The question of whether dividend policy impacts firm value remains an important and highly debated question in corporate finance. The separation principle implies independence among a firm’s financing, investment, and dividend decisions and that investment policy is the sole determinant of firm value. One important implication of the separation principle is that investment decisions of the firm should never be impacted by the firm’s dividend decisions. However, recent theoretical work argues that dividend policy is also a first-order firm value determinant, which suggests interdependence between a firm’s dividend and investment decisions. In this dissertation, I empirically examine and quantify the relation between dividends and investment by modeling the dynamics of investment, earnings, and dividends at the firm level in a vector autoregression (VAR) framework for a large cross-section of firms. Results show that shocks to changes in dividends do have short-term consequences for changes in investment and vice versa, but the relationship between the two variables is weak over longer time horizons.