

Community Banking
in the 21st Century



The Entry, Performance, and Viability of De Novo Banks

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*The views expressed here are solely of the authors and do not necessarily reflect the views of Federal Deposit Insurance Corporation.



Questions

- What are the entry patterns of the recent cohort of De Novo banks?
- What factors determined their entry?
- What were their performance outcomes?
- What factors determined their performance?

Importance of Healthy De Novo Banks

- De Novo banks invest a larger share of their assets in small business loans (Goldberg and White, 1997) and can help fill the gap in reduction in small business loans resulting from bank mergers or the increasing trend in bank size.
- De Novo entry, or prospects of entry, can curb the exercise of market power and make banking markets more competitive.
- De Novo banks fail at higher rates compared to established banks.
 - Among De Novo banks chartered between 2000-2008, 12.8% failed as of September 2014 compared to 5.3% for small established banks.

Outline

I. Chartering Activity

1. Identify 'True' Community Bank De Novos
2. Examine trends in De Novo chartering
3. Model De Novo entry into local markets

II. De Novo Performance

1. Measure 'performance' by whether failed, merged, or survived
2. Explore characteristics correlated with performance

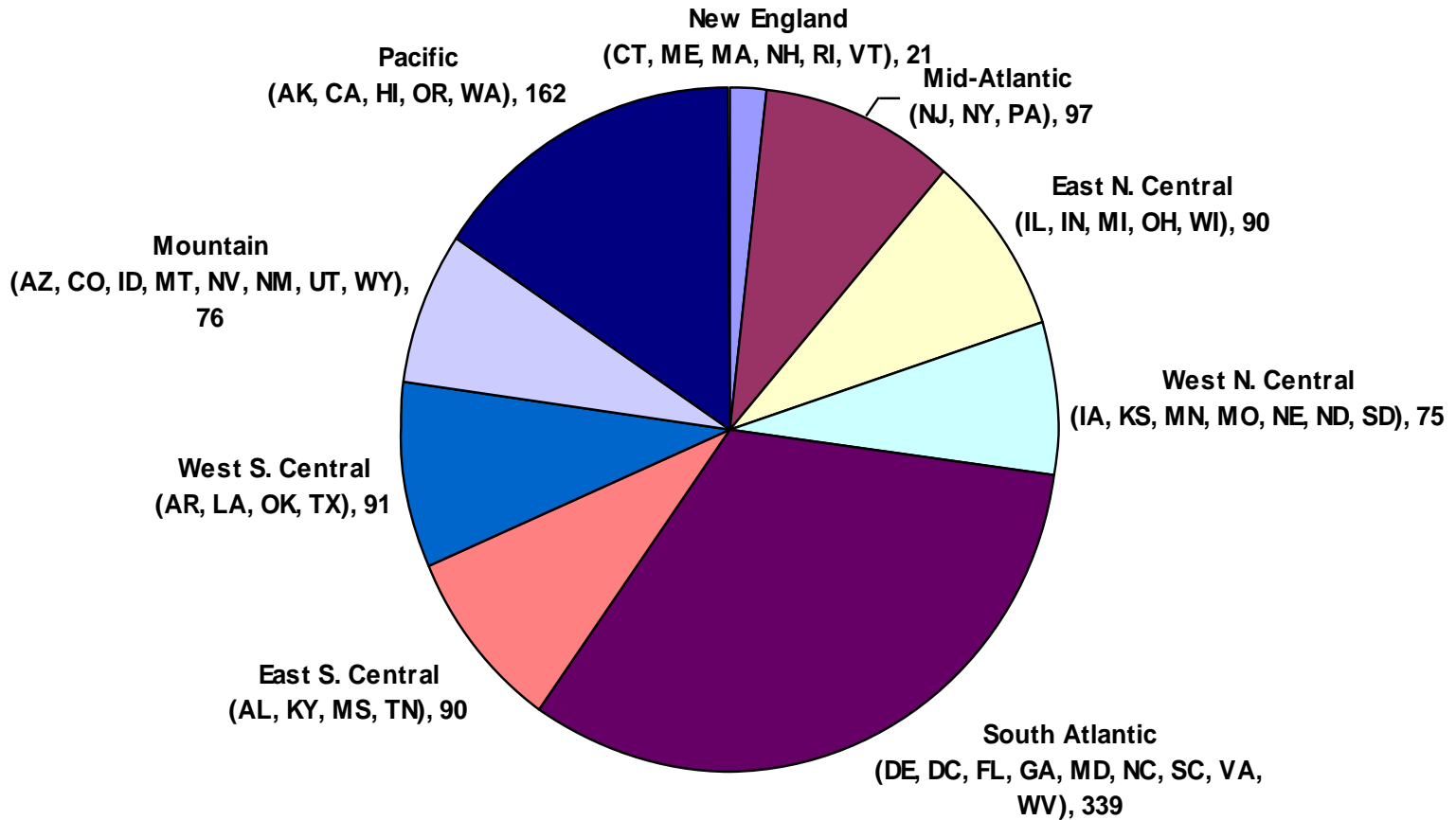
'True' Community Bank De Novos

- Insured institutions chartered between 2000-2008 (1,341 total)
- Not part of multi-bank holding company (*less 225*)
- If assets over \$100 million in first Call Report/TFR filed, investigate whether a 'true' De Novo (*less 19*)
- On FDIC's 'Community Bank' list (*less 89*)
- Or on CB list 3 years after charter (*plus 34*)
- Total 1,042 'true' community bank De Novos chartered from 2000-2008

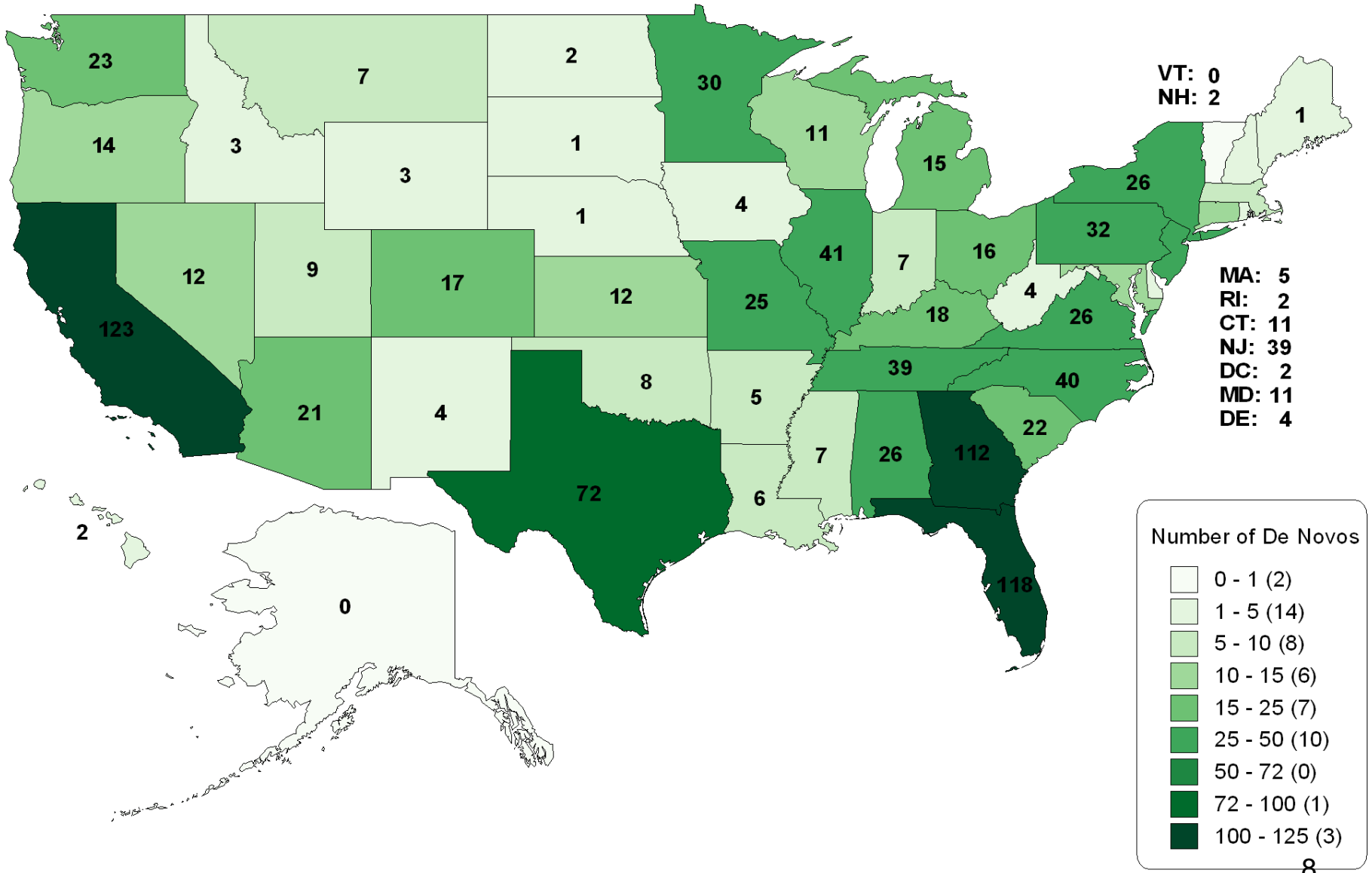
Community Bank List

- Based on the FDIC research definition of community banking organizations
 - Asset size threshold (< \$1 billion in 2010)
 - For organizations with assets exceeding the above threshold,
 - Loan-to-assets threshold (>33%)
 - Core deposit-to-assets threshold (>50%)
 - Number, location and geographic dispersion of bank offices threshold

Figure 3. 2000-2008 De Novos by Census Region



Total De Novos, 2000-2008



Source: CALL Report Data

Trends in De Novo Chartering

- 1,042 community bank De Novos from 2000-2008
- Majority FDIC-regulated (76.5%)
- Most chartered in South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, WV, 32.5%)
- Majority headquartered in MSA's (83.6%)

De Novo Entry Model

- Model De Novo entry into local markets with:
 - Merger and acquisition activity
 - Local market conditions
 - Financial condition and portfolio share of incumbent banks
 - State regulation on new charter application requirements

New Charter Application Requirements

- Minimum capital required to charter a new bank (ranges from \$0 to \$10 million)
- Minimum number of board members required for a new bank (ranges from 1 to 7 members)
- New bank charter application fee (ranges from \$500 to \$20,000)
- Requirements for board members
 - State resident, US citizen, minimum net worth

De Novo Entry Regression Model

	(1)	(2)	(3)	(4)
Variable		Entry	Entry	Entry
Intercept		-18.44***	-18.67***	-19.23***
Merger Deposits		0.07***	0.07***	0.06***
Acquisition Deposits		0.05***	0.05***	0.05***
Large banks deposit share		-0.002	-0.005*	-0.004
HHI		-1.17**	-0.93*	-0.80
Log of population		0.51***	0.56***	0.61***
Log of deposits		0.55***	0.53***	0.50***
Population growth		0.15***	0.13***	0.12***
Deposit growth		0.001	0.001	0.001
State income growth		0.05**	0.05**	0.05**
HPI growth rate		0.01	0.02	0.02
ROA_County			0.07	0.06
Equity_County			-0.01	-0.002
Nonperforming loans_County			-0.18***	-0.16***
C&D_County			0.03***	0.02***
CRE_County			-0.003	-0.003
1-4 family residential_County			0.01	0.01**
Small C&I_County			-0.01	-0.01
Charter application fee				0.35***
Minimum capital requirement				-0.20***
Director requirements				-0.04
Likelihood Ratio		2495***	2301***	2350***
Regional dummies		Yes	Yes	Yes

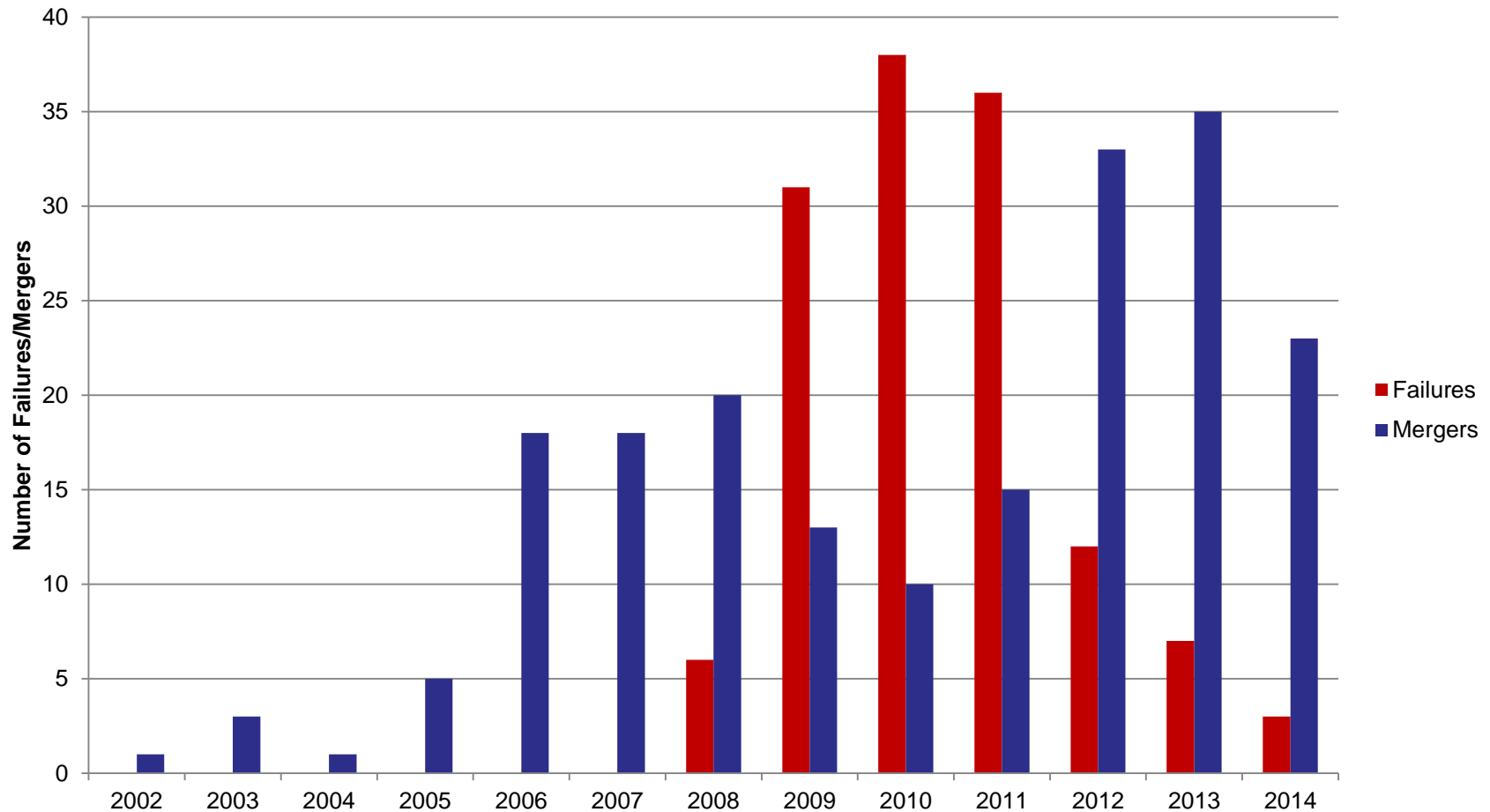
De Novo Entry Model Summary

- De Novo entry more likely in:
 - Markets that experienced bank mergers or acquisitions (Keeton (2000), Seelig and Critchfield (2003), Berger, Bonime, Goldberg, and White (2004))
 - Large, growing, and less concentrated markets
 - markets where incumbent banks have low nonperforming loans and high concentration in C&D loans
 - States with lower initial capital requirements

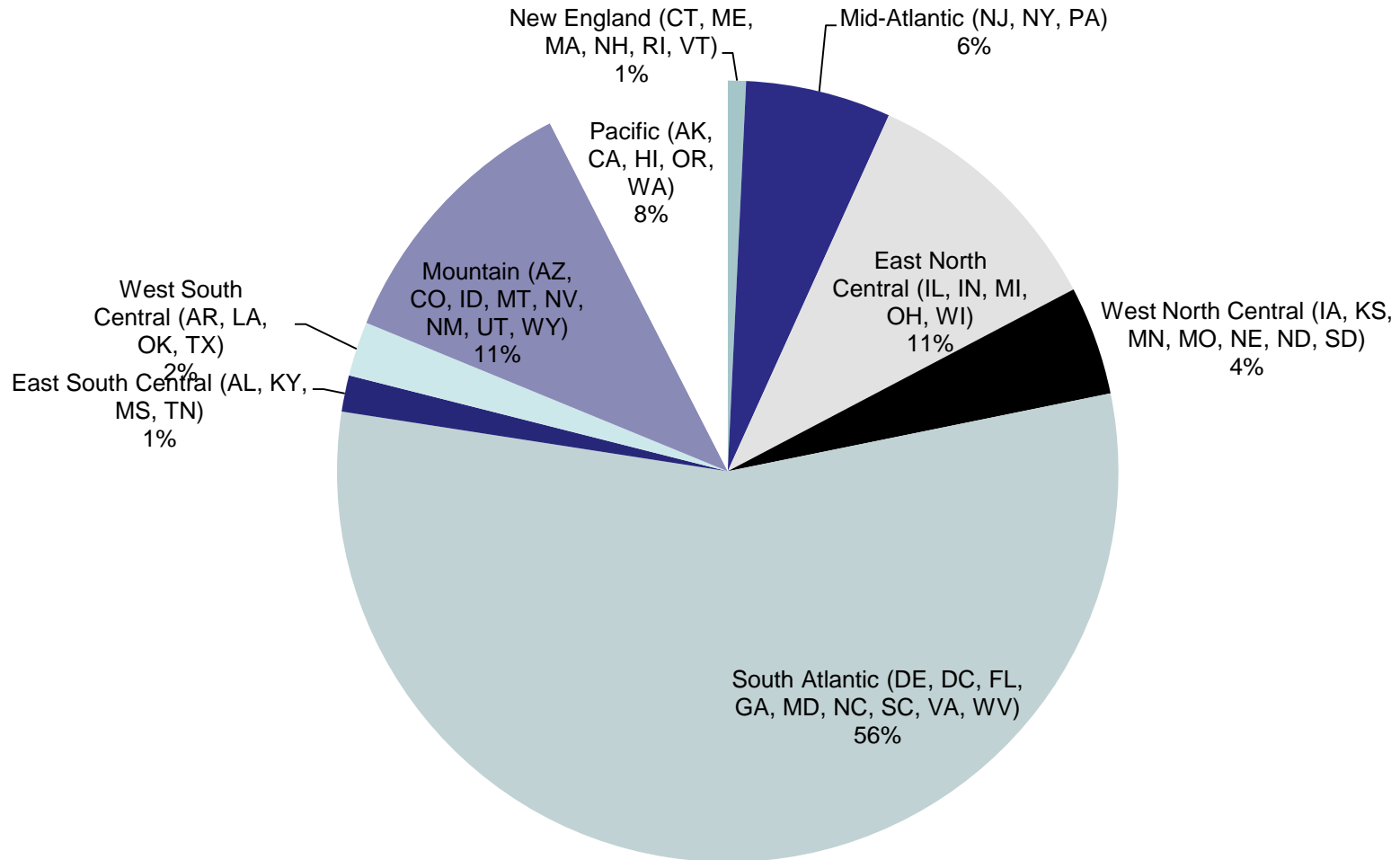
De Novo Bank Outcomes

- 1042 banks chartered in 2000-2008
 - 133 (12.8%) Failures
 - 195 (18.7%) Unassisted Mergers
 - 10 (1.0%) Liquidations
 - 704 (67.6%) Survivors

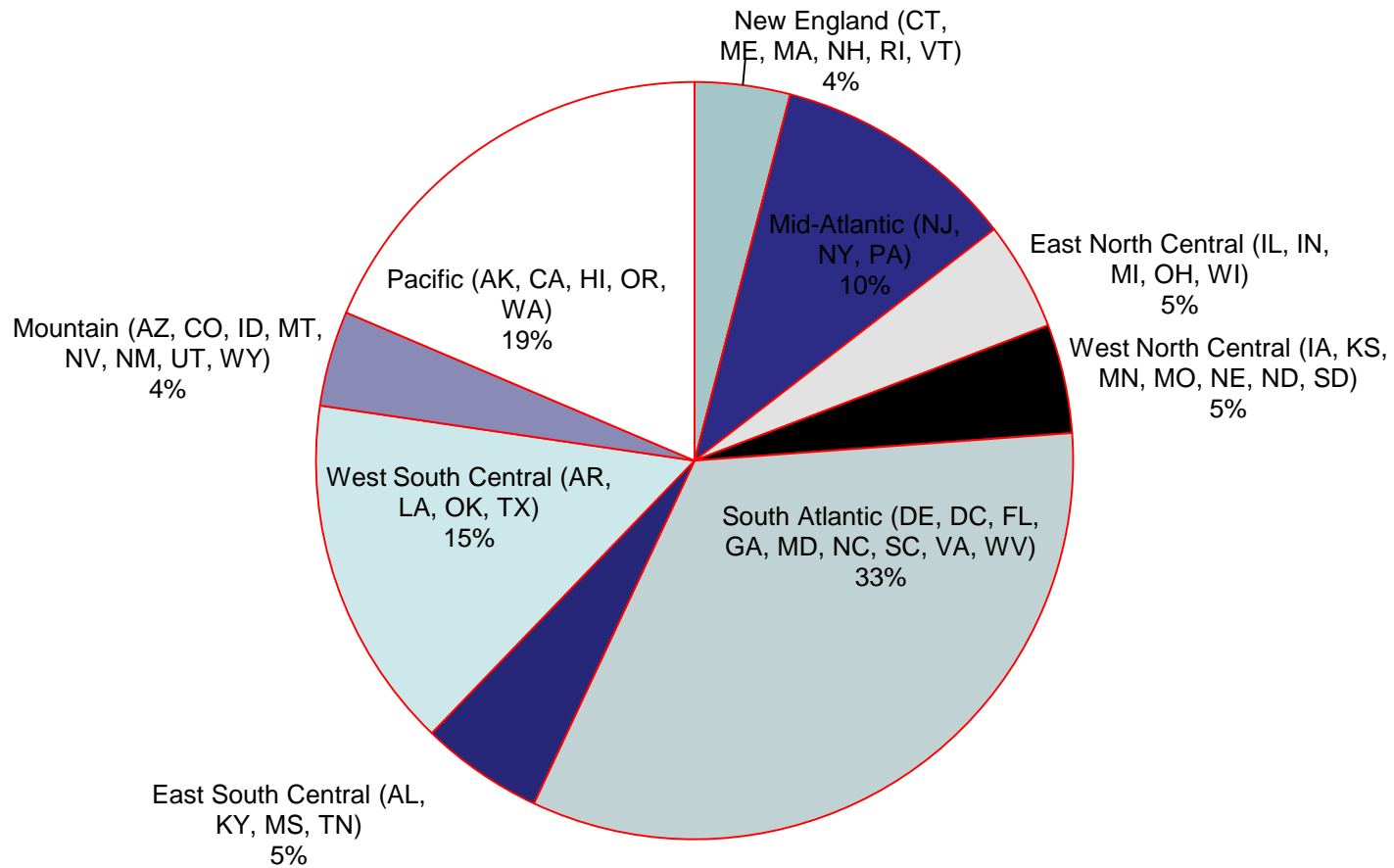
Number of De Novo Bank Failures and Mergers by Year



De Novo Failures in Each Region, as Percent of Total De Novo Failures



De Novo Mergers in Each Region, as Percent of Total De Novo Mergers



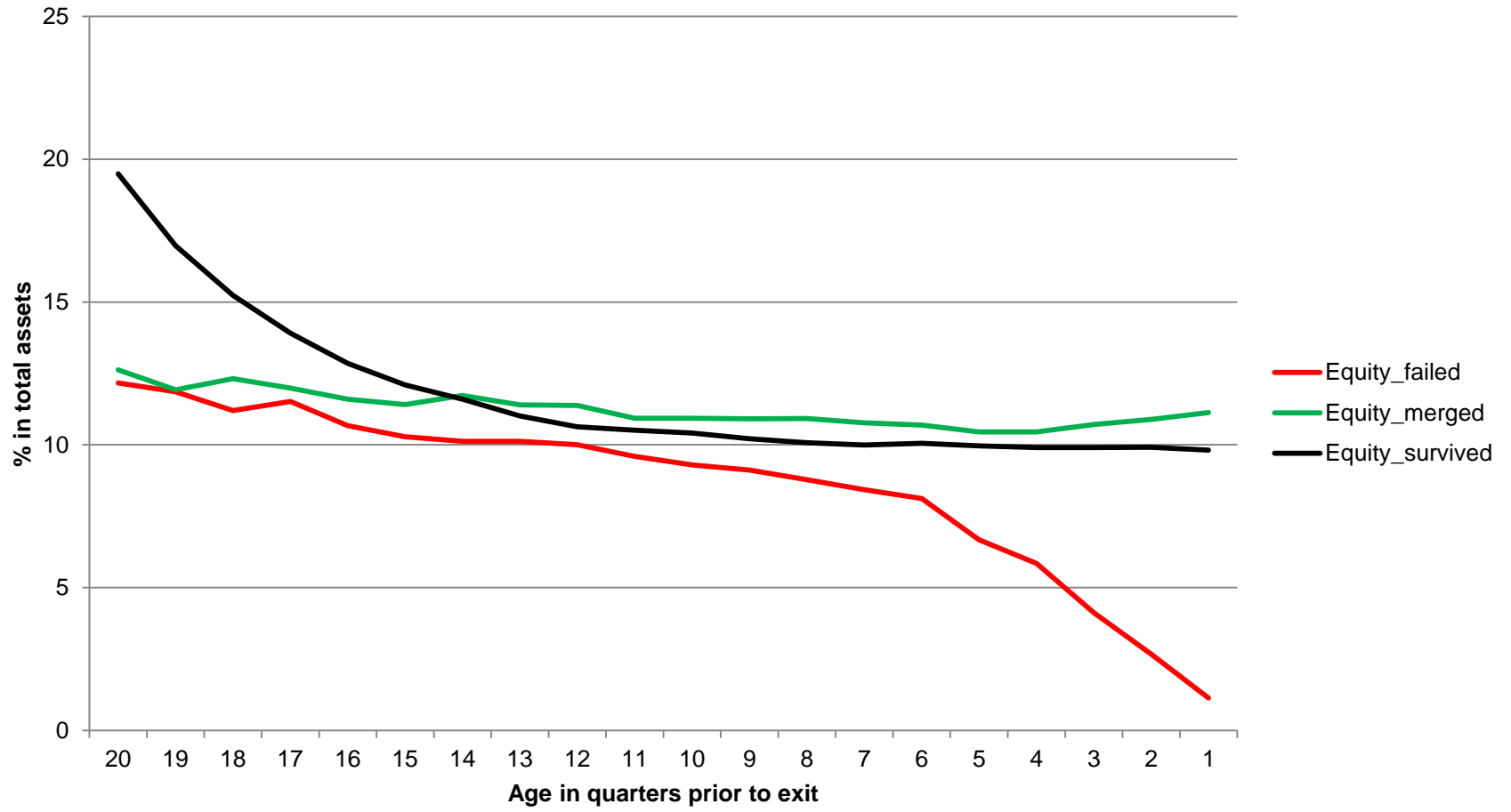
Five States with Highest Number of De Novo Bank Failures

STATE	FAILURES	(PERCENT)	MERGERS	(PERCENT)	SURVIVED	(PERCENT)
GA	42	(38%)	13	(12%)	56	(50%)
FL	23	(19%)	25	(21%)	71	(60%)
IL	11	(27%)	4	(10%)	26	(63%)
CA	8	(7%)	26	(21%)	89	(72%)
AZ	6	(29%)	2	(9%)	13	(62%)

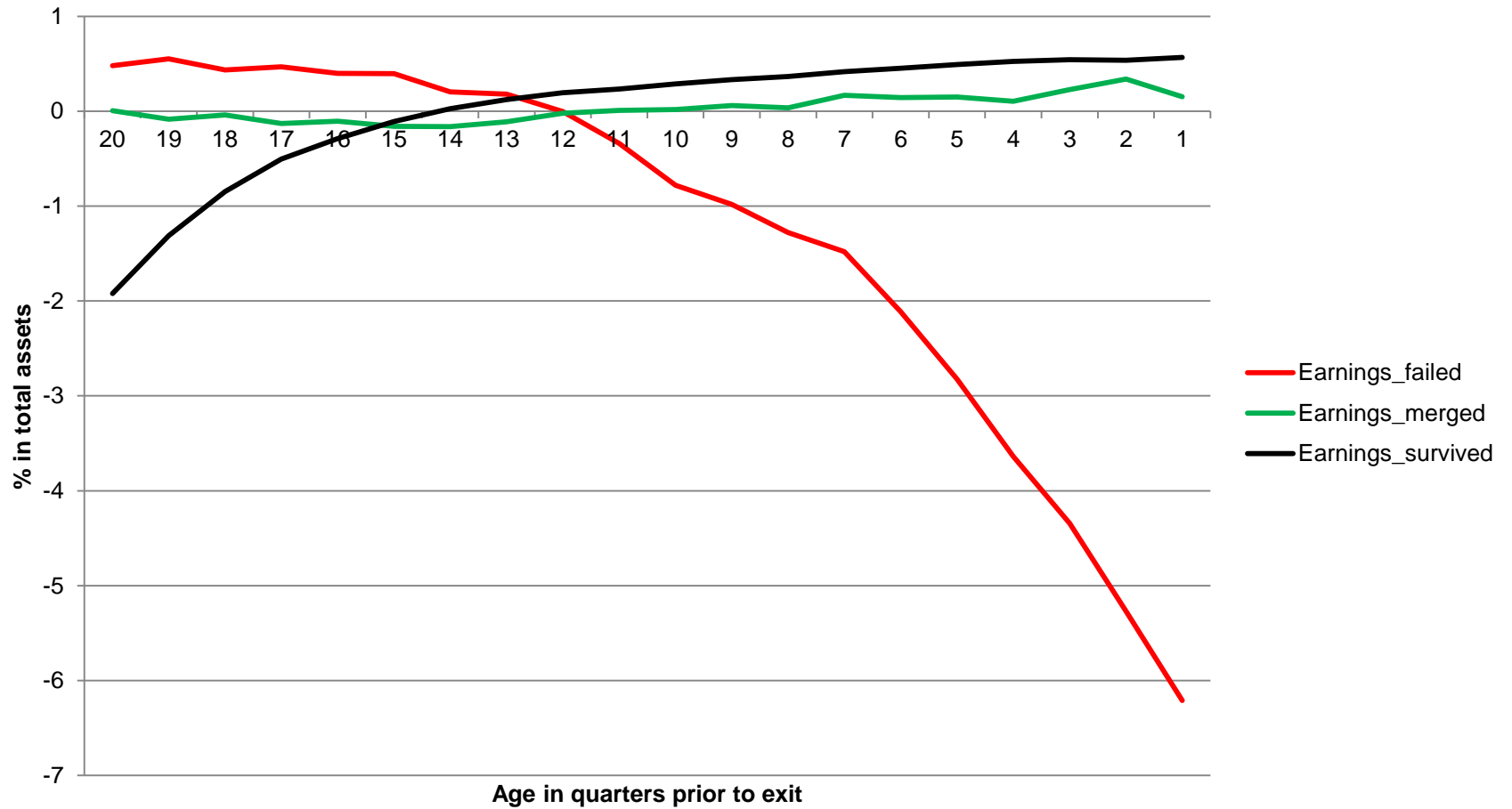
De Novo Performance: Financial Condition

- Group De Novo banks into
 - Survived
 - Merged-out
 - Failed
- Compare the median ratios of these groups starting five years prior to exit outcome

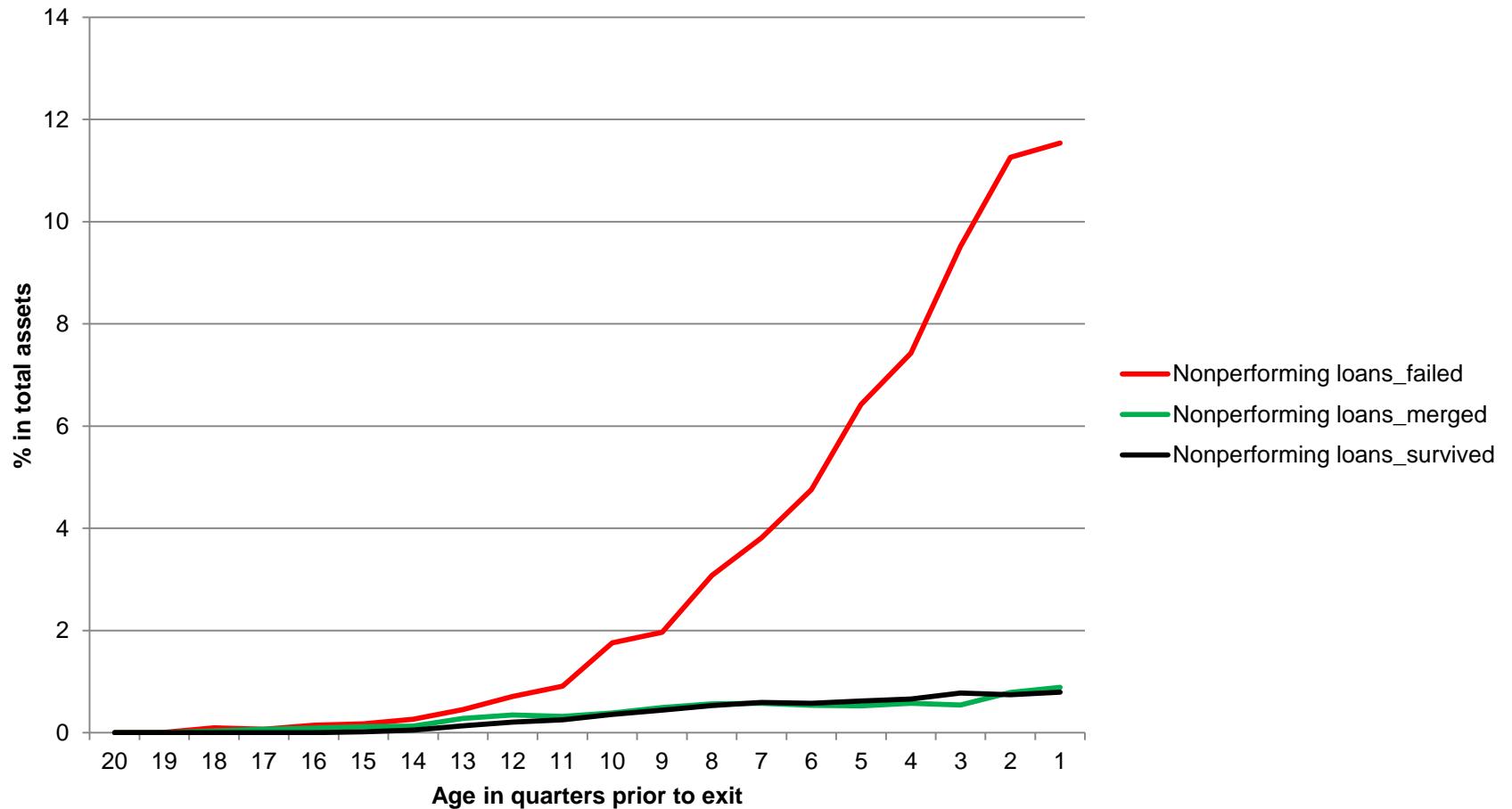
Equity



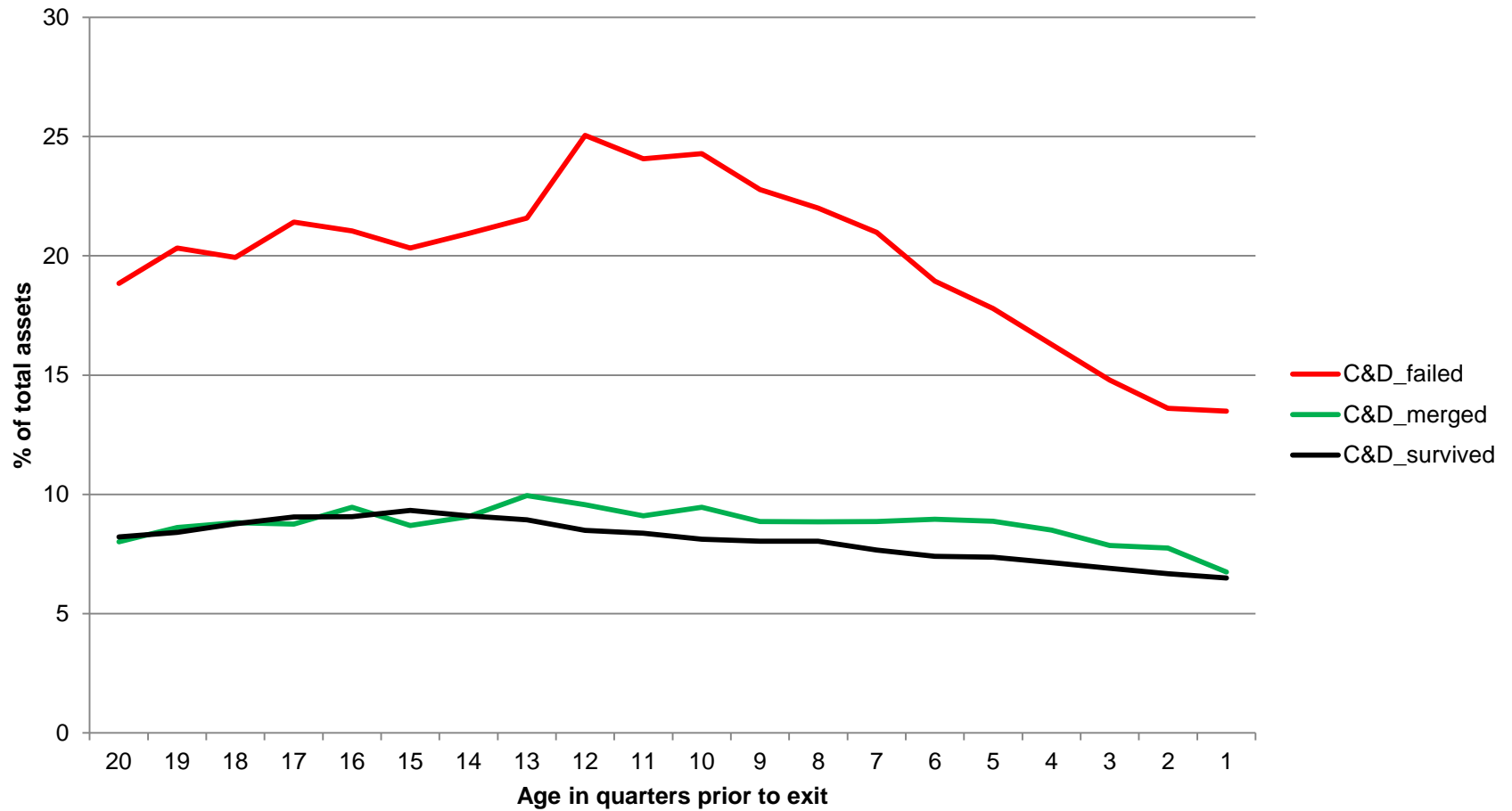
Earnings



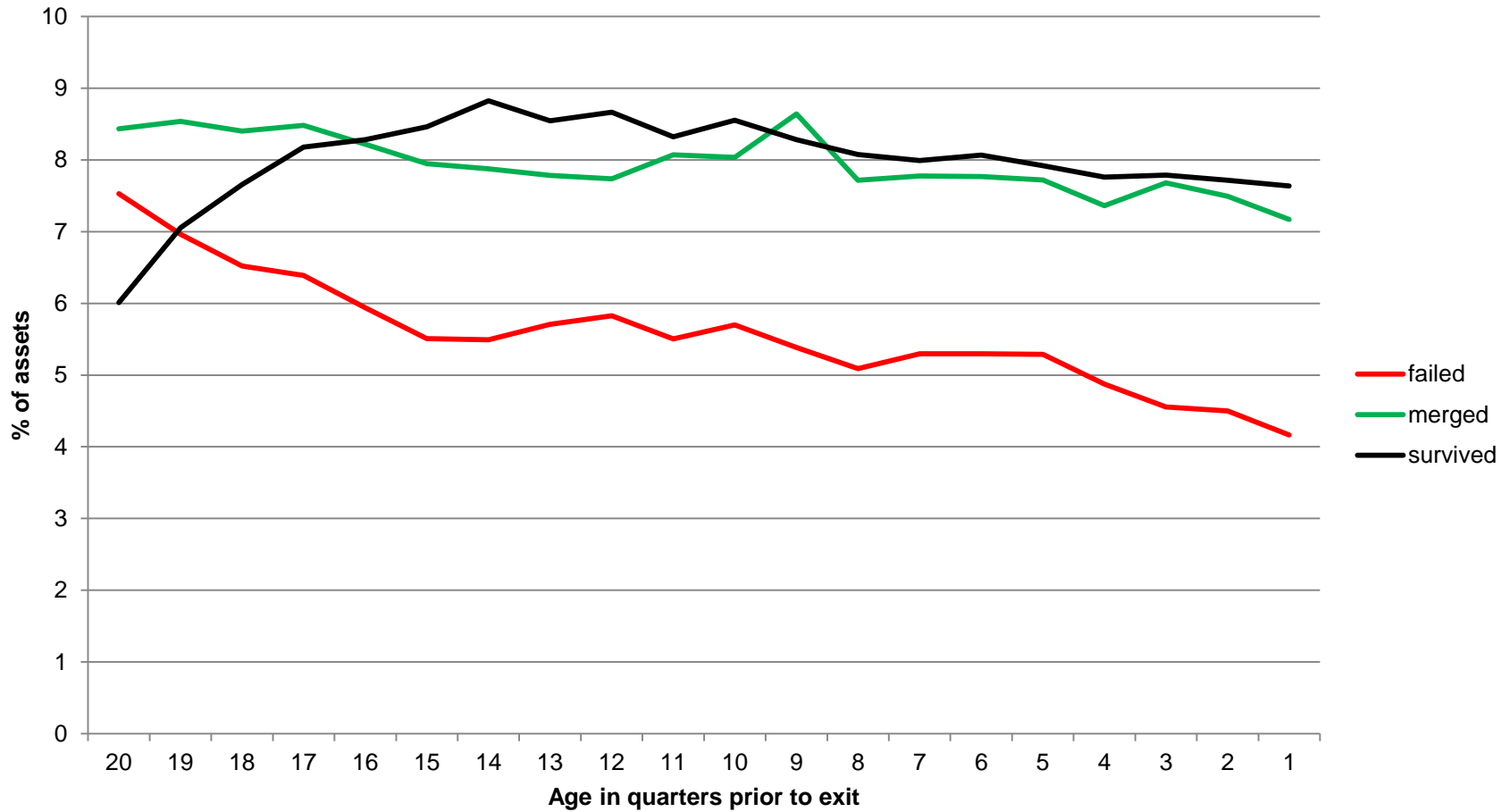
Nonperforming Loans



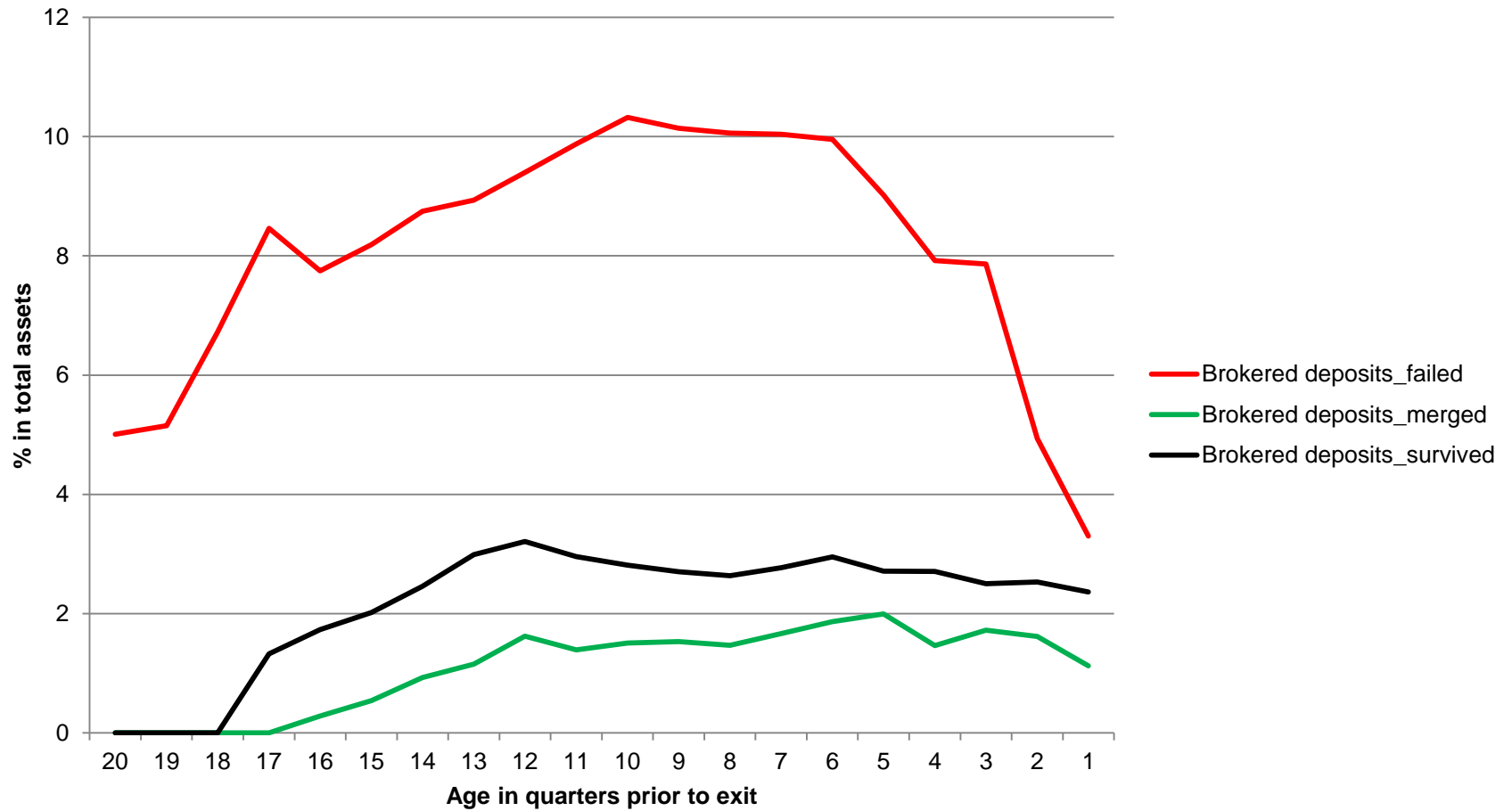
C&D Loans



C&I less than \$1 million



Brokered Deposits



De Novo Bank Failure Model

- Hazard model Shumway (2001)
- De Novo banks' financial characteristics:
 - equity, earnings, noncore funds, nonperforming loans, asset growth rate
- Loan portfolio composition:
 - C&D, C&I (< \$1 mil), 1-to-4 family residential, CRE

De Novo Bank Failure Model

	(1)	(2)	(3)
Variable		Failure	Failure
Intercept		-3.05***	-3.37
Equity		-0.14**	-0.14*
Income before taxes		-0.25***	-0.29***
Noncore funds		0.03**	0.03
Nonperforming loans		0.21***	0.17**
Liquid assets		-0.03	-0.01
One-year asset growth rate		0.01	-0.0001
C&D loans			0.08***
1-4 family residential loans			-0.01
CRE loans			-0.02
C&I (< \$1mil) loans			-0.03
Likelihood Ratio		326***	401***
No. of observations		1,023	1,023

Conclusions

- Same factors that determined De Novo entry into local markets in the past applied in 2000-2008. De Novo entry more likely in:
 - markets that experienced bank mergers or acquisitions
 - large, growing, and less concentrated markets
- De Novo entry is also more likely in:
 - Markets where incumbent banks have low nonperforming loans and high concentration in C&D loans
 - States with lower initial capital requirements
- De Novo banks failed at higher rate than that of small established banks, while their non-failure exit rate is lower than that of small established bank
- Compared to those that survived or merged out, De Novo banks that failed had
 - Lower equity and earnings
 - Higher nonperforming loans
 - Greater reliance on noncore funds
 - Higher concentration in C&D loans
 - Experienced a rise in non-performing loans and declines in earnings and equity roughly 3 years before failure