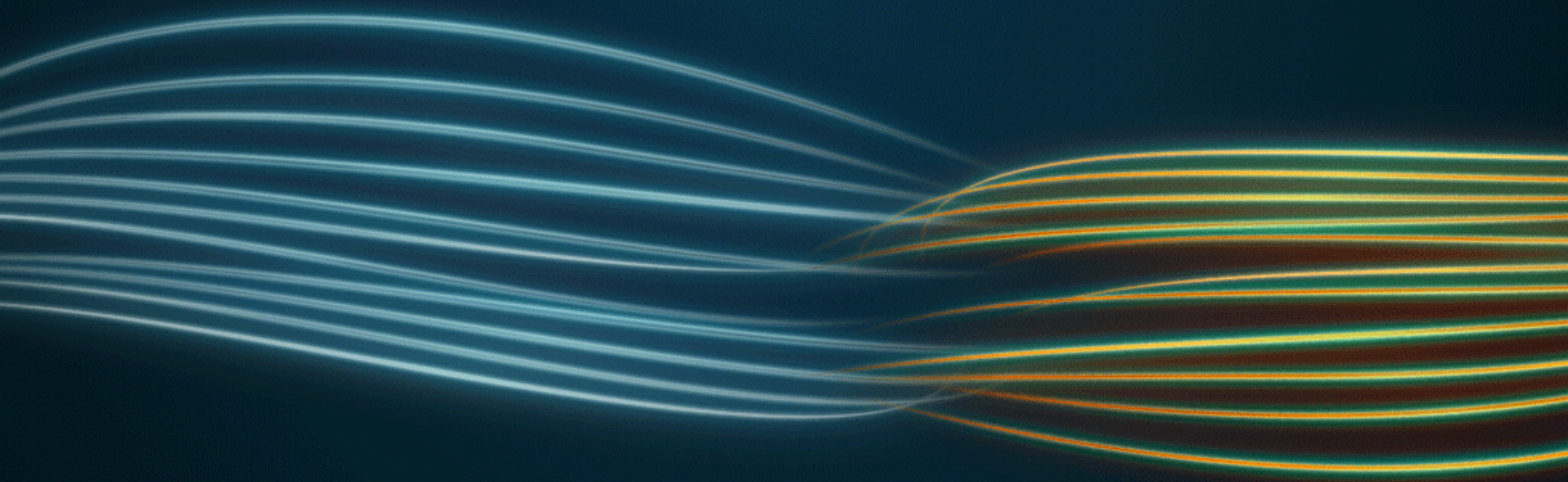


# **BLACK SWANS AND FINANCIAL CRISES: IMPLICATIONS FOR FINANCIAL REGULATION**

Paper presented to Paul Woolley Centre for the Study of  
Capital Market Dysfunctionalty Centre conference 2014



# NEVER SAW IT COMING

- ✦ The Global Financial Crisis came as a complete surprise to financial regulators and policymakers
- ✦ Pre-crisis period widely viewed as one of unparalleled stability
- ✦ The Great Moderation
- ✦ The GFC seen as a 'Black Swan'

# PRE-CRISIS REGULATION

- Light-handed
- Pro-innovation
- Depth + Sophistication = Stability
- Efficient Markets Hypothesis

# THE FAILURE OF REGULATION

- Light-handed = poorly understood
- Innovation = toxic assets
- Broader markets = broader failures
- EMH = falsified hypothesis

# AUSTRALIA'S ESCAPE

- Good luck or good management ?
  - A lot of both
- Macro policy
  - Fiscal stimulus
- Shift to financial intervention (just in time)
  - Deposit guarantees
  - Replacement of failed markets

# TWIN PEAKS OR LUCKY COUNTRY?

- Australian prudential regulation much praised after crisis
- But macro policy success and sustained housing boom meant system was never really tested
- Mining boom resumed rapidly thanks to Chinese stimulus

# THE GLOBAL COSTS OF CRISIS

- Output loss worse than Great Depression
- Cumulative output losses relative to the 1995-2007 trends now stand at 78% of a year's GDP for the United States, and at 60% of a year's GDP for the Eurozone.
- Costs far outweigh benefits of financial deregulation during Great Moderation

# NO REAL GROWTH SINCE MID-2000s

- Huge increase in wealth for CEOs and financial sector
- Declining median income for households in US, eurozone
- No reason to believe financial markets are serving a net positive social function



# SMALL RETURNS, HIGH RISKS

- ✦ Picking up pennies in front of a steam roller
- ✦ Interest rate swaps market
  - ✦ Notional volume > \$400 trillion
  - ✦ Estimated benefit 10 basis points

# MELTDOWNS AND NEAR-

- Multiple failures during GFC
- Near-misses since GFC
- Compare nuclear power

# DURING THE GFC

- ✘ Failure of CDOs
- ✘ AIG exposure to CDS
- ✘ Freeze of auction-rate market
- ✘ Breaking the buck on CDs
- ✘ Eurozone sovereign debt

# NEAR-MISSES SINCE THE GFC

- ✖ US debt default
- ✖ S&P downgrade implies positive probability
- ✖ LIBOR fraud
- ✖ Could lead to repudiation
- ✖ Eurozone breakup
- ✖ Criminal convictions of banks

# MORAL HAZARD

- Repeated bailouts have rewarded guilty, punished innocent
- Reinforced patterns of risk arbitrage, fines as a cost of doing business, revolving doors

# BLACK SWANS

- Unforeseen events (Taleb)
- Optimization vs robustness
- Precautionary principle

# UNFORESEEN EVENTS

- Have always happened and always will
- Importance of inductive reasoning from experience
- Limits of deductive models
- Don't assume perfect knowledge

# OPTIMIZATION VS ROBUSTNESS

- Given complete model, can derive optimal decision
- If model slightly wrong, decision can be badly wrong
- Incomplete awareness requires robust decisions



# PRECAUTIONARY PRINCIPLE

- When surprises are likely to be unfavourable, avoid decisions with poorly understood consequences
- Unless losses can be bounded reliably

# FINANCIAL INNOVATION

- Pre-crisis view of financial innovation as unambiguously good
- But poorly understood innovations are dangerous
- Onus of proof should be on innovator

# TBTF OR TCTF?

- Too Big To Fail or
- Too Interconnected To Fail ?
- Cost of isolated failures can be estimated and bounded
- Costs of cascading failures are unbounded
- Standard prudential measures of limited use

# NARROW BANKING

- ✦ Restrict central bank support to narrow banks
  - ✦ savings & loans only
  - ✦ no trading activities, no exposure to investment banks
- ✦ Isolate bailouts to core banking sector
- ✦ Would require breakup of existing banks

# FIGHTING THE LAST WAR

- Reforms since 2009 have reduced risk of exact repeat
- But no fundamental change in thinking
- Large and dynamic financial sector assumed beneficial
- Costs of financial crises played down

# PREPARING FOR THE NEXT CRISIS

- When, not if
- Strategic ambiguity a failed idea
- Need an explicit plan
- Fiscal stimulus and bailouts politically untenable?

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