

April 27-28, 2017

***WORKSHOP ON APPROPRIATE GOVERNMENT  
ROLE IN U.S. MORTGAGE MARKETS***

*FEDERAL RESERVE BANK OF NEW YORK*

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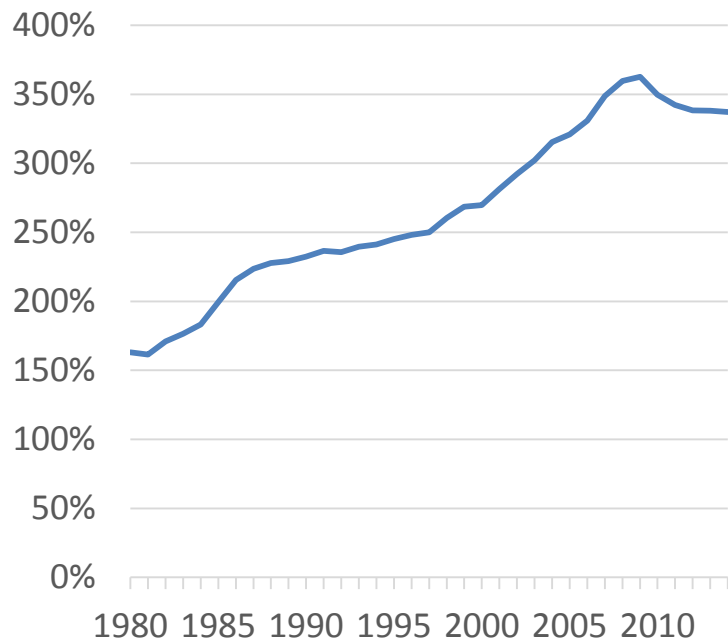
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# Financial Stability and Mortgage Markets

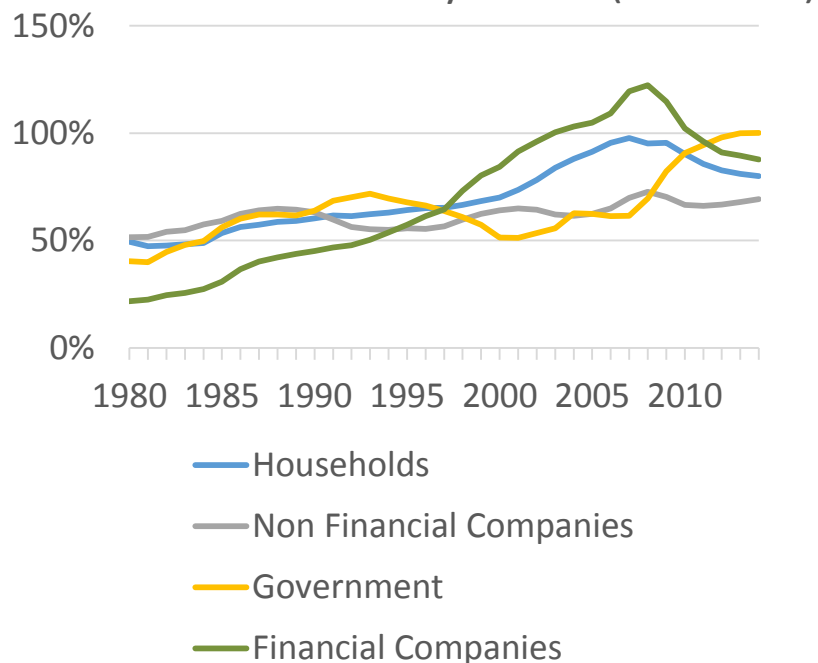
- **Simple, Transparent, and Standardized Securitization: Solution for Financial Stability?**
- **Opaque, Complex Securitization and Financial Instability**
- **Incompleteness of Securitization and the Underlying Asset Markets**
- **Market Micro Structure**

# We avoided a Great Depression 2.0 but at the cost of large increases in government and total debt, even as households deleveraged.

Total Debt Outstanding to GDP (%)



Gross Debt By Sector (% of GDP)



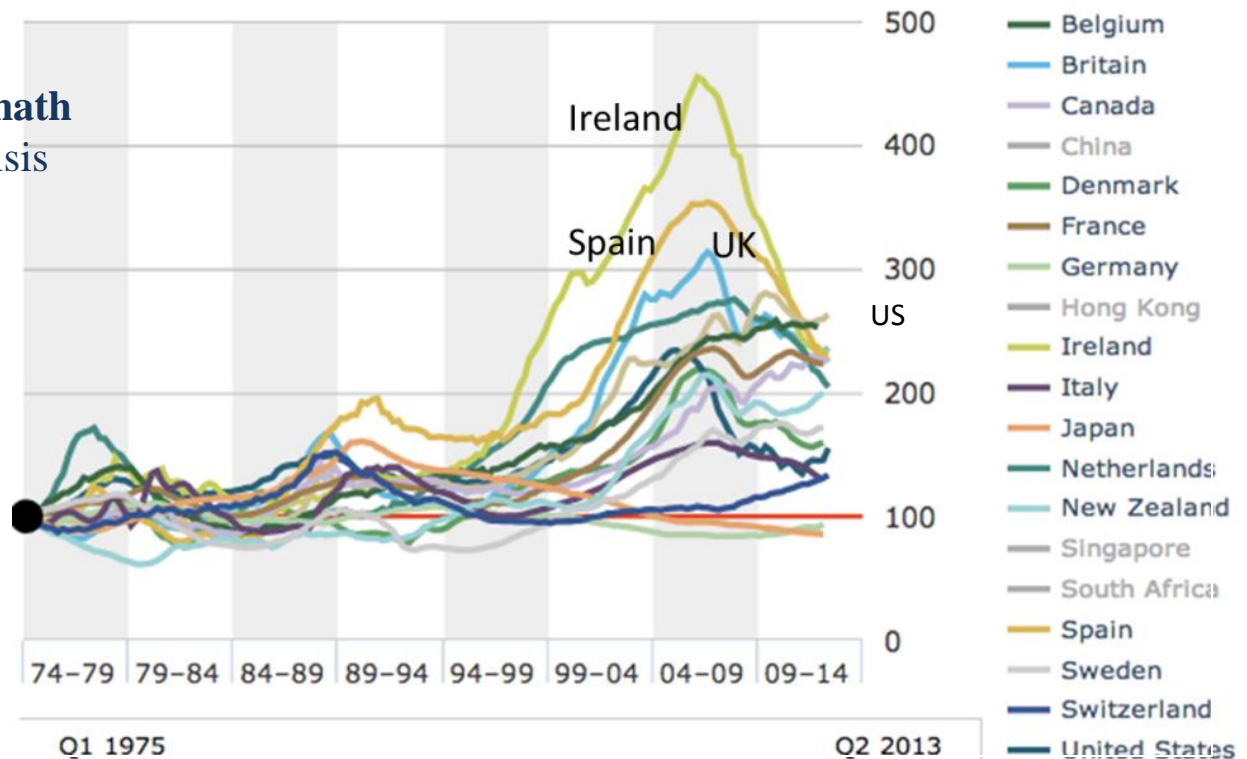
Source: Federal Reserve



# Capital Market Integration and Financial System Risk

- **Housing finance revolution integrated segmented housing finance after '90s** Q1 1975=100

- **Asset bubbles in the aftermath**
  - 1997: Asian Financial Crisis
  - Subprime Crisis
  - 2007 bubbles in UK, Ireland and Spain, Netherlands, Denmark



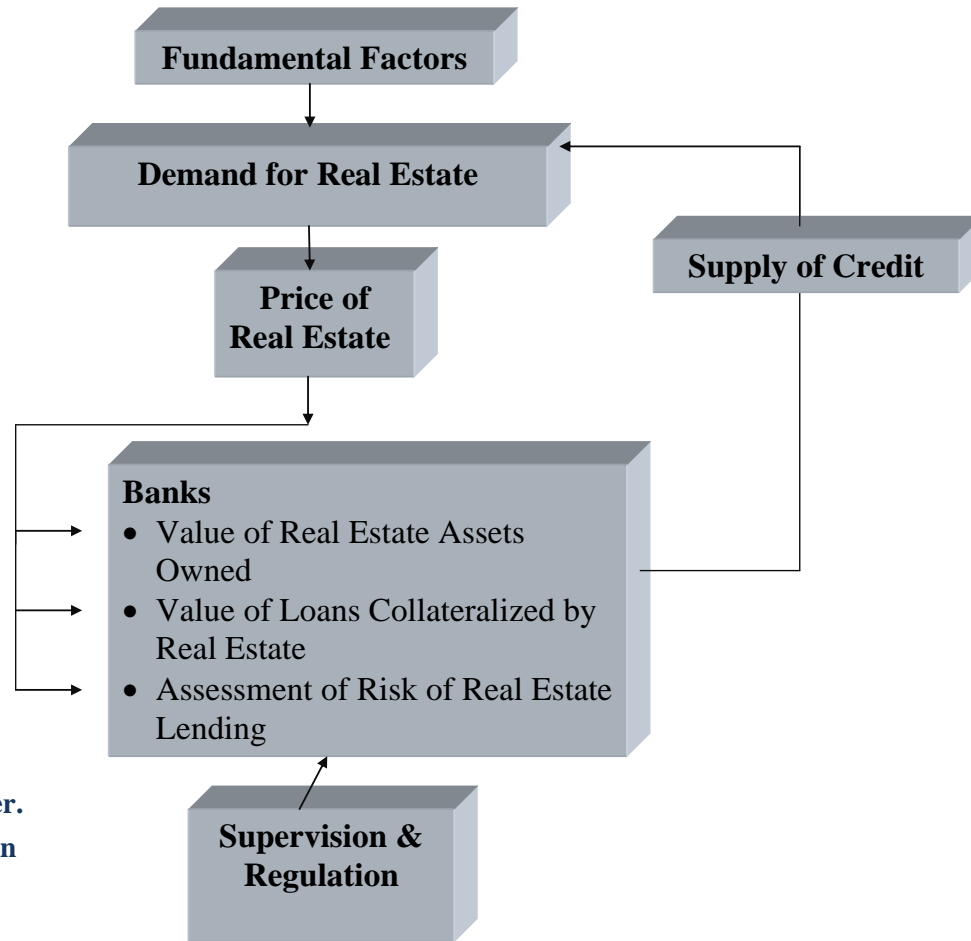
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# Incomplete Real Estate Markets

- **With heterogeneous beliefs and lack of short selling, optimist buyers set real estate prices.**
- **Inelastic supply, backward looking price expectation formation**
- **Banks lend at optimist set market prices. Financial accelerator with, and resulting underpricing of risk sets up feedback loop (Herring and Wachter).**
- **Underpriced risk through opaque securitization as well.**

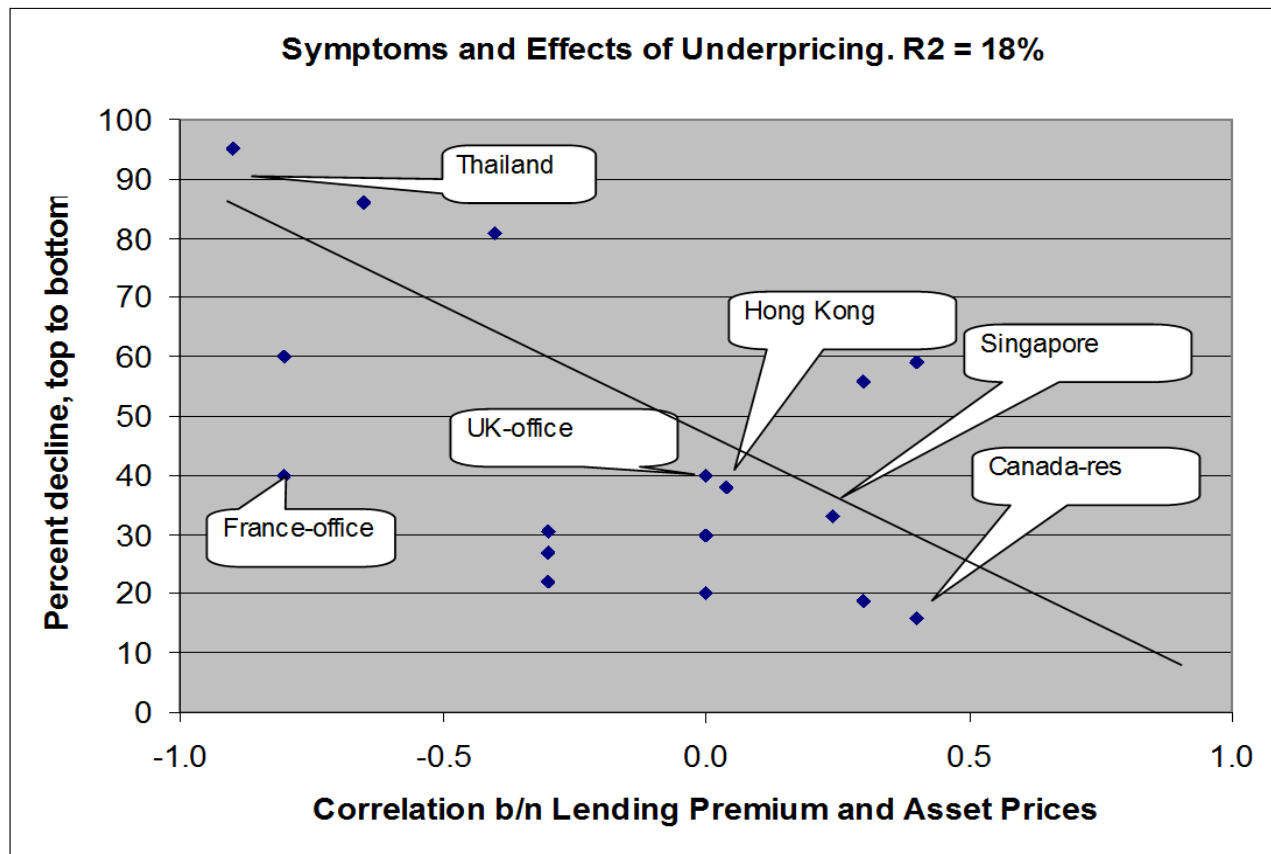
# Bank Lending Drives Real Estate Prices



Herring, Richard J., and Susan Wachter. Real estate booms and banking busts: an international perspective. US-Japan Management Studies Center, Wharton School of the University of Pennsylvania, 1998.

# The Pavlov-Wachter Indicator of Underpricing of Risk

- **Ex ante, the Pavlov-Wachter Indicator correlation between declines in the credit risk premium credit risk and increases in the price to rent ratio predicts the depth of price decrease during the decline**



Source: Pavlov and Wachter (2009) "Mortgage put options and real estate markets."

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# Incomplete Mortgage Securities Markets

- **The information was there—lack of liquid market to short credit mispricing—Paulsen was structuring specific deals himself.**
- **With heterogeneous beliefs aggressive lender sets prices, lack of liquid short selling securities to counter with transparent information on aggregate lending.**
- **STS Securitization as a remedy: European Way**
- **Credit Risk Transfer mechanisms in the US with CSP—common securitization platform.**



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# Simple, Transparent, and Standardised (“STS”) Securitization—Proposal of European Parliament

The proposed regulation (expected to come online in 2018) intends to replace fragmented regulation to a single form, and implement new requirements for new issuances. Newly issued securities must conform to the following general requirements, among others:

## *Simplicity*

- Securitization must be traditional (i.e. SSPE owns the underlying assets backing the securitization)
- Reps and warranties that the underlying assets are unencumbered
- Securitized assets must be homogenous
- No re-securitization of assets
- No defaults in the pool, and one-payment completed at the loan level

## *Transparency*

- Must provide investors with historical default/loss data, verified by an independent party
- Must provide investors with a liability cash flow model
- Originator and sponsor both responsible for STS transparency compliance

## *Standardization*

- Risk-retention of 5% of net securitization amount; obligation held by originator/sponsor *not* investor
- Must mitigate interest rate and currency risks
- Must provide for early amortization triggers
- Specify rights of creditors and resolutions for inter-creditor conflicts

Proposal (expected to come into effect early 2018)

**REGULATION OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL**

laying down common rules on securitisation and creating a European framework for simple, transparent and standardised securitisation

Source: “Common Rules and New Framework for Securitisation,” EU Legislation in Progress – Briefing, July 2016

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## Credit Risk Transfer

- **\$46 B in 2016 of STACR and CAS deals. Freddie Mac and Fannie Mae payed out, on an annualized basis, nearly \$1.2 billion to investors to take mortgage credit risk transferring risk from taxpayers to private investors.**
- **Common securitization platform: Information infrastructure for transparency.**
- **Securitization market for price discovery and risk based pricing. In all reform proposals, as a way of putting private capital at risk in front of government/taxpayer**

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## Asset Market Runs

- **Derivative markets for price discovery with full information signal risk and “complete” markets.**
- **But herding behavior can interact with and set off downward price spirals, contagion effects, in the underlying asset and reintroduce instability.**
- **Circuit breakers-attachment points at which point federal funding steps in to cap lending rate in proposals.**

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## Paradox: Transparency can lead to Pareto inferior outcomes

Pavlov, Wachter and Zevelev, “Transparency in the Mortgage Market”  
Journal of Financial Services Research (2016) shows how geographic transparency in the secondary mortgage market can amplify and propagate house price shocks in the underlying market.

If the secondary mortgage market is geographically opaque, lending to each region depends on the average payoff. If transparent, region based house price shocks are exacerbated, as lending is withdrawn.

If house price adjusts immediately to new basis, new lending is forthcoming; the problem is predictable ongoing price declines, serial price correlation and contagion effects, and lack of short selling in the underlying market.

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# Collective Action and Competitive Action

- **Mortgage credit is now integrated into capital markets.**
- **And changing capital market conditions impact asset prices in efficient markets.**
- **Lending term shifts transmitted through changes in financial market conditions may be incorporated into housing prices only over time, leading to predictable pricing shifts.**
- **Collective action problem to solve for “right” price over time. Sudden stops/upward repricing in financing may lead to drawn out real market declines and endogenous declines in finance. The competitive transmission of lower financing costs will also mean that the former occurs.**
- **CRT and STS are critical for price discovery!**

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# Thank you

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KNOWLEDGE FOR ACTION  
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