Extracting fiscal policy expectations from daily stock returns

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Abstract

The "Fiscal foresight problem" poses a challenge to researchers who wish to estimate macroeconomic impacts of fiscal policies. That is, as much of the policies are pre-announced, the traditional identification strategy which relies on the timing and the amount of actual spending changes could be misleading. In Shioji and Morita (2014), we addressed this problem by constructing a daily indicator of surprises about future public investment spending changes for Japan. Our approach combined a detailed analysis of newspaper articles with information from the stock market. The latter was represented by a weighted average of stock returns across companies from the sector deeply involved with public work, namely the construction industry. A potential shortcoming with this approach is that any shock that has an industry-wide consequence, which *happened* to arrive on the same day that a news about policy arrived will be reflected in this average return.

In contrast, in this paper, we propose a new indicator which takes advantage of heterogeneity across firms within the same industry. Degrees of dependence on public procurement differ markedly between construction companies. For some firms, over 80% of their work is government-related. Others essentially do all their work for the private sector. Yet they share many other features, such as large land ownership and a heavy reliance on bank finance. By looking at differences in the reactions of stock returns between those firms, we should be able to come up with a more purified measure of changes in the private agents' expectations about policies. Based on this idea, we propose two new indicators. One is simply the difference in the average excess returns between two groups of firms characterized by different degrees of dependence on public investment. The other one is more elaborate and is based on the "Target Rotation" approach in the factor analysis.

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