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Small Business Research Summary

Advocacy: the voice of small business in government

November 2005 No. 267

The Effect of Changes in Monetary Policy on the Expectations, Spending, and Hiring Decisions of Small Business Owners

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2005. [42] pages. Voorhees, N.J. 08043

The transmission channels through which changes in monetary policy affect private sector spending and hiring are incompletely understood, especially in the small business sector. This sector is responsible for most of the job growth and innovation in the U.S. economy and half of the private sector GDP production. Despite the importance of this sector's contribution to real economic activity, many small firms are not closely tied to the capital markets.

This study documents how small firms react to unexpected changes in monetary policy. Monthly survey data obtained from the National Federation of Independent Business illustrate how owner expectations are affected by these changes, with corresponding adjustments to spending and hiring plans, and ultimately changes in actual spending and hiring. Thus, the results provide some new micro level insight into how quickly changes in monetary policy work through the small business sector and ultimately the aggregate real economy.

This analysis is unique among studies of the transmission channels of monetary policy in two ways. First, the data include small firm expectations for both the economy as it affects general business conditions and their own sales as well as for spending and hiring plans. Two of the surveys are bifurcated on the date of a surprise policy announcement, thus permitting a more precise examination of how the policy change affected expectations and plans of small firm owners. Second, the disaggregated data allow a comparison of the reaction of interest-sensitive sectors such as construction and manufacturing to less sensitive sectors such as non-professional services or retailing to monetary policy changes.

Overall Findings

The findings indicate that the small business sector responds immediately to announced changes in monetary policy and that these changes have significant impacts on employment and prices, the two major concerns of monetary policy.

Highlights

- Small business owners respond within two weeks of unexpected changes in monetary policy announced by the Federal Reserve Board. As measured by the percent of firms responding positively to a group of questions about expectations and spending plans, the changes were significant.
- Owners with no exposure to interest rates and borrowing costs respond in much the same way as interest-sensitive borrowers.
- These changes produced are associated with significant changes in the inflation and unemployment rates in the month after the announcement.
- The responses to changes in monetary policy differ substantially by industry groups.
- The spending responses do not conform to the simple predictions of capital market models of the response to monetary policy (e.g. lower rates do not always produce positive spending and hiring responses).
- Firm owners clearly interpret Federal Reserve Board actions in the context of other information about the economy and their local markets. A rational expectations model appears to describe the responses of owners better, but this model cannot be used to predict systematically the responses of owners to policy changes.

This report was developed under a contract with the Small Business Administration, Office of Advocacy, and contains information and analysis that was reviewed and edited by officials of the Office of Advocacy. However, the final conclusions of the report do not necessarily reflect the views of the Office of Advocacy.

Methodology

The analysis relies on the monthly surveys conducted by the National Federation of Independent Business of their members. These surveys ask about the owner's outlook for the economy and overall business environment, company plans for hiring, capital spending, inventory investment, worker compensation and selling prices. Two of the surveys were bifurcated in April and September 2001 when the Federal Reserve Board announced surprise changes in monetary policy, with unexpected inter-meeting declines in the target Fed funds rate. In addition, the response of owners to an unexpected increase in the target Fed funds rate in April 1994 was examined as well. The former changes with the bifurcated samples allow a more precise assessment of how owner expectations and plans change.

The mean responses to the questions are computed before and after the policy change for April and September 2001. Significance is assessed by examining the sampling error between the two periods. Tests are conducted to ensure that the responses received before the policy change and after are statistically independent.

Assessment of the effect of policy changes on actual hiring and spending plans are more difficult to assess because of the effect of other economic events taking place during that time. An alternative approach is used that incorporates the post-policy change responses to hiring plans and planned price changes into previously estimated equations that related these variables to the unemployment rate and CPI inflation.

The responses are also disaggregated by industry for construction, manufacturing, retailing and non-professional services. The smaller sample sizes made it more difficult to assess the significance of changes, but non-parametric tests still provide evidence of important negative effects on expectations and plans for the construction industry.

For the April 1994 policy change there is no bifurcated sample but it was a surprise increase instead of a surprise decrease as was the case in April and September 2001. While significant changes were identified comparing May versus March responses, they could have been attributable to seasonal factors. After seasonally adjusting the responses, none of the signs of the changes are affected, although the significance changes for a few of the variables.

This report was peer reviewed consistent with Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research at *advocacy@sba.gov* or (202) 205-6533.

Ordering Information

The full text of this report and summaries of other studies performed under contract with the U.S. Small Business Administration's Office of Advocacy are available on the Internet at ***www.sba.gov/advo/research***. Copies are available for purchase from:

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