Does CFPB Oversight Crimp Credit?

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Motivation

- Since the Great Recession, there is been heightened interest in consumer financial protection
- In the U.S., this is exemplified by the creation of the Consumer Financial Protection Bureau (CFPB)
  - New agency focused on consumer financial protection
  - Powers: rule-writing, supervision and enforcement
  - Broad authority over both banks and nonbanks
- Critics: Heavy-handed approach ("regulation by enforcement") reduces the availability of financial services to consumers
- This paper: Estimate effects of CFPB supervision & enforcement on lending by exploiting exemption of small banks from CFPB oversight

Key Powers of the CFPB

1. Rule-making
   - Authority under statutes transferred to CFPB (e.g., TILA, HMDA).
   - Organic authority to define "unfair, deceptive or abusive acts or practices" (UDAAPs), prohibited under Dodd-Frank Act.
2. Supervision and examination
   - Power to send examiners to study records, interview employees, collect data etc. for nearly any firm engaged in consumer finance.
3. Enforcement
   - Pursue enforcement actions for breaches of consumer financial protection laws (resulting in civil money penalties, refunds etc.)
   - Must act in cooperation with other regulatory agencies.
   - More than 200 public enforcement actions through 2019, recovering more than $12bn in consumer relief.

Research question and empirical strategy

$\Rightarrow$ Hypothesis: Has CFPB oversight (= supervision & enforcement) impacted the supply or composition of credit from affected banks due to increased legal risk/uncertainty/compliance costs?

- **Identification:** Exploit fact that small depository institutions are (mostly) exempt from CFPB oversight. Exempt if:
  - <\$10bn in total assets, and
  - All depository affiliates are <\$10bn in size
- For these banks, oversight falls to prudential supervisor (e.g. OCC).

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- Evaluate credit supply response around two episodes:
  - CFPB formation in July of 2011
  - The November 2016 federal election which signalled a relaxation in oversight intensity

Difference-in-differences strategy

Do differences in lending behavior emerge between these two groups starting in the second half of 2011?

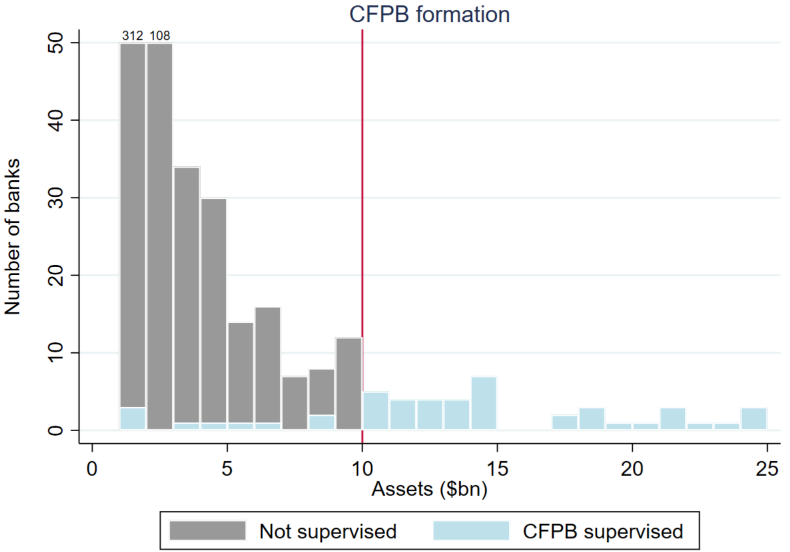
Bank Size	Regulator responsible for consumer financial supervision and enforcement:	
>$10bn	Prudential regulator	**CFPB**
<$10bn	Prudential regulator	Prudential regulator
	Pre-CFPB (up to Q2:2011)	Post-CFPB (Q3:2011 onwards)

Comments & caveats on empirical strategy

- For identification purposes, focused on "local" effects around \$10bn cutoff. Larger banks may have responded differently.
- We study CFPB supervision and enforcement activities; not market-wide CFPB regulations (e.g. QM rule)
- We cannot as fully capture *benefits* of CFPB oversight – this is not a comprehensive evaluation
- Our estimates are likely to reflect an *upper bound*
  - Other regulatory changes at \$10bn – debit-card interchange fees, company-run stress tests – may affect some outcomes
  - Substitution between treatment and control groups can increase the estimated impact (but not decrease!)

Main sample: banks with assets \$1bn-25bn as of 2011Q2

Include commercial banks and savings banks; exclude if high-holder >\$50bn



Data and outcomes

- Analysis of mortgage lending
  - Mortgage lending a good 'laboratory': biggest component of consumer lending and subject of about 1/4 of CFPB enforcement actions.
  - HMDA: loan-level origination data includes borrower income, loan principal, location, origination date etc. (matched to bank & BHC using NIC)
  - Study effects on overall credit supply (volume, denial rates etc.) as well as *composition* of lending (e.g., drop in riskier lending?)

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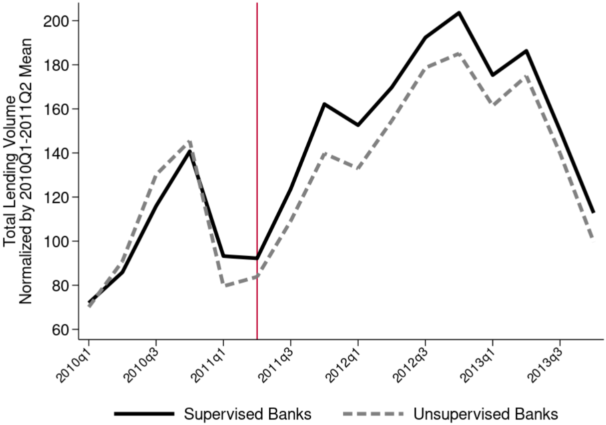
  - Study effects on overall credit supply (volume, denial rates etc.) as well as *composition* of lending (e.g., drop in riskier lending?)
- Analysis of FHA-insured mortgage performance
  - FHA-insured borrowers are typically lower income / higher risk, hence this market is more sensitive to legal & regulatory risk
  - Data: Proprietary loan-level FHA mortgage data (Bhutta and Hizmo, 2020) includes performance, credit score, LTI, DTI, LTV, property types, loan type.
  - Examine impact of CFPB oversight on delinquency and servicing

CFPB oversight and total mortgage originations

(2011:Q2=100)



- No evidence CFPB-supervised banks decreased total mortgage lending
- Similar conclusion from bank-level DiD (CFPB $\times$ post-2011Q2)
- *But:* not controlling for differential trends in mortgage demand

Loan-level analysis

Estimate linear probability model on 2010-2013 mtg originations:

$$CFPBsupervised_{ict} = \alpha_c + \beta \cdot post2011Q2_t + \Gamma X_{ict} + \varepsilon_{ict}$$

where $CFPBsupervised_{ict} = 1$ if lender is overseen by CFPB (as of 2011Q2).

- $\beta < 0$ would suggest CFPB oversight reduced lending.
- Census tract fixed effects α_c control for regional demand differences.
- Loan controls X_{ict}: loan amount, income, purpose, occupancy, type (conventional, FHA, VA), gender, race, co-applicant.
- Estimate weighted (by loan amount) and unweighted models.
- Baseline sample: originations by banks with \$1bn-\$25bn in assets.

Overall mortgage lending: 2011:Q2 results

Dep. var.: Loan originated by CFPB-sup. bank (0/1)				
	(1)	(2)	(3)	(4)
Post-2011Q2	0.0230**	-0.00172	-0.00289	-0.0131***
	(0.00974)	(0.00731)	(0.00688)	(0.00432)
N	3704987	3702041	3702041	3702041
Mean Y	0.38	0.38	0.38	0.33
Loan controls	N	N	Y	Y
Census Tr. FE	N	Y	Y	Y
Weighted	Y	Y	Y	N

Standard errors clustered by county.

- Weighted (col. 1-3): no effect with census tract FE; lower bound of 95% CI is -1.6ppt (comparison: sample average $=$ 38 pct).
- Unweighted (col. 4): stat. sig. but economically small (-1.3ppt)
- **Punchline:** Confidence bounds precise enough to rule out view that CFPB oversight induced large drop in lending.

Composition of mortgage lending: 2011:Q2 results

Dep. var.: loan originated by CFPB-sup. bank (0/1)

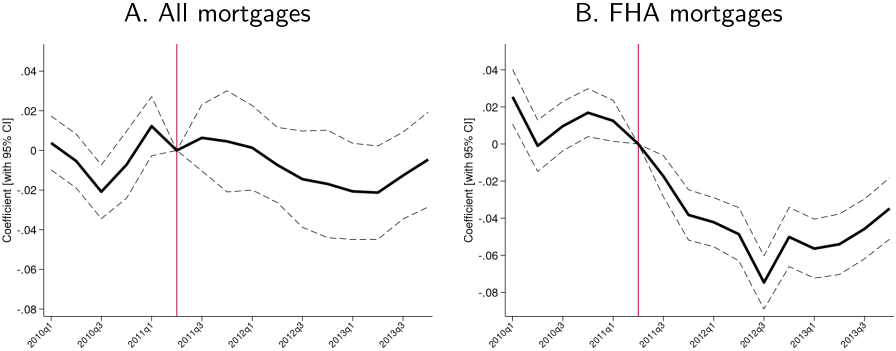
	(1)	(2)	(3)	(4)
Post-2011Q2	0.00282	-0.00997	-0.000147	-0.00164
	(0.00718)	(0.00701)	(0.00789)	(0.00669)
Post-2011Q2 × FHA	-0.0647***			
	(0.00745)			
Post-2011Q2 × Jumbo		0.0536***		
		(0.0110)		
Post-2011Q2 × Conv. Conforming			-0.00350	
			(0.00763)	
Post-2011Q2 × (No Coapp. & High LTI)				-0.00784**
				(0.00352)
N	3702041	3702041	3702041	3702041
Mean Y	0.38	0.38	0.38	0.38
Loan controls	Y	Y	Y	Y
Census Tr. FE	Y	Y	Y	Y
Weighted	Y	Y	Y	Y

Standard errors clustered by county.

- **Substitution effects:** CFPB-sup. banks market share *falls* for FHA loans (1); *rises* for jumbos (2) — estimates fairly large

CFPB-sup. banks' issuance probability by quarter

Relative to 2011:Q2; dotted lines reflect 95% confidence interval



Note: Regressions control for census tract fixed effects and loan-level controls, and observations are weighted by loan amount. Standard errors clustered by county.

Overall mortgage lending: 2016 election results

Dep. var.: Loan originated by CFPB-sup. bank (0/1)				
	(1)	(2)	(3)	(4)
Post-2016Q4	-0.00158	0.000509	0.0128***	0.00891***
	(0.00467)	(0.00302)	(0.00295)	(0.00242)
N	2792412	2790772	2784815	2784815
Mean Y	0.31	0.31	0.31	0.30
Loan controls	N	N	Y	Y
Census Tr. FE	N	Y	Y	Y
Weighted	Y	Y	Y	N

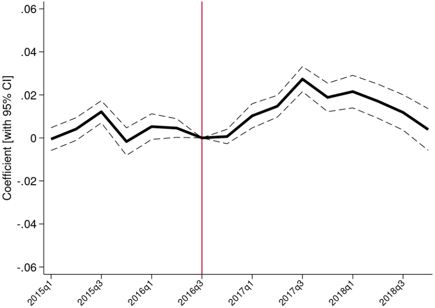
Standard errors clustered by county.

- No effect absent loan controls (col. 1-2)
- Small (+1%) increase in presence of loan controls (col. 3-4)
- Larger effects for FHA loans w/ loan controls (+4.5%) consistent with 2011:Q2 findings (next slide)

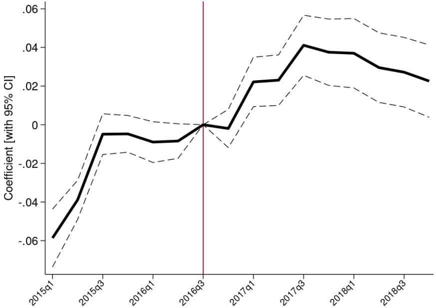
CFPB-sup. banks' issuance probability by quarter

Relative to 2016:Q4; dotted lines reflect 95% confidence interval

A. All mortgages



B. FHA mortgages



Note: Regressions control for census tract fixed effects and loan-level controls, and observations are weighted by loan amount. Standard errors clustered by county.

Robustness of mortgage origination results

Interpretation: Results imply CFPB oversight has a minimal impact on overall mortgage lending, but reduces FHA lending activity.

Robustness:

- Alternative samples around threshold – lower asset bound of \$2.5bn or upper bound of \$50bn – find similar conclusions
- Robust to excluding refinancings

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- Robust to excluding refinancings

Alternative explanations:

- Threshold may induce 'bunching', but robust to excluding banks within $2.5B of $10B cut-off
- Other regulatory changes at $10bn might affect banks' risk appetite
  - July 2011 timing unique to CFPB formation vs. other changes
  - Placebo test on small business lending (risky lending, but outside CFPB oversight) does not find similar patterns

Delinquency analysis

- CFPB oversight could improve lending standards and/or servicing practices in order to mitigate consumer distress
- Estimate linear probability model of delinquency status (Y_{ijct}) using 2009-2013 mtg originations:

$$Y_{ijct} = \alpha_j + \gamma_t + \nu_{ct} + \beta(CFPBsup._j \times post2011Q2_t) + \theta X_i + \varepsilon_{ijct}$$

- $\beta < 0$ would suggest CFPB oversight reduced delinquency.
- FE: Lender α_j, origination-month γ_t, county-origination year ν_{ct}
- Loan controls X_i include nonlinear transformations of credit score, LTI, DTI, LTV, as well as property type and loan type indicators.

Delinquency results

Dep. var.: Delinquency outcome (0/1)

	(1)	(2)	(3)	(4)	(5)	(6)
	30-day delinquency		30-to-60 transition		60-to-90+ transition	
CFPB-sup. × Post-2011Q2	0.0079**	0.0077*	-0.0051	-0.0062	-0.0357**	-0.0426***
	(0.0039)	(0.0041)	(0.0147)	(0.0116)	(0.0157)	(0.0153)
N	363,512	347,014	82,920	79,703	46,280	44,456
Loan characteristics		Y		Y		Y
Bank fixed effects	Y	Y	Y	Y	Y	Y
Origination Month FE	Y	Y	Y	Y	Y	Y
County × Year FE	Y	Y	Y	Y	Y	Y
Delinquency Month FE			Y	Y	Y	Y

Standard errors clustered by lender.

- CFPB-sup. banks originate marginally *riskier* loans (col. 1-2) but these loans are less likely to become severely delinquent (col. 5-6)
- Consistent with increased supervisory risk mitigation via servicing

Other findings

Regulatory arbitrage:

- Nonbank entities fall under CFPB regardless of size, so banks below the threshold may find it beneficial to shift originations from nonbank subs to bank sub
- Result: Analysis of origination entity suggests small banks shifted FHA lending away from CFPB supervised nonbanks

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Bank-level outcomes:

- CFPB oversight may impact operating expenses and other forms of lending / risk-taking at supervised banks
- Result: Bank-level financial data (Call Reports, Y9C) reveal no statistically significant effects on balance sheet composition, profitability, or sources of income.

Key takeaways

- CFPB oversight did not impact overall mortgage supply BUT, loans subject to legal/regulatory risk are sensitive to oversight intensity:
  - Risk reduction on the extensive margin, by originating fewer FHA loans, but no evidence on intensive margin (i.e. screening)
- Evidence of improved servicing efforts as fewer FHA loans transition to severe delinquency
  - May help reduce inefficient foreclosures
- We cannot make overall welfare determinations, but there is an intuitive trade-off between protection of vulnerable borrowers and the willingness to lend to these borrowers
- Ongoing work looking at the impact of overall FHA supply in response to CFPB oversight