



# SMALL BUSINESS RESEARCH SUMMARY

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## Impact of Tight Money and/or Recessions on Small Business

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### Purpose

Small businesses may be particularly exposed to recessions, banking conditions, and monetary policy. Small firms typically rely more for their credit on bank lending than larger firms do and may be more adversely affected when tighter monetary policies or a deterioration in bank health reduce the supply of bank loans. During the 1990-1991 recession, for example, smaller businesses were affected more than larger businesses by banks' troubles. This study addresses the relative effects on small businesses of changes in various economic, monetary, and financial conditions. To do so, the study attempts to answer these questions:

- (1) Do economic slowdowns, tighter monetary policy, or adverse conditions in banking sector affect small businesses more than larger businesses?
- (2) During tight monetary periods or economic slowdowns, what are the effects on real economic activity at smaller businesses and in the overall economy of small, medium, and large-size bank capital and SBA-guaranteed loan programs?
- (3) How much are various effects changed during economic slowdowns or when interest rates are high?

### Overall Findings

The findings suggest that tighter monetary policy and adverse conditions in the banking sector reduce economic activity in businesses of all sizes. Using banks' capital positions and delinquency rates as

proxy measures for conditions in banking, the study found that capital pressures at small banks turned out to be particularly detrimental to the performance of small businesses.

Evidence was found that increased flows of SBA-guaranteed loans raised output, employment, wages and salaries, and nonfarm proprietors' incomes. To the extent that they did, SBA-guaranteed lending acted as an economic stabilizer.

The effects of various ameliorating or counter-cyclical policies may be significantly larger than would be suggested by their average effects over the whole period of observation.

### Highlights

- This study reaffirms the conventional wisdom that higher federal funds interest rates reduce the amount of bank lending. Lending also declined in the face of adverse banking developments, such as reduced bank equity capital and higher loan delinquency rates.
- Small bank capital had the largest effect on employment. This suggests that capital at small banks was "high-powered capital," in terms of stimulating employment. The effect on employment of additional capital at small banks was about three times the effect at large banks.
- Larger numbers and amounts of SBA-guaranteed loans tended to raise employment and payroll at firms of all sizes.

- Generally, a decline in bank capital leads to a reduction in the number of bank loans. However, a reduction in bank capital at both small and large banks was found to lead to an increase in the volume of SBA-guaranteed loans, although the effect was not statistically significant. This finding suggests that the SBA program is countercyclical, providing a stabilizing influence on small business lending.

- Reduced bank capital and increased real estate delinquencies at small banks were more associated with business failures and bankruptcies than the same deterioration at larger banks.

- During periods of slow growth or of tight monetary policy, the effects of bank capital levels, loan delinquencies, and SBA-guaranteed loans were both much larger and more statistically significant than during other periods. Thus, the effects of both adverse changes and potential solutions were magnified during recessions.

## Scope and Methodology

The study estimated how much and how differently small businesses responded to banking sector difficulties and aggregate economic conditions over the 1991-2000 period. Annual data from a variety of sources including banks' call reports, U.S. Bureau of the Census data for business activities in firms of different sizes, and reports on macroeconomic conditions from the Federal Reserve and the Bureau of Economic Analysis were used in the statistical analysis. Most variables were adjusted for inflation and population growth. In general, changes in various measures of business activity relative to changes in other variables were estimated. This specification has the benefit of removing "fixed effects," which were likely to differ considerably across states but not be readily measured.

Ordinary least squares using annual data for each state for each year from 1991 to 2000 were estimated. Data for some of the variables were not available for the years before 1990 or after 2000, which precluded extending the sample period. Dependent variables in the models included employment, number of firms, dollar payrolls, loans, gross state product (GSP) growth rates, personal income and some of its

major components (wages and salaries and nonfarm proprietors' incomes), SBA-guaranteed loans, business failures, and business bankruptcies. To the extent possible, business activities were displayed by firm size. The effects on employment, number of firms, and payrolls were estimated both at the aggregate level and disaggregated into activities at firms with either 1-19, 20-99, 100-499, or more than 499 employees. The effects on various categories of bank loans (commercial, consumer, etc.) by bank size were also estimated. Bank sizes were small, with less than \$1 billion in assets; medium-sized, with \$1 to \$10 billion in assets; large, with \$10 billion to \$50 billion in assets; and megabanks, with more than \$50 billion in assets. .

Independent variables included bank capital, loan delinquencies, SBA-guaranteed loans, and macroeconomic conditions. Bank capital measures for banks of various sizes were used. Loan delinquencies were separated by loan type (commercial and real estate) and by bank size. To measure economic conditions, the growth rates of gross state product, the federal funds rate, and spreads of risky over safer short-term and long-term interest rates were used.

## Ordering Information

The full text of this report and summaries of other studies performed under contract to the U.S. Small Business Administration's Office of Advocacy are available on the Internet at [www.sba.gov/advo/research](http://www.sba.gov/advo/research). Printed copies are available for purchase from:

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