

# Intermediary Asset Pricing and the Financial Crisis<sup>\*</sup>

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<sup>\*</sup> Drawn from work with Zhiguo He

# Neoclassical Asset Pricing

$$P_t = E_t \left[ \sum D_{t+j} M_{t+j} \right]$$

- Pricing kernel  $M_{t+j}$  reflects how a “representative” investor values stochastic payoffs
  - Consumption habits (Campbell-Cochrane, JPE 1999)
  - Long-run risk to consumption growth (Bansal-Yaron, JF 2004)

# Granularity in crises

*Panel A: EURO basis, January 2007- January 2012*

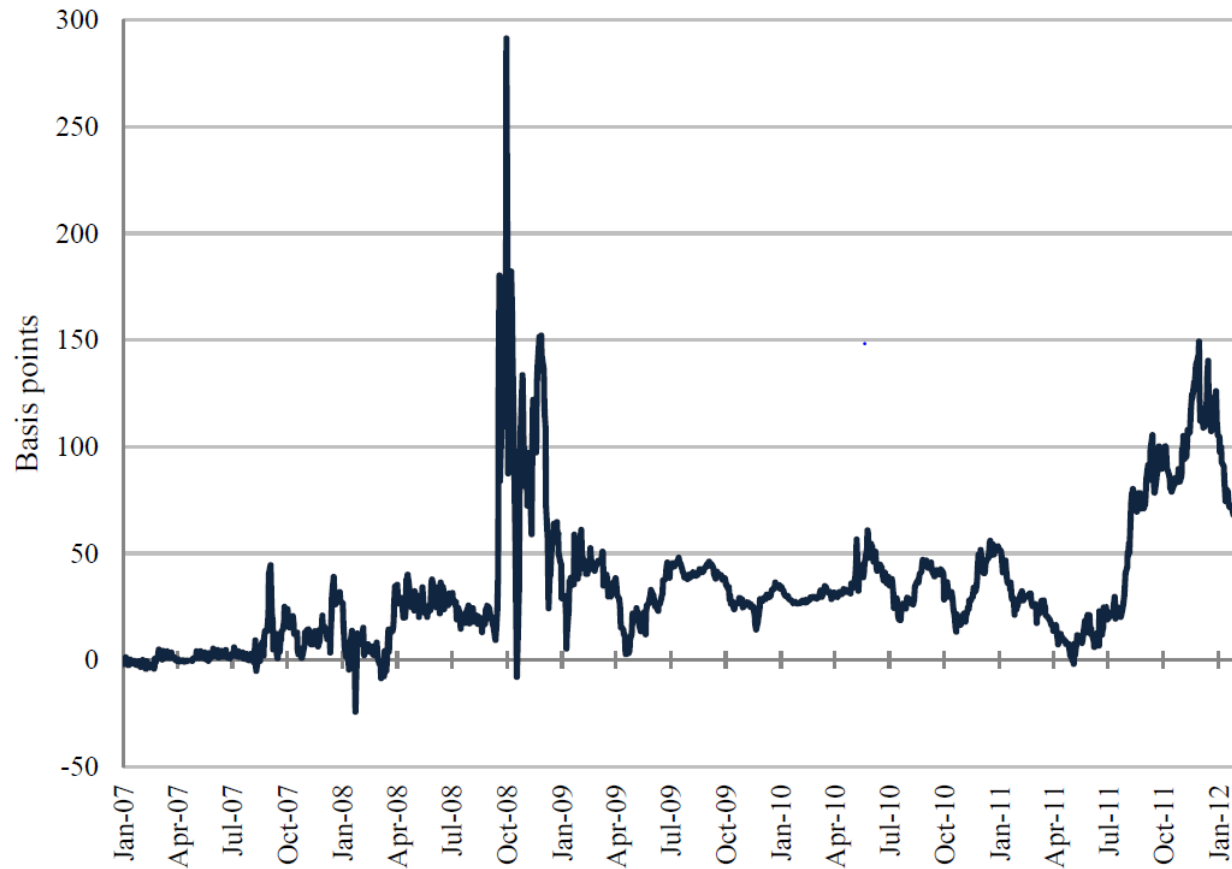


Figure 3 from Ivashina, Scharfstein and Stein (QJE 2012)

# Non-linearity

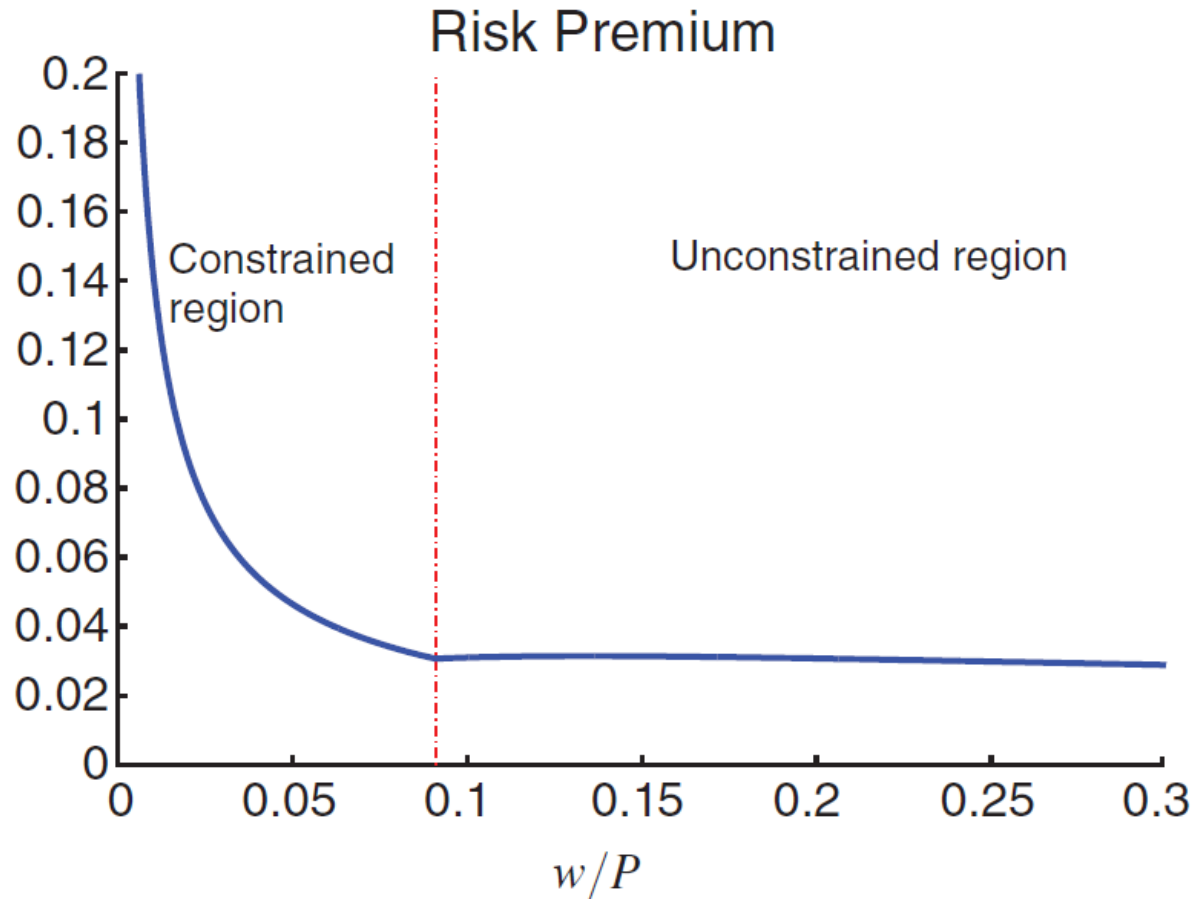


Figure 2 from He and Krishnamurthy (AER 2013)

# Model impulse response (-1% shock)

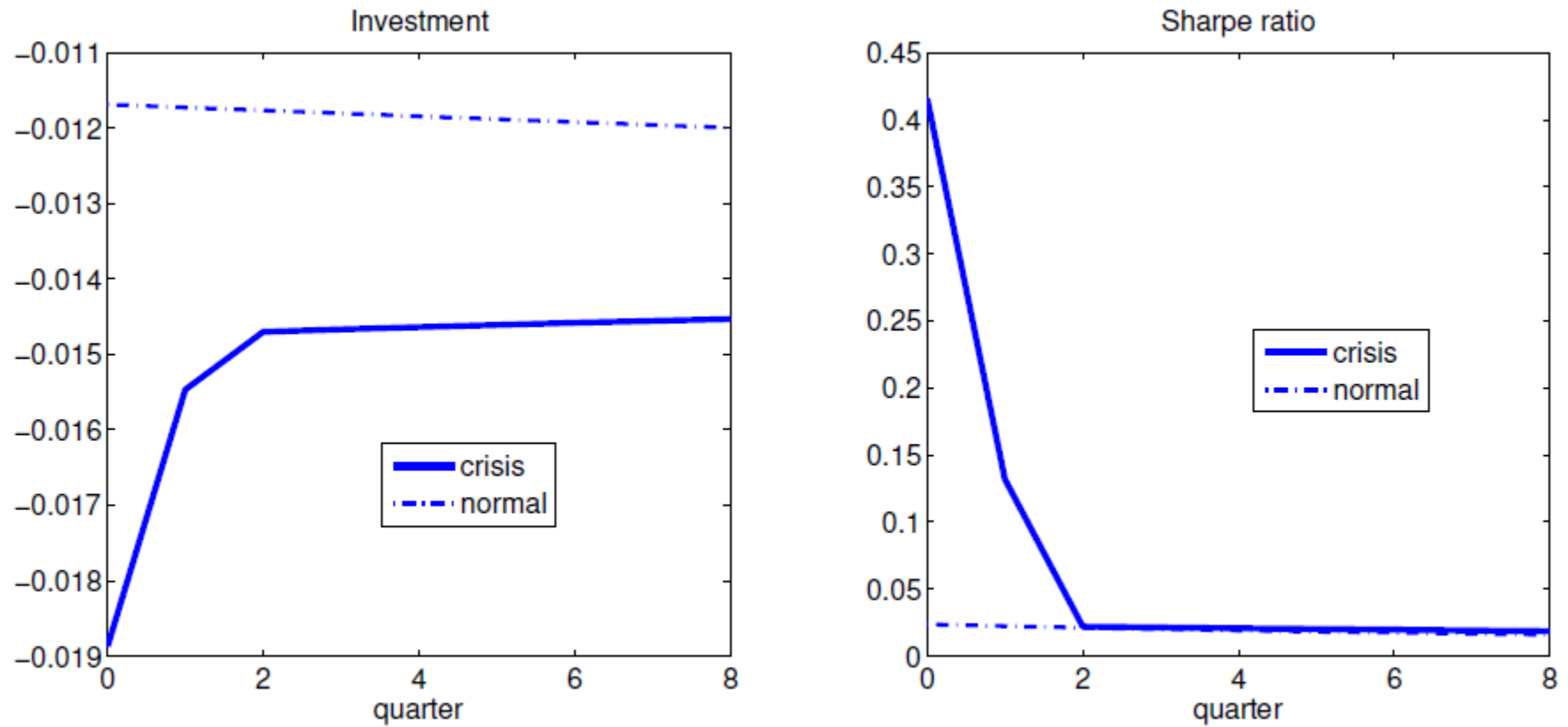


Figure 6 from He and Krishnamurthy (WP 2017)

# Academic progress report card

- ✓ • Models of intermediary asset pricing
- Data linking intermediary frictions to asset prices
  - ✓ • Good case studies
  - ✓ • How much does it matter for aggregate asset prices?
- ✓ • Models to connect phenomena to macro
- ✓ • Data on crises and macro outcomes

# Where is the cliff?

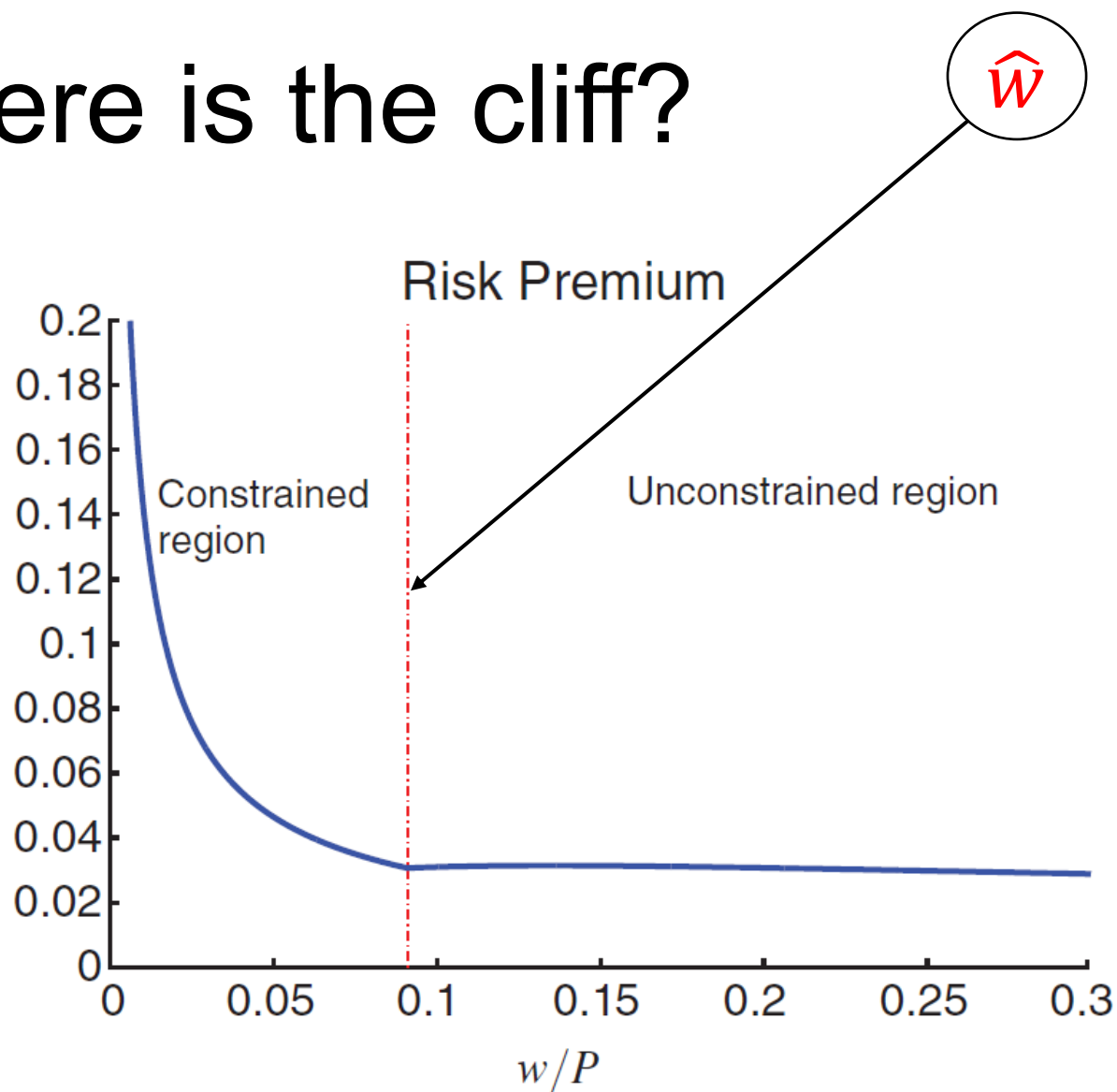


Figure 2 from He and Krishnamurthy (AER 2013)

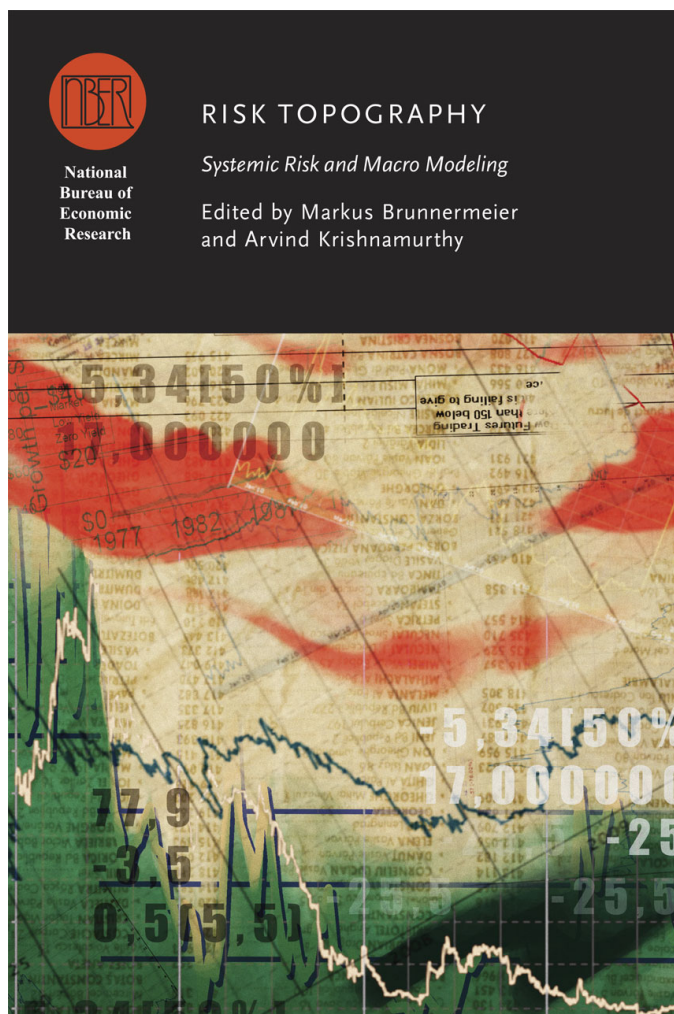
# Measurement

- Leveraged loans, consumer credit, corporate leverage
  - All look stretched and likely will unstretch at some point
  - Will this have a significant macro effect?
    - 1998 (LTCM) versus 2008 (Subprime)
- How to determine we are close to  $\hat{w}$ ?
  - Loosely “leverage” of the financial system
- ✘ • We should be able to do much better



*“One reads with dismay of Presidents Hoover and then Roosevelt designing policies to combat the Great Depression of the 1930s on the basis of such sketchy data as stock prices indices, freight car loadings, and incomplete indices of industrial production. The fact was that comprehensive measures of national income and output did not exist at the time. The Depression, and with it the growing role of government in the economy, emphasized the need for such measures and led to the development of a comprehensive set of national income accounts.”*

Froyen (2005)



## I. Measurement and Disclosure

### 1. Challenges in Identifying and Measuring Systemic Risk

Lars Peter Hansen

### 2. Regulating Systemic Risk through Transparency: Trade-Offs in Making Data Public

Augustin Landier and David Thesmar

## II. Risk Exposures

### 3. Systemic Risk Exposures: A 10-by-10-by-10 Approach

Darrell Duffie

### 4. Remapping the Flow of Funds

Juliane Begenau, Monika Piazzesi, and Martin Schneider

### 5. Measuring Margin

Robert L. McDonald

### 6. A Transparency Standard for Derivatives

Viral V. Acharya

## III. Liquidity and Leverage

### 7. Liquidity Mismatch Measurement

Markus Brunnermeier, Arvind Krishnamurthy, and Gary Gorton

### 8. Monitoring Leverage

John Geanakoplos and Lasse Heje Pedersen

## IV. Financial Intermediation and Credit

### 9. Repo and Securities Lending

Tobias Adrian, Brian Begalle, Adam Copeland, and Antoine Martin

### 10. Improving Our Ability to Monitor Bank Lending

William F. Bassett, Simon Gilchrist, Gretchen C. Weinbach, and Egon Zakrajšek

### 11. The Case for a Credit Registry

Atif Mian