## SMALL BUSINESS



# RESEARCH SUMMARY

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### Small Business during the Business Cycle

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#### **Purpose**

After the longest expansion in post-war history, the U.S. economy has been through a recession and is struggling to return to a solid growth path. How small firms behave during the different phases of a business cycle—expansion and recession—is again a focus of policy discussion. This research separates firm size differences related to the economic cycle from differences that might be related to longer term economic trends. It also looks at various quarterly indicators produced by small business surveys to determine what, if any, insights they provide into where small businesses are in relation to the economic business cycle.

#### **Overall Findings**

Industries react differently to changes in the business cycle. Within some industries, primarily those that produce goods, there are noticeable differences between small and large business activities related to cyclical changes. In the construction industry, small business gross domestic product (GDP) fluctuates much more than large business GDP. In the service industry there is little difference between small and large firms in response to the business cycle.

#### **Highlights**

• The firm size relationship of GDP to the business cycle has changed over time. The study compares six expansionary periods (from the low point

of a cycle to the next peak) since the late 1950s. Small business GDP declined relative to large business GDP during the earliest two expansionary periods (1958 and 1961), held about steady during the 1970s, and rose during the 1980s and 1990s.

- Cyclical changes affect industries differently. Construction, populated primarily by small businesses, is among the industries most sensitive to the business cycle. Small construction firms are both more negatively affected by downturns and more positively affected by expansions than large construction firms.
- The manufacturing and mining industries also show firm size differences related to the business cycle, especially in the non-compensation components of GDP (profits, interest payments, etc.) Large manufacturing businesses are more cyclically sensitive, in part related to large swings in corporate profits. They grow faster than small manufacturing businesses during expansions and may also dip lower during contractions.
- The finance, insurance, and real estate industry and the trade sectors show little difference by firm size in their response to the business cycle.
- Service businesses, which produce a large portion of small business GDP, are less cyclically sensitive and show a modest difference between large and small business activity over the cycle.
- When the Index of Small Business Optimism produced by the National Federation of Independent Business (NFIB) is above 103, it indicates an expansionary mode for small business GDP.

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#### **Scope and Methodology**

The study used a variety of annual business size measures but primarily focused on GDP by business size, currently available for 1958-1999, and the major sub-components of those data, compensation and noncompensation (which includes net interest, depreciation, profit-type income and indirect business taxes). Limited by the unavailability of monthly or quarterly data, the study was not able to examine small firms' behavior during the recession phases, which have been relatively short in duration.

Regression analysis was used with the GDP data to estimate the relationships of the fluctuations in GDP by major industry sector to the fluctuations in overall GDP, and within industry sectors, the relationships of fluctuations in GDP by business size to the those of the industry overall.

Other data examined for differences by business size that could be related to cyclical changes in the economy were employment by establishment size and selected measures of small business financing activities.

The study examines the possible use of quarterly survey data from the NFIB as an indicator of small business' place in the business cycle.

#### **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 <a href="https://www.sba.gov/advo/research">www.sba.gov/advo/research</a>. Printed copies are available for purchase from:

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