The failure of new entrants in commercial banking markets: a split-population duration analysis☆

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Abstract

Almost one in four of the new commercial banks chartered in the United States during the 1980s failed. This study uses a split-population duration model to examine failure patterns and failure determinants for these banks and compares the results to a benchmark model estimated for small established banks. The results are consistent with a ''life cycle'' pattern of new bank failure: compared to small established banks, newly chartered banks are initially less likely, then substantially more likely, and finally equally likely to fail. These patterns were most extreme for banks chartered just prior to the banking recession of the late 1980s or early 1990s.
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1. Introduction

As the U.S. commercial banking industry continues to consolidate, the number of new, or de novo, commercial banks in the United States has burgeoned. Over 1200 new bank charters were issued by state and federal regulators between 1995 and 2001 or roughly one new

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charter for every three existing charters that disappeared due to mergers and acquisitions. Indeed, recent studies find a causal link between bank mergers and de novo bank charters (Berger, Bonime, Goldberg, & White, 1999; Keeton, 2000), supporting the anecdotal wisdom that new banks spring up when depositors, small business borrowers, and loan officers become disgruntled, displaced, or dismissed in the aftermath of a bank merger. In addition to preserving retail competition in markets where existing community banks have been acquired, de novo banks are potentially important for ensuring access to credit for small businesses (DeYoung, Goldberg, & White, 1999). However, like most new business ventures, newly chartered banks can be financially fragile—as a result, a new bank cannot be relied upon as a long-run source of credit or competitive rivalry until it establishes a strong financial footing.

This study examines the financial performance of commercial banks chartered in the United States between 1980 and 1985, a period of especially intense chartering activity. Studying de novo banks from the early 1980s, rather than the more recent wave of de novos from the late 1990s, has two important advantages. First, the survivors among these banks are now 15–20 years old, so the data will capture all the stages of their entire financial life cycles, from birth to adolescence to financial maturity. Second, these banks started up just prior to the turbulent banking conditions of the late 1980s and early 1990s, so the data will reflect the abilities and inabilities of these new banks to withstand periods of intense economic pressure. Although one might argue that an analysis of banks chartered during the 1980s cannot be prescriptive for banks chartered during the 1990s or early 2000s, evidence presented below suggests that the rate of financial development of newly chartered banks is in many ways invariant to the era in which they start up.

Four sets of information are collected for each of the sample banks: a vector of key financial ratios at the end of its first year of life, a vector of the local environmental conditions under which it operated, whether the bank exited the sample by either failure or acquisition before it was 14 years old, and if so, the date at which it exited the sample. A "split-population duration model" is used to estimate three sets of parameters: the probability that de novo banks fail during the first 14 years of their lives, the distribution of de novo bank failures across this time period, and which financial and environmental conditions are strongly associated with higher/lower probabilities of failure and faster/slower times to failure. To judge the relative magnitudes of these estimated parameters, a separate benchmark duration model is estimated for small established commercial banks located in the same geographic markets as the de novo banks.

The results both reinforce and sharpen earlier research on de novo bank life cycles (DeYoung, 1999). The average de novo bank was initially less likely to fail than the average established bank, largely because of very high levels of initial start-up capital. However, after about 4 years, the average de novo bank had become just as likely to fail as the average established bank, as fast asset growth and negative earnings ate into its cushion of excess capital. At 8 years, the estimated failure rate for the average de novo bank climbed to twice that of the average established bank but began to decline after that as the average de novo bank became more financially mature. However, the probability of failure for any given de novo bank strongly depended on how its life cycle was positioned vis-a-vis the business