

# Economic Causes of the “Subprime” Crisis

Professor Patrick Bolton  
Department of Economics and Graduate School of  
Business  
Columbia University

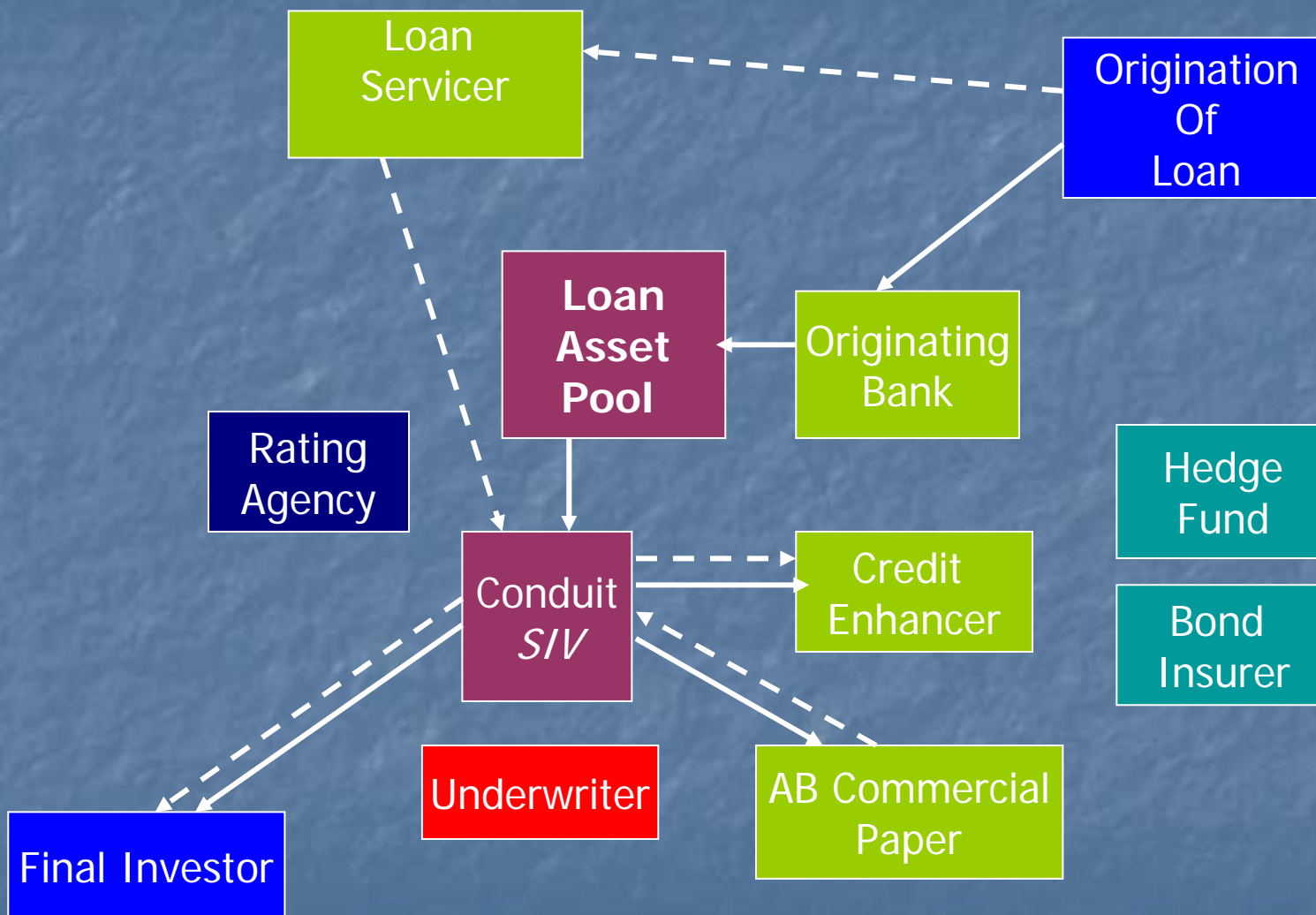
# The tradeoff between risk-sharing and incentives

Basic economic principle:

→ *skin-in-the game* to create incentives for performance

Subprime crisis has largely been caused by the failure to apply this principle at multiple levels of the *loan chain*

# Securitization and the *loan-chain*

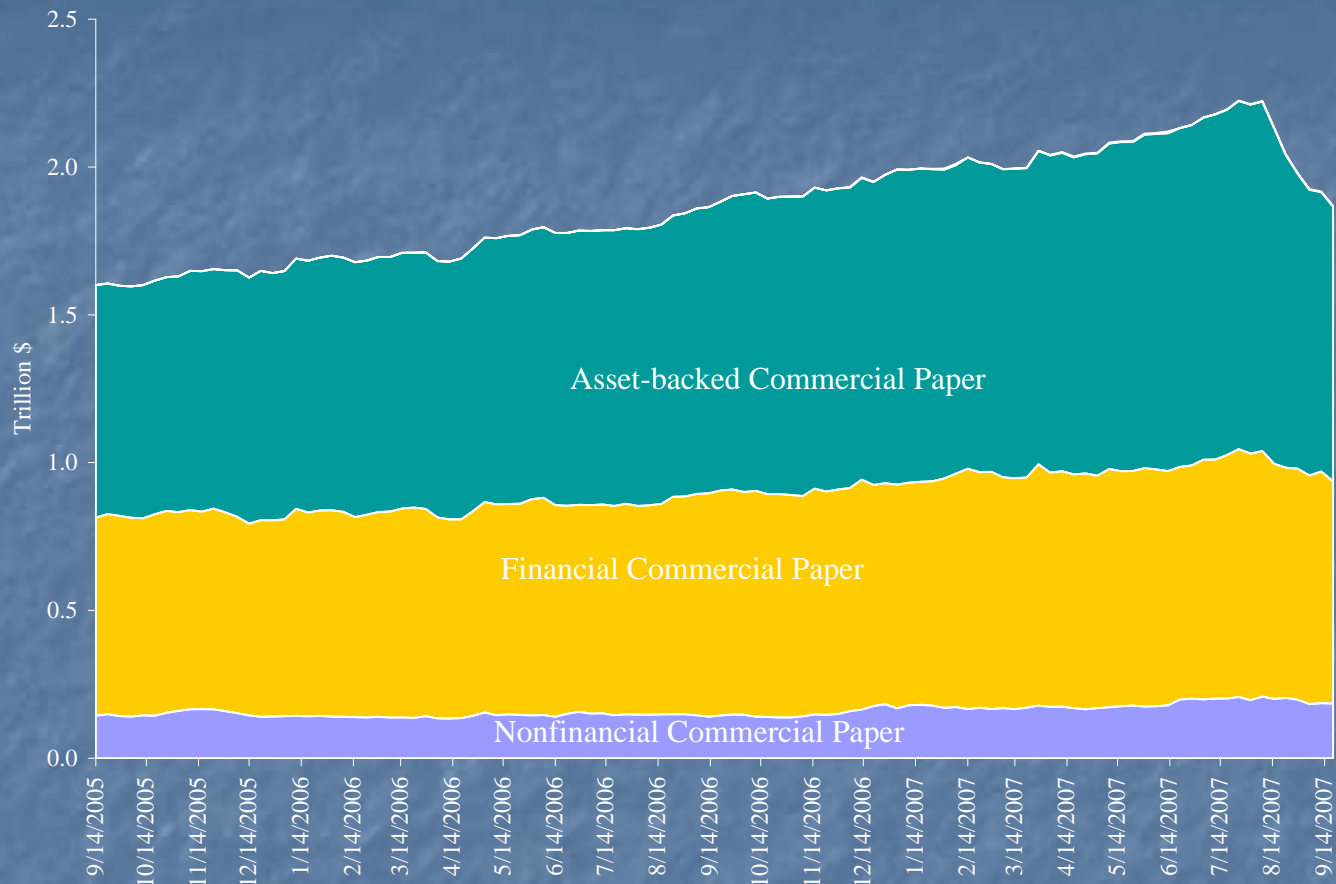


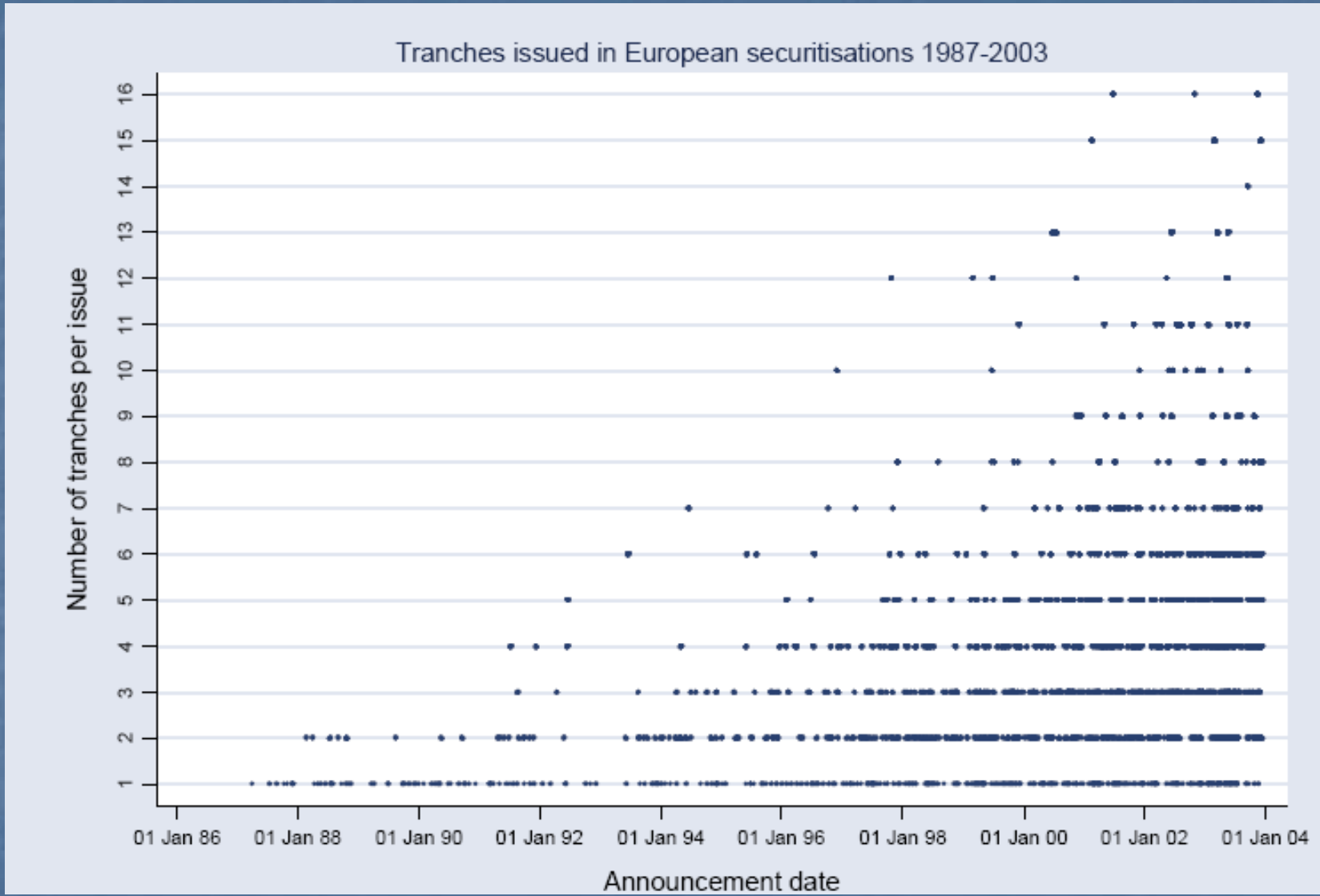
# The weak links in the *loan-chain*

- Loan origination → *breakdown of screening*
- Loan servicing → *breakdown of renegotiation*
- Rating Agencies → *conflict of interest, pressure towards rating inflation, misuse of credit risk models*
- Credit Enhancement by originator → *regulatory arbitrage (FASB 140, voluntary clean-ups)*

## The weak links in the *loan-chain 2*

- Credit Enhancement by Hedge Funds → *stealth hedging of toxic waste risk, mispricing of CDSs?*
- Credit Enhancement by Bond Insurers → *critical role of ratings agencies*
- Underwriters → *conflicts of interest*
- SIVs and Asset-backed Commercial Paper → *backdoor liquidity transformation outside the banking safety net (no deposit insurance!)*



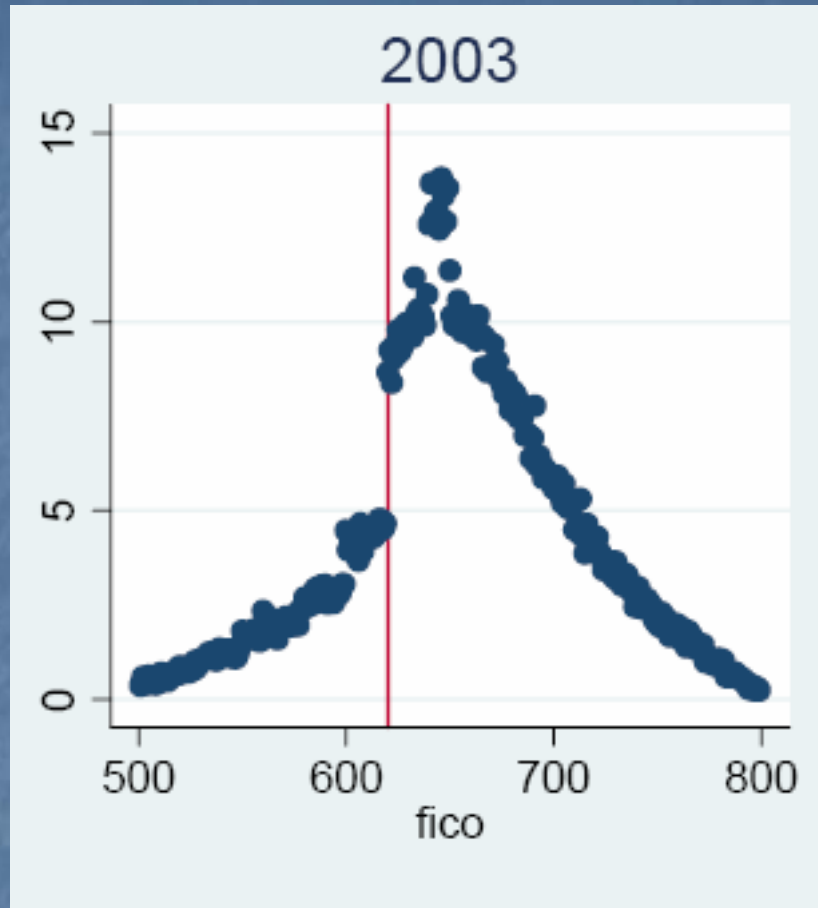


## LoanPerformance Database

Panel A: Entire Sample

| Year | Number of<br>Loans | % Low<br>Documentation | Mean<br>Loan-To-Value | Mean<br>FICO |
|------|--------------------|------------------------|-----------------------|--------------|
| 1997 | 24,067             | 24.9%                  | 80.5                  | 611          |
| 1998 | 60,094             | 23.0%                  | 81.5                  | 605          |
| 1999 | 104,847            | 19.2%                  | 82.2                  | 610          |
| 2000 | 116,778            | 23.5%                  | 82.3                  | 603          |
| 2001 | 136,483            | 26.0%                  | 84.6                  | 611          |
| 2002 | 162,501            | 32.8%                  | 85.6                  | 624          |
| 2003 | 318,866            | 38.9%                  | 87.0                  | 637          |
| 2004 | 610,753            | 40.8%                  | 86.6                  | 639          |
| 2005 | 793,725            | 43.4%                  | 86.3                  | 639          |
| 2006 | 614,820            | 44.0%                  | 87.0                  | 636          |

Keys, Mukherjee, Seru and Vig (2008)



Number of Loans (Low Documentation)

Keys, Mukherjee, Seru and Vig (2008)