Bank Finance in the Boom and Bust

Discussion by:

Philip E. Strahan
Boston College
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Big Picture: Two Questions

- What was the role of bank lending in the boom?
  - Poor lending practice (information effect)
  - Capital mobility (integration effect)
- What was the role of bank lending in the bust?
  - Decline in new lending (amplifying effect)
  - Liquidity insurance (dampening effect)

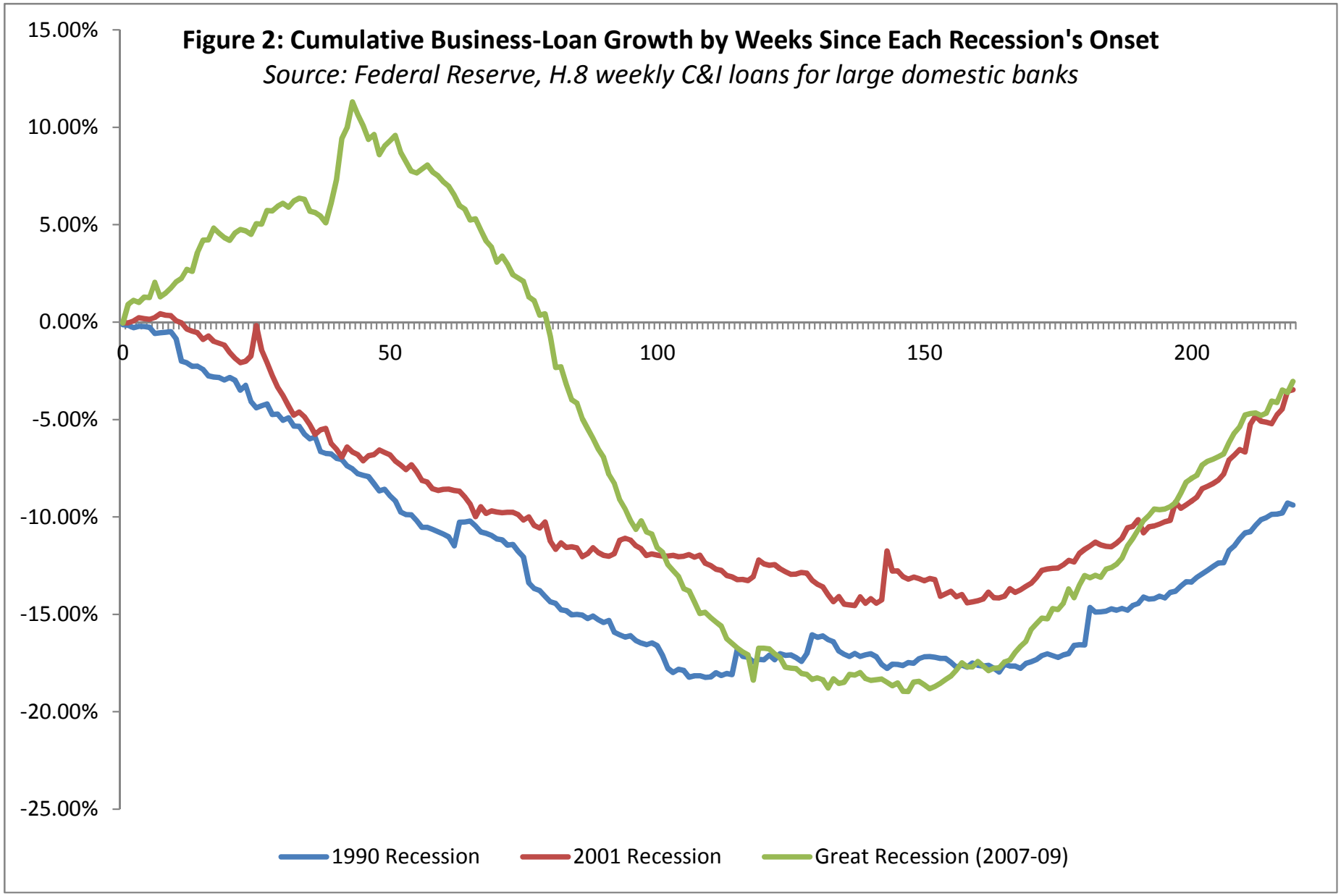
Figure 2: Cumulative Business-Loan Growth by Weeks Since Each Recession's Onset
Source: Federal Reserve, H.8 weekly C&I loans for large domestic banks
15.00%
10.00%
5.00%
0.00%
-5.00%
-10.00%
-15.00%
-20.00%
-25.00%
0
50
100
150
200
1990 Recession
2001 Recession
Great Recession (2007-09)

First Paper (Chakraborty, Goldstein & MacKinlay)

- Financial integration harmed some borrowers
  - Bank capital drawn to booms (construction in Las Vegas)
  - Reduced supply to businesses and consumers
  - Strongest effect for firms using banks heavily exposed to 'Las Vegas' type markets
- Normative effects
  - If housing boom is a bubble, then reallocation of capital is inefficient
  - But if boom is rational, then reallocation is ex ante efficient
  - Paper has no way to separate these two interpretations!

I like the identification idea

- Consider two banks
  - ‘A’ gets 90% deposit in AZ, 10% in TX, (‘A’ faces stronger demand for credit)
  - ‘B’ get 10% deposits in AZ, 90% in TX (‘B’ faces weaker credit demand)
- Do borrowers from ‘A’ invest less than borrowers from ‘B’?
  - Yes: bank-location housing shocks negatively correlated with firm investment
  - (Strategy is similar to classic Peek/Rosengren (2000))

Identification

- What could go wrong?
  - Firms faces <u>similar shocks</u> to their lenders
    - Control for firm-location housing shocks
    - Could do better: introduce firm-state*year effects (works as long as you have firms in the same state borrowing from different banks)
  - Borrower/lender <u>pairing</u> is endogenous
    - Control for bank-borrower fixed effects

Results for Firm-Level Investment

	OLS				IV			
Housing Price Index, Bank's State	-10.2	-5.6			-13.76	-11.86	-15.74	-11.79
	(1.76)	(2.96)			(1.97)	(4.40)	(2.15)	(4.36)
NB x HPI, Bank's State	6.94	4.45			9.65	8.01	10.16	7.78
	(1.82)	(2.14)			(2.00)	(2.79)	(2.00)	(2.77)
Housing Price Index, Firm's state	-	-			-	-	2.99	1.41
	-	-			-	-	(1.31)	(1.19)
Time Varying Firm Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Firm-Bank Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Effects	No	Yes	No	Yes	No	Yes	No	Yes
N	19133	19133	19133	19133	19133	19133	19133	19133

Some questions/concerns

- Why do we need an IV?
  - Results are stronger than OLS; note sure why
- Why model level of housing price?
  - Growth rate seems more relevant
- Why are time effects treated inconsistently?
  - Very important given strong trends in housing and other variables (e.g. interest rates)

Second Paper (Berrospide and Meisenzahl)

- What explains huge draw downs on credit lines during the crisis?
  - Liquidity insurance (protect current investment)
  - Precautionary demand for cash (to protect future investment)
  - Concern that lender might tighten (or even fail)

- Great data to explore drivers of drawdown behavior across firms
  - normal v. crisis period
  - Less convinced about investment regressions.

Empirical Strategy

- Drawdown regressions ('first-stage')
  - $Drawdown_{i,t} = \alpha_i + \gamma_t + \beta_1 CF_{i,t-1} + \varepsilon_{i,t}$
  - Crisis effects <u>not identified</u> with time effects!
- Investment regressions ('second-stage')
  - $I_{i,t}/K_{i,t-1} = \alpha_i + \gamma_t + \beta_1 Drawdown_{i,t-1} + \varepsilon_{i,t}$
    $+ \beta_2 Crisis_t \times Drawdown_{i,t-1} + \varepsilon_{i,t}$

  <u>Instruments</u> are measures of financial constraints lagged two periods. Financial constraints are <u>not excludable</u> from an investment equation. Lagging is not helpful with persistent shocks.

Empirical Strategy

- Focus on explaining drawdown behavior
  - Crisis v. non-crisis: how does the relationship change? (Add interactions)
  - All we see now is overall correlation between cash flow shocks and drawdowns (Table 3)

Empirical Strategy

- Wish list of variables to interact with crisis
  - Liquidity Insurance
    - If firms use LC for liquidity insurance, cash flow's effects on drawdowns should strengthen in crisis
    - What about investment opportunities (Q)? Firms with relatively strong demand should draw more in the crisis
  - Precautionary demand
    - If firms hoard cash, cash stock x crisis should be negatively related to drawdowns (i.e. low cash-stock firms draw more in crisis)
  - Risk that lender tightens
    - If firms worry about lines being pulled, lender financial health (capital) might predict drawdowns in crisis

Summary

- Papers extend knowledge about bank's role in the recent boom/bust cycle
  - Capital mobility across markets had effects on allocation of credit across asset classes and regions
    - But normative conclusions are less clear
  - Banks provided liquidity insurance to firms to reduce impact of financial crisis (at least for those with pre-existing lines)