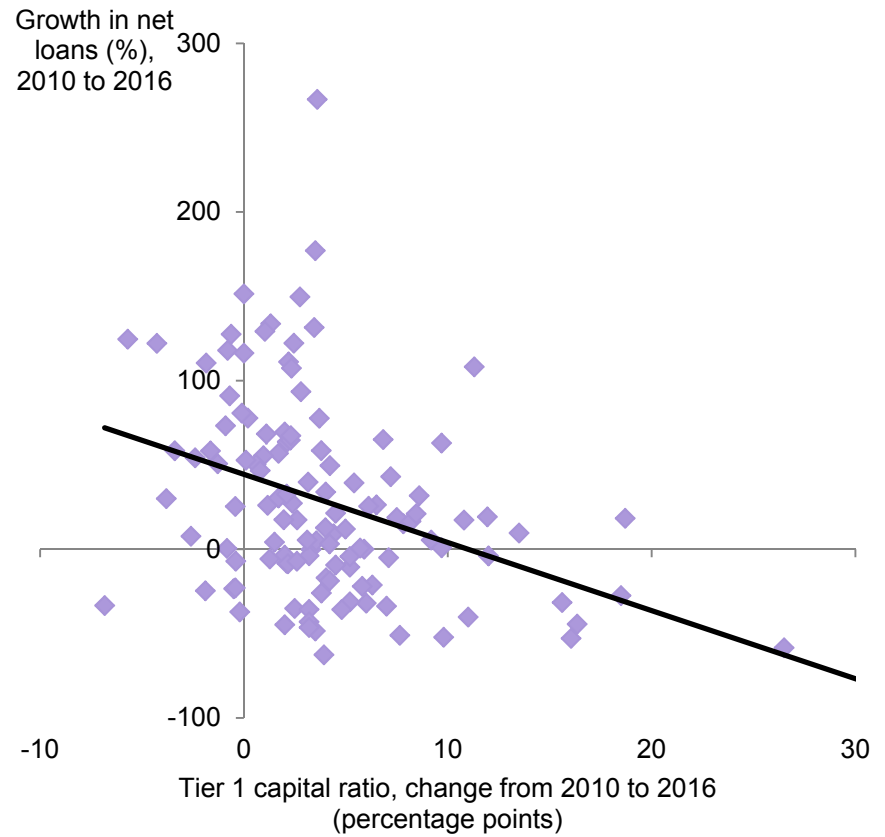
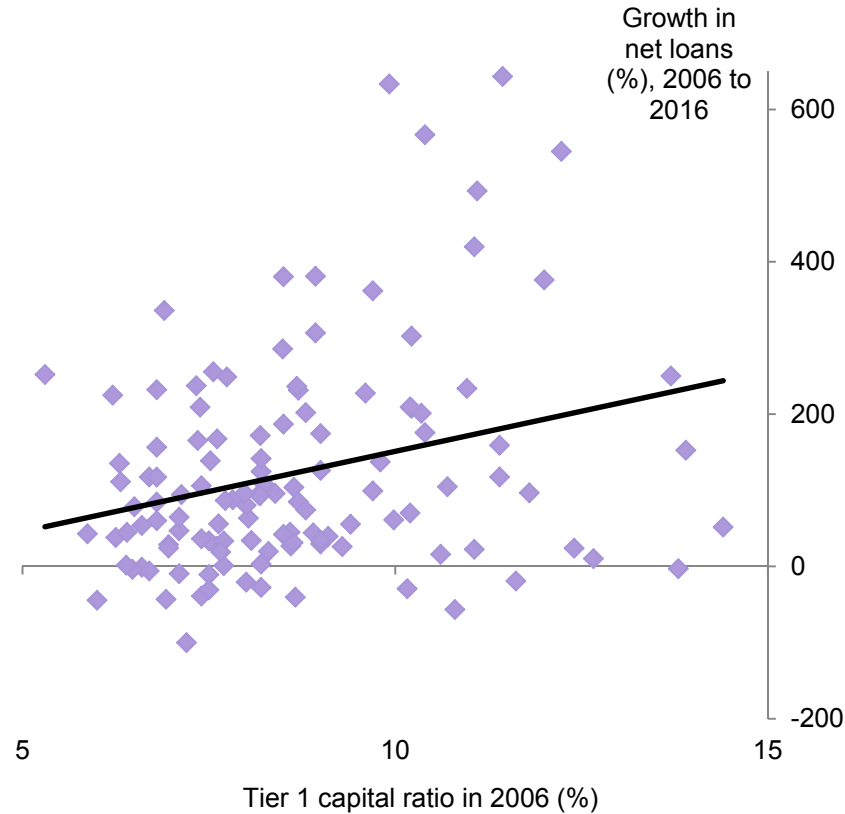
Impact of capital on credit conditions and growth



Impact of capital on market liquidity in normal conditions



Capital ratios and lending



New Research on Costs and Benefits

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Benefits:

Likelihood and severity of crises



Impact of capital on probability of crises



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Impact of TLAC and resolution regimes on prob. and severity of crises



Costs:

Impact of capital on credit conditions and growth



Impact of capital on market liquidity in normal conditions



□



The System of Financial Regulation

- **New regulatory architecture**
 - *Multiple* versus singular constraints
 - (More) *complex* versus simpler metrics
 - Greater *discretion* versus rule-like regime

- **The multiple constraints problem**
 - Over-identified system – redundancy
 - Distortion of business models/behaviours
 - Cost and complexity



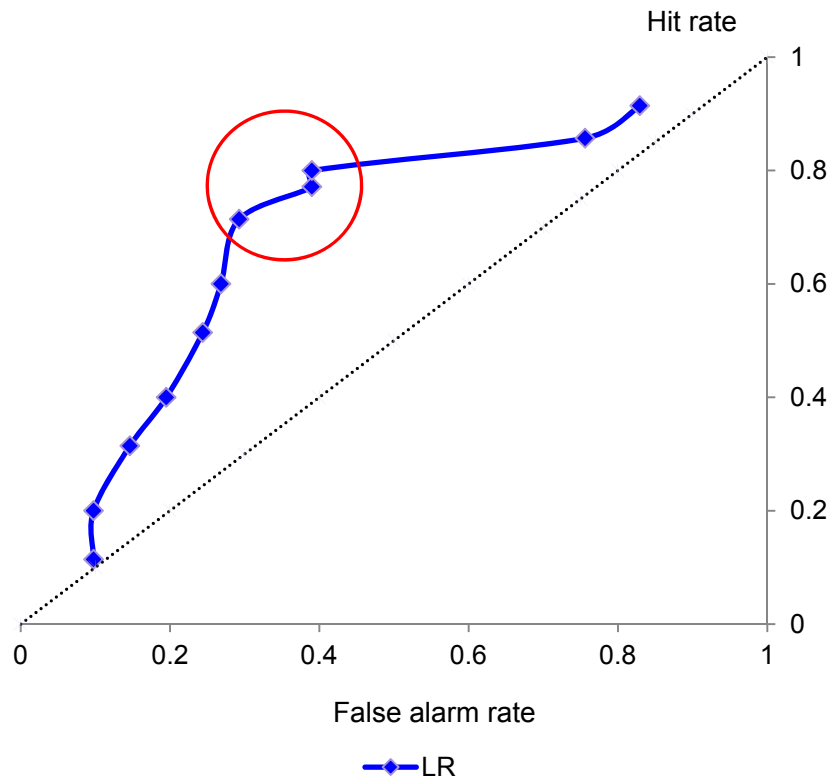
Benefits of Multiple Constraints

- **Multiple fault-lines, multiple instruments**
 - The Tinbergen principle
- **Uncertain risks, multiple instruments**
 - The Brainard principle
- **Avoidance and arbitrage, multiple instruments**
 - The First Law of Thermodynamics principle



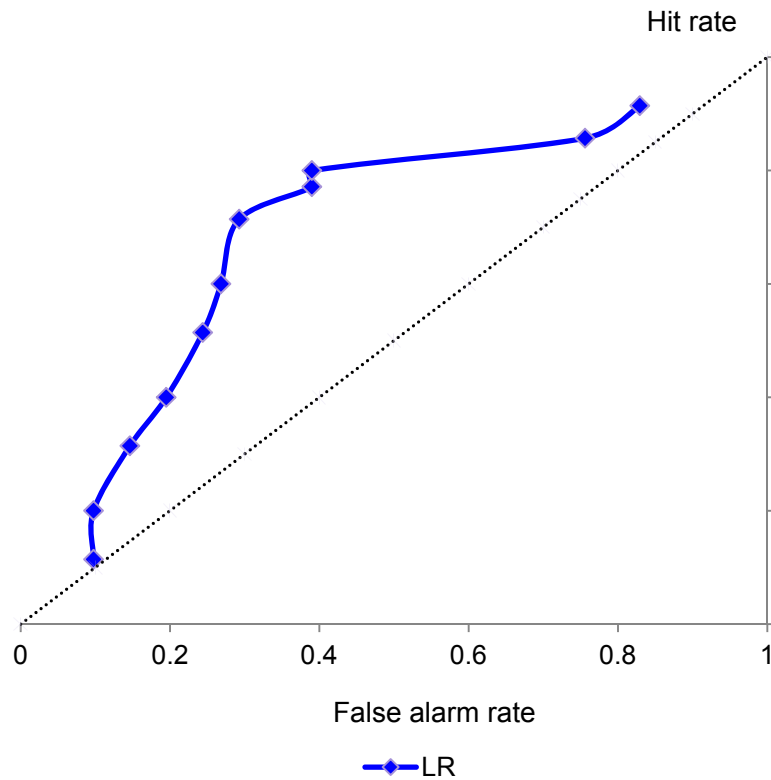
Crisis Experience

Single Leverage Ratio constraint

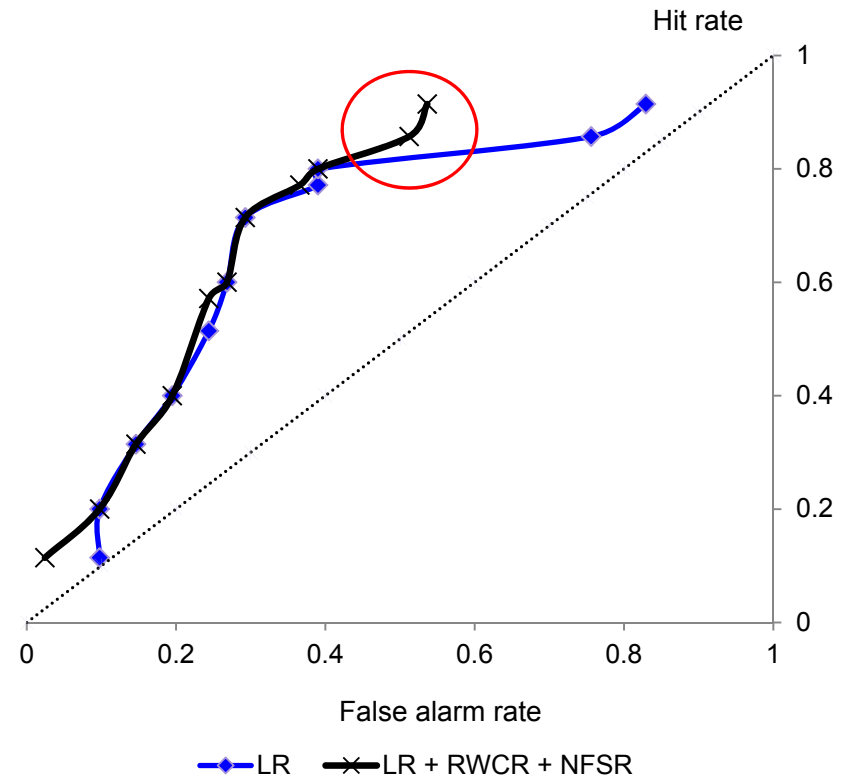


Benefits of Multiple Constraints

Single Leverage Ratio constraint



Multiple constraints



Open Issues

- **Calibration** – is TLAC as credible as equity?
- **Multi-polarity** – what is a robust portfolio of instruments?
- **Stress-testing** – beyond banking, to market-based finance?
- **Macro-prudential** – defining/refining the reaction function?
- **Political economy** – predictability and accountability?
- **Meta-question**
 - is finance “too big”?
 - will “fintech” be disruptive?

