

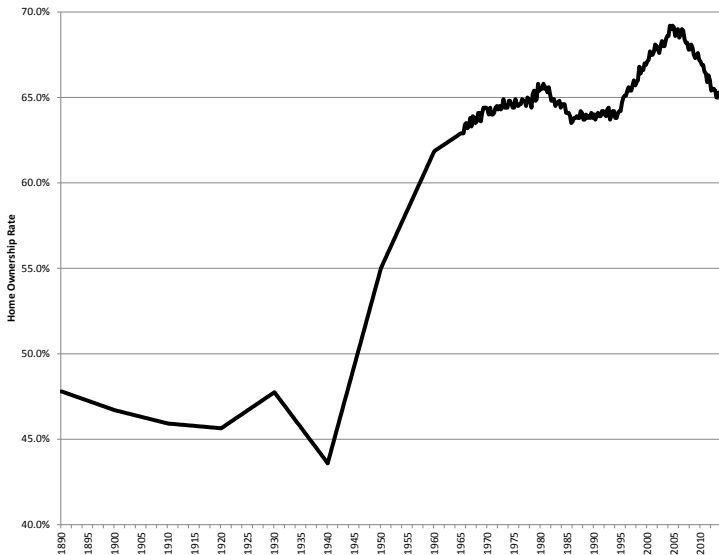
THE SINGLE-FAMILY RENTAL BUSINESS AND ITS SECURITIZATION

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US HOMEOWNERSHIP RATE SINCE 1890



Source: Census Bureau Data (ACS)

2013 US Census reports approximately 133M housing units in US.

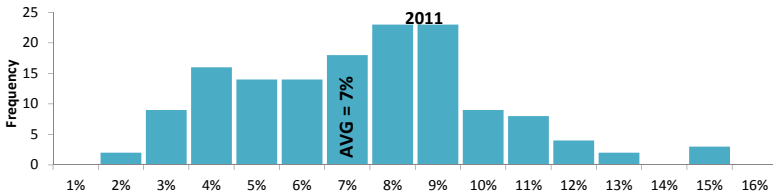
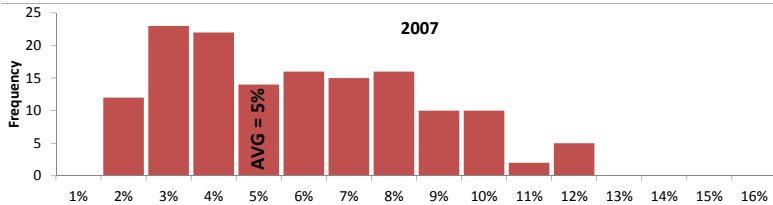
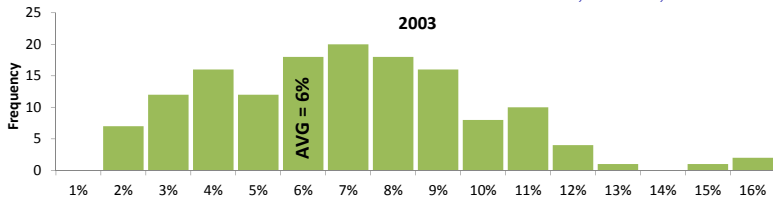
At 65.5% homeownership rate, there are 87M owned units, 46M rental units, of which approximately 12M are single family rentals (mainly owned by small investors).

PRO FORMA: SINGLE HOME, TOTAL ASSET

Years out	0	1	2	3	4	5	Assumptions
Capital Invested	\$ 189,488						
Revenue							
<i>Gross Rent</i>	\$ 18,949	\$ 19,517	\$ 20,103	\$ 20,706	\$ 21,327		3.00%
<i>Gross yield (=R/(P+capex) ratio)</i>	10.0%	10.3%	10.6%	10.9%	11.3%		
Vacancy and Credit Loss	\$ (612.80)	\$ (631)	\$ (650)	\$ (670)	\$ (690)		3.23%
Effective Gross Rent	\$ 18,336	\$ 18,886	\$ 19,453	\$ 20,036	\$ 20,637		
Expenses							
Property Mgmt and Leasing	\$ (1,478)	\$ (1,522)	\$ (1,568)	\$ (1,615)	\$ (1,664)		7.80%
Expenses linked to home value	\$ (6,253)	\$ (6,378)	\$ (6,506)	\$ (6,636)	\$ (6,769)		2.00%
Total Expenses	\$ (7,731)	\$ (7,900)	\$ (8,074)	\$ (8,251)	\$ (8,432)		
Net operating income	\$10,605	\$10,986	\$11,379	\$11,785	\$12,205		
Cap Ex	\$ (1,895)	\$ (1,933)	\$ (1,971)	\$ (2,011)	\$ (2,051)		2.00%
Operating Free Cash Flow	\$ 8,710	\$ 9,053	\$ 9,407	\$ 9,774	\$ 10,154		
<i>Operating ROA</i>	4.6%	4.8%	5.0%	5.2%	5.4%		
Home Value	\$ 189,488	\$ 200,857	\$ 210,900	\$ 221,445	\$ 230,302	\$ 239,514	
<i>House Price Appreciation (HPA)</i>		6.0%	5.0%	5.0%	4.0%	4.0%	6%-4%
Total Return: Operating ROA + HPA		10.6%	9.8%	10.0%	9.2%	9.4%	
Total Free Cash Flow	\$ (189,488)	\$ 8,710	\$ 9,053	\$ 9,407	\$ 9,774	\$ 249,669	

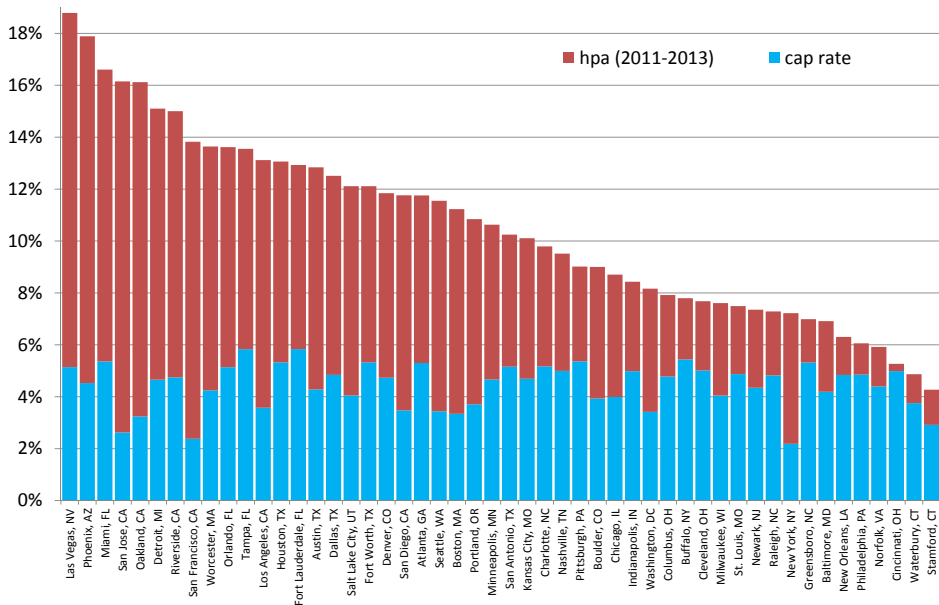
Unlevered IRR: 9.3%

GROSS RENTAL YIELDS: '03, '07, '11



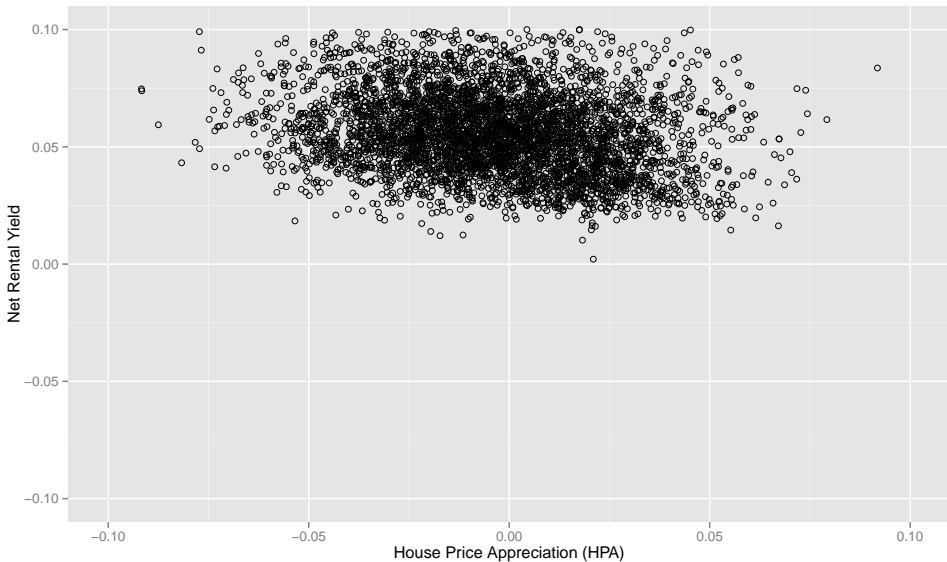
Source: Census Bureau Data, hedonic model from Demers and Eisefeldt (2014)

HPA + NET RENTAL YIELDS '11-'13



Source: Core Logic Data, Demers and Eisfeldt (2014)

NET RENTAL YIELDS VS. HPA '09-'14



Source: Core Logic zip level data, Demers and Eisfeldt (2014)

SECURITIZATIONS: SFR, CMBS, RMBS

	SFR	SB CMBS	RMBS
Number of Borrowers	Single Borrower	Single Borrower	Many Borrowers
Number of Loans	Single Loan	Single Loan	Many Loans
Sequential	Straight Sequential	Straight Sequential	Not Straight Sequential
Income	Rental Income	Rental Income	Mortgage Payments
Property Maintenance	Management Co	Management Co	Owners
Diversity	Concentrated	Concentrated	Diverse
Recovery Rates	Liquidate or Re-stabilize Pool	Liquidate or Restabilize	Liquidate defaulted
Special Servicing	Many Properties	Few Properties	Many Properties
		Deal Metrics	
	SFR CAH 2014-2	CMBS BAML	
		2014 IP TriBeCa	
LTV	77.4 %	73.0%	
Debt yield = OpFCF/D	5.7%	8.6%	
DSCR	2.89x (LIBOR Current), ≈ 1.67x (if swapped to fixed*)	3.17x (Fixed Rate)	
AAA Credit Enhancement	47.9%	28.4%	

Source: Bond issue data, and Demers and Eisfeldt (2014)

*To compare to the fixed rate CMBS deal, we use $2.89 = \text{Operating Free Cash Flow (OpFCF)} / (173 \text{ weighted coupon} + 25\text{bps current LIBOR})$, implying $\text{OpFCF} = 572.22$. The Bloomberg quote on a 5 year LIBOR swap to fixed was about 170bps in 06/14, implying a DSCR at a fixed rate of $572.22 / (173 + 170) = 1.66$

SECURITIZATIONS: SFR COLLATERAL HETEROGENEITY

Transaction Name	Fixed Effect Net Income	Relative HPA Stated vs. Zip	Relative Gross Yield Stated vs. Zip
AH4R 2014-SFR1	\$ 2,596	11.4%	-0.6%
AH4R 2014-SFR2	\$ 2,566	12.8%	0.0%
IH 2013-SFR1	\$ 2,048	0.7 %	-0.4%
IH 2014-SFR1	\$ 1,450	6.3 %	-0.9%
IH 2014-SFR2	\$ 1,064	7.3 %	-1.2%
ARP 2014-SFR1	\$ 644	3.3 %	-1.0%
CAH 2014-1	\$ 571	7.9%	-1.3%
CAH 2014-2	\$ 417	3.4%	-1.1%
SBY 2014-1	\$ -	2.8%	-1.0%

Source: Bond data, Annex A, and Demers and Eisefeldt (2014)

Fixed Effect Net Income: Regression estimate of incremental annual net income, conditional on BPO and zip code.

Relative HPA Stated vs. Zip: Compares HPA between purchase and brokers price opinion date to zip code-level HPA (CoreLogic). Includes renovations in purchase price.

Relative gross yield Stated vs. Zip: Compares gross yield (annual rent divided by brokers price opinion) to zip code-level rent-to-price ratios (Zillow).

ENDNOTES

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