Would Macroprudential Regulation Have Prevented the Last Crisis?

AIKMAN ET AL. (2019)

Introduction

A key response of official sectors around the world to the financial and economic crisis in 2007 - 2008 has been the formation of financial stability committees.

The remits of these committees are “macroprudential.” Macroprudential policy focuses on potential system-wide risks and amplification mechanisms, complementing the detailed firm-specific microprudential regulators.

The paper asks whether macroprudential authorities, as they have been designed over the past decade, would prevent a rerun of the last crisis.

Fault-Lines That Let to the 2008 Crisis

The two dominant contributors are:

1) the fragilities in the financial system associated with excessive leverage and the use of potentially flighty short-term funding

2) the unprecedented lending boom to the household sector that began in the mid-2000s.

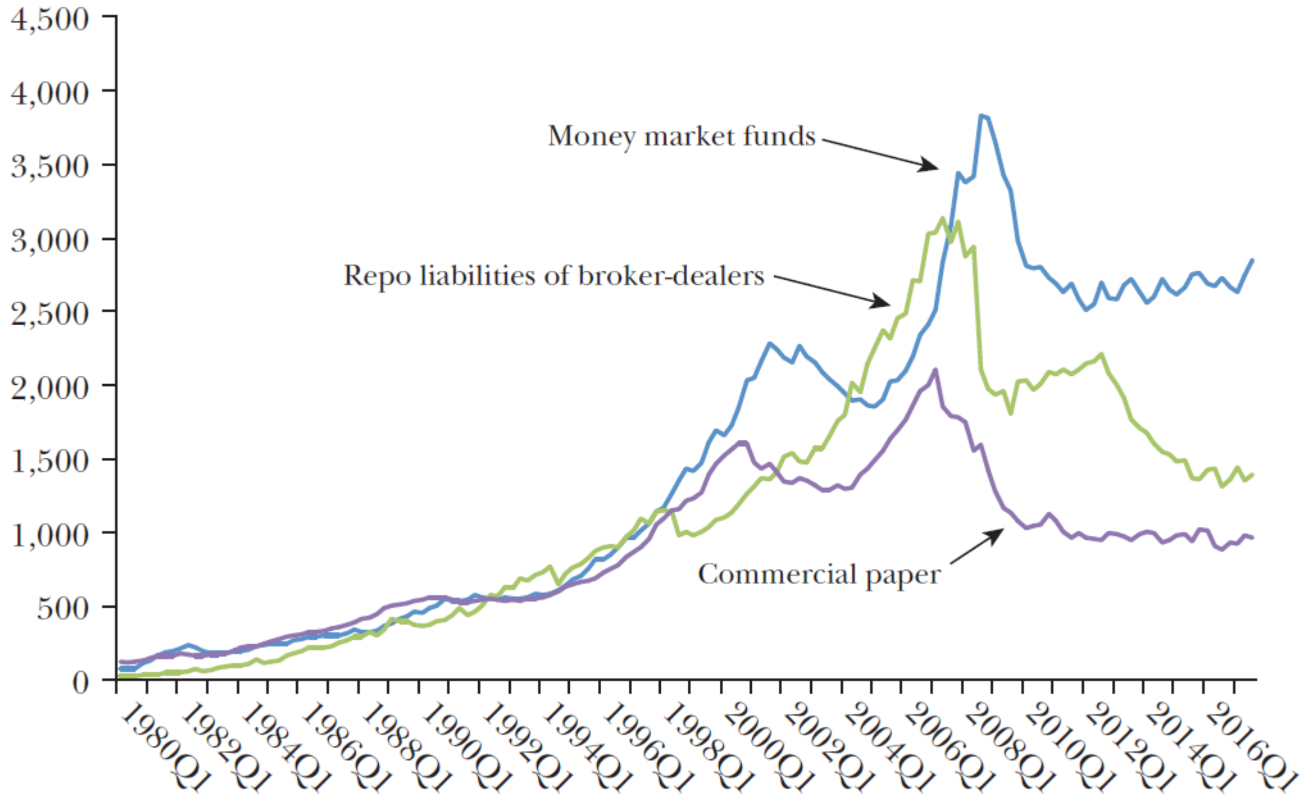
These two factors can account for around two-thirds to three-quarters of the fall in US GDP that followed the financial crisis.

Table 1
Size and Structure of the Leveraged Financial System

	2001:Q4				2007:Q4			
	Assets ($bn)	*Leverage*	*Liquid assets*	*Short-term funding*	*Assets ($bn)*	*Leverage*	*Liquid assets*	*Short-term funding*
Commercial banks	6,552	11.0	6.6%	26.5%	11,182	9.8	4.6%	33.2%
of which: large institutions	*2,291*	*12.2*	*6.7%*	*32.9%*	*5,422*	*11.8*	*4.6%*	*37.5%*
Savings institutions	1,317	11.6	3.0%	18.2%	1,852	9.1	2.3%	22.6%
Broker-dealers	2,376	28	2.4%	57.3%	4,686	45	0.4%	63.4%
Government-sponsored enterprises	1,417	42.3	0.2%		1,677	23.7	0.7%	
Total	**11,662**				**19,397**			

Fragilities in the Financial System

Figure 1
Reliance on Short-Term Funding
($ billions)



Fragilities in the Financial System

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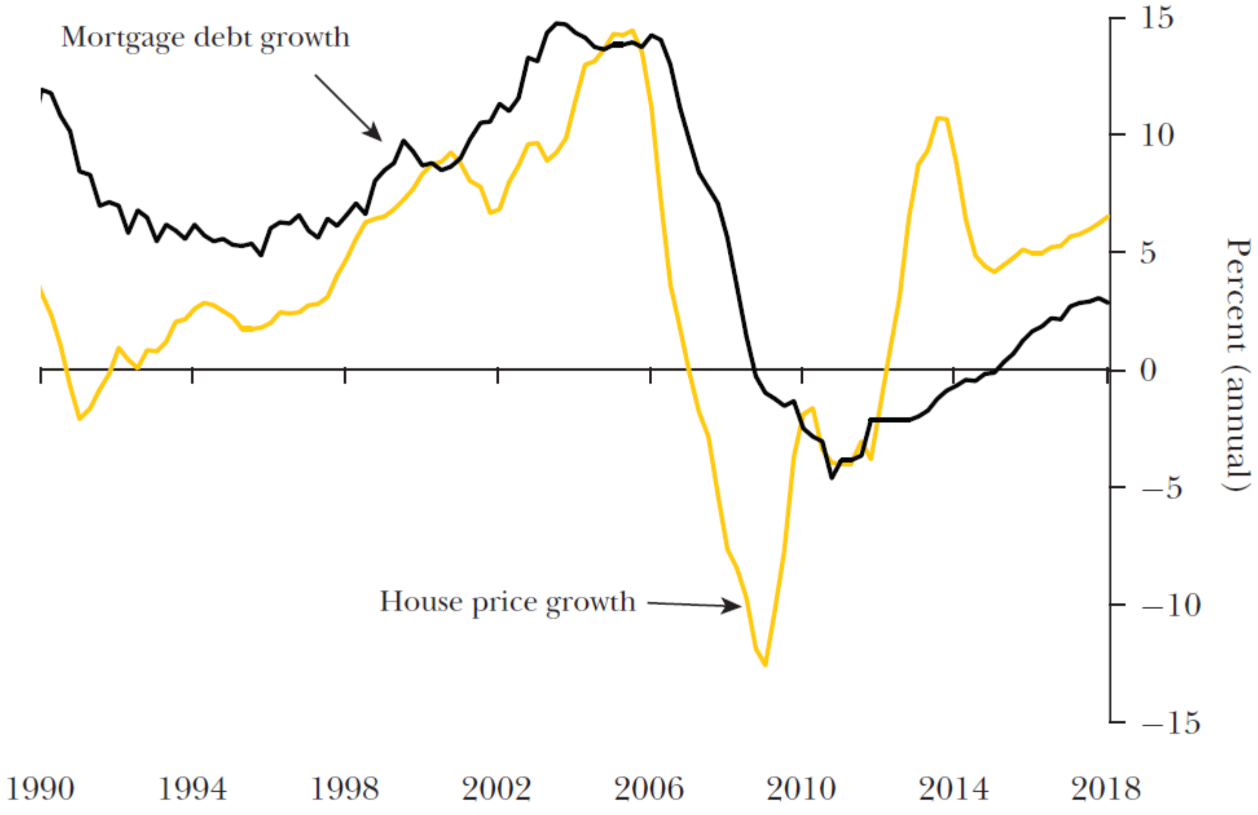
In summary, nonbanks became an increasingly important source of credit for the real economy in the years preceding the crisis.

Short-term borrowing became more important, with the belief that it could be rolled over continually.

These observations suggest that macroprudential regulators' arsenals must include

- tools to affect the overall propensity to rely on debt financing
- tools to affect the maturity of the funding
- macroprudential regulators must have scope to apply these tools both to banks and to nonbanks.

Figure 2
Mortgage Debt and House Prices
(annual percentage change)



The Build-up in Household Debt

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In summary, the years running up to the Great Recession saw an unprecedented surge in US household debt.

That boom was accompanied and reinforced by soaring property prices. Aggressive credit supply expansion, compounded by financial innovation, provided the undercurrent for an unsustainable cycle.

Household balance sheets became increasingly vulnerable to a shock as more credit was extended to highly indebted households.

What Could a Macroprudential Regulator Have Done?

Identifying the Build-up in Risk in Real Time

Identifying macroprudential policy interventions requires spotting emerging risks and accumulating vulnerabilities prior to a crisis.

Identifying the debt build-up in the household sector was relatively straightforward.

While some warning signs were clearly present in the lead-up to the crisis, we are cautious about the ability of macroprudential regulators to understand the nature of systemic financial risks as they emerge in real time.

One implication is that policymakers should seek to develop systematic frameworks within which to monitor emerging risks and their potential implications for macroeconomic tail events. Another implication is that we should be humble.

What Could a Macroprudential Regulator Have Done?

Tools and Actions

The macroprudential regulator should be able to implement or at least recommend the use of various tools and actions to counter any signs of problem:

- Capital injection from the central bank or the government
- Countercyclical capital buffer (Regulators can increase capital requirements according to the aggregate risk environment)
- Net stable funding ratio
- Imposing loan-to-income limit, which may be more effective than imposing loan-to-value limit
- Etc.

Could the Macroprudential Frameworks Set Up Since the Crisis Implement Such Policies?

Of the 58 countries surveyed in Edge and Liang (2017) that have created macroprudential frameworks since the crisis, 41 have set up multi-agency financial stability committees.

Only 11 of these have formal powers, including either direct controls over macroprudential policy tools or the right to issue “comply or explain” recommendations to which other authorities are formally obliged to respond.

The remaining cases rely on the voluntary cooperation of other regulators to achieve their policy aims.

Could the Macroprudential Frameworks Set Up Since the Crisis Implement Such Policies?

Our analysis suggests that a macroprudential regime with a suitably strong mandate, coupled with powers to adjust financial system leverage and maturity/liquidity transformation and to limit household sector indebtedness, could have significantly ameliorated the macroeconomic fall-out from the collapse of the real estate bubble.

Many macroprudential regulators must rely on making nonbinding recommendations to other regulators.

The evidence presented above suggests that one obvious risk of this arrangement is that the recipient of these recommendations does not share the macroprudential regulator's objectives, and no action will be taken.

A less obvious risk is that a financial stability committee that lacks the authority to address risks will be tempted to see risks everywhere—after all, warning of such risks is costless and a useful way to hedge one's bets.