# **2008 FINANCIAL CRISIS:** A TEN-YEAR REVIEW November 8-9, 2018





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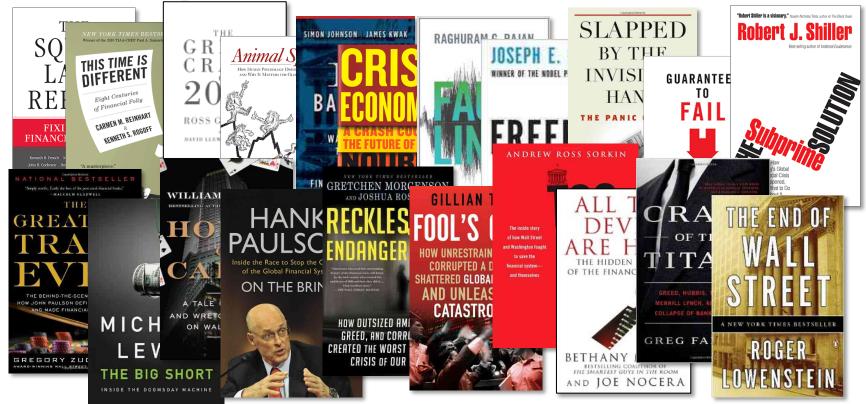
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## **The Many Narratives of the Crisis**



## **The Many Narratives of the Crisis**

Journal of Economic Literature 2012, 50:1, 151–178 http://www.aeaweb.org/articles.php?doi=10.1257/jel.50.1.151

#### Reading About the Financial Crisis: A Twenty-One-Book Review

#### ANDREW W. LO\*

The recent financial crisis has generated many distinct perspectives from various quarters. In this article, I review a diverse set of twenty-one books on the crisis, eleven written by academics, and ten written by journalists and one former Treasury Secretary. No single narrative emerges from this broad and often contradictory collection of interpretations, but the sheer variety of conclusions is informative, and underscores the desperate need for the economics profession to establish a single set of facts from which more accurate inferences and narratives can be constructed. (JEL E32, E44, E52, G01, G21, G28)

## **The Many Narratives of the Crisis**

- Crisis is all about subprime portrage lending
- Policy and lower lending star to ds were at fault
- Bankers didn't have er is skin in the game"
- No one saw the cross co hing
- Devotion to many terficiency caused the crisis
- Changes in regulation allowed huge increases in leverage

8 Nov 2018

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## The Role of Housing and Mortgage Markets in the Financial Crisis

#### **Annual Review of Financial Economics**

Vol. 10:25-41 (Volume publication date November 2018) https://doi.org/10.1146/annurev-financial-110217-023036

#### Manuel Adelino,<sup>1,2</sup> Antoinette Schoar,<sup>2,3</sup> and Felipe Severino<sup>4</sup>

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 <sup>4</sup>Tuck School of Business, Dartmouth College, Hanover, New Hampshire 03755, USA



#### WIDESPREAD INCREASES IN MORTGAGE LEVERAGE

The significant increase in mortgage and other household debt in the period leading up to the 2008 crisis has been widely documented. Brown et al. (2010) show that household mortgage debt almost doubled between 2000 and 2007, and contrary to earlier periods, increases in mortgage debt were not offset by reductions in other household debt. Remarkably, in the run-up to the crisis, this increase in leverage was prevalent across all income groups and was closely tied to house-price appreciation across neighborhoods. Adelino, Schoar & Severino (2016) document that the increase in household leverage, measured as DTI levels, went up across all income groups and all credit scores. Figure 1 shows the increase in mortgage credit during the period 2001–2007 and demonstrates that the flow of new (purchase) mortgages across incomes was stable over this period. Adelino, Schoar & Severino (2016) also document similar patterns across the credit score distribution. In other words, the fraction of credit going middle- and high-income households did not change over the period 2001–2007. But since richer household higher credit scores take out larger mortgages, the dollar value of mortgage credit held by middle-class ar middle-class borrowers increased significantly over this time period. Adelino, Schoar & Severino (2017) also show the increase in DTI ratios was almost twice as high in states with high house-price appreciation compared to thos.

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#### HOW DID LENDING STANDARDS CHANGE IN THE BOOM?

In the previous section, we showed that DTI levels increased proportionally for all income groups. DTI levels are usually seen as an indicator of a household's ability to pay its mortgage. But since mortgage loans are collateralized by the value of the house, the key indicator of changing lending standards is CLTV ratios at origination. This is the amount of mortgage leverage including any second liens or home equity loans on the house. It is often argued that the way the financial sector can create a bubble in housing markets is by relaxing CLTV requirements (see, for example, Geanakoplos 2010).

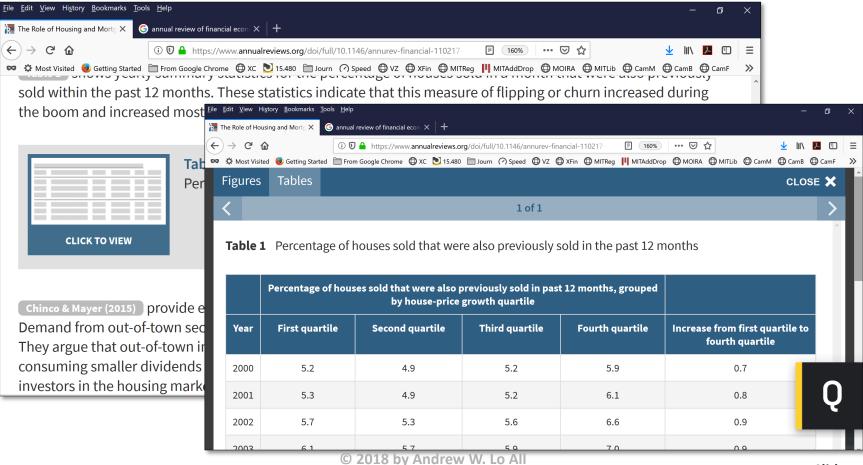
Figure 2 shows that the distribution of CLTV ratios at origination for purchase mortgages remained stable between 2001 and 2007. The median home purchased between 2001 and 2007 had a CLTV of 90%, and me in the 90th percentile of the leverage distribution had a CLTV just lower than 100%. Furthermore,
 Adelino, Schoar & Severino (2017) show that there is no difference in the stability of the CLTV distribution between areas with high and low house-price growth. Ferreira & Gyourko (2016) also show that CLTV ratios between 1
 2011 were stable and did not increase dramatically during the boom period. Somewhat contrary to popular belie.,



#### NO EXPANSION OF HOMEOWNERSHIP

Several researchers have explicitly asked if an erosion of credit standards happened at the extensive margin. In other words, did distortions in credit origination allow households with low income and poor credit quality, who previously were rationed out of the market, to become homeowners (see Mian & Sufi 2015)? Goodman & Mayer (2018) present evidence that runs counter to this hypothesis. Using data from the American Housing Survey, they show that the overall US homeownership rate rose from 63.5% in 1985 to 68.8% in 2005. However, most of the increase was concentrated in the period before 2000, that is, before the onset of the mortgage expansion. It then dropped to 62.7% after the onset of the financial crisis.

But aggregate homeownership rates might mask important changes in the composition of borrowers if the significant expansion of credit to marginal households. Adelino, Schoar & Severino (2017) test this idea by company changes in homeownership rates for high-versus low-income households across regions. Figure 3 shows housing boom made homeownership less accessible for the lowest-income households. In particular, star 2001, low-income households entered homeownership at lower rates than middle- and high-income households,



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#### **DEFAULTS IN THE MIDDLE CLASS**

Early in the crisis, most commentators focused on the high levels of subprime foreclosures experienced during the bust (using different definitions of subprime, as pointed out by Mayer & Pence 2009). This is not surprising, given that in some areas subprime foreclosure rates were as high as 20% during the crisis. Further, the cost to families and neighborhoods was very high (Campbell, Giglio & Pathak 2011). However, subprime default levels are high even in good economic times, with an average of almost 6%, and subprime mortgages are small compared to prime mortgages (Amromin & Paulson 2009).

Adelino, Schoar & Severino (2016) show that ex post defaults increased most sharply for middle-income and prime borrowers. Since these borrowers take on larger mortgages, the fraction of mortgage dollars in delinquen increased most steeply for this group. Mayer, Pence & Sherlund (2009) point out that, already at the beginning foreclosure crisis, the proportional increase in default rates for Alt-A, or near-prime, loans was larger than subprime loans. Ferreira & Gyourko (2016) similarly estimate that, although defaults during the housing bust occurred on prime and subprime mortgages, almost twice as many prime as subprime borrowers lost their homes

#### DISCLOSURE STATEMENT

The authors are not aware of any affiliations, memberships, funding, or financial holdings that might be perceived as affecting the obj

#### ACKNOWLEDGMENTS

We thank Matt Richardson, the review

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