Abstract

This paper presents a dynamic investment model that explains differences in the sensitivity of small- and large-sized firms to changes in the money market interest rate. In contrast to existing studies on the firm size effects of monetary policy, the importance of firms as monetary transmission channel does not originate from credit market imperfections, but from size-related differences in the degree of investment irreversibility. The degree of investment irreversibility is determined by sunk capital investment expenditures. We show that size-related differences in sunk investment expenditures have two interdependent effects: they (i) affect the optimal investment behavior of small- and large-sized firms and (ii) account for differences in the interest rate sensitivity of small- and large-firm investment. We illustrate that sunk investment expenditures affect the region of zero and non-zero investment activity and, hence, the frequency at which large and small firms change investment regimes. Furthermore, sunk investment costs determine the extent to which small- and large-firm investment displays discrete jumps. We find that large firms change investment regimes less frequently than small firms and that swings in investment are more accentuated for large than for small firms. We illustrate that the response of small- and large-firm investment to monetary policy actions depends on the magnitude of the monetary policy shock.