Bank Entrepreneurs

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Abstract: This paper provides the first analysis of entrepreneurs chartering deposit-insured banks in the U.S. By merging hand-collected biographical data on entrepreneurs of De Novo banks with detailed call reports, we directly connect entrepreneurial characteristics to corporate policy and firm outcomes. First, we find strong evidence that bank entrepreneurs are driven by local opportunities, bring significant banking and managerial experience, have the networks necessary to raise local funding, and extend past lending practices. Second, to better identify the value of each individual in our study, we confirm that a new bank's lending policies are strongly predicted by the prior employment experiences of the bank's entrepreneurs. Exploiting these relationships, we illustrate the entrepreneur has a causal effect on loan and bank performance, as well as the likelihood of failure.

Key words: De Novo Banks, Entrepreneurship, Bank Management, Bank Failures

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1 Introduction

Researchers have long recognized the vital role of banking in promoting economic growth through corporate investment (Ivashina and Scharfstein, 2010; Santos, 2010), employment (Chodorow-Reich, 2014; Peek and Rosengren, 1998), entrepreneurship (Black and Strahan, 2002; Kerr and Nanda, 2009), and innovation (Cornaggia et al., 2015). As a result, policy makers require a detailed evaluation of the lifecycle of banks and have been met by research in (i) the development of new financial products (De Young and Roland, 2001), bank expansion into the nonbanking sector (Boyd and Graham, 1986), the role of competition and monopoly (Cetorelli and Strahan, 2006), acquisitions and mergers (Berger et al., 1999), and the process of bank failure (Granja et al., 2017). The obvious gap missing in the literature is an evaluation of how banks are initially chartered in the U.S. Understanding the establishment process is vital given the lack of new bank entrants over the last decade: while nearly 3,000 new banks (also known as De Novo banks) were chartered between 1990 and 2008, the last decade has seen fewer than thirty approved applications. Without a detailed account of these individuals, we are unable to identify what motivates entry and spurs future bank creation.

The purpose of this paper is therefore to present the first analysis of the bank entrepreneur. More specifically, we frame our analysis on two separate research questions. First, who charters new banks? Second, how do these entrepreneurs influence the bank's growth and survival? Through the former question, we develop a better understanding of the drivers of bank creation; through the latter question, we causally identify whether these drivers are significant to the success of the bank.

To answer both questions, we develop a novel dataset derived from Section 5 of the FDIA, which requires any institution seeking federal deposit insurance to apply to the FDIC. Through this intensive application process, we are able to observe a detailed business plan for each potential De Novo Bank- including the sources of financing, earning prospects, lending risk, and community needs- as well as detailed biographies of all founding members. We are therefore able to identify the drivers of entry into deposit-insured banking. By matching each approved application to the future balance sheet of the bank, we can additionally characterize the lending strategies and performance of each new insured bank. We are therefore able to relate measures of individual entrepreneur preferences with actual risk-exposure and survival rates.

To begin, we detail the characteristics of the De Novo banks in the sample. We analyze a total of 185 banks chartered between 2000 and 2008 that are sampled from a population of 1,042 new charters[1]. As all proposed entrepreneurs, the CEO/president, and any shareholders holding at least 10% of the bank are required to file both a biographical and financial report, we follow over 1,900 separate individuals in the sample. We note bank charters closely follow the business cycle as entry rises beginning in 2002 and remain high from 2006 through 2008. The de novo banks in the sample then face a high failure rate during 2009 through 2011 as compared to established institutions, while the likelihood of acquisition increases following the Financial Crisis. The mean (median) bank in the sample comprises two (one) branch upon charter and five (three) branches ten years later. To begin our analysis, we summarize the characteristics, skillsets, and backgrounds of bank entrepreneurs and make three primary observations.

[1] Lee and Yom (2016) details how 1,042 institutions are identified as community bank De Novos.

First, we detail the characteristics of the De Novo entrepreneurs. We note that entrepreneurs have significant banking and managerial experience. Nearly 95% of the De Novo banks in the sample have at least one entrepreneur with prior banking experience; similarly, over 90% include an entrepreneur who previously owned another firm. More specifically, we find that bank entrepreneurs disproportionately come from smaller banks, potentially due to a greater likelihood of prior experience within a community bank[2]. Among the smallest banks in the sample, defined as holding under $100 million in assets, 72% of entrepreneurs served as either a president/CEO or director. In comparison, entrepreneurs with prior experience in the largest banks, which hold assets over $10 billion, serve in non-executive roles such as branch president. The results highlight the role of entrepreneurial spawning with the De Novo bank sector (Gompers et al., 2005).

Second, we confirm that bank entrepreneurs appear to hold unique local knowledge, which likely offers an advantage when identifying local opportunities. As part of the application process, entrepreneurs address their motivations for chartering a De Novo bank. We find fifty-six percent of respondents specifically mention the need for a locally-focused bank, which may be driven by recent merger activity in the area (thirteen percent); another sixteen percent mention market growth. In addition, we match each respondent to his personal residence and find the median entrepreneur lives less than eight miles from the bank headquarters. Finally, we estimate the majority of entrepreneurs have prior experience in occupations with significant local networks; these entrepreneurs explicitly mention the value of these contacts as a source of potential deposit and credit customers. Overall, we find little evidence for a Schumpeterian view of bank entrepreneurship where new entrants enter the banking sector to offer innovative products, services, or business models. Rather, the results lend support to a Kirznerian theory, where bank entrepreneurs have the skills necessary to take advantage of recent investment opportunities in the local economy.

Third, we detail the characteristics of the De Novo capital structure. According to the data, bank entrepreneurs report comparatively significant resources, with the median entrepreneur reporting $3 million in net worth. Collectively, 24% of the capital held by the median bank is derived from entrepreneur equity ownership: roughly 20% is purchased through cash and the remaining 4% is purchased through borrowing. Previously unknown in the literature, a full 76% of all capital is sourced from outsider equity. In addition, we find suggestive evidence that the capital thresholds are more likely to be binding for the smallest banks in the sample as they raise capital closer to the amount agreed upon with the FDIC based on their business plan which we will refer to as the "initial capital assumed in the business plan".

While the results above offer a detailed illustration of the entrepreneurs in the sample, whether these characteristics are predictive of bank outcomes is less clear. To better identify the role of the entrepreneur, we follow a recent literature highlighting the effects of prior managerial experiences on corporate policy (Malmendier et al., 2011; Dittmar and Duchin, 2015; Bernile et al., 2017). In our particular setting, we identify a significant relationship between the prior employment experiences of the bank entrepreneur and the performance and outcome of the bank by incorporating an instrumental variables approach.

[2] In addition, we establish that De Novo entrepreneurs are disproportionately likely to have previously worked in a young bank, a bank focused on traditional lending activities, or an acquired bank.

In the first-step of the analysis we develop two instrumental variables. First, we rely on reported data to group the loan portfolio into four primary categories: commercial real estate, residential real estate, commercial and industrial, and consumer. Second, we estimate the percent of entrepreneurs within the bank that report prior experience in the real estate industry. Exploiting both instruments, we next evaluate whether either measure predicts the lending activities of the De Novo bank. In line with our hypothesis, we confirm that (i) entrepreneurs replicate the loan ratio of their prior employer and (ii) prior experience in the real estate industry predicts a higher rate of commercial real estate lending, especially for construction and development. Therefore, we derive an instrumented measure of risk exposure for each loan category.

In the second-step, we measure the instrumented loan ratios of the De Novo bank on the bank's performance during the Financial Crisis. We focus on exposure to the commercial real estate market- especially construction and development loans- as the primary source of risk during this period.[3] Under instrumental variables, we illustrate that greater exposure to commercial real estate risk due to CEO preferences leads to (i) lower bank equity, (ii) lower earnings, and (iii) greater loan delinquencies and losses. We conclude by extending the analysis to the determinants of bank survival; we establish that a ten percent increase in exposure to CRE (or C&D) lending leads to a 1-2% higher likelihood of failure. These similarities explain not only lending outcomes, but also performance and survival.

Our paper is the first to analyze the bankers- rather than the banks- founding deposit insured institutions. Instead, much of the past literature has focused on (i) where new banks enter the market, (ii) lending outcomes, or (iii) bank performance. First, researchers have highlighted that De Novo bank entry is more common in growing or highly concentrated markets (Moore and Skelton, 1998), following mergers (Berger et al., 2004), and after relaxing regulations (Lindley et al., 1992). Second, the literature details the role of De Novo banks in small business lending (Goldberg and White, 1998; Keeton et al., 2000). Third, research documents the causes and consequences of low survival rates among De Novo banks (DeYoung and Hasan, 1998; Hunter and Srinivasan, 1990). By detailing the motivations that drive bank charters, our results provide policy makers important insights into bank entrepreneurship.

More generally, we extend past research highlighting the significant role of managers (Bertrand and Schoar, 2003; Malmendier and Tate, 2005). Specifically, we follow the methodology of (Malmendier et al., 2011; Dittmar and Duchin, 2015; Bernile et al., 2017). and relate prior managerial experiences to corporate policy and outcomes. New to this literature, we focus on young firms in the banking sector. By focusing on new banks, we are able to directly observe the investment decisions of young firms as well as a range of performance outcomes; as recently established firms generally face high failure rates- compared to large public firms- we can directly connect certain managerial characteristics to the survival of the firm.

[3] Real estate loans compose 55% of all assets within two years of founding, primarily commercial real estate loans (41%). In addition, FDIC (2012) found that over seventy percent of the bank failures between 2008 and 2011 specialized in CRE lending. Within CRE, C&D loans can be especially risky due to (i) additional construction risks not present in loans for built structures, and (ii) greater uncertainty about future market conditions for yet-to-be-built structures (Shibut and Singer, 2015).

2 Data

2.1 Data Sources and Collection

FDIC Report of Investigation

We begin by briefly summarizing the role of the FDIC and the application process to be a member institution. Section 5 of the Federal Deposit Insurance Act establishes a requirement for new institutions to apply for deposit insurance: "Any depository institution which is engaged in the business of receiving deposits other than trust funds, upon application to and examination by the Corporation and approval by the board of entrepreneurs, may become an insured depository institution." Section 6 then identifies seven statutory factors to be considered in the application process: (i) the financial history and condition, (ii) adequacy of the institution's capital structure, (iii) future earnings prospects, (iv) general character and fitness of the management, (v) risk to the institution, (vi) convenience and needs of the community, and (vii) whether the corporate powers are consistent with the purposes of this act.

The Emergency Economic Stabilization Act in 2008 established on a temporary basis the FDIC deposit insurance in member banks upto $250,000 per ownership category which was made permanent in 2011 with the passage of the Dodd-Frank Wall Street Reform and Consumer Protection Act. The Deposit Insurance Fund is funded by insurance assessment dues from each insured bank. As with any insurance system, the assessment rate for a given bank is based on the estimated risk. The FDIC's assessment model considers, as one element, the safety and soundness rating (CAMELS rating) assigned to the institution. In addition, newly insured small institutions (those insured less than five years) are subject to a separate assessment ratings system to account for the higher risk posed by newly organized institutions.

Our primary dataset is derived from federal deposit insurance applications. The FDIC reviews applications under the framework of the seven statutory factors. Deposit insurance will generally be granted when all factors are favorably resolved. Out of 1,042 De Novo banks chartered during this sample period, we analyze 185 approved applications for our study. To create our sample, we overdraw banks chartered from the southeastern US (including Florida, Georgia, North Carolina, and Alabama) as sections of our analysis requires geographically-concentrated data. However, we also include banks from all regions of the US to ensure our results hold outside the states mentioned above. Within each state, we then randomly select banks for our sample.[4]

For each proposed De Novo bank in the sample, we observe the FDIC Report of Investigation (ROI), which summarizes the results of the field investigation conducted during the application review process. The ROI includes: (i) the conclusions and recommendations of the FDIC examiner assigned to conduct the field investigation, and (ii) an in-depth assessment summarizing each section of the application. The ROI is solely for the official use of the FDIC. The bank examiner is required to separately assess each of the seven factors discussed above.

[4] We confirm our empirical results remain quantitatively similar when we include only charters originated in the Southeastern US region. These alternate results are available upon request.

We collect the ROIs for 185 deposit institutions chartered between 2000 and 2008. All institutions in the dataset were approved for deposit insurance. We hand-collect the necessary information and compile a dataset detailing biographical and financial reports for each De Novo bank in the sample.

As part of the application process, proposed entrepreneurs are interviewed by FDIC examiners and the ROI includes a summary of the interview. We are able to observe the interviews of 1,158 entrepreneurs and presidents/CEOs working with 136 separate proposed De Novo banks. In addition, each proposed De Novo bank is required to include an Interagency Biographical and Financial report for each of the proposed "Directors, Non-Director Officers, and Others owning 10% or more of total capital." Each report contains information including age and experience in banking, profession, previous employers, net worth and proposed financial investment in the De Novo bank.

FDIC Call Reports

As we analyze approved De Novo banks, we can match each bank in the sample to corresponding Call Reports following the bank's opening. Every insured bank is required to file a call report for each calendar quarter. Call reports include income statements, balance sheets, and supporting schedules for the institution.

2.2 Summary of De Novo Banks

Comparison of Sample and Full Population of De Novo Banks

We define all variables in Appendix Table A.1. Due to data limitations, we are only able to observe the applications of 185 De Novo banks chartered between 2000 and 2008. To confirm our sample is representative of the full population, we summarize both the 185 De Novo banks in our sample and the set of all 1,042 De Novo banks during 2000-2008 in Appendix Table A.4.

First, summarizing the full population, we find the number of new institutions in each year more than doubled from a low of 73 in 2002, to a high of 151 in 2006, before again dropping to 75 in 2008. As mentioned above, these new institutions were geographically concentrated in the southeastern US: 118 (11.3%) banks during this time period were originated in Florida and 112 (10.7%) originated in Georgia. The mean asset size is roughly $21 million in the first quarter of charter. Finally, turning to the long-term outcomes, we find 22% of the banks merged with another institution and 11% failed within the first ten years since being chartered.[5]

Turning to our own sample, we compare our sample to the full population. We find a similar rise in the number of De Novos each year between 2002 (3% of the sample) to 2006 (17% of the sample). As we overdraw our sample from the Southeastern US, Florida and Georgia each compose 24.9% of the sample. In addition, 9.7% of the banks in the sample were chartered in North Carolina and 6.5% were chartered in Alabama. The remaining 44% of the sample was

[5] In the online appendix, we demonstrate that De Novo banks are (i) significantly smaller and (ii) experience higher failure rates compared to the full sample of deposit-insured banks. First, the mean deposit-insured bank is 11.5 times larger than the mean De Novo bank (three years after charter). Second, between 2008 and 2013, the failure rate of De Novo banks was 12.5% compared to a 5.7% failure rate among all banks.

drawn from across the US. The banks in the sample are slightly larger than the full population as we measure a mean asset size of $25 million in the first quarter of charter. Last, a higher proportion of the banks in the sample merged (24%) and failed (17%). Overall, our sample seems relatively comparable to the population at large.

De Novo Bank Size

For the remainder of the analysis, we focus exclusively on the 185 De Novo banks in the sample. To begin, we follow the lifecycle of each De Novo in the sample. First, in Figure 1, we display the asset size of these banks. The median bank size is $49 million at the end of the first year; within five (ten) years, the median grows to $163 million ($272 million). However, the top five percent of the sample experiences significant growth, with $832 million after five years and $2.1 billion after ten years.

We estimate a mean (median) of fifteen (nineteen) employees in the first year and forty-four (eighty-two) employees for firms surviving ten years as shown in Figure 2. In parallel to our analysis of asset size, we note (i) the median bank has relatively few employees compared to the universe of deposit-insured banks and (ii) a small proportion of De Novo banks experience substantial growth in employees.

We compare the size of De Novo banks to all firms in the financial sector in Figure 5. We collect information from the Census 2007 Survey of Business Owners on all financial firms, according to a two-digit NAICS and measure employment size at birth. We find that nearly sixty percent of firms are self-employment, while ten percent of firms employ more than ten or more workers. In comparison, nearly ninety percent of De Novo banks employ at least ten workers within the first year of charter. The results illustrate that De Novo banks are substantially larger than the vast majority of new financial firms in the economy. It should be noted that these new financial firms can differ significantly from banks in terms of function and the business model.

De Novo Bank Failures and Acquisitions

De Novo banks experience high failure rates: during the 2008 Financial Crisis, 12.5% of all De Novo banks failed compared to 5.7% of all banks. In Figure 3 we graph the failure rate of the firms and observe the failure rate is highly cyclical. We observe no failures between 2002 and 2007. We see failures beginning in 2008 until 2012 and we observe no failures during 2013-2017. In addition, we also graph the acquisition rate of De Novo banks. The rate of acquisition increases following the 2008 Financial Crisis and continues to a peak in 2015.

De Novo Bank Balance Sheets

In the first step of the analysis, we outline the De Novo banks in the sample. Specifically, in Table 1 we compare the actual balance sheet to the projected balance sheet as outlined in the application. We note that De Novo banks hold significant assets in the real estate market at the end of year three, especially commercial real estate loans. Specifically, real estate loans compose over 58% of total assets by the third year of the charter, with 43% in commercial real estate and the remaining 14% in residential real estate. Prior research has evaluated the balance sheets of De Novo banks and has noticed a similar trend (DeYoung and Hasan, 1998); however, we are the first to determine whether balance sheet outcomes are readily explained by the projected outcomes. According to the projected balance sheet data, real estate loans will compose half of total assets by the third year of the charter, 37% in commercial loans and the remaining 13% in

residential real estate loans. Therefore, real estate loan holdings are substantially higher than originally projected.

Given the scale of real estate loans in the balance sheet, other assets must hold a less prominent role when compared to the projections. We find De Novo banks hold significantly fewer consumer loans and Commercial and Industrial (C&I) loans when compared to the projections. While the projections suggest C&I loans will compose over 16% of total assets, they actually compose less than 12% according to the actual balance sheet by the third year. Similarly, the projections suggest consumer loans will compose 6% of total assets for the mean bank, yet the number is under 2% in reality. We summarize these results in Figures 4A and 4B.

2.3 Summary of De Novo Entrepreneur Backgrounds

Bank Entrepreneurs

To begin our analysis, we summarize the backgrounds, motivations, and lending strategies of bank entrepreneurs. For our analysis, we define entrepreneurs as all De Novo bank directors and the CEO/president. In addition, we define non-director officers (e.g. CFO, CCO) who invest capital in the proposed bank and shareholders who invest more than 10% of the capital as entrepreneurs. Entrepreneurs are responsible for (i) formulating the business plan and financial projections underlying the application, (ii) management, and (iii) raising capital. Our sample includes 185 De Novo banks in our sample and the mean bank has eleven different entrepreneurs.

Entrepreneur Experience

First, we note significant prior banking experiences among De Novo entrepreneurs in Table 2. Within our sample the mean/median proposed bank has eleven entrepreneurs, including five with prior experience in banking. In total, 873 entrepreneurs hold some prior experience in banking. Within this subsample, 112 (12%) are previous Presidents/CEOs, and 337 (35%) are previous directors of a separate bank. Both groups generally have experience with smaller banks: 98 of the 112 Presidents/CEOs and 273 of the 337 directors worked with banks holding under $1 billion in assets. In comparison, the other entrepreneurs with banking experience often work with larger banks and are employed as branch or regional managers.

As entrepreneurs often hold significant prior banking experience, we next examine whether entrepreneurs of a given De Novo bank hold overlapping employment experience with the same prior bank. We estimate the mean (median) charter has two (two) entrepreneurs that worked at the same bank prior to charter, composing roughly twenty percent of entrepreneurs.

Outside of the banking sector, we note a few other common professions among the entrepreneurs in the sample. First over 90% of boards include at least one entrepreneur with entrepreneurial experience. Similarly, 80% of entrepreneurs include at least one person with experience in real estate, roughly half of boards include an attorney, and roughly a third includes at least one entrepreneur holding a CPA. While there are a number of potential explanations for the particular occupations, one common thread is that the professions listed all lead to a large network of contacts. For further evidence arguing the value of contacts, we note that 58% of the interview statements explicitly state they, “hold many contacts to refer to the bank for deposit and/or credit

services".

Entrepreneur Local Knowledge

Second, we evaluate whether bank entrepreneurs have the ability to effectively identify local demand for bank services. We believe local knowledge is likely as the median entrepreneur lives less than eight miles from the bank and is commonly engaged in a profession that leads to many contacts. To better understand the motivations of the entrepreneurs chartering a De Novo bank, we analyze the entrepreneurs' interviews in Figure 6.

We analyze two particular motivations based on whether the De Novo bank is offering improved services, or recent growth in credit demand. To measure improved services, we analyze whether respondents mention (i) demand for a locally-focused bank or (ii) the need for customer service. Among the subsample, 56% of respondents mention the demand for a locally-focused bank, while another 34% mention the need for better customer service. We note both business practices characterize community banks more broadly. For instance, according to the FDIC Small Business Lending Survey (2018), (i) over 82% of business lending is local for small banks and (ii) small banks are considered to hold a competitive advantage in customer service. In comparison, we find respondents are less likely to mention credit demand growth as only 16% discuss recent market growth and 13% mention a decrease in the number of banks due to merger activity.

Overall, our findings lend support to Kirzner (1985), who suggested that individuals may choose to enter entrepreneurship as a response to new investment opportunities in the local economy. According to the theory, waged workers may identify demand for a standard financial service and respond by opening a De Novo bank.[6] In contrast, we find limited evidence for the Schumpeter (1947) view of entrepreneurship where new entrants enter the banking sector to offer new innovations.

2.4 Summary of De Novo Bank Capital

We next analyze the initial capital structure of the De Novo bank. Capital for the first three years is raised and injected into the De Novo bank in the first day of establishment. Given these requirements, entrepreneur wealth is likely a significant characteristic as bank entrepreneurs must be able to meet the initial capital assumed in the business plan. We first note that the median entrepreneur reports significant personal financial resources, which plays a role in the bank's initial capital structure. As summarized in Table 1, the median entrepreneur reports a net worth of $ 3.1 million at the time of application.

We estimate the mean (median) De Novo bank in our sample receives 24% (22%) of capital from entrepreneur equity ownership. In comparison, entrepreneur equity among De Novo banks is

[6] In this way, our findings contribute to past research arguing for a Kirzerian view of entrepreneurship. Specifically, prior studies establish that firms-relative to older firms- disproportionately respond to local income shocks (Adelino et al., 2014) and are responsible for the majority in employment growth during economic expansions (Ryan Decker and Upton, 2018).

significantly higher than other industries. Among new firms with outside equity ownership (through angel investors, venture capital, corporations, or government-sponsorship), Robb and Robinson (2012) estimate mean equity ownership below 15%. Within the 24% entrepreneur equity, 20% of is purchased through cash and the remaining 4% is purchased through borrowing. Previously unknown in the literature, a full 76% of all capital is sourced from outsider equity.

For additional analysis, we distinguish the breakdown of financing sources across initial bank size quartiles in Figures 7. We find no evidence that bank size is predictive of financing sources. In Figure 8, we instead split banks into quartile based on proximity to the initial capital assumed in the business plan. Again, we find no evidence of differences across banks.

Finally, in Figure 9, we offer suggestive evidence that the capital thresholds are more likely to be binding for the smaller banks in the sample. Specifically, while banks in largest quartile (according to capital or assets) hold capital 30-40% above the initial capital assumed in the business plan, banks in the lowest quartile hold capital roughly 5% in excess.

2.5 Summary of De Novo Banker Prior Employment Histories

According to our analysis, over 94% of proposed banks have at least one entrepreneur with full-time banking experience. Among these entrepreneurs, 12% were previously a CEO/president and another 35% held prior director positions. Given that a significant proportion of De Novo entrepreneurs hold prior experience in banking sector, we next analyze whether bank characteristics affect employee propensity to leave and start a De Novo bank. We relate our results to the literature on entrepreneurial spawning, the process where employees in established firms establish new firms in the same industry (Gompers et al., 2005).

To begin our analysis, we count the number of spawns per 1,000 employees in each bank. We limit our analysis to banks in five states (Alabama, Florida, Georgia, New Jersey, and North Carolina) as these states have the highest number of De Novo banks in our sample. In total we analyze spawning rates across 1,422 banks headquartered in these five states; within these 1,422 banks, 341 employees exited the bank to charter a De Novo bank.[7]

We define the spawning rate as the number of new banks chartered for every 1,000 bank employees. Ideally, we would like to adjust the number of spawns by a number of employees who can potentially spawn a bank; as we do not have such a measure, we proxy using a bank's total number of employees. The mean spawn rate among all 1,422 banks is 3.9 charters for every 1,000 employees. If we instead group banks by asset size we estimate a spawning rate of 4.95 charters among the banks with under $100 million in assets, 3.89 charter for banks between $100 and $500 million in assets, 1.82 charters for banks between $500 million and $1 billion in assets, and 0.69 charters among the largest banks.

[7] We note a De Novo bank can be chartered by multiple entrepreneurs employed with multiple banks. In addition, bank employees in these five states may charter a bank outside the state. These charters are also counted in our sample.

We consider both bank age and size as potential predictors of entrepreneurial spawning. First, we evaluate the role of bank size as prior research highlights entrepreneurs disproportionately arise from smaller firms (Elfenbein et al., 2010). Bankers employed at small banks may have a particular preference for smaller banks, specific skillsets better applied to small establishments, lower opportunity cost to exiting, and entrepreneurial human capital due to on-the-job learning. Second, we examine whether younger firms produce bank entrepreneurs based on past evidence that employees acquire entrepreneurial human capital from younger firms (Gompers, Lerner, and Scharfstein, 2005). Age is defined as the difference between the De Novo establishment date and the charter date of the spawning bank.

According to Table 3, we find strong evidence that spawning rates are higher among young and especially small banks. In addition, the results suggest bank entrepreneurs arise disproportionately from (i) banks that were merged out and (ii) banks engaged in traditional lending. First, we estimate the spawning rate is roughly 0.16% higher following a merger, in line with prior research recognizing an increase in De Novo banks following mergers (Berger et al., 2004). Given job displacement increases following mergers (Ma et al., 2018; Olsson and Tag, 2017), a possible explanation is that workers charter new De Novo banks following job loss.

Second, we estimate banks focused exclusively on traditional activities (non-interest income is derived only from fiduciary activities or services charged on deposit accounts) have a 0.26% higher spawning rate. Given De Novo banks are rarely focused on non-lending activities, as illustrated in Table 1, we believe experience with traditional lending is especially relevant preparation for bank entrepreneurship.

3 Empirical Methodology

The results above offer a range of potential channels for how bank entrepreneurs may influence actual bank outcomes. First, entrepreneurs hold significant experience, potentially bringing particular knowledge and preferences as a result. This is especially likely as entrepreneurs often hold prior experience within small and young banks. Second, entrepreneurs have contacts and relationships within the local area. Third, entrepreneurs may impact the De Novo bank through equity ownership and access to capital. While informative, the results offer only correlations between the variables. We develop a more robust methodology to analyze the role of the bank entrepreneur below.

3.1 Instrumental Variables Approach

Past literature acknowledges the challenge of identifying the role of managerial characteristics on corporate outcomes (Fee et al., 2013). To overcome these concerns, we follow (Bernile et al., 2017; Dittmar and Duchin, 2015; Malmendier et al., 2011) and analyze how the past experiences of the De Novo bank's entrepreneurs can predict lending policy, and how these policies ultimately impact the performance and success of the bank. We hypothesize prior employment experiences may be a valuable proxy for both the skills and preferences of the entrepreneurs in the sample. First, based on a significant literature highlighting the role of firm-specific human capital and on-the-job training (Hashimoto, 1981; Katz and Ziderman, 1990), entrepreneurs may

learn lending strategies from coworkers and employers. In addition, past research has found prior experiences may also impact selection into entrepreneurship (Nanda and Sorensen, 2010; Lindquist et al., 2015). Second, entrepreneurs may sort into prior employment based on expertise and preferences as evidenced by prior research (Baghai et al., 2017; Brown and Matsa, 2015).

We conduct our analysis under a two-step instrumental-variables procedure. In the first-stage, we analyze whether the employment experiences of the entrepreneur are correlated with the investment decisions of the chartered bank. In the second-stage, we analyze whether the instrument investment decisions are associated with loan performance (measured by delinquencies and defaults), bank performance (measured from changes in equity and earnings), and bank survival.

As our methodology requires that the investment decisions of the De Novo bank are strongly predictive not only of the loan outcomes, but also the bank's growth and survival, we focus on lending in the commercial real estate market. Specifically, we measure the size of the bank's commercial real estate (or CRE) lending relative to total assets.[8]

Focusing explicitly on commercial real estate lending has two advantages. First, De Novo banks hold a substantial fraction of assets in commercial real estate, in some cases even beyond the rate discussed in the projections. At the end of the third year, commercial real estate loans comprise over 43% of total assets for the mean bank in the sample. For comparison, residential real estate loans compose 14% of assets, commercial and industrial loans make up an additional 12%, and consumer loans are under two percent.

Second, cross-sectional variation in exposure to the commercial real estate market is likely a primary predictor of loan and bank performance following the 2008 Financial Crisis. Between December of 2008 and December 2011, the total value of commercial real estate loans across all commercial banks fell eighteen percentage points. A contributing factor to the decline was the substantial increase in commercial real estate delinquencies, which rose from a low of one percentage point in 2006 to over 8.75 percentage points by the end of 2010. In line with this view, (FDIC, 2012) found that over seventy percent of the bank failures between 2008 and 2011 specialized in CRE lending. As a result, high rates of commercial real estate holdings were a primary predictor of ex-post bank losses and ultimately, bank failures during the last financial crisis.

As a secondary measure, we extend our analysis to percent of loans originated for construction and development (or C&D loans), a subset of the commercial real estate loans. C&D loans can be especially risky due to (i) additional construction risks not present in loans for built structures, and (ii) greater uncertainty about future market conditions for yet-to-be-built structures. As a result, Shibut and Singer (2015) finds the C&D loans are the riskiest component of CRE lending. First, peak non- current rates reported by the banking industry were 16.6 percent for C&D loans, compared to only 4.4 percent for other CRE loans. Second, 2010 net charge-off rates for C&D

[8] In addition, we also extend our analysis to examining the percent of originations in (i) residential real estate (or RRE), (ii) commercial and industrial loans (or C&I), and (iii) consumer loans.

loans were 6.1 percent, compared to only 1.2 percent for other CRE loans.[9]

Therefore, we develop two measures of De Novo investments: (i) the proportion of commercial real estate loans in the lending portfolio and (ii) the proportion of construction and development loans in the lending portfolio. The second-stage regression then evaluates whether risk exposure due to lending in the CRE (and more specifically C&D) market impacted loan and bank performance:

$$\Delta Performance_{2008-2010} = \beta CRE\widehat{LoanRatio}_{3rd\ Year} + \delta Controls + \rho_t + \epsilon \quad (1)$$

The dependent variable is $\Delta Performance_{2008\text{-}2010}$, measured as the change in loan performance between 2008 and 2010. We measure performance based on loan outcomes (defined as the change in loan delinquencies, non-performing loans, and loan charge-offs), bank performance (defined as the change in bank equity and earnings), and bank failure.

The independent variable of interest is instrumented $CRE\ LoanRatio_{3rd\ Year}$, which measures the percent of bank assets in commercial real estate markets at the end of 3rd year of the De Novo charter. Assuming exposure to the commercial real estate market is associated with lower performance, we expect $CRE\ LoanRatio_{3rd\ Year}$ to be positively correlated with the rate of loan defaults and delinquencies, negatively correlated with bank earnings and equity, and positively correlated with failure rates.

We include several controls in the regression. First, as De Novo banks differ in underlying characteristics prior to 2008, we control for the level of (i) bank equity, (ii) earnings, (iii) non-performing loans, and (iv) non-core funds, all measured three years after the bank charter.

Second, bank entrepreneurs may influence bank performance in ways outside lending strategies. Therefore, we control for other characteristics of the entrepreneurs: the percent of entrepreneurs with prior experience in the same bank, and the percent of equity derived from entrepreneurs at the time of establishment. Third, exposure to the commercial lending market is likely driven by local demand. To address the cross-sectional variation in local credit demand, we control for the county-level commercial real estate loan ratio in the second year of the De Novo bank as well as the county-level personal income growth in the second year.[10] Last, to controls for the time-series variation, we include year fixed effects for the year of initial charter.

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[9] In Table 12, we match all De Novo banks chartered in 2000-2008 with established banks in the same state and with similar (i) asset size and (ii) deposit-to-asset ratio. We confirm the mean De Novo banks has an 11% higher CRE loan ratio and 4.5% higher C&D loan ratio. In addition, we also find De Novo Banks report higher rates of delinquencies and defaults during the Financial Crisis, as well as higher rates of bank failure.

[10] As we are not able to observe lending outcomes at individual branches, we construct a proxy measure of county-level commercial real estate loan ratio by allocating banks' CRE loans into each county in same proportion as their deposits. For instance, if a bank has 40% of its deposits in a county, then we assume the bank has 40% of its CRE loans in the same county. Then we aggregate these allocated CRE loans across all banks with branches in a county and divide by total deposits in that county. In an alternative framework, we control for the mean CRE loan ratio of banks with all the branches in the same county and the results remain similar.

3.2 First-Stage Analysis

The ultimate purpose of this exercise is to isolate the impact of the entrepreneur on the performance of the De Novo bank. In the first-stage of the analysis, we estimate whether the prior employment experiences of the entrepreneurs predict lending strategies in the De Novo bank. Therefore, in our first-stage analysis we analyze the equation:

$$CRE\ LoanRatio_{3rd\ Year} = \beta_1 CRE\ LoanRatio_{Prior} + \beta_2 RealEstate\ Exp_{Prior} + \delta Controls + \rho_t + \epsilon \qquad (2)$$

We consider two instruments for CRE LoanRatio$_{3rd\ Year,}$ both based on the prior employment outcomes of bank entrepreneurs. The first instrument is *CRE LoanRatio$_{prior}$,* which measures the commercial real estate loan ratio of the prior employer for all entrepreneurs with prior experience in banking. As entrepreneurs in the same De Novo banks are unlikely to have the same prior employer, we must decide how to weight each individual in the sample. For the purposes of this analysis, we consider two metrics: (i) we weight all entrepreneurs equally, or (ii) place full weight on the CEO as the individual most likely to determine lending strategies.[11] Under our hypothesis that prior experience in commercial real estate lending is associated with a higher rate of commercial real estate lending at the De Novo bank, we assume $\beta_1>0$.

One concern with the instrument above is that entrepreneurs without prior banking experience may still influence lending outcomes. Therefore, our second instrument, *RealEstate Exp$_{prior}$*, measures the percent of entrepreneurs with prior employment experience in the real estate industry. We focus on the real estate industry as over 80 percent of the De Novo banks in the sample employ an entrepreneur with prior experience (according to Table 2). Assuming entrepreneurs with prior experience in real estate are associated with De Novo banks focusing on commercial real estate lending, we expect that $\beta_2>0$. Last, as in the second-stage regression, we control for differences in bank characteristics, entrepreneur demographics, and local demand factors.

4 Results

The purpose of the next section is to determine whether an individual's characteristics predict (i) bank risk exposure, (ii) planned risk exposure, (iii) bank performance, and (iv) bank failure. To analyze each relationship, we focus on the entrepreneur's past experiences within the banking sector as all De Novo banks in the sample include at least one entrepreneur with prior bank experience either as a full-time employee or as a director.

[11] In unreported results, we consider additional weighting metrics. As a third metric, we weight each entrepreneur by his/her relative equity stake in the bank. This measure assumes that equity stake is a proxy for the responsibility of each entrepreneur in lending strategies. Fourth, we take the maximum value of commercial real estate loans ratio among the prior employer of any entrepreneur. The regression results are quantitatively similar to regression results under our primary weighting metrics.

4.1 De Novo Bank Regression Data

Summary of Regression Data
We first summarize the loan ratios of the entrepreneurs' and CEO's prior bank. Within three years after charter, the mean De Novo bank in our sample has a commercial real estate loan ratio of roughly 39.3 percent; within the CRE portfolio, we estimate the construction and development (C&D) portfolio comprises 14.7 percent of total assets. These numbers are higher than the corresponding measures in the balance sheet projections provided to the FDIC in the deposit insurance application. In addition, the prior employers of entrepreneurs were slightly less likely to invest in the commercial real estate lending market: we estimate a mean CRE loan ratio of 27.2 percent and a C&D loan ratio of 9.1 percent.

We offer three measures of entrepreneur teams. First, we estimate that roughly 17.9 percent of a given entrepreneurial team has prior experience in the real estate industry. Second, entrepreneurs hold 24.4 percent of all equity in the bank. Third, 20.5 percent of the team has previously worked in the same bank prior to charter.

Last, in line with our expectations, we confirm a decline in both loan performance and bank performance between 2008 and 2010. We estimate a 1.1 percent increase in the rate of loan and lease charge-offs and a 2.9 percent increase in the rate of nonperforming loans. Meanwhile, the equity ratio decreased roughly 8.7 percent.

4.2 De Novo Bank Policy

Entrepreneur Experience
We first present the results of the first-stage analysis in Table 4A and 4B. Table 4A measures the mean lending experience of all entrepreneurs with prior experience in the banking sector; 4B measures only the lending experience of the CEO. According to 4A, we estimate a ten percentage point increase in the size of the commercial real estate loan ratio at the entrepreneurs' prior banks is correlated with a 4.1 percentage point increase in the size of commercial real estate loan ratio at the De Novo bank. The result is statistically significant at the 1% level and holds after controlling for bank and entrepreneur characteristics, time fixed effects, and local demand measures.

As we have discussed, construction and development (C&D) loans can be especially risky class of commercial real estate loans. We estimate a ten percent increase in prior experience in C&D lending is associated with a 4.1 percentage point increase in C&D lending in the De Novo bank. In addition, we confirm a similar relationship across residential real estate loans (4.3 percent increase), C&I loans (3.2 percent increase), and consumer loans (1.7 percent increase). In total, we find strong evidence that the prior lending experiences of the entrepreneurs predict the lending strategies of the De Novo banks in our sample.

As discussed above, some entrepreneurs holding non-banking experience will still influence the lending strategies of the De Novo bank. Therefore, we also consider an additional independent variable measuring the percent of entrepreneurs within the bank that previously worked in the real

estate industry. We estimate a ten percent increase in the percent of entrepreneurs with real estate experience is correlated with a 1.8 percent increase in the percent of commercial real estate loans and a 1.6 percent increase in the percent of C&D loans. Due to increased focus on commercial real estate, the De Novo banks see a decrease in the loan ratio for residential real estate (1.1 percent), C&I (0.4 percent), and consumer loans (0.3 percent).

As entrepreneurs mirror the lending practices of their former employer, bank entrepreneurship is more similar to bank expansion than previously recognized. This evidence differs from past research arguing for the superior role of small banks in loan monitoring (Berger et al., 2005; Peek and Rosengren, 1998; Strahan and Weston, 1998).

Isolating CEO Experience

We conduct a similar analysis in Table 4B, but instead focus on the prior lending experiences of the CEO, as opposed to all entrepreneurs. A ten percent increase in commercial real estate lending at the CEO's prior bank is associated with a 2.3 percent increase in CRE lending at the De Novo bank; a ten percent increase in C&D lending at the CEO's prior bank is associated with a 1.4 percent increase in the De Novo bank. We estimate similar effects in residential real estate (2.5 percent), C&I lending (2.2 percent), and consumer lending (1.4 percent).[12] Overall, the evidence confirms the particular role of the CEO within the De Novo bank.

Projected Lending Outcomes

For additional confirmation that entrepreneurs influence the lending strategies of the De Novo bank, we next analyze how prior experience influences projected loan ratios, as opposed to the realized loan ratios. Recall that all De Novo banks are required to include the projected balance sheet as part of the application to the FDIC. In Table 5A we estimate that a ten percent increase in the commercial real estate loan ratio of the entrepreneurs' prior banks is associated with a 2.3 percent increase in commercial real estate; when focusing solely on the CEO's experience in Table 5B, we estimate a similar 1.7 percent increase. Across both tables, we also estimate a ten percent increase in prior real estate experience increases the commercial real estate lending by 2.8-3.2 percent. The results highlight that entrepreneurs with prior experience in real estate lending and real estate industries charter a De Novo bank with an intended focus on commercial real estate lending.

Distinguishing Local Credit Supply and Demand

As discussed, a majority of bank entrepreneurs live in the same county as the De Novo bank. This leads to a potential concern with our identification as the prior employers of the entrepreneurs and the De Novo bank may be responding to the same local credit demand shocks, leading to similar loan portfolios. In this setting, there is an unobservable variable (credit demand) that is driving correlation between the two variables of interest. To partially alleviate this concern, we have included multiple controls for both county-level credit supply and county-level income growth. However, including these variables does not fully eliminate this concern.

[12] In addition, similar to before we confirm a ten percent increase in the number of entrepreneurs previously involved in the real estate industry results in a 2.2 percent increase in CRE lending and a 1.8 percent increase just in C&D lending.

Therefore, in Table 6 we distinguish between entrepreneurs with prior work experience in the county (classified as local entrepreneurs) and non-local entrepreneurs. The argument is that if our results are driven by local credit demand, we should find that our results are greatest for local entrepreneurs; in contrast, if entrepreneurs are imposing the lending strategies of their prior employers, then entrepreneurs, regardless of prior location, should be influenced.

In Panel A of Table 6, we first evaluate the relationship between the lending ratios of the banks previously employing entrepreneurs and the lending ratios of the De Novo bank. We estimate a ten percent increase in the CRE (C&D) lending at the prior bank is correlated with a 3.2 (3.7) percent increase at the De Novo bank. Both results are statistically significant at the one percent level. We find similar effects for residential RRE, C&I, and consumer lending and again all results are statistically significant.

Second, we evaluate whether this relationship is stronger for local entrepreneurs, suggesting at least a portion of our estimates are driven by local credit demand at the local level. We find no evidence that local entrepreneurs disproportionately respond to their prior bank as none of the results are statistically significant at the ten percent level. In Panel B, we instead focus exclusively on the prior experiences of the CEO and confirm similar findings. The relationship holds for all CEOs rather than just local CEOs. Overall, we find no evidence our results are driven by responses to local credit demand shocks.

4.3 De Novo Bank Performance

Loan Performance

We analyze the results of the second-stage regression in Tables 7-9. Recall, we exploit the two instruments discussed above, prior experience in commercial real estate lending (or alternatively construction and development lending) and prior experience in the real estate industry.[13] We equally weight the experience of all entrepreneurs when estimating the instrumented loan ratio, though the results are largely consistent if we instead focus exclusively on the CEO experience. We then evaluate the impact of commercial real estate lending (or construction and development lending) on loan performance, bank performance, and the rate of bank failure.

In our baseline analysis in Table 7A, we estimate that De Novo banks with a ten percent higher commercial real estate loan ratio in the third year following charter observe a 1.8 percent increase in the rate of non-performing loans between 2008 and 2010 (significant at the 1% level) and a 0.6 percent increase in the rate of loan charge-offs between 2008 and 2010 (significant at the 5% level). In addition, the estimates suggest a 3.7 percent increase in the rate of 30-89 day delinquent loans, though the estimates are not quite statistically significant at the 10% level.

Next, in Table 8A, we extend the analysis to the impact of construction and development (C&D) lending. We estimate that the De Novo banks holding a loan portfolio with ten percent more C&D loans in the third year after charter see a 3.1 percent increase in non-performing loans

[13] We note the second-stage results do not require multiple instruments. We conducted a similar analysis, but include a single instrument, the loan ratio at the prior bank. We confirm both the first-stage and second-stage results are robust to this alternate specification.

between 2008 and 2010, and a 0.8 percent increase in loan charge-offs between 2008 and 2010.

Bank Performance

Overall, the results above confirm that the lending policies of the entrepreneurs' prior employer predict the loan performance with the De Novo bank. Extending this argument, we also expect that the instrumented policies can predict overall bank performance. In Table 7A we estimate that De Novo banks with a ten percent higher commercial real estate loan ratio in the third year following charter observe a 2.1 percent decrease in the equity ratio between 2008 and 2010 (statistically significant at the 1 percent level), and a 0.8 percent decrease in the reported earnings ratio (statistically significant at the 10 percent level). As illustrated in Table 8A the coefficients are quantitatively similar when we instead analyze the impact of construction and development loan portfolio.

Alternative Instrumental Variables Specification

For robustness, we redo the second-stage analysis with our alternative instrumental variables framework. The results weight all entrepreneur lending experiences equally; in the results provided below we instead only consider the lending experiences of the CEO.

First, in Table 7B, we estimate De Novo banks with a ten percent higher rate of commercial real estate lending are associated with a 1.7 percent higher rate of non-performing loans between 2008 and 2010. When instead examining exposure to the C&D loan market in Table 8B, we estimate a similar 3.3 percent higher rate of non-performing loans between 2008 and 2010.

Second, we estimate that increased exposure to CRE (and C&D) lending leads to a 1.9 (2.0) percent lower equity ratio. Third, in Table 9, we estimate the likelihood of failure increases by roughly 1.2 percentage points, statistically significant at the five percent level. Overall, the results do not appear to depend on the exact instrumental variables framework.

Bank Failure

The results above illustrate how exposure to commercial real estate (and C&D) lending, driven by the prior experiences of bank entrepreneurs, results in higher rates of delinquencies and defaults, and lower bank performance. In this environment, we then similarly expect that exposure to these lending strategies lead to a causal increase in the De Novo failure rate. As discussed in the prior literature (DeYoung and Hasan, 1998; Hunter and Srinivasan, 1990), De Novo banks observe a comparatively higher rate of failure as compared to established institutions. In our sample, seventeen percent of the banks fail following the 2008 Financial Crisis.

According to Table 9, we estimate that De Novo banks with ten percent higher rates of exposure to the commercial real estate lending markets were 1.2 percent more likely to fail within ten years after charter. As all banks in our sample were chartered between 2000 and 2008, the ten year prior always include the 2008 Financial Crisis. Similarly, De Novo banks with ten percent higher rates of exposure to the C&D lending markets were 1.9 percent more likely to fail. Across both specifications, we find consistent evidence that the experiences of the entrepreneur predicted the likelihood of De Novo failure rates following the 2008 Crisis.

Auditing Standards as an Alternative Channel

Of course, bank entrepreneurs may influence De Novo bank policy through a range of channels outside lending outcomes. We consider one possible corporate decision: auditing standards. Specifically, we consider whether an entrepreneur's prior employment with a bank holding high auditing standards predicts the auditing standards of the De Novo bank. We define high auditing standards as a bank that keeps financial statements in accordance with Generally Accepted Auditing Standards (GAAS) as promulgated by the American Institute of Certified Public Accountants' Auditing Standards Board (ASB) or the Public Company Accounting Oversight Boards (PCAOB) auditing standards.

According to Table 10, among De Novo banks where at least two-thirds of entrepreneurs previously worked in high auditing standards banks, the high auditing standards is more likely. A 10 percent increase in the ratio of entrepreneurs previously employed with high auditing standards banks are 23 percent more likely to also follow high auditing standards. Similarly, if the CEO previously worked at a high auditing standards bank, the De Novo banks is 20 percent more likely to engage in these high standards. The results further confirm the role of the bank entrepreneurs in policies outside lending strategy.

Asset Growth Prior to the Financial Crisis

Our results confirm that the prior experiences of bank entrepreneurs are predictive of the strategies of the De Novo bank, ultimately impacting bank performance. Given these results, it is natural to ask why bank entrepreneurs choose to invest in the same risky lending strategies as prior employers (in our particular case, commercial real estate) given high risk exposure increases the rate of failure during the 2008 Financial Crisis. While a complete analysis is beyond the scope of this paper, one potential explanation is that De Novo banks were able to grow more quickly by increasing exposure to high risk assets prior to the crisis (Falhenbrach et al., 2018). We conclude this section by offering evidence of this channel.

In Table 11 we confirm that the De Novo asset growth between the first and third year after charter is negatively correlated with bank performance during the Financial Crisis. After controlling for bank, banker, and local characteristics and year fixed effects, we estimate De Novo banks experiencing a ten percent point higher asset growth rate are associated with a 0.98% decrease in equity, a 0.33% increase in loan delinquencies, and a 1.39% increase in loan charge-offs. While we also establish a correlation between early asset growth and bank failure, the relationship is not statistically significant at the ten percent level. The results support our argument that bank entrepreneurs in our sample may have been willing to accept increased exposure to long-term risk in exchange for a short-term gain in growth.[14]

[14] In addition, we confirm that asset growth is positively associated with high exposure to both CRE loan ratios and C&D loan ratios and present these results in the appendix. Specifically, a ten percent point increase in the CRE (C&D) loan ratio is associated with a 1.3% (2.0%) faster asset growth between one and three years after charter. The result helps confirm that bank entrepreneurs in our sample may explicitly have chosen to invest in CRE lending to pursue greater asset growth.

5 Conclusion

This paper provides the first analysis of entrepreneurs chartering insured banks in the U.S. By merging hand-collected biographical data on entrepreneurs of De Novo banks with detailed call reports, we can directly connect entrepreneurial characteristics to corporate policy and firm outcomes. First, we find strong evidence that bank entrepreneurs are driven by local demand opportunities, bring significant banking and managerial experience, and have the networks necessary to attract deposit and loan customers. In most cases, entrepreneurs pursue traditional banking models as compared to innovative models, and thereby extend past lending practices. Second, to better identify the value of the individual entrepreneur, we confirm that employees in small and young banks are disproportionately likely to exit the firm to charter a De Novo bank. Following charter, the new bank's lending policies are highly predicted by employment experiences of the bank entrepreneurs and the CEO. Exploiting these correlated lending strategies, we illustrate how entrepreneurs have a causal effect on the performance and survival of the bank.

More broadly, while we focus our analysis on insured banking, our results meet recent concerns of declining small business dynamism (Decker et al., 2016a, 2016b, 2017). Startup rates have declined since the 1980s with a more accelerated slowdown of high-growth young firm activity starting in 2000. These patterns are best illustrated in the technology sector, which saw growth in the 1990s before a steep decline in the 2000s starting with the burst of the tech bubble. Yet, in contrast to other industries, a lack of new banks can lead to insufficient credit supply, ultimately lowering rates of investment and employment across outside sectors. As a result, we believe our results hold particular value to guide polices that support both entrepreneurship and financial stability.

First, our results confirm that the backgrounds of bank entrepreneurs are a valuable predictor of the performance and success of the De Novo bank. Second, we detail the profile of the bank entrepreneur. The FDIC may therefore better assess the risk in deposit insurance applications.

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Figure 1A: Asset Size across the Lifecycle (De Novo Banks Sample)

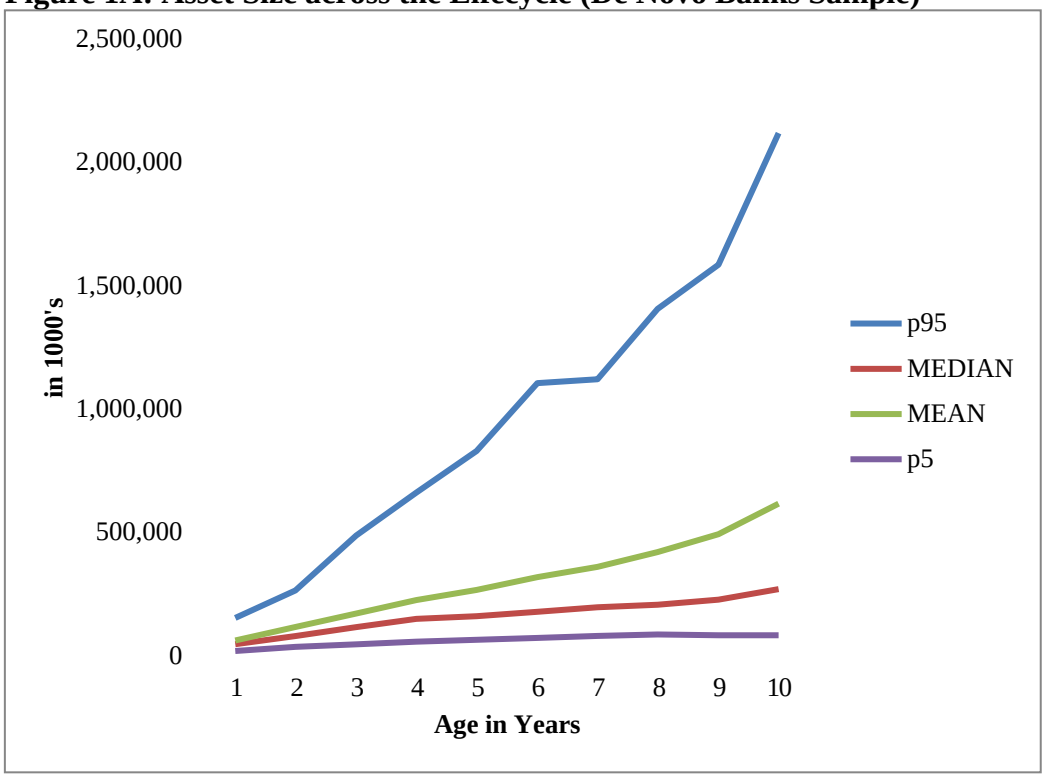


Figure 1B: Asset Size across the Lifecycle (De Novo Banks Population)

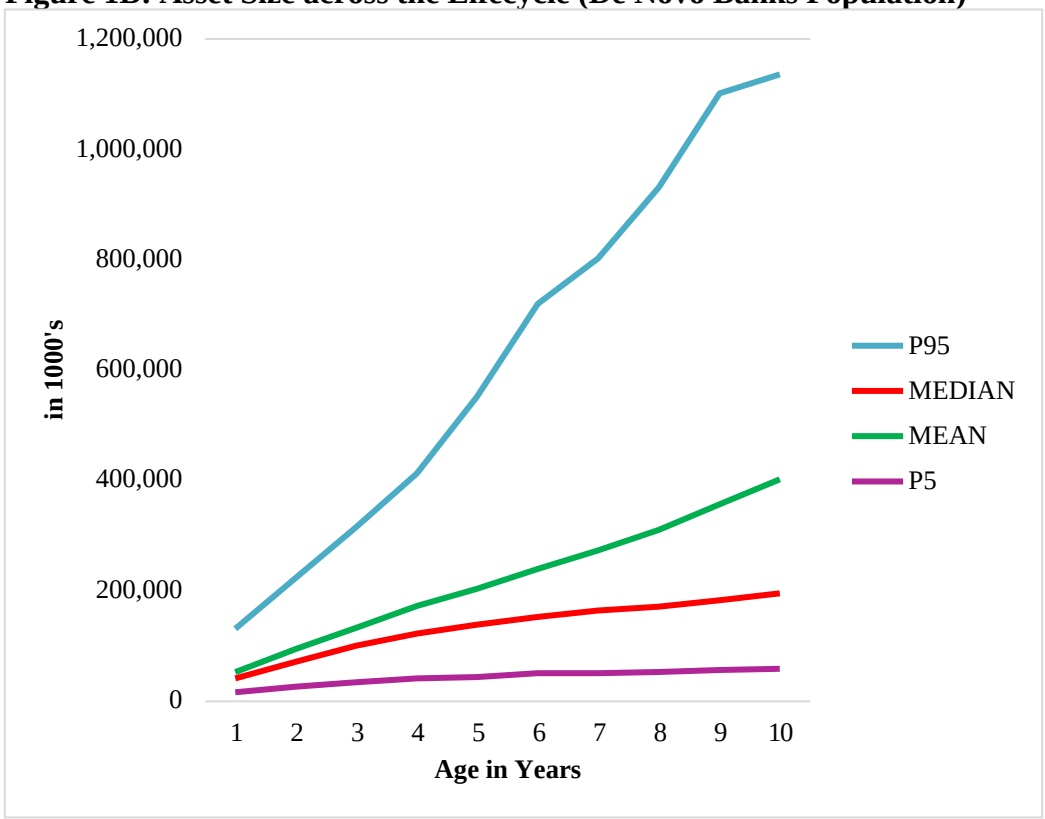


Figure 2A: Number of Employees across the Lifecycle (De Novo Banks Sample)

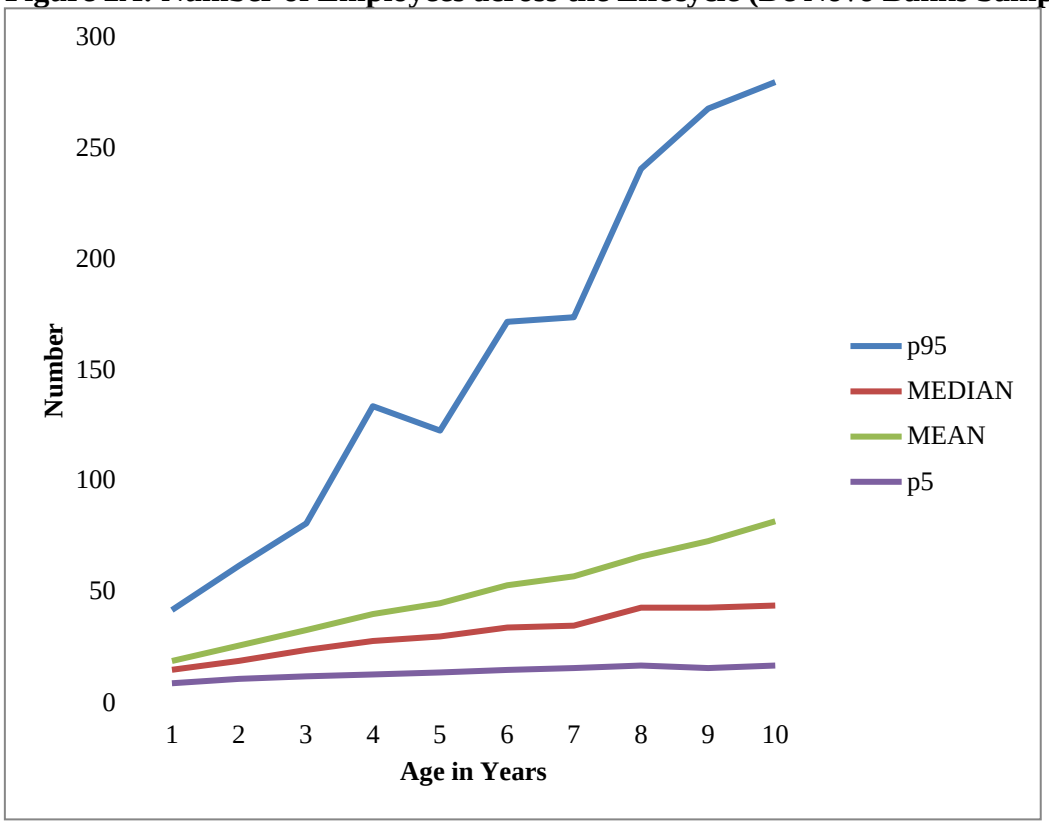


Figure 2B: Number of Employees across the Lifecycle (De Novo Banks Population)

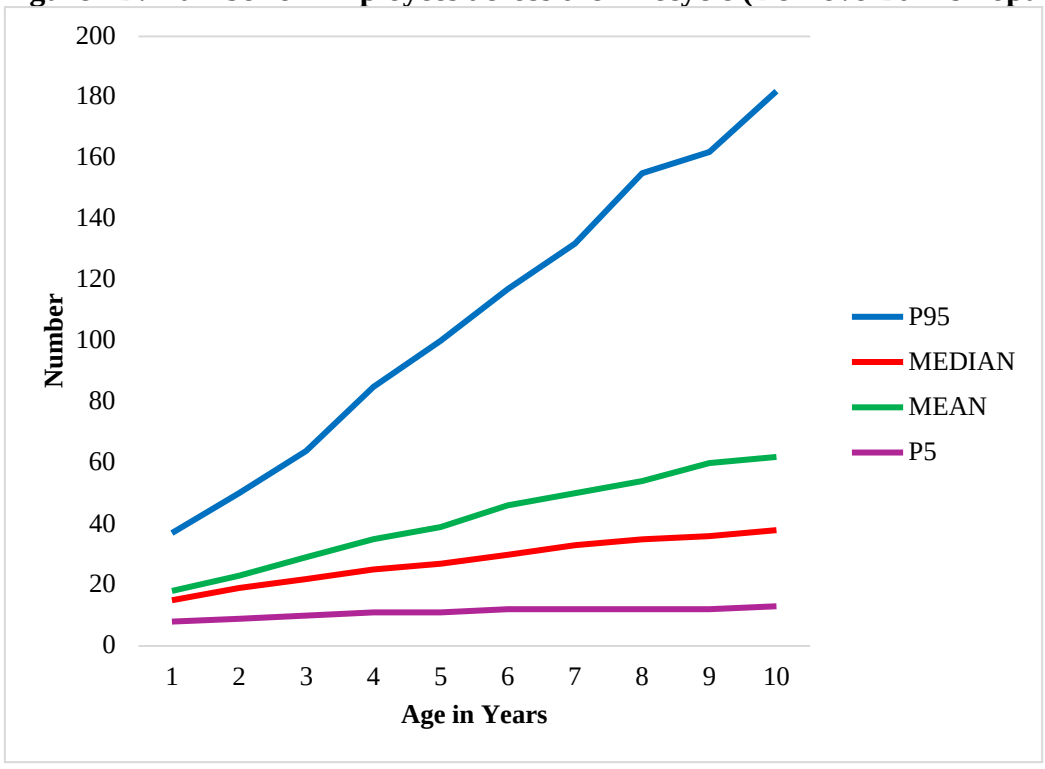


Figure 3A: Number of Failures and Mergers by Year (De Novo Banks Sample)

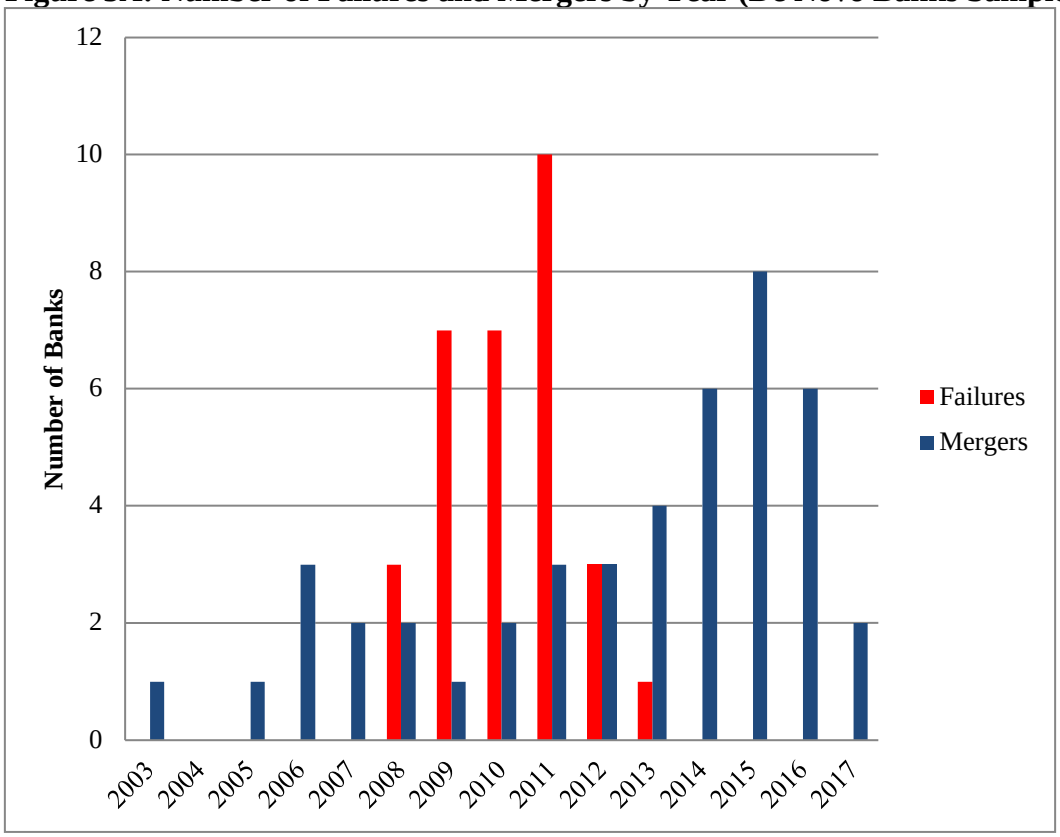


Figure 3B: Number of Failures and Mergers by Year (De Novo Bank Population)

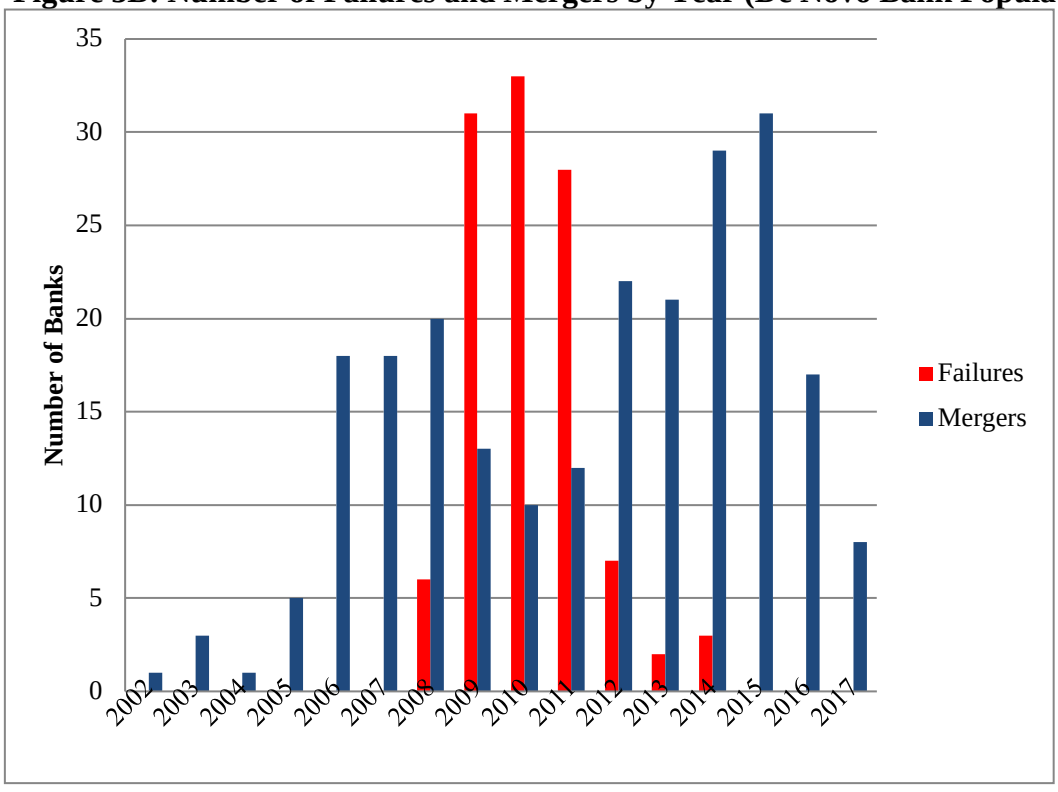


Figure 4A: Mean Balance Sheet Projections for First Three Years

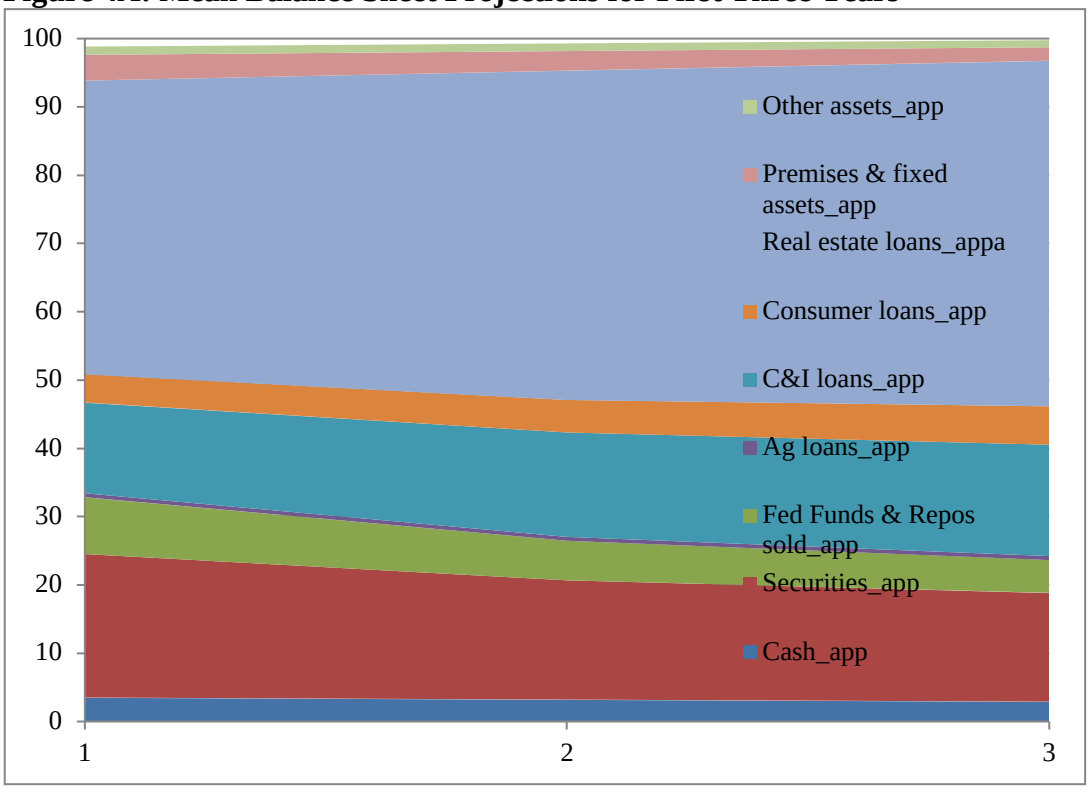


Figure 4B: Mean Actual Balance Sheet for First Three Years

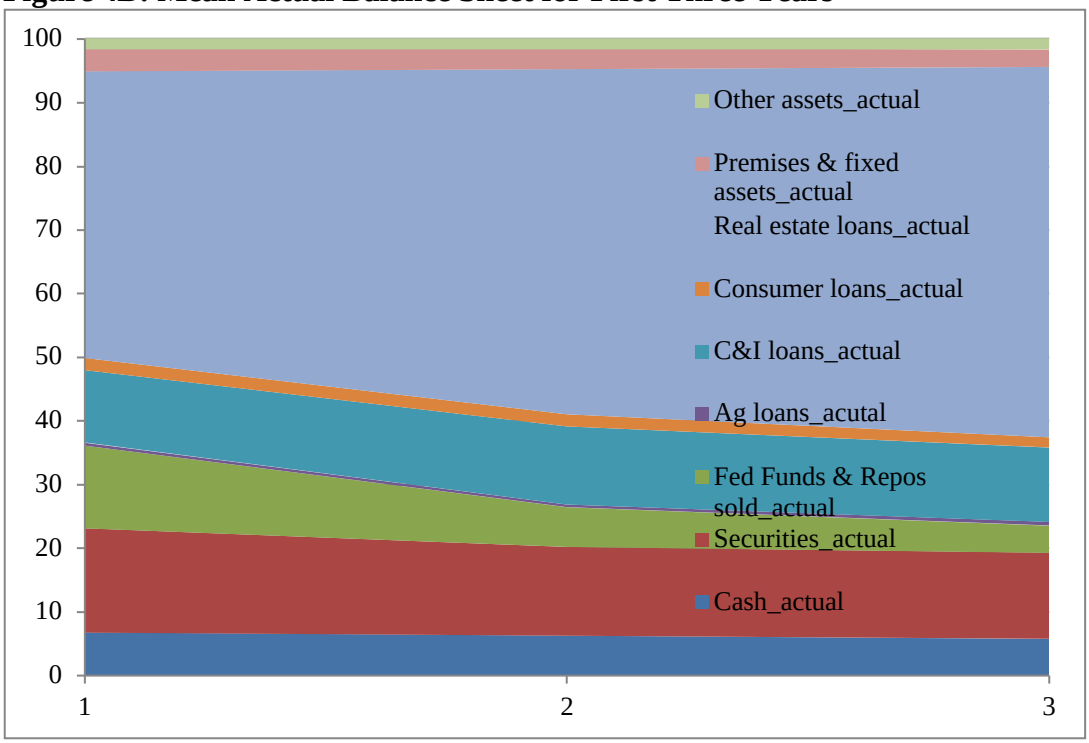
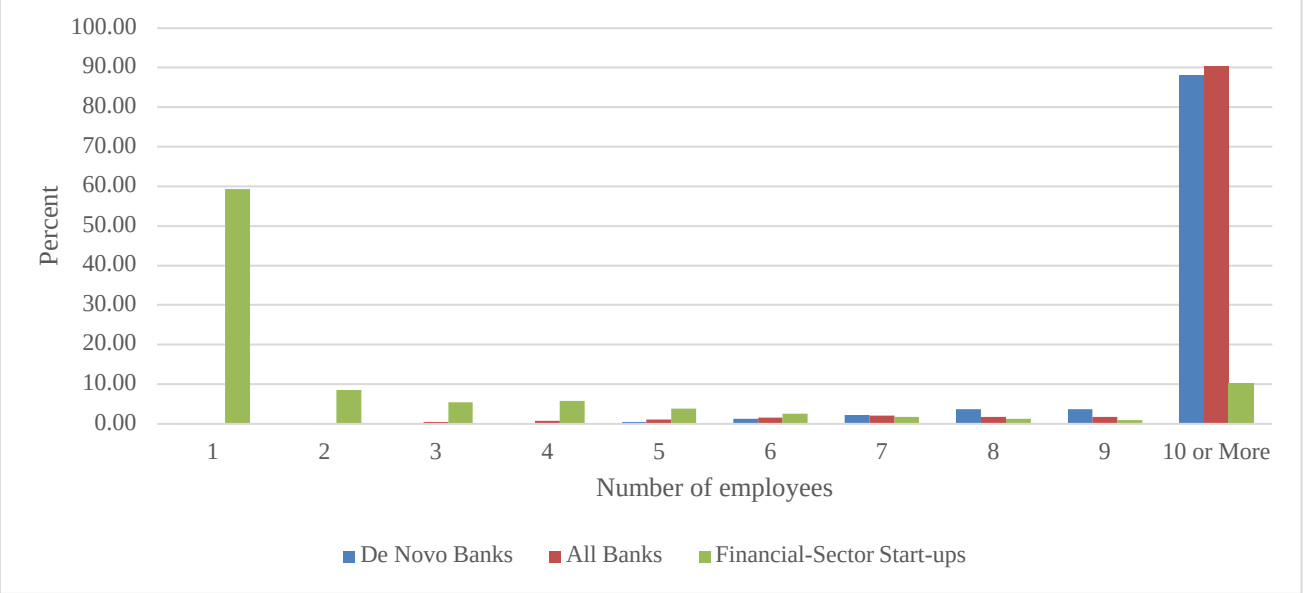


Figure 5: Comparison of De Novo Bank Employment with Financial Sector Start-ups



*For De Novo banks (chartered between 2000 and 2008) and financial sector start-ups, the number of employees is as of end of first year since establishment. For all banks, the number of employees is as of December 2004. We chose December 2004 since it is a mid-year between 2000 and 2008 when the De Novo banks are chartered.

Figure 6: Reasons for Starting a De Novo Bank

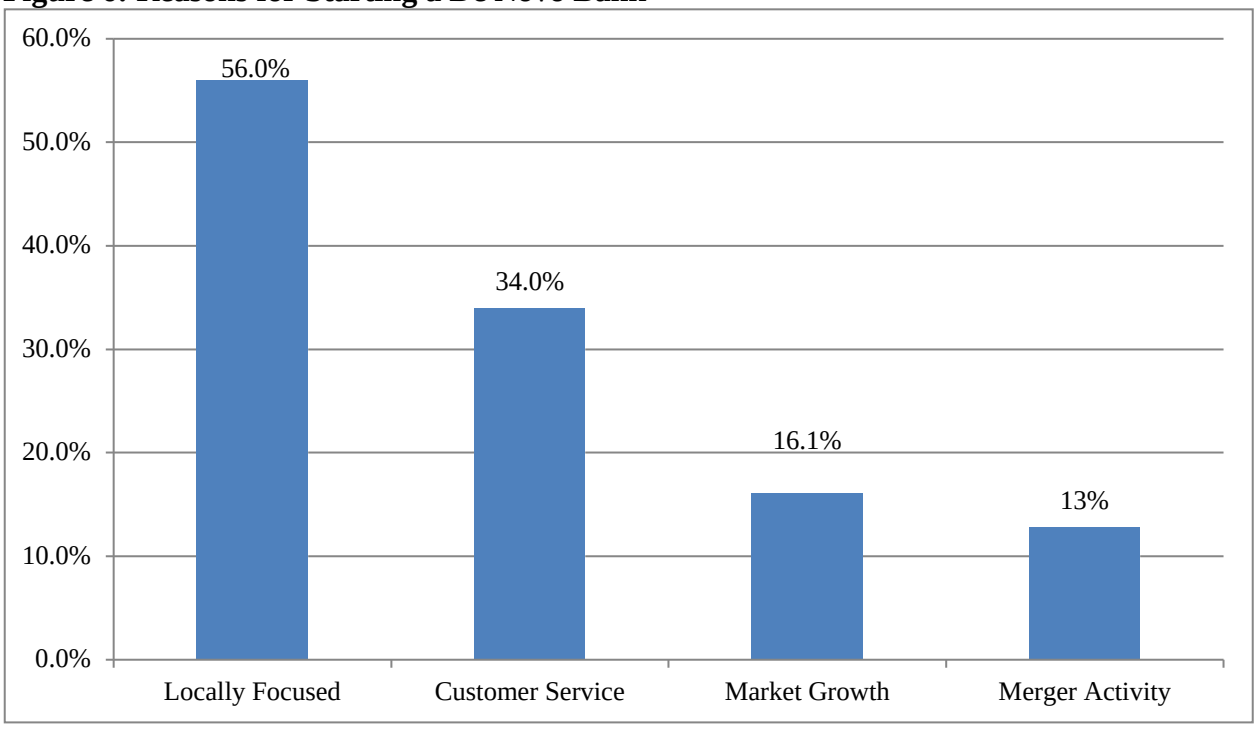


Figure 7. Source of De Novo Financing across Initial Asset Size Quartiles

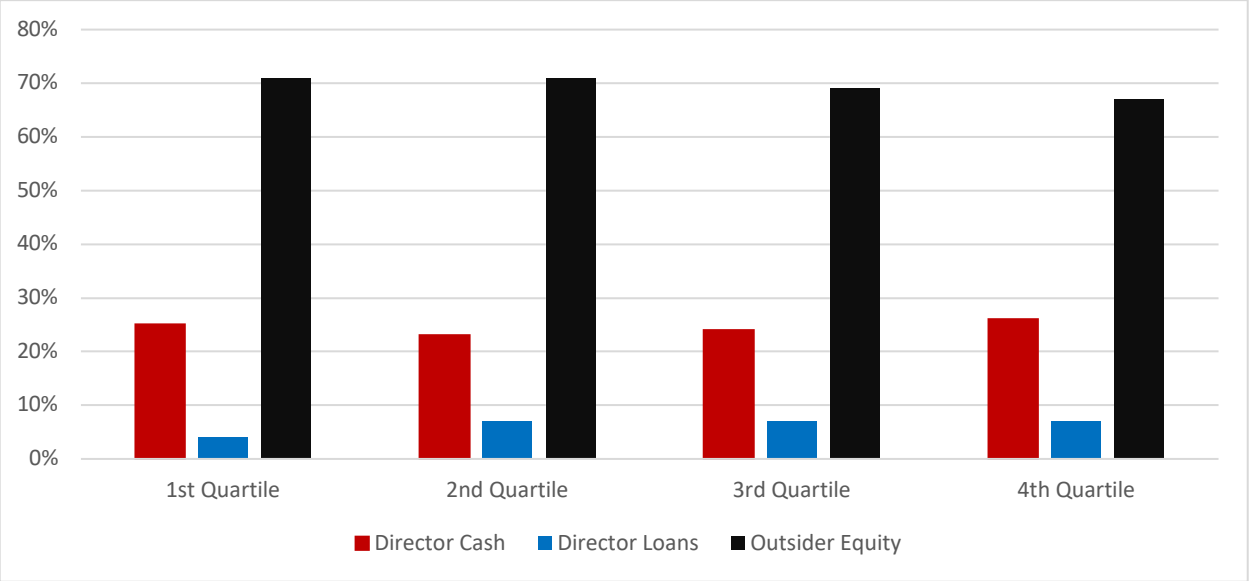


Figure 8. Source of De Novo Financing across Initial Capital Quartiles

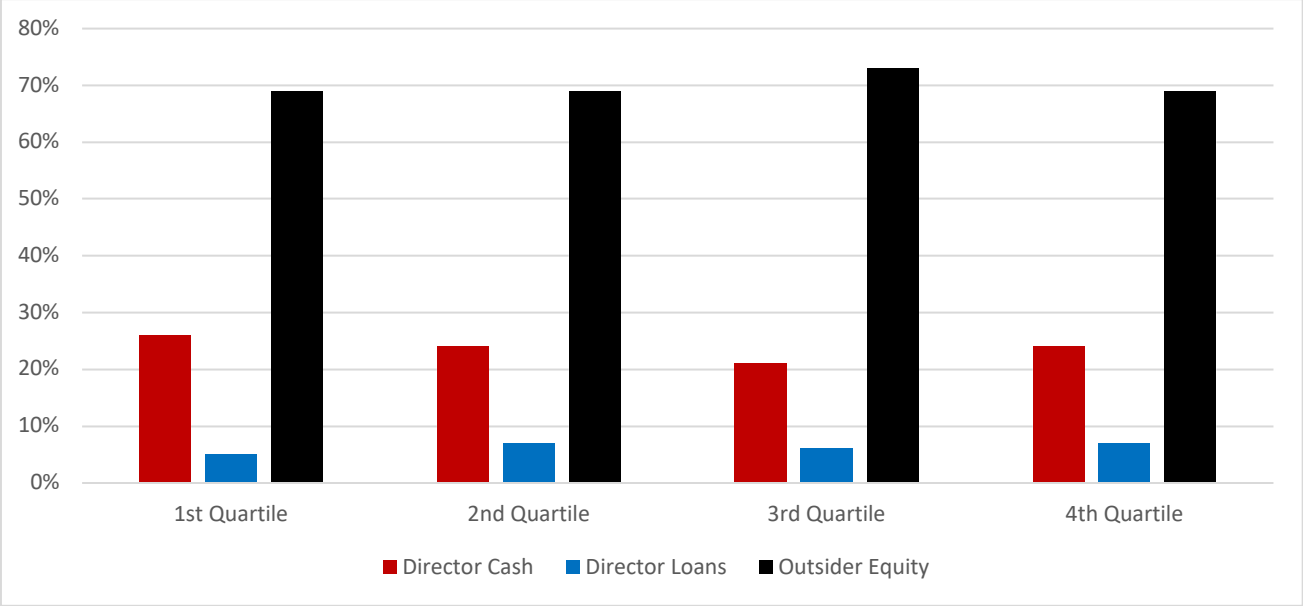


Figure 9. Actual Initial Capital relative to Initial Capital Assumed in the Business Plan across Bank Size Quartiles

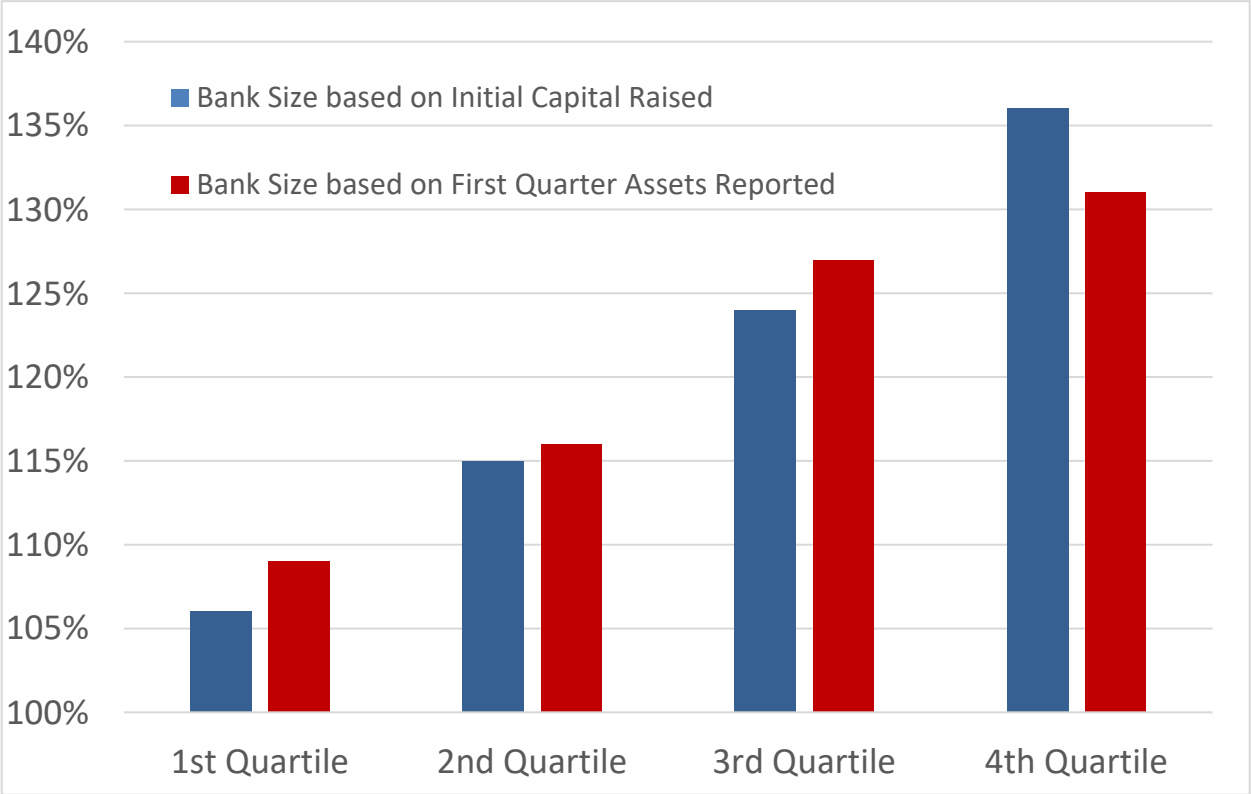


Table 1: Comparison of Projections and Actual Balance Sheet

Mean Projections and Actual Balance Sheet Items

	First Year End		Second Year End		Third Year End	
	Projections (%)	**Actual (%)**	**Projections (%)**	**Actual (%)**	**Projections (%)**	**Actual (%)**
Assets						
Cash	3.5	6.8	3.2	6.0	2.9	5.8
Securities	21.0	16.4	17.4	14.3	15.9	13.5
FedFunds&Repos_sold	8.3	13.0	5.8	6.1	4.8	4.3
Ag loans	0.6	0.4	0.6	0.5	0.6	0.6
C&I loans	13.3	11.4	15.2	12.2	16.3	11.7
Consumer loans	4.2	1.9	4.8	1.9	5.6	1.6
Real Estate loans	43.0	45.0	48.2	54.6	50.6	58.2
Commercial RE loans	32.1	32.9	35.9	40.6	37.4	43.1
Residential RE loans	10.8	11.6	12.2	13.3	13.1	14.3
Ag RE loans	0.002	0.61	0.001	0.64	0.001	0.74
Other loans	0.0	0.5	0.0	0.4	0.0	0.3
premises & fixed assets	3.8	3.9	2.8	3.2	2.0	2.8
Other Assets	1.2	1.3	1.1	1.4	1.0	1.6
Equity & Liabilities						
Equity	23.1	28.1	13.7	16.1	10.6	12.4
Deposits	38.8	38.9	43.7	37.4	45.6	37.5
Small time deposits	21.4	13.7	24.3	20.7	25.3	21.9
Large time deposits	14.3	16.3	15.6	21.2	15.6	22.2
Fed funds & Repos_purchased	0.0	1.7	0.0	1.5	0.0	1.3
Other borrowed money	1.6	0.9	2.0	2.6	2.3	4.2
Other liabilities	0.7	0.4	0.6	0.4	0.6	0.4

*The balance sheet items reported are % of total assets.

Table 2: Summary Statistics on De Novo Bank Entrepreneurs

Entrepreneur Demographics and Characteristics

	No. of Entrepreneurs	No. of Entrepreneurs with bank experience	Percent of Entrepreneurs with bank experience	Total Entrepreneur Investment in Bank/Total Equity Raised (%)	Entrepreneur Age	Bank Headquarter and Entrepreneur Residence Distance (miles)
Mean	11.0	5.2	48.6	24.4	52.4	39.2
Median	11.0	5	47.1	21.8	52.0	7.5

Entrepreneur Profession

Number of board members	Banker or retired banker	Real Estate	Health Care	CPA	Attorney	Business owner	Retiree	Other
At least one	94.6%	81.1%	43.8%	34.1%	47.6%	90.3%	36.8%	73.0%
At least two	63.8%	57.8%	13.0%	4.3%	18.4%	74.1%	9.2%	44.9%
At least three	33.5%	35.1%	3.8%	0.5%	5.9%	51.9%	2.2%	22.2%

Table 2 Continued.

Entrepreneurs' Previous Bank Size and Position Held[1]							
	President/CEO		**Director**		**Other[2]**		**Total**
	Number	(Percent) [Percent]	Number	(Percent) [Percent]	Number	(Percent) [Percent]	Number [Percent]
Less than $100 Mil	44	(21.78%) [4.58%]	100	(49.50%) [10.41%]	58	(28.71%) [6.04%]	202 [21.02%]
$100 to $500 Mil	49	(17.13%) [5.10%]	139	(48.60%) [14.46%]	98	(34.27%) [10.20%]	286 [29.76%]
$500 to $1 bil	5	(5.68%) [0.52%]	34	(38.64%) [3.54%]	49	(55.68%) [5.10%]	88 [9.16%]
$1 to $5 bil	7	(6.19%) [0.73%]	24	(21.24%) [2.50%]	82	(72.57%) [8.53%]	113 [11.76%]
$5 to $10 bil	4	(9.09%) [0.42%]	6	(13.64%) [0.62%]	34	(77.27%) [3.54%]	44 [4.58%]
Over $10 bil	3	(1.32%) [0.31%]	34	(14.91%) [3.54%]	191	(83.77%) [19.88%]	228 [23.73%]
CEOs' Previous Bank Size and Position Held							
Less than $100 Mil	27	(60.00%) [14.67%]	5	(11.11%) [2.72%]	13	(28.89%) [7.07%]	45 [24.46%]
$100 to $500 Mil	33	(60.00%) [17.93%]	1	(1.82%) [0.54%]	21	(38.18%) [11.41%]	55 [29.89%]
$500 to $1 bil	3	(23.08%) [1.63%]	0	(0.00%) [0.00%]	10	(76.92%) [5.43%]	13 [7.07%]
$1 to $5 bil	7	(33.33%) [3.80%]	2	(9.52%) [1.09%]	12	(57.14%) [6.52%]	21 [11.41%]
$5 to $10 bil	1	(14.29%) [0.54%]	0	(0.00%) [0.00%]	6	(85.71%) [3.26%]	7 [3.80%]
Over $10 bil	0	(0.00%) [0.00%]	2	(4.65%) [1.09%]	41	(95.35%) [22.28%]	43 [23.37%]

[1] Percent of the size group are reported in parentheses. Percent of all previous banks are reported in brackets.

[2]Other position includes a bank executive vice president, senior vice president, regional president, branch president, etc.

Table 3: Spawning of De Novo Bank Entrepreneurs.

	(1)	(2)	(3)
	Spawns/Employees	**Spawns/Employees**	**Spawns/Employees**
Intercept	8.448**	9.084**	9.716***
	[2.27]	[2.48]	[2.71]
Log(asset)	-0.688**	-0.739**	-0.801***
	[-2.38]	[-2.55]	[-2.78]
Log(age)	-0.850***	-0.776**	-0.361
	[-2.64]	[-2.35]	[-1.05]
Loans & leases/Assets	0.076***		
	[3.35]		
RE loans/Assets		0.082***	
		[3.77]	
CRE loans/Assets			0.122***
			[5.24]
C&I loans/Assets		0.073	0.019
		[1.37]	[0.36]
Merger	1.532*	1.577*	1.655**
	[1.85]	[1.90]	[2.00]
Asset growth	-0.006	-0.007	-0.008
	[-0.68]	[-0.76]	[-0.95]
Earnings	0.076	0.084	0.071
	[0.74]	[0.82]	[0.69]
Traditional activities	2.688***	2.596***	2.630***
	[3.44]	[3.34]	[3.41]
Adjusted R2	0.034	0.036	0.044
No. of observations	1422	1422	1422

Dependent variable is ratio of the number of spawns of de novo entrepreneurs per thousand spawning bank employees. Independent variables are spawning bank characteristics. T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 4A: Bank Origination Regressions
First Stage: Previous bank loan ratio and real estate experience of all Entrepreneurs

	(1)	(2)	(3)	(4)	(5)
VARIABLES	**C&D_year3**	**CRE_year3**	**RRE_year3**	**C&I_year3**	**Consumer_year3**
C&D_Entrepreneurs	0.4136***				
	(3.88)				
CRE_Entrepreneurs		0.4144***			
		(4.58)			
RRE_Entrepreneurs			0.4317***		
			(5.17)		
C&I_Entrepreneurs				0.3221***	
				(3.09)	
Consumer_Entrepreneurs					0.1676***
					(3.94)
Real Estate Exp_	0.1567***	0.1804**	-0.1062**	-0.0358	-0.0269**
Entrepreneurs	(3.33)	(2.43)	(-2.17)	(-0.92)	(-2.29)
Equity_Year3	-0.0400	-0.2241*	0.0301	-0.2938***	-0.0211
	(-0.50)	(-1.75)	(0.36)	(-4.31)	(-1.05)
Earnings_Year3	0.4054	0.9460	1.0001	-0.1919	-0.0904
	(0.42)	(0.62)	(1.00)	(-0.24)	(-0.38)
Nonperforming	1.0765	2.1158*	0.4071	-1.4891***	-0.0783
Loans_Year3	(1.57)	(1.96)	(0.57)	(-2.64)	(-0.46)
Noncore Funds_Year3	0.0609	0.1020	0.1590**	-0.0533	0.0165
	(0.92)	(0.98)	(2.40)	(-0.99)	(1.02)
Entrepreneurs from	-0.0338	-0.1708***	0.0716**	0.0032	0.0079
Same Bank	(-1.06)	(-3.28)	(2.19)	(0.12)	(0.97)
Entrepreneurs Equity to	-0.0771	-0.0158	-0.0847*	0.0663	-0.0075
Total Equity	(-1.57)	(-0.20)	(-1.66)	(1.63)	(-0.61)
County C&D	0.3653***				
	(3.37)				
County CRE		0.0608			
		(0.56)			
County RRE			0.0863		
			(1.18)		
County C&I				0.3299***	
				(2.65)	
County Consumer					-0.0436***
					(-2.67)
County Personal Income	-0.0260	0.0038	-0.1377	-0.0344	0.0019
Growth	(-0.18)	(0.02)	(-0.94)	(-0.29)	(0.05)
Constant	1.8947	24.779***	7.7487*	6.2703*	2.8277***
	(0.56)	(4.19)	(1.67)	(1.79)	(3.10)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	182	182	182	182	182
R-squared	0.499	0.43	0.403	0.286	0.268

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 4B: Bank Origination Regressions
First Stage: Previous bank loan ratio and real estate experience of CEOs

VARIABLES	(1) C&D_year3	(2) CRE_year3	(3) RRE_year3	(4) C&I_year3	(5) Consumer_year3
C&D_CEO	0.1436*				
	(1.80)				
CRE_CEO		0.2276***			
		(3.44)			
RRE_CEO			0.2512***		
			(4.13)		
C&I_CEO				0.2221***	
				(3.10)	
Consumer_CEO					0.1439***
					(4.66)
Real Estate Exp_ Entrepreneurs	0.1811***	0.2166***	-0.1078**	-0.0302	-0.0326***
	(3.74)	(2.84)	(-2.14)	(-0.77)	(-2.84)
Equity_Year3	-0.0297	-0.2362*	-0.0013	-0.2949***	-0.0183
	(-0.35)	(-1.79)	(-0.02)	(-4.32)	(-0.92)
Earnings_Year3	0.0021	0.3542	0.9800	-0.2431	-0.0320
	(0.00)	(0.22)	(0.95)	(-0.30)	(-0.13)
Nonperforming Loans_Year3	1.2747*	2.5390**	0.2922	-1.4889***	-0.1209
	(1.79)	(2.27)	(0.40)	(-2.62)	(-0.72)
Noncore Funds_Year3	0.0224	0.0316	0.1435**	-0.0380	0.0197
	(0.33)	(0.30)	(2.10)	(-0.70)	(1.25)
Entrepreneurs from Same Bank	-0.0281	-0.1449***	0.0635*	0.0032	0.0062
	(-0.85)	(-2.74)	(1.88)	(0.12)	(0.77)
Entrepreneurs Equity to Total Equity	-0.0579	0.0200	-0.0926*	0.0735*	-0.0050
	(-1.14)	(0.25)	(-1.77)	(1.80)	(-0.41)
County C&D	0.4749***				
	(4.31)				
County CRE		0.0795			
		(0.70)			
County RRE			0.0992		
			(1.32)		
County C&I				0.3187**	
				(2.54)	
County Consumer					-0.0404**
					(-2.54)
County Personal Income Growth	-0.1272	-0.0995	-0.0831	-0.0220	0.0028
	(-0.83)	(-0.41)	(-0.53)	(-0.18)	(0.08)
Constant	1.7169	27.6942***	12.3302***	6.7918*	3.0362***
	(0.49)	(4.60)	(2.70)	(1.95)	(3.51)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	181	181	181	181	181
R-Squared	0.463	0.398	0.371	0.286	0.291

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 5A: Projected Lending Regressions
First Stage: Previous bank loan ratio and real estate experience of all Entrepreneurs

VARIABLES	(1) C&D_Projected	(2) CRE_Projected	(3) RRE_Projected	(4) C&I_Projected	(5) Consumer_Projected
C&D_Entrepreneurs	0.4169***				
	(3.08)				
CRE_Entrepreneurs		0.2433**			
		(2.24)			
RRE_Entrepreneurs			0.0806		
			(0.69)		
C&I_Entrepreneurs				0.5000***	
				(3.41)	
Consumer_ Entrepreneurs					0.0691
					(0.34)
Real Estate Exp_ Entrepreneurs	0.0629	0.3170***	-0.0632	-0.0835	-0.0749
	(0.92)	(3.35)	(-1.03)	(-1.51)	(-1.37)
Equity_projected	-0.1565	-1.3232***	0.4028	-0.2038	-0.3052
	(-0.45)	(-2.76)	(1.34)	(-0.72)	(-1.11)
Earnings_ projected	-1.4485	-3.4196	-3.6239**	-0.0748	1.1805
	(-0.81)	(-1.39)	(-2.35)	(-0.05)	(0.84)
Noncore funds_ projected	0.0151	-0.0980	0.1323	0.1265	-0.0106
	(0.14)	(-0.69)	(1.45)	(1.54)	(-0.13)
Entrepreneurs from Same Bank	-0.0401	-0.0956	-0.0196	0.0540	0.0410
	(-0.82)	(-1.40)	(-0.46)	(1.37)	(1.06)
Entrepreneurs Equity to Total Equity	0.0356	0.1116	-0.0308	0.0260	-0.1030*
	(0.49)	(1.12)	(-0.49)	(0.45)	(-1.81)
C&D county	0.6352***				
	(3.90)				
CRE_county		0.2005			
		(1.39)			
RRE_county			-0.0015		
			(-0.02)		
C&I_county				0.1918	
				(1.11)	
Consumer_county					0.1059
					(0.54)
County Personal Income Growth	-0.2617	0.0088	0.0223	0.1729	-0.3371**
	(-1.25)	(0.03)	(0.12)	(1.03)	(-2.01)
Constant	6.8270	25.1017	-1.5450	7.5431	11.5330
	(0.58)	(1.49)	(-0.14)	(0.76)	(1.22)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	139	139	139	139	139
R-squared	0.278	0.288	0.206	0.235	0.167

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 5B: Projected Lending Regressions
First Stage: Previous bank loan ratio and real estate experience of CEOs

VARIABLES	(1) C&D_Projected	(2) CRE_Projected	(3) RRE_Projected	(4) C&I_Projected	(5) Consumer_Projected
C&D_CEO	0.3697***				
	(3.72)				
CRE_CEO		0.2304***			
		(2.96)			
RRE_CEO			0.0667		
			(0.81)		
C&I_CEO				0.2429**	
				(2.36)	
Consumer_CEO					0.0009
					(0.01)
Real Estate Exp_ Entrepreneurs	0.0797	0.2904***	-0.0408	-0.0746	-0.0793
	(1.14)	(3.09)	(-0.65)	(-1.28)	(-1.41)
Equity_projected	-0.1443	-1.2878***	0.3803	-0.3033	-0.3013
	(-0.42)	(-2.74)	(1.25)	(-1.03)	(-1.06)
Earnings_projected	-1.6953	-4.4002*	-3.3711**	-0.4660	1.1314
	(-0.94)	(-1.84)	(-2.18)	(-0.32)	(0.79)
Noncore funds_ projected	0.0427	-0.1136	0.1231	0.1192	-0.0084
	(0.40)	(-0.79)	(1.30)	(1.36)	(-0.10)
Entrepreneurs from Same Bank	-0.0495	-0.0761	-0.0298	0.0541	0.0413
	(-1.01)	(-1.14)	(-0.69)	(1.32)	(1.05)
Entrepreneurs Equity to Total Equity	0.0607	0.0950	-0.0185	0.0347	-0.1043*
	(0.84)	(0.98)	(-0.29)	(0.58)	(-1.79)
C&D_county	0.6672***				
	(4.18)				
CRE_county		0.2609*			
		(1.84)			
RRE_county			-0.0144		
			(-0.18)		
C&I_county				0.2262	
				(1.27)	
Consumer_county					0.1137
					(0.57)
County Personal Income Growth	-0.2422	-0.1567	0.1043	0.1289	-0.3645**
	(-1.11)	(-0.54)	(0.54)	(0.71)	(-2.08)
Constant	8.3625	27.3116*	-3.9262	12.5454	12.0375
	(0.71)	(1.68)	(-0.33)	(1.23)	(1.26)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	137	137	137	137	137
R-squared	0.298	0.306	0.207	0.198	0.162

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 6A: Bank Origination Regressions

First Stage: Previous bank loan ratio and real estate experience of all entrepreneurs controlling for the fraction of entrepreneurs previously employed in the county. Local_Entrepreneurs refers to share of entrepreneurs whose previous bank is in the same county as the De Novo bank.

VARIABLES	(1) C&D_year3	(2) CRE_year3	(3) RRE_year3	(4) C&I_year3	(5) Consumer_year3
C&D_Entrepreneurs	0.3740***				
	(2.98)				
CRE_Entrepreneurs		0.3164***			
		(2.71)			
RRE_Entrepreneurs			0.4339***		
			(3.35)		
C&I_Entrepreneurs				0.2760*	
				(1.77)	
Consumer_Entrepreneurs					0.1105**
					(2.01)
Local_Entrepreneurs	0.0016				
X C&D_Entrepreneurs	(0.53)				
Local_Entrepreneurs		0.0031			
X CRE_Entrepreneurs		(1.34)			
Local_Entrepreneurs			-0.0007		
X RRE_Entrepreneurs			(-0.28)		
Local_Entrepreneurs				0.0020	
X C&I_Entrepreneurs				(0.66)	
Local Entrepreneurs					0.0021
X Consumer_Entrepreneurs					(1.60)
Real Estate Exp_Entrepreneurs	0.1601***	0.1612**	-0.1127**	-0.0173	-0.0249**
	(3.28)	(2.10)	(-2.37)	(-0.44)	(-2.06)
Local_Entrepreneurs	-0.0299	-0.1002	0.0280	-0.0573	-0.0053
	(-0.97)	(-1.47)	(0.59)	(-1.35)	(-0.58)
Earnings_Year3	0.6414	0.8562	0.5241	0.0005	-0.0767
	(0.65)	(0.55)	(0.53)	(0.00)	(-0.31)
Non Performing Loans_Year3	1.0695	2.2359**	0.7803	-1.6101***	-0.0477
	(1.52)	(2.02)	(1.12)	(-2.76)	(-0.28)
Noncore Funds_Year3	0.0765	0.1232	0.1396**	-0.0508	0.0134
	(1.16)	(1.19)	(2.16)	(-0.94)	(0.83)
Entrepreneurs from Same Bank	-0.0391	-0.1777***	0.0717**	0.0110	0.0064
	(-1.21)	(-3.35)	(2.20)	(0.41)	(0.77)
Entrepreneurs Equity to	-0.0627	-0.0090	-0.0672	0.0698*	-0.0073
Total Equity	(-1.29)	(-0.12)	(-1.38)	(1.73)	(-0.61)
County C&D	0.3686***				
	(3.40)				
County CRE		-0.0064			
		(-0.06)			
County RRE			0.1782**		
			(2.49)		
County C&I				0.2286*	
				(1.66)	
County Consumer					-0.0435
					(-1.52)
County Personal Income Growth	-0.1446	0.0603	0.4465**	0.0899	-0.0149
	(-0.82)	(0.21)	(2.52)	(0.60)	(-0.34)
Constant	4.3670	30.4326***	1.7589	9.0445**	2.8929***
	(1.24)	(4.82)	(0.36)	(2.25)	(2.96)
Charter Year Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	182	182	182	182	182
R-squared	0.505	0.437	0.439	0.287	0.272

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 6B: Bank Origination Regressions

First Stage: Previous bank loan ratio and real estate experience of the CEO controlling for whether the CEO was previously employed in the county. Local_CEO is a binary variable indicating that CEO's previous bank was in the same county as current De Novo bank.

VARIABLES	(1) C&D_year3	(2) CRE_year3	(3) RRE_year3	(4) C&I_year3	(5) Consumer_year3
C&D_CEO	0.1252				
	(1.43)				
CRE_CEO		0.1822**			
		(2.21)			
Residential RE_CEO			0.3728***		
			(4.56)		
C&I_CEO				0.2459***	
				(2.65)	
Consumer_CEO					0.1430***
					(3.98)
Local CEO X C&D_CEO	0.1783				
	(1.15)				
Local CEO X CRE_CEO		0.1229			
		(0.96)			
Local_CEO X Residential RE_CEO			-0.2965**		
			(-2.57)		
Local_CEO X C&I_CEO				-0.0203	
				(-0.14)	
Local CEO X Consumer_CEO					-0.0081
					(-0.11)
Real Estate Exp_Entrepreneurs	0.1862***	0.2099***	-0.1098**	-0.0193	-0.0328***
	(3.82)	(2.69)	(-2.29)	(-0.48)	(-2.79)
Local_CEO	-2.7737	-4.9080	6.1958**	-1.6195	-0.1965
	(-1.38)	(-1.15)	(2.51)	(-0.75)	(-0.41)
Earnings_Year3	0.0073	0.0822	0.3887	-0.1256	-0.0361
	(0.01)	(0.05)	(0.38)	(-0.15)	(-0.15)
NonPerforming Loans_Year3	1.2992*	2.5225**	0.5199	-1.4554**	-0.1267
	(1.83)	(2.24)	(0.74)	(-2.50)	(-0.74)
Noncore Funds_Year3	0.0513	0.0549	0.1391**	-0.0295	0.0184
	(0.75)	(0.51)	(2.11)	(-0.53)	(1.14)
Entrepreneurs from Same Bank	-0.0371	-0.1452***	0.0744**	0.0075	0.0045
	(-1.12)	(-2.72)	(2.26)	(0.28)	(0.56)
Entrepreneurs Equity to Total Equity	-0.0396	0.0369	-0.0872*	0.0778*	-0.0035
	(-0.80)	(0.47)	(-1.76)	(1.92)	(-0.29)
County C&D	0.4524***				
	(4.22)				
County CRE		0.0227			
		(0.21)			
County RRE			0.1687**		
			(2.31)		
County C&I				0.2444*	
				(1.76)	
County Consumer					-0.0518*
					(-1.88)
County Personal Income Growth	-0.2118	-0.0420	0.4183**	0.0714	-0.0037
	(-1.13)	(-0.14)	(2.26)	(0.47)	(-0.08)
Constant	4.4092	30.7725***	5.6499	7.6274*	3.3194***
	(1.27)	(5.06)	(1.27)	(1.97)	(3.52)
Charter Year Fixed Effect	Yes	Yes	Yes	Yes	Yes
Observations	180	180	180	180	180
R-squared	0.476	0.402	0.428	0.286	0.282

Table 7A: Bank Performance Regressions
Second Stage: Bank performance measures as a function of instrumented CRE from Entrepreneur Experience

VARIABLES	(1) ΔEquity	(2) ΔEarnings	(3) Δ30-89 Days Past Due	(4) ΔNon-performing	(5) ΔLoan Charge-offs
Instrumented CRE	-0.2101***	-0.0843*	0.0372	0.1811***	0.0634**
	(-3.34)	(-1.87)	(1.51)	(2.76)	(2.54)
Equity_Year3	-0.7513***	-0.1020***	0.0125	0.0384	0.0317*
	(-16.45)	(-3.11)	(0.70)	(0.81)	(1.75)
Earnings_Year3	1.4955***	-1.2513***	-0.2468	0.4042	0.4303**
	(2.85)	(-3.32)	(-1.21)	(0.74)	(2.07)
Nonperforming Loans_Year3	0.3256	-0.0473	-0.2255	0.0763	-0.0451
	(0.80)	(-0.16)	(-1.42)	(0.18)	(-0.28)
Noncore Funds_Year3	0.0588*	0.0053	0.0085	-0.0201	-0.0173
	(1.66)	(0.21)	(0.62)	(-0.55)	(-1.24)
Entrepreneurs from Same	-0.0141	-0.0007	-0.0029	-0.0220	0.0066
Bank	(-0.76)	(-0.05)	(-0.41)	(-1.14)	(0.90)
Entrepreneurs Equity to Total	0.0800***	0.0192	0.0002	-0.0142	-0.0113
Equity	(2.96)	(0.99)	(0.02)	(-0.51)	(-1.06)
County CRE	0.0180	-0.0359	-0.0165	-0.0308	0.0005
	(0.48)	(-1.34)	(-1.13)	(-0.79)	(0.03)
County Personal Income	0.0661	0.0291	0.0175	0.0058	-0.0510
Growth	(0.84)	(0.52)	(0.57)	(0.07)	(-1.64)
Constant	9.3764***	3.1434	-0.3559	1.3458	-0.5752
	(3.29)	(1.54)	(-0.32)	(0.45)	(-0.51)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	182	182	182	182	182
R-squared	0.859	0.347	0.075	0.213	0.197

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 7B: Bank Performance Regressions
Second Stage: Bank performance measures as a function of instrumented CRE from CEO Experience

VARIABLES	(1) ΔEquity	(2) ΔEarnings	(3) Δ30-89 Days Past Due	(4) ΔNon-performing	(5) ΔLoan Charge-offs
Instrumented CRE	-0.1895***	-0.0520	0.0305	0.1712**	0.0326
	(-2.59)	(-0.97)	(1.05)	(2.21)	(1.12)
Equity_Year3	-0.7469***	-0.0951***	0.0111	0.0365	0.0249
	(-16.40)	(-2.87)	(0.62)	(0.76)	(1.38)
Earnings_Year3	1.4680***	-1.2828***	-0.2355	0.4320	0.4479**
	(2.85)	(-3.41)	(-1.15)	(0.79)	(2.18)
Nonperforming Loans_Year3	0.2521	-0.1475	-0.1986	0.1301	0.0345
	(0.61)	(-0.49)	(-1.21)	(0.30)	(0.21)
Noncore Funds_Year3	0.0578*	0.0036	0.0088	-0.0198	-0.0155
	(1.66)	(0.14)	(0.64)	(-0.54)	(-1.12)
Entrepreneurs from Same Bank	-0.0116	0.0030	-0.0038	-0.0235	0.0035
	(-0.63)	(0.22)	(-0.52)	(-1.20)	(0.47)
Entrepreneur Equity to Total Equity	0.0785***	0.0172	0.0007	-0.0130	-0.0099
	(2.96)	(0.89)	(0.07)	(-0.46)	(-0.94)
County CRE	0.0180	-0.0377	-0.0169	-0.0331	0.0041
	(0.48)	(-1.39)	(-1.14)	(-0.84)	(0.28)
County Personal Income	0.0637	0.0323	0.0197	0.0156	-0.0612*
	(0.79)	(0.55)	(0.62)	(0.18)	(-1.91)
Constant	8.6609***	2.0507	-0.1183	1.7239	0.4338
	(2.82)	(0.92)	(-0.10)	(0.53)	(0.35)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	181	181	181	181	181
R-squared	0.866	0.358	0.088	0.222	0.230

Table 8A: Bank Performance Regressions
Second Stage: Bank performance measures as a function of instrumented C&D from Entrepreneur Experience

VARIABLES	(1) ΔEquity	(2) ΔEarnings	(3) Δ30-89 Days Past Due	(4) ΔNon-performing	(5) ΔLoan Charge-offs
Instrumented C&D	-0.2404***	-0.0848	0.0414	0.3121***	0.0783**
	(-2.62)	(-1.21)	(1.10)	(2.99)	(2.05)
Equity_Year3	-0.7131***	-0.0842***	0.0064	0.0098	0.0201
	(-17.51)	(-2.71)	(0.38)	(0.21)	(1.19)
Earnings_Year3	1.3460***	-1.2911***	-0.2140	0.5378	0.4724**
	(2.76)	(-3.47)	(-1.07)	(0.97)	(2.32)
Nonperforming Loans_Year3	0.1424	-0.1057	-0.1949	0.0730	-0.0039
	(0.38)	(-0.37)	(-1.28)	(0.17)	(-0.03)
Noncore Funds_Year3	0.0546*	0.0035	0.0079	-0.0194	-0.0162
	(1.66)	(0.14)	(0.58)	(-0.52)	(-1.19)
Entrepreneurs from Same Bank	0.0040	0.0069	-0.0061	-0.0357*	0.0012
	(0.25)	(0.56)	(-0.92)	(-1.95)	(0.18)
Entrepreneurs Equity to Total Equity	0.0615**	0.0098	0.0020	0.0042	-0.0053
	(2.46)	(0.52)	(0.19)	(0.15)	(-0.51)
County C&D	0.0795	-0.0444	-0.0212	-0.1336*	-0.0166
	(1.15)	(-0.84)	(-0.75)	(-1.70)	(-0.58)
County Personal Income Growth	0.0731	0.0287	0.0131	0.0167	-0.0513*
	(0.99)	(0.51)	(0.43)	(0.20)	(-1.68)
Constant	3.9936**	0.5108	0.3415	5.1755***	1.0687
	(2.34)	(0.39)	(0.49)	(2.67)	(1.50)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	182	182	182	182	182
R-squared	0.877	0.356	0.103	0.183	0.227

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.

Table 8B: Bank Performance Regressions
Second Stage: Bank performance measures as a function of instrumented C&D from CEO Experience

VARIABLES	(1) ΔEquity	(2) ΔEarnings	(3) Δ30-89 Days Past Due	(4) ΔNon-performing	(5) ΔLoan Charge-offs
Instrumented C&D	-0.2018*	-0.0139	0.0459	0.3253**	0.0482
	(-1.75)	(-0.15)	(0.95)	(2.43)	(0.99)
Equity_Year3	-0.7120***	-0.0821***	0.0067	0.0106	0.0190
	(-17.68)	(-2.61)	(0.40)	(0.23)	(1.12)
Earnings_Year3	1.3363***	-1.2993***	-0.2093	0.5580	0.4669**
	(2.77)	(-3.44)	(-1.04)	(1.00)	(2.29)
Nonperforming Loans_Year3	0.0739	-0.2200	-0.1957	0.0781	0.0339
	(0.19)	(-0.74)	(-1.22)	(0.18)	(0.21)
Noncore Funds_Year3	0.0543*	0.0027	0.0077	-0.0200	-0.0157
	(1.68)	(0.11)	(0.57)	(-0.53)	(-1.15)
Entrepreneurs from Same Bank	0.0048	0.0082	-0.0061	-0.0359*	0.0009
	(0.30)	(0.66)	(-0.92)	(-1.94)	(0.13)
Entrepreneurs Equity to Total Equity	0.0629**	0.0125	0.0022	0.0052	-0.0066
	(2.53)	(0.64)	(0.22)	(0.18)	(-0.63)
County C&D	0.0604	-0.0810	-0.0243	-0.1435	0.0003
	(0.77)	(-1.32)	(-0.74)	(-1.57)	(0.01)
County Personal Income	0.0758	0.0390	0.0165	0.0299	-0.0603*
	(0.99)	(0.65)	(0.51)	(0.34)	(-1.86)
Constant	3.8050**	0.1636	0.3197	5.1106**	1.2165*
	(2.21)	(0.12)	(0.44)	(2.56)	(1.68)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	181	181	181	181	181
R-squared	0.881	0.344	0.102	0.174	0.234

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 9: Failure Models
Second Stage: Failure as a function of instrumented CRE and C&D loan ratios

VARIABLES	(1) Failure	(2) Failure	(3) Failure	(4) Failure
Instrumented C&D (Entrepreneur)	0.0187**			
	(2.55)			
Instrumented C&D (CEO)		0.0170*		
		(1.83)		
Instrumented CRE (Entrepreneur)			0.0116**	
			(2.38)	
Instrumented CRE (CEO)				0.0119**
				(2.06)
Equity_Year3	0.0033	0.0033	0.0053	0.0054
	(1.02)	(1.03)	(1.51)	(1.51)
Earnings_Year3	0.0290	0.0320	0.0217	0.0245
	(0.74)	(0.82)	(0.54)	(0.60)
Nonperforming Loans_Year3	0.0537*	0.0598*	0.0557*	0.0587*
	(1.81)	(1.94)	(1.78)	(1.79)
Noncore Funds_Year3	0.0000	-0.0000	0.0001	0.0001
	(0.01)	(-0.01)	(0.05)	(0.03)
Entrepreneurs from Same Bank	-0.0021	-0.0022*	-0.0012	-0.0012
	(-1.59)	(-1.67)	(-0.81)	(-0.82)
Entrepreneurs Equity to Total Equity	-0.0005	-0.0005	-0.0017	-0.0016
	(-0.26)	(-0.27)	(-0.83)	(-0.78)
County C&D	-0.0019	-0.0014		
	(-0.34)	(-0.22)		
County CRE			0.0007	0.0001
			(0.23)	(0.05)
County Personal Income Growth	0.0062	0.0074	0.0056	0.0075
	(1.06)	(1.20)	(0.93)	(1.18)
Constant	-0.0527	-0.0444	-0.3119	-0.3156
	(-0.39)	(-0.32)	(-1.42)	(-1.30)
Year Fixed Effects	YES	YES	YES	YES
Observations	182	181	182	181
R-squared	0.248	0.261	0.200	0.199

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 10: Entrepreneurs' or CEO's previous bank having high standard audit predict De Novo bank having high standard audit, Audit_High_DeNovo is a binary variable indicating the De Novo bank's audit standards is high. Namely, the bank's financial statements are audited in accordance with Generally Accepted Auditing Standards (GAAS) as promulgated by the (ASB) or the Public Company Accounting Oversight Board's (PCAOB) auditing standards. Audit_High_Entrepreneurs indicates that 67% or higher share of the entrepreneurs come from a previous bank whose audit standards is high.

VARIABLES	(1) Audit_High_DeNovo	(2) Audit_High_DeNovo
Audit_High_Entrepreneurs	0.2324***	
	(2.79)	
Audit_High_CEO		0.1969***
		(2.81)
Equity_3yr	0.0076	0.0071
	(1.57)	(1.42)
Earnings_3yr	0.1199**	0.1137**
	(2.27)	(2.04)
Nonperforming loans_3yr	0.0329	0.0382
	(0.94)	(1.03)
Noncore funds_3yr	0.0036	0.0030
	(1.08)	(0.86)
Entrepreneurs from same bank	0.0010	0.0019
	(0.64)	(1.11)
Entrepreneurs Equity to Total Equity	-0.0016	-0.0021
	(-0.66)	(-0.78)
County personal income growth	-0.0043	-0.0048
	(-0.43)	(-0.42)
CRE_County	-0.0083**	-0.0086**
	(-2.40)	(-2.29)
Constant	0.6672***	0.6582***
	(3.70)	(3.41)
Charter Year Fixed Effect	Yes	Yes
Observations	169	158
R-squared	0.216	0.224

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 11: Asset Growth Regressions

VARIABLES	(1) ΔEquity	(2) ΔEarnings	(3) Δ30-89 Days Past Due	(4) ΔNon-performing	(5) ΔLoan Charge-offs
Asset Growth_Year3	-0.9834**	-0.1427	0.3264*	1.3438***	1.3922***
	(-2.41)	(-0.44)	(1.89)	(2.88)	(3.02)
Equity_Year3	-0.7197***	-0.0890***	0.0074	0.0065	0.0045
	(-17.05)	(-2.66)	(0.42)	(0.14)	(0.09)
Earnings_Year3	0.9241*	-1.5258***	-0.1534	0.6687	0.6677
	(1.76)	(-3.67)	(-0.69)	(1.11)	(1.12)
Nonperforming Loans	-0.4513	-0.3278	-0.1043	0.6409	0.7072*
(Year 3)	(-1.27)	(-1.16)	(-0.69)	(1.57)	(1.75)
Noncore Funds_Year3	0.0588*	0.0047	0.0068	-0.0239	-0.0293
	(1.72)	(0.17)	(0.47)	(-0.61)	(-0.76)
Entrepreneurs from Same	0.0016	0.0077	-0.0051	-0.0359*	-0.0323*
Bank	(0.10)	(0.59)	(-0.72)	(-1.87)	(-1.70)
Entrepreneurs Equity to Total	0.0560**	0.0043	0.0005	-0.0042	-0.0005
Equity	(2.20)	(0.21)	(0.05)	(-0.14)	(-0.02)
County Personal Income	0.0430	0.0698	-0.0067	-0.0926	-0.0931
Growth	(0.47)	(0.96)	(-0.17)	(-0.88)	(-0.89)
Constant	4.4303**	2.1349	-0.1429	1.7704	1.7553
	(2.38)	(1.45)	(-0.18)	(0.83)	(0.83)
Year Fixed Effects	YES	YES	YES	YES	YES
Observations	180	180	180	180	180
R-squared	0.881	0.344	0.097	0.210	0.212

T-stats in parenthesis. *** p<0.01, ** p<0.05, * p<0.1

Table 12: Matching all De Novo and Established Banks by Year, Assets, and Deposit-to-Asset Ratio

	(1) CRE	(2) C&D	(3) RRE	(4) C&I	(5) Consumer	(6) ΔNon-Performing	(7) Δloan Charge-Offs	(8) Failure
Denovo Bank	10.8797***	4.4910***	-4.6375***	6.2329***	-2.6074***	0.8755***	0.3140***	3.7448**
	(12.01)	(8.28)	(-9.01)	(9.25)	(-15.05)	(3.47)	(4.13)	(1.99)
Observations	22,791	22,791	22,791	22,823	22,760	18,434	18,368	22,823

T-stats in parentheses *** p<0.01, ** p<0.05, * p<0.1

Appendix

Table A.1 Variables Definition

Name	Definition
Initial capital assumed in the business plan	De Novo bank's initial capital agreed upon with the FDIC based on the bank's business plan
Spawns/employees	Number of de novo bank spawns per 1000 bank employees
Log(asset)	Log of spawning bank assets averaged over 2000 to 2008
Log(age)	Log of spawning bank age. Age is a difference between established date of the first spawned de novo bank in our sample and the established date of the spawning bank
Loans & leases/Assets	Total loans and leases to assets ratio (%) averaged over 2000 to 2008
RE loans/Assets	Total real estate loans to assets ratio (%) averaged over 2000 to 2008
CRE loans/Assets	Sum of non-farm and non-residential, multifamily, and construction & land development RE loans to assets ratio (%) averaged over 2000 to 2008
C&I loans/Assets	Commercial & Industrial loans to assets ratio (%) averaged over 2000 to 2008
Merger	A dummy variable equal to 1 if a spawning bank was merged out any time between 3 years before the bank employees first spawned a de novo bank and the year the bank employees last spawned a de novo bank in our sample. This only includes unassisted mergers and not failures
Asset growth	Merger-adjusted one year asset growth (%) averaged over 2000 to 2008
Earnings	Merger-adjusted annual income before taxes to assets ratio (%) averaged over 2000 to 2008
Traditional activities	A dummy variable equal to 1 if a bank has non-interest income only from traditional activities such as fiduciary activities or service charges on deposit accounts
C&D_Year3	De novo bank's construction & land development RE loans to assets ratio (%) at the end of third year
CRE_Year3	De novo bank's commercial RE loans to assets ratio (%) at the end of third year
RRE_Year3	De novo bank's residential RE loans to assets ratio (%) at the end of third year
C&I_Year3	De novo bank's commercial & industrial loans to assets ratio (%) at the end of third year
Consumer_Year3	De novo bank's consumer loans to assets ratio (%) at the end of third year
Asset Growth_Year3	De novo bank's change in asset size between end of first year and third year
C&D_Entrepreneurs	De novo bank entrepreneurs' previous bank construction & land development RE loans to assets ratio (%) year-end before their last year at the bank, averaged across all entrepreneurs
CRE_Entrepreneurs	De novo bank entrepreneurs' previous bank commercial RE loans to assets ratio (%) year-end before CEO's last year at the bank, averaged across all entrepreneurs
RRE_Entrepreneurs	De novo bank entrepreneurs' previous bank residential RE loans to assets ratio (%) year-end before CEO's last year at the bank, averaged across all entrepreneurs

C&I_Entrepreneurs	De novo bank entrepreneurs' previous bank commercial & industrial loans to assets ratio (%) year-end before CEO's last year at the bank, averaged across all entrepreneurs
Consumer_Entrepreneurs	De novo bank entrepreneurs' previous bank consumer loans to assets ratio (%) year-end before CEO's last year at the bank, averaged across all entrepreneurs
Real Estate Exp_ Entrepreneurs	Percent of entrepreneurs with prior employment experience in the real estate industry
Equity_Year3	De novo bank's total equity to assets ratio (%) at the end of third year
Earnings_Year3	De novo bank's annual income before taxes to assets ratio (%) at the end of third year
Nonperforming Loans_Year3	De novo bank's nonperforming loans to assets ratio (%) at the end of third year
Noncore funds_Year3	De novo bank's noncore funds to assets ratio (%) at the end of third year
Entrepreneurs from Same Bank	Percent of entrepreneurs with prior experience in the same bank
Entrepreneurs Equity to Total Equity	Percent of equity derived from directors at the time of charter
County C&D	Total construction & land development RE loans/total deposits in a county
County CRE	Total commercial RE loans/total deposits in a county
County RRE	Total residential RE loans/total deposits in a county
County C&I	Total commercial & industrial loans/total deposits in a county
County Consumer	Total consumer loans/total deposits in a county
County Personal Income Growth	One-year growth rate in county personal income
C&D_CEO	De novo bank CEO's previous bank construction & land development RE loans to assets ratio (%) year-end before CEO's last year at the bank
CRE_CEO	De novo bank CEO's previous bank commercial RE loans to assets ratio (%) year-end before CEO's last year at the bank
RRE_CEO	De novo bank CEO's previous bank residential RE loans to assets ratio (%) year-end before CEO's last year at the bank
C&I_CEO	De novo bank CEO's previous bank commercial & industrial loans to assets ratio (%) year-end before CEO's last year at the bank
Consumer_CEO	De novo bank CEO's previous bank consumer loans to assets ratio (%) year-end before CEO's last year at the bank
C&D_Projected	De novo bank's projected construction & development RE loans to assets ratio (%) at the end of year 3

CRE_Projected	De novo bank's projected commercial RE loans to assets ratio (%) at the end of year 3
RRE_Projected	De novo bank's projected residential RE loans to assets ratio (%) at the end of year 3
C&I_Projected	De novo bank's projected commercial & industrial loans to assets ratio (%) at the end of year 3
Consumer_Projected	De novo bank's projected consumer loans to assets ratio (%) at the end of year 3
Equity_Projected	De novo bank's projected equity to assets ratio (%) at the end of year 3
Earnings_Projected	De novo bank's projected earnings to assets ratio (%) at the end of year 3
Noncore funds_Projected	De novo bank's projected noncore funds to assets ratio (%) at the end of year 3
Local_Entrepreneurs	Share of entrepreneurs whose previous bank is in the same county as De Novo bank
Local_CEO	Binary variable indicating that CEO's previous bank is in the same county as De Novo bank
ΔEquity	Difference between De novo bank's equity to assets ratio in 2010 and 2008
ΔEarnings	Difference between De novo bank's earnings to assets ratio in 2010 and 2008
Δ30-89 Days Past Dues	Difference between De novo bank's loans & leases 30-89 days past due to assets ratio in 2010 and 2008
ΔNon-performing	Difference between De novo bank's nonperforming loans to assets ratio in 2010 and 2008
ΔLoan Charge-offs	Difference between De novo bank's loan charge-offs to assets ratio in 2010 and 2008
Instrumented CRE	De novo bank's instrumented commercial RE loans to assets ratio at the end of year 3
Instrumented C&D	De novo bank's instrumented construction & development RE loans to assets ratio at the end of year 3
Failure	Binary variable indicating whether a De Novo bank failed within the 10 years since being chartered
Audit_High_DeNovo	Binary variable indicating the De Novo bank's audit standards is high
Audit_High_Entrepreneurs	Binary variable indicating that the share of the entrepreneurs coming from a previous bank whose audit standards is high is at the top quartertile (67% or higher share)
Audit_High_CEO	Binary variable indicating that the CEO comes from a previous bank whose audit standards is high
Asset Growth_Year3	De novo bank's one year asset growth at the end of third year

Table A.2: Comparison of De Novo Banks and All Banks

	De Novo Banks[1]	All banks[2]
No. of institutions	1042	8534
Asset size[3,4]	$133,419,350	$1,527,294,860
Failure rate[5]	12.5%	5.7%

[1]De Novo banks chartered between 2000-2008, Lee and Yom (2016).
[2]Insured depository institutions as of December 2007.
[3]For De Novo banks, mean asset size is as of end of third year since chartered.
[4]For all banks, mean asset size is as of end of 2007.
[5]Based on failures between 2008 and 2013.

Table A.3: Outcome of De Novo Bank Sample and the Population
Outcomes are measured ten years following charter.

	De Novo Bank Sample		De Novo Bank Population	
Outcome[2]	**Number**	**(Percent)**	**Number**	**(Percent)**
Unassisted mergers	44	(23.8%)	229	(22.0%)
Failures	31	(16.8%)	110	(10.6%)

Table A.4: Comparison of De Novo Bank Sample and the Population
Among the De Novo banks included in our sample, 67% are headquartered in the states below. The remaining 33% have headquarters in other states.

	De Novo Bank Sample		De Novo Bank Population	
Charter Year	**Number**	**(Percent)**	**Number**	**(Percent)**
2000	17	(9.2%)	159	(15.3%)
2001	12	(6.5%)	102	(9.8%)
2002	5	(2.7%)	73	(7.0%)
2003	16	(8.6%)	94	(9.0%)
2004	21	(11.4%)	103	(9.9%)
2005	25	(13.5%)	138	(13.2%)
2006	31	(16.8%)	151	(14.5%)
2007	30	(16.2%)	147	(14.1%)
2008	28	(15.1%)	75	(7.2%)
Charter State	**Number**	**(Percent)**	**Number[1]**	**(Percent)**
Florida	46	(24.9%)	118	(11.3%)
Georgia	46	(24.9%)	112	(10.7%)
North Carolina	18	(9.7%)	40	(3.8%)
Alabama	12	(6.5%)	26	(2.5%)
New Jersey	12	(6.5%)	39	(3.7%)
Pennsylvania	9	(4.9%)	32	(3.1%)
South Carolina	9	(4.9%)	22	(2.1%)
Texas	7	(3.8%)	72	(6.9%)
New York	7	(3.8%)	26	(2.5%)
Maryland	4	(2.2%)	11	(1.1%)
Colorado	3	(1.6%)	17	(1.6%)
West Virginia	3	(1.6%)	4	(0.4%)
Missouri	2	(1.1%)	25	(2.4%)
California	1	(0.5%)	123	(11.8%)
Connecticut	1	(0.5%)	11	(1.1%)
DC	1	(0.5%)	2	(0.2%)
Delaware	1	(0.5%)	4	(0.4%)
Idaho	1	(0.5%)	3	(0.3%)
Louisiana	1	(0.5%)	6	(0.6%)
Mississippi	1	(0.5%)	7	(0.7%)
Bank Size	**Asset Size ($000s)**		**Asset Size ($000s)**	
Mean	$24,995		$21,042	