
Securitization: the Good, the Bad & the Ugly



September 2019

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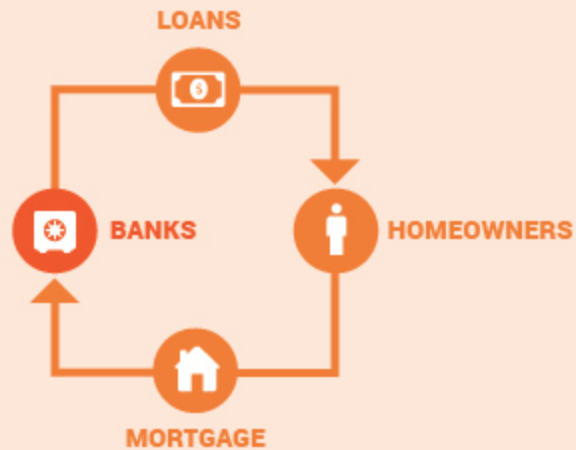
Cybersecurity



The Good: Securitization 101

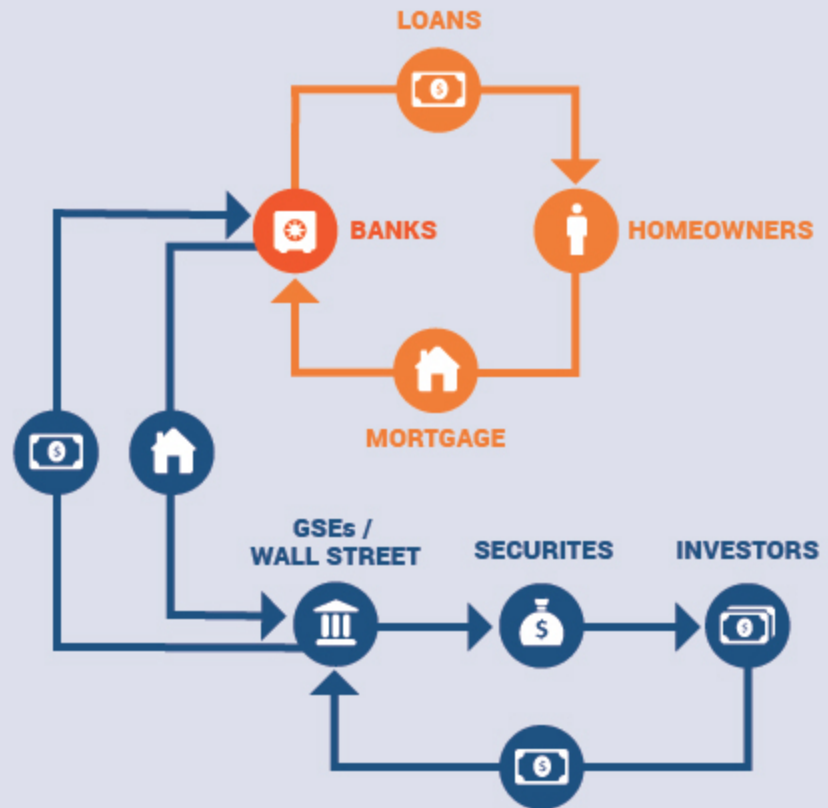
Before Securitization

- BANKS MAKE LOANS
- BANKS HOLD LOANS

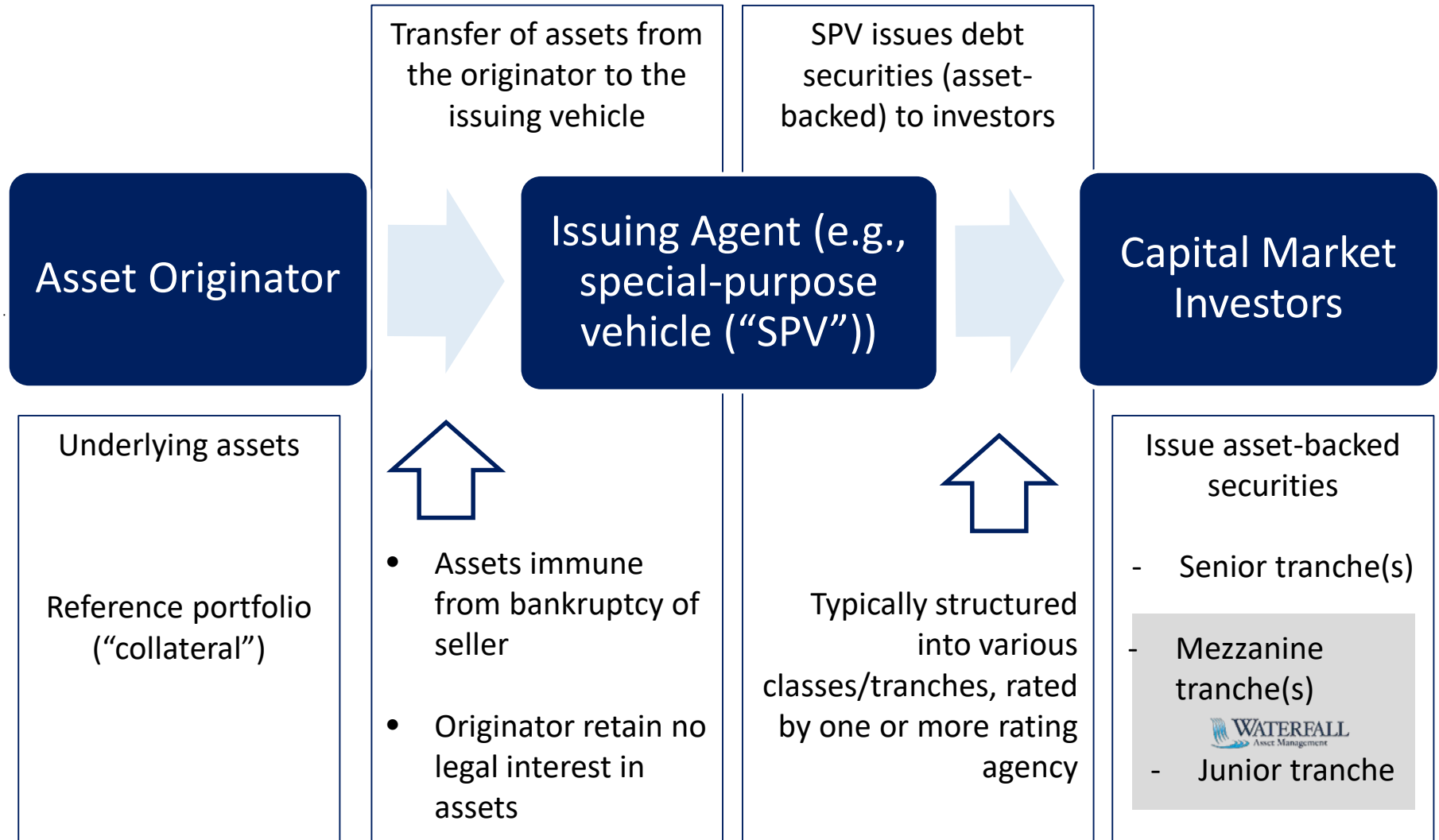


After Securitization

- BANKS MAKE LOANS
- INSTEAD OF HOLDING LOANS, BANKS SELL LOANS TO WALL STREET
- BANKS CAN MAKE MORE LOANS

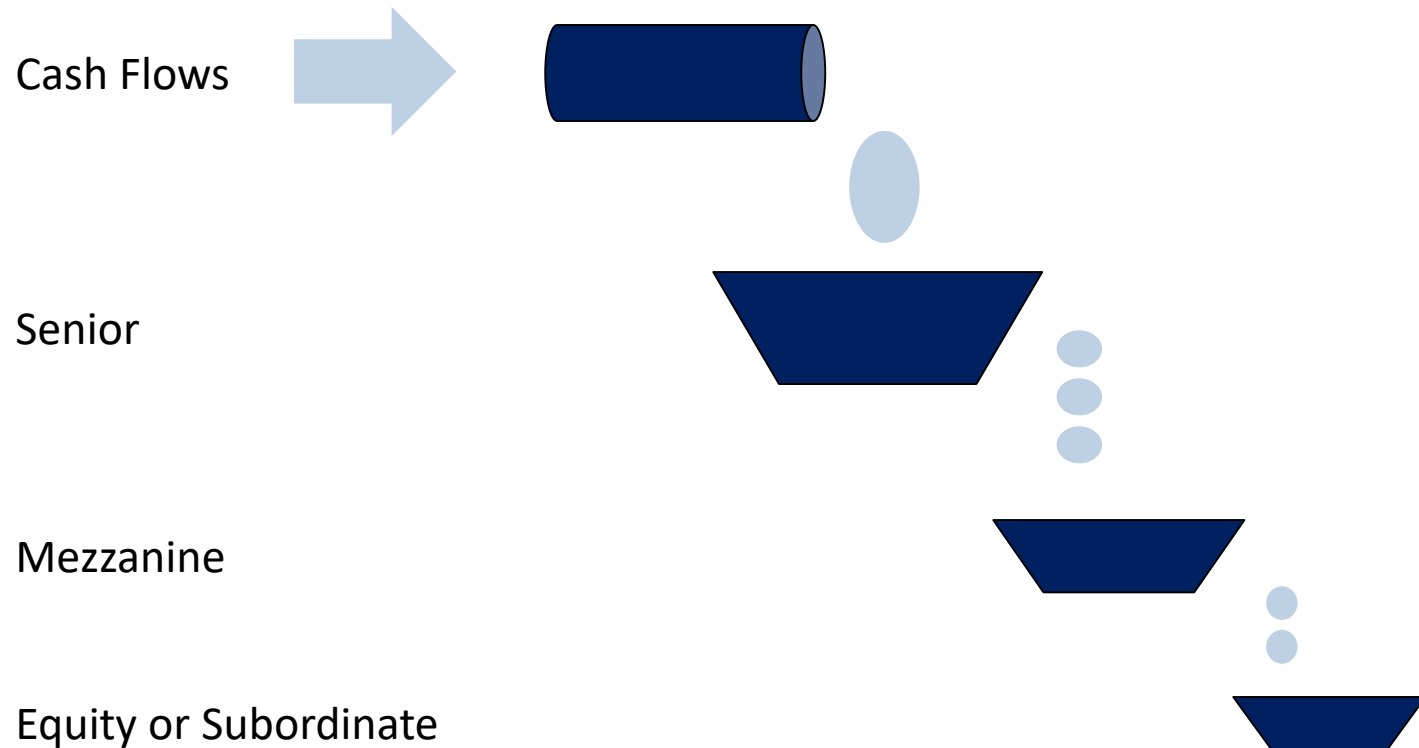


How Securitization Works – Flow of Securitization



Securitization “Waterfall”

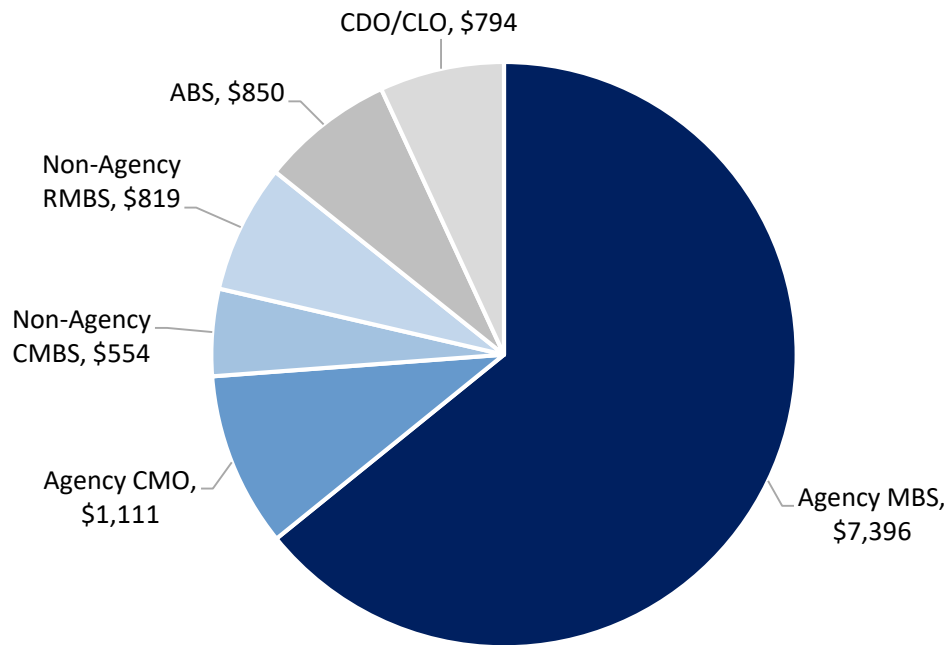
The Waterfall in Securitization



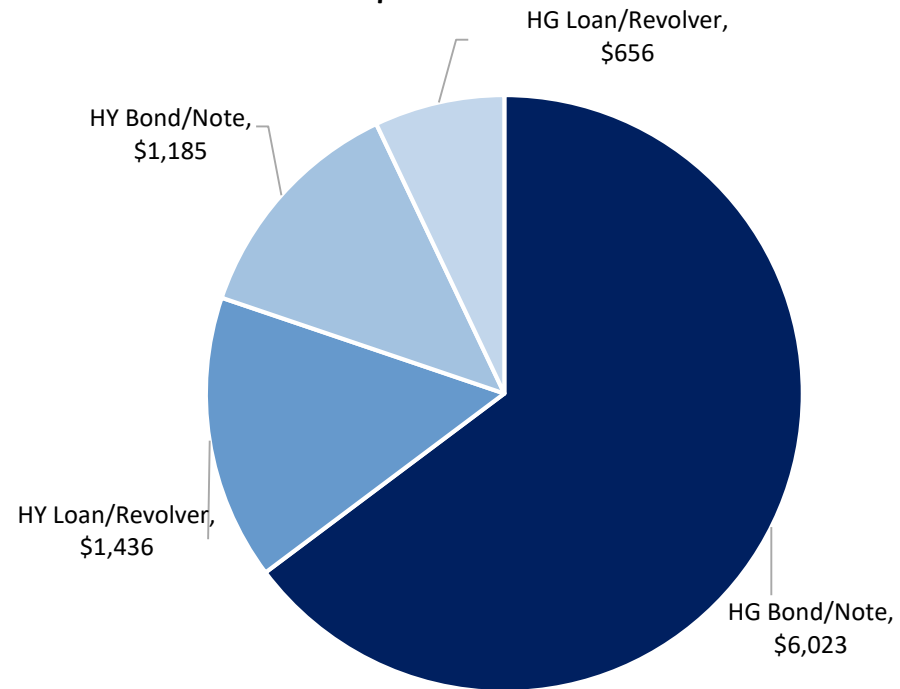
Largest Debt Market

Market Size Outstanding

**Structured Products
\$11.5T**



**Corporate Debt
\$9.3T**



What Gets Securitized

1985 - Vanilla Sectors



Today - Esoteric Sectors (60+)



Past: “Good” Subprime



- *2nd largest branch-based consumer finance company*
- *Issued one of first Subprime Mortgage ABS in October, 1989*

“....pledge the house to buy a blouse....”
A Merrill Lynch executive, T. Capasse, NYT 1988

~300M AAA-rated ABS

~30% Retained Interest (“skin in the game”)

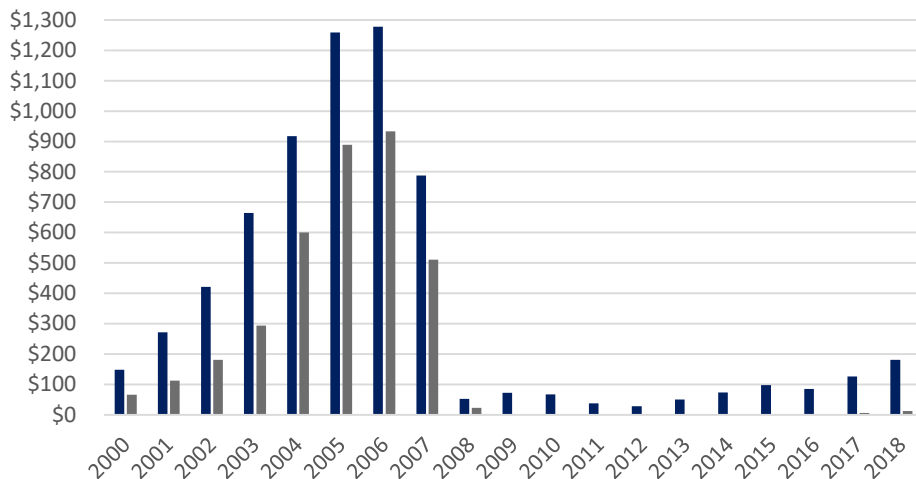
Collateral: ~10,000 “subprime” first/second mortgages

-FICO score didn’t exist

-~25% of collateral in 10/17/89 San Francisco earthquake

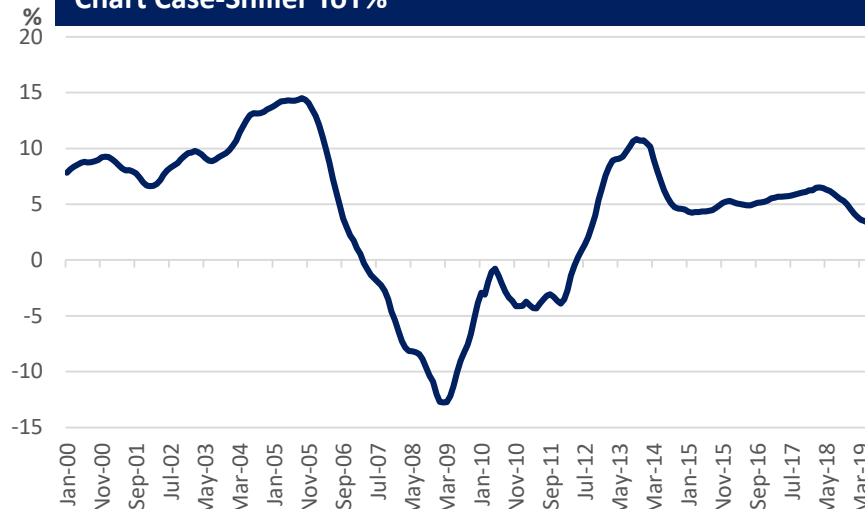
Past: "Bad" Subprime

Issuance Chart (\$ Billions)



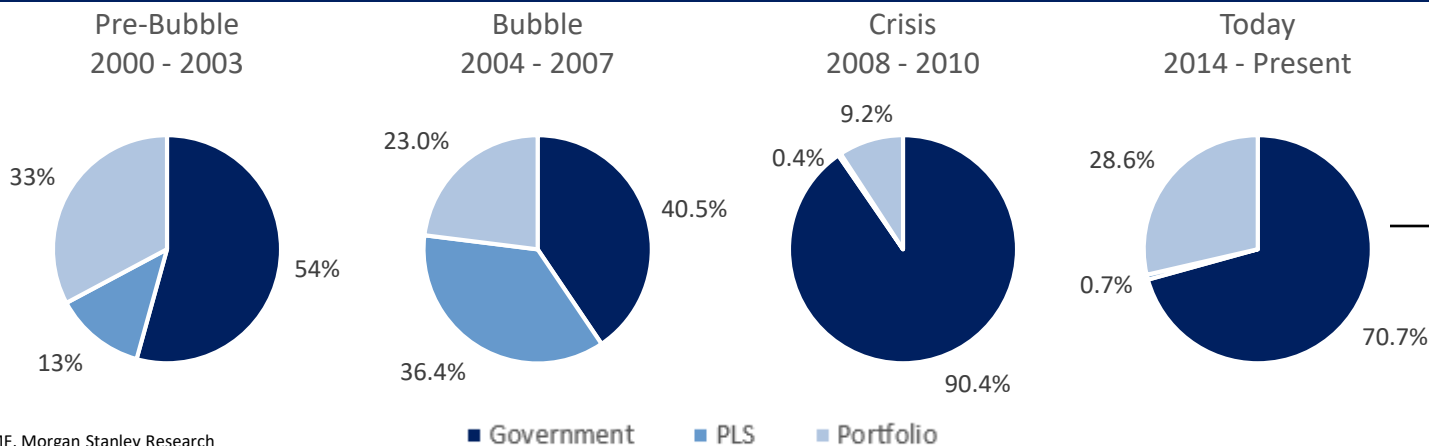
Numbers are in USD billions.
Source: SIFMA

Chart Case-Shiller YoY%



Source: Bloomberg

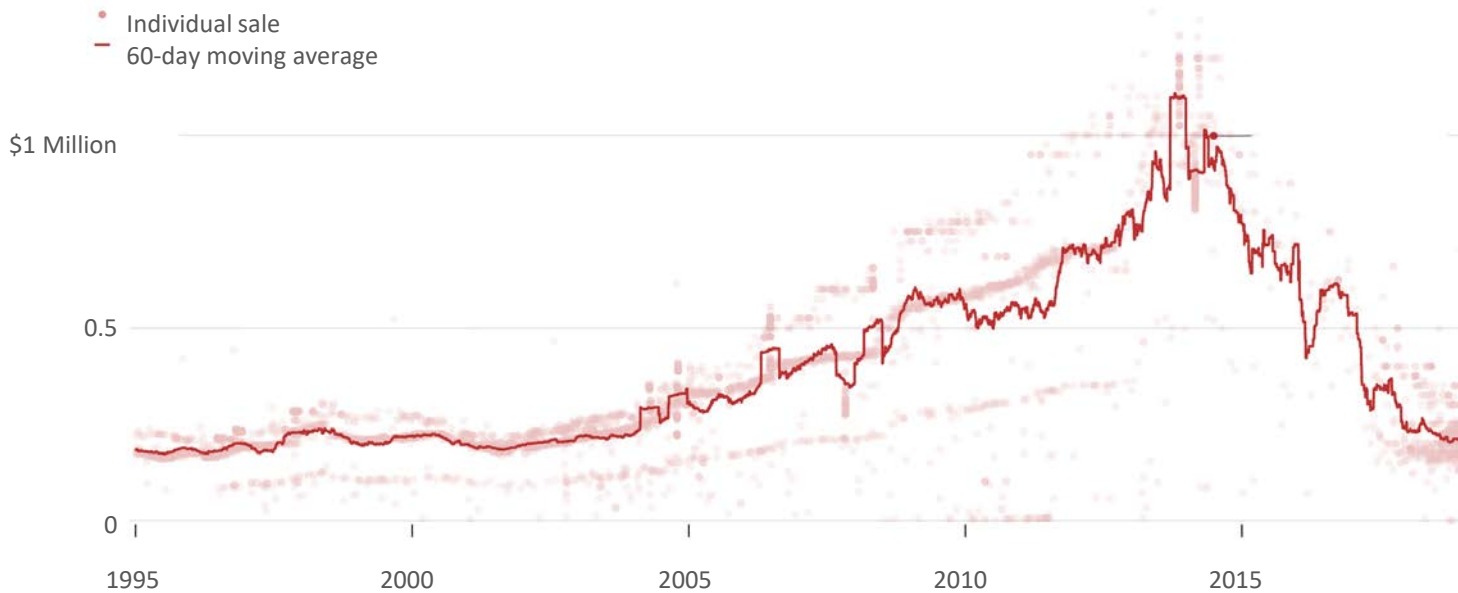
Sources of U.S. Mortgage Finance Through History



9.5.19
GSE
Reform
Proposal

Source: IMF, Morgan Stanley Research
Numbers may not add to 100% due to rounding.

Current: NYC Taxi Medallions



	Pre-bubble	Bubble (2010-2014 Uber entry)
LTV	70%	100%
Term	10 years	50 years
Rate	7%	3-4%
Balloon	No	3yr balloon/rate reset to 24%

**Confession of
Judgement**

~85% price drop

**Garnish Immigrant
(40% India/Pakistan) bank
accounts**

~950 bankruptcies

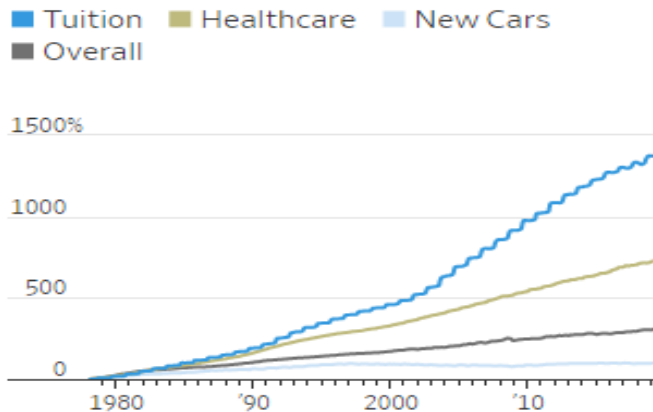
Future: Student Loans (“a six pack & a backpack”)

Education = Entitlement



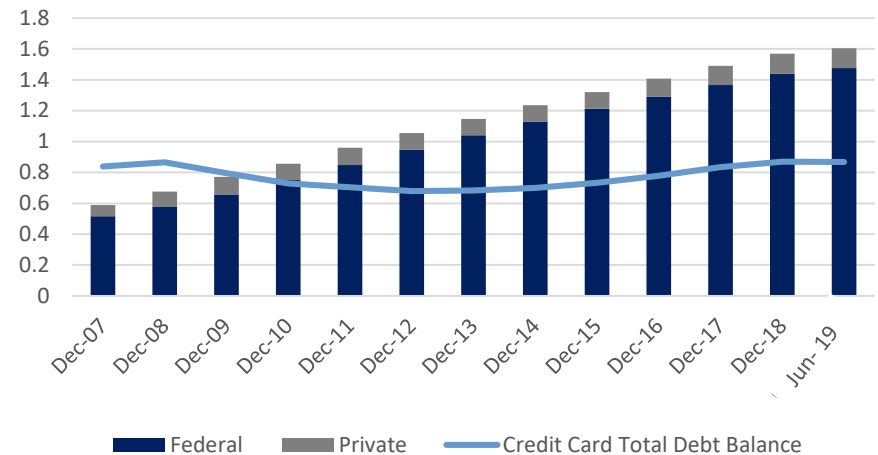
Peak Prices: College tuition has risen much faster than other household expenses.

Change in Prices Since 1978



Source: Labor Department

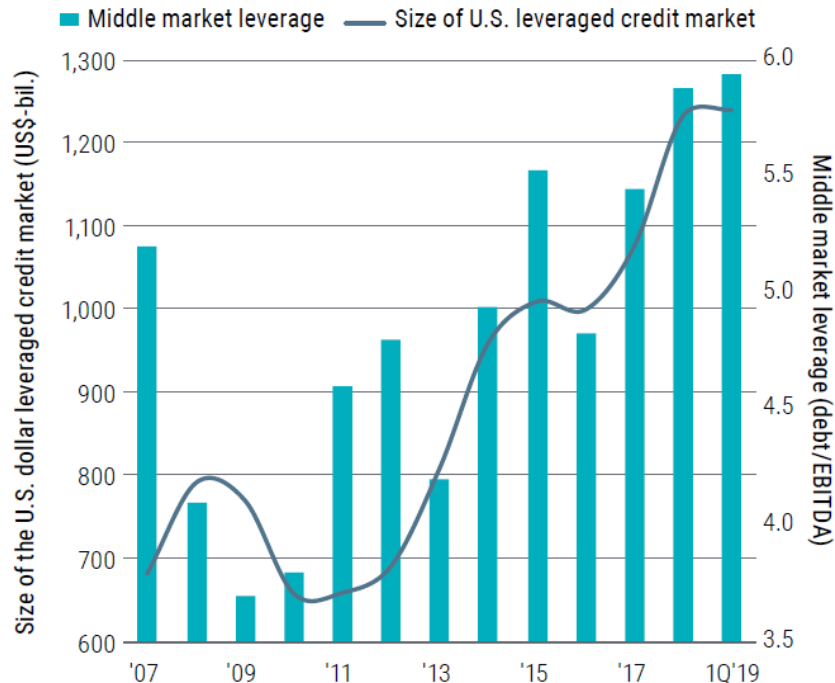
Student Loan Debt Outstanding vs Credit Card Debt Balance (\$T)



- **11% 90-day+ delinquent + ~50% of 20% in deferral likely non-payers**
- **2M defaults in last 6 years/1400 day**
- **\$32B projected loss on DOE program**
- **40% of grads in non-college jobs**
- **70 college presidents earn >\$1M**
- **In >33% of schools, <50% students graduate within 8 years**

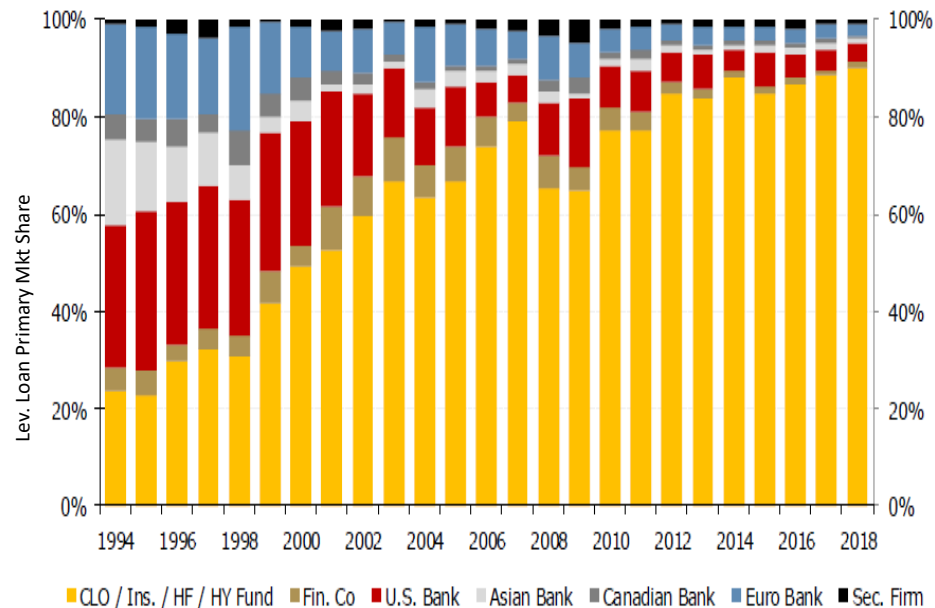
Future: Direct Lending

Bank Loan Market and Middle-Market Leverage Ratios Climb to All Time Highs



Source: Credit Suisse and S&P LCD as of 3.31.19

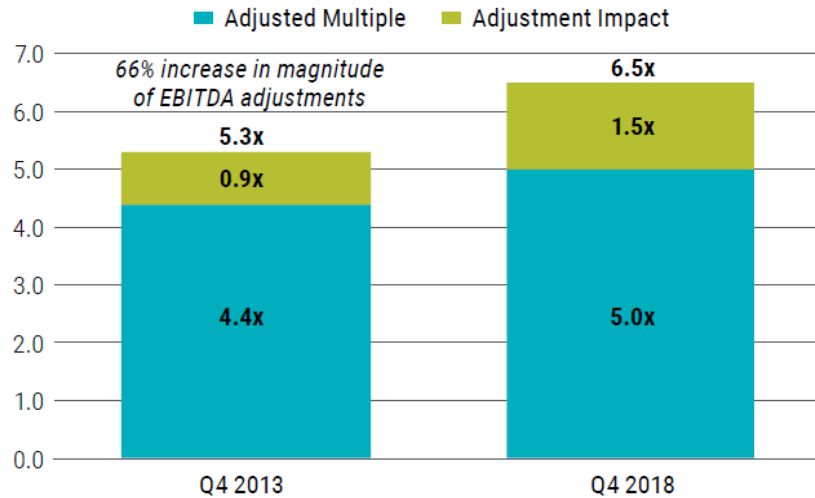
Direct Lending (CLO/BDC/Private Funds) Drives Leveraged Loan New Issue



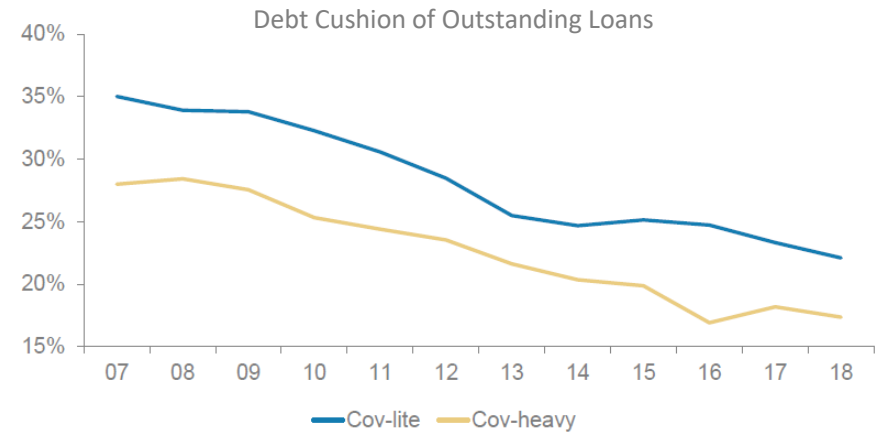
Source: Wells Fargo Securities, LCD

Future: Direct Lending

Bubble 1 – EBITDA Adjustments = 1.0 CMBS ('07) Underwriting

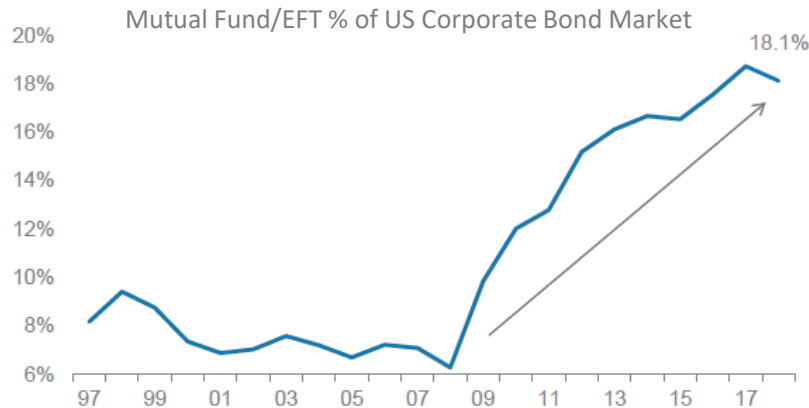


Bubble 2 – Risk Layering: Structural Leverage + Financial Leverage



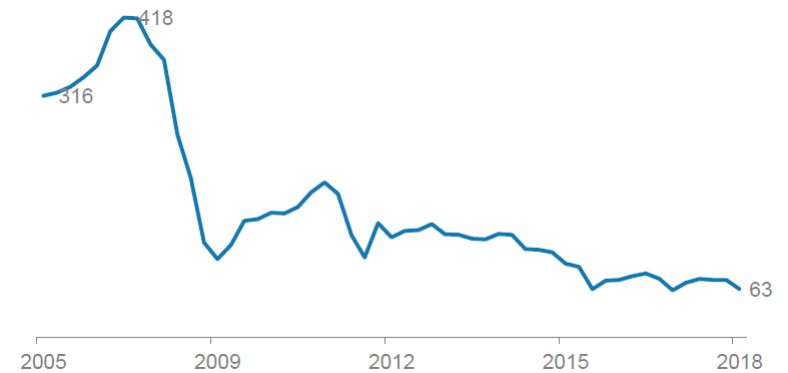
Source: Morgan Stanley Research, S&P LCD

Bubble 3 – Liquidity



Source: Federal Reserve data, Morgan Stanley Research

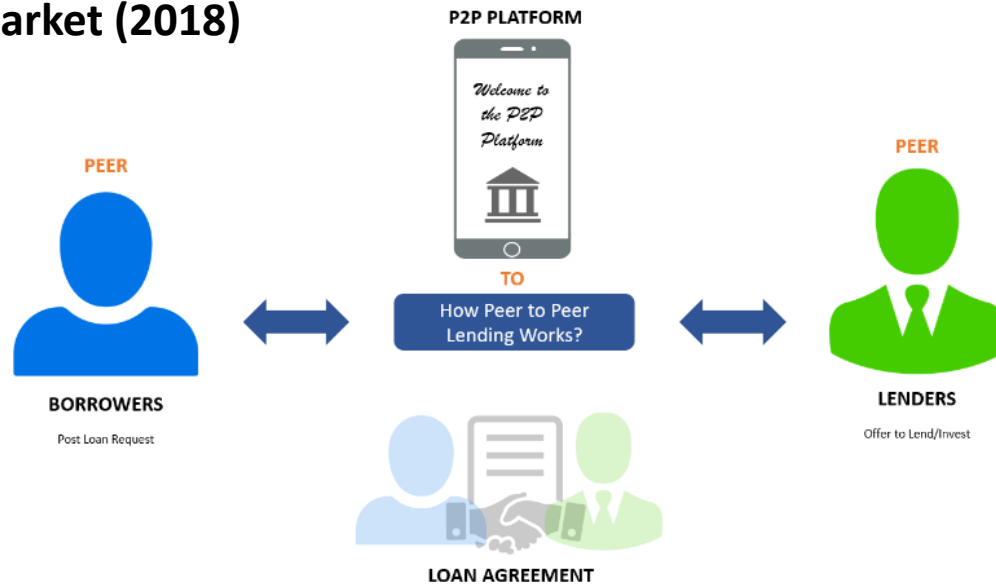
Dealer Inventories in Credit Assets (\$B)



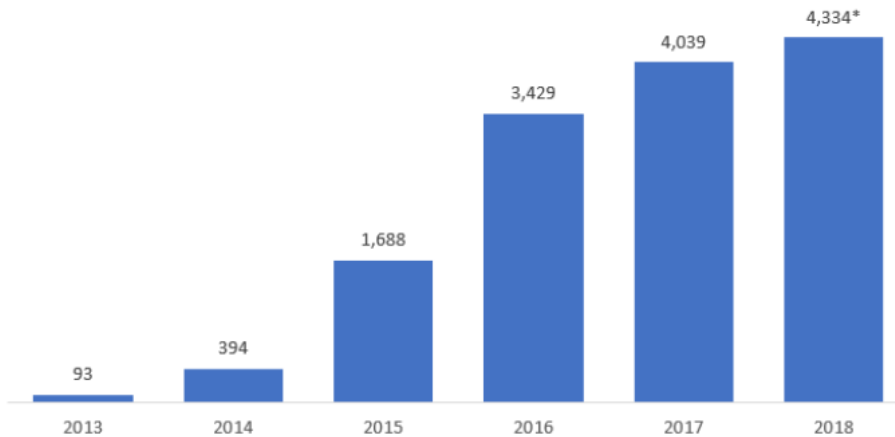
Source: Federal Reserve data, Morgan Stanley Research

Future: China Fintech

\$219B Market (2018)



Failed Peer-to-Peer Lending Platforms in China (cumulative)



Source: Bloomberg

- 50% of P2P borrowers <30-years old
- >50% borrow from multiple platforms
- 33% use new loans to refinance
- 50% missed payments

Source: Rong360 2018 survey

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