

Empirical Household Finance Online PhD-Level Class

Mortgage Borrowing and Default

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Plan For My Presentation Today

- Some observations on today's topic:

Mortgage Borrowing and Default

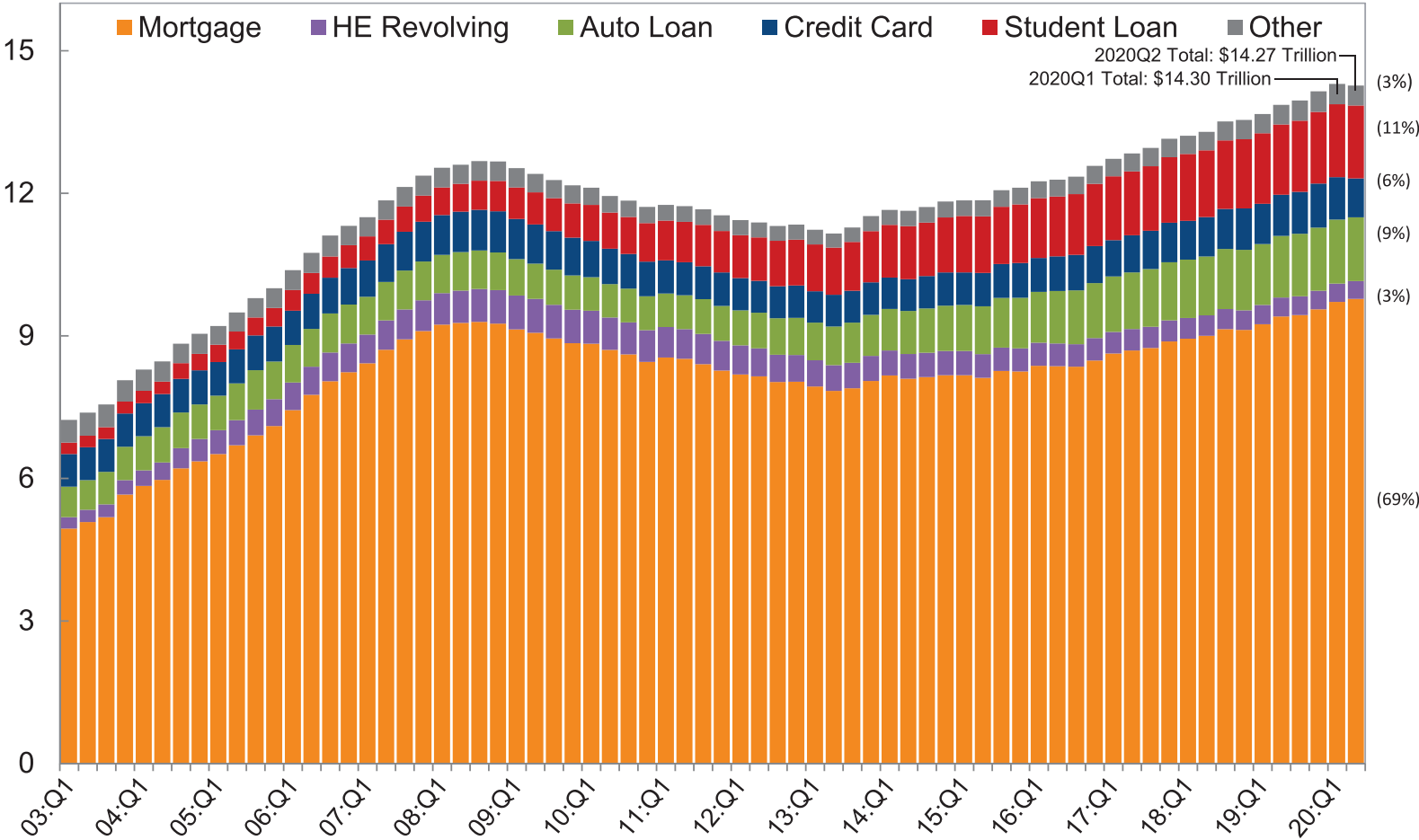
- Present a research paper:

Asymmetric Information about Collateral Values

Mortgages: Largest Consumer Credit Category

Total Debt Balance and its Composition

Trillions of Dollars



Source: New York Fed Consumer Credit Panel/Equifax

Mortgages: Large and Important Credit Class

"All the News That's Fit to Print"

The New York Times

Late Edition
Today: Main, Today, Sports, Bus., Tech, U.S., World, Health and Money, Local, New York, Business, Daily News, Sports, Tech, U.S., Weather map on page 10.

VOL. CLVII - No. 54,834 NEW YORK, MONDAY, SEPTEMBER 15, 2008 \$1.50



Residents of Galveston Island, in Texas, seeking services like power and water after Hurricane Ike, were stranded Sunday.

After Surviving Storm, Fleeing A Fetid, Devastated Galveston

By STEPHEN LEVY
GALVESTON, Tex. — For thousands of people stuck in an increasingly food-depleted island, the aftermath of Hurricane Ike is a grimace on the face of America.

BIDS TO HALT FINANCIAL CRISIS RESHAPE LANDSCAPE OF WALL ST.

BY LAMAR LIVINGSTON
Jittery Road For Markets

By FLORENCE WILSON and VIKAR RAMJI
Wall Street and the federal government played a game of chicken over the weekend, and neither side backed down, pushing Lehman Brothers toward bankruptcy and raising the possibility of a worldwide sell-off when markets open on Monday.

When some financial groups came together in Washington, they developed the Bank of America's proposal to buy out Lehman. Some say it was hoping Merrill Lynch might provide enough credit to keep Lehman afloat.

"The world is not in very good shape," U.S. Sen. Frank Lautenberg, the chief investment strategist for Charles Schwab & Company, said on Sunday. "I don't know if it's better or if it's worse than what we've seen in the past, but it's not good."

Wall Street's markets closed for a holiday on Monday, the second day of the week's trading. The market's reaction to the news could not be predicted until the markets open, and, after that, the American exchange.

In the Lehman case on Monday, the government, worried about the possibility of a sell-off, is helping to finance the government's bid to buy Lehman and the other major financial groups, raising the possibility of a worldwide sell-off.



MERRILL IS SOLD

Fading to Find Buyer, Lehman Boss Is Set to Wind Down

This article was reported by John Stewart (The Book) and Andrew Ross Sorkin and was written by Mr. Sorkin.

In one of the most dramatic days in Wall Street's history, Merrill Lynch agreed to sell itself on Sunday to Bank of America for roughly \$50 billion in cash, a shocking financial crisis, while another prominent investment firm, Lehman Brothers, hurried toward liquidation after a failed effort to buy.

The banking services, which include the brokerage of Ameriquest, mark the start of a turbulent year in which once-proud financial institutions have been brought to their knees by a wave of hundreds of billions of dollars in losses because of bad mortgage loans and toxic assets.

The event in the case of Lehman and Merrill being in the hot seat, another crisis loomed in the American financial system. An investment group appeared to have stepped in to buy Lehman from the credit crisis. A.I.C. bought a \$40 billion stake from the holding company, without which the company may have survived in service.

The evening series of events culminated a weekend of frantic



Mortgages: Large and Important Credit Class



Dimensions of Mortgages

- Mortgages potentially differ on many dimensions
 - FRM/ARM
 - Leverage
 - Duration
 - Teaser rate
 - Government insured?
 - Recourse/Non-recourse (US: State-level laws)

Mortgages: Interesting Questions

- What determines which mortgages individuals pick?
 - Which lender? How much leverage? ARM/FRM?
 - House price beliefs (e.g., Bailey, Davila, Kuchler, and Stroebel, 2019)?
 - Peer effects (e.g., McCartney and Shah, 2016)
 - Role of intermediaries such as mortgage brokers (e.g., Robles-Garcia, 2020)
 - Do borrowers search appropriately (e.g., Woodward and Hall, 2012)

Mortgages: Interesting Questions

- Why do individuals default on mortgages?
 - Liquidity Defaults vs. Strategic Defaults (e.g., Ganong and Noel, 2020)
 - Peer effects (e.g., Gupta, 2019; Guiso, Sapienza, Zingales, 2013)
 - Information about cost of defaulting
 - Direct effect on social stigma cost
 - Depends on legal environment (recourse/non-recourse)

Mortgages: Interesting Questions

- What determines mortgage refinancing behavior?
 - Particularly relevant for fixed rate mortgages
 - Expectations of future interest rate changes
 - Peer effects (see Jordan Nickerson's presentation from a while ago)
 - Other frictions: The need to prove income may prohibit welfare-improving refis
 - Important implications for functioning of monetary policy
 - Government programs such as HAMP/HARP

Mortgages: Interesting Questions

- Information Friction in Mortgage Markets
 - Adverse Selection vs Moral Hazard
 - Source: Borrower Types (Hansman and Gupta, 2020)
 - Source: Collateral Values (Stroebe, 2015)

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 - FRM/ARM: Who is best placed to bear interest rate risk?
 - State-dependent repayment (e.g., vary with house prices to avoid strategic defaults)

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 - State-dependent repayment (e.g., vary with house prices to avoid strategic defaults)
- Government intervention in the mortgage market?
 - Leverage regulation (Johnson, Mondragon, DeFusco, 2020; Benetton, 2020)
 - GSEs (Fannie Mae / Freddie Mac): Guarantee certain MBS
 - Crisis interventions: HAMP/HARP; Fed purchasing MBS