Variable Markups, Heterogeneous Firms and Pass-through of Marginal Costs into Prices

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Abstract

In this paper, we study variable markups and imperfect pass-through of marginal costs into prices. Using a novel theoretical framework for a general oligopolistic market, we derive sufficient statistics for elasticities and superelasticities that are independent from the revenue shares distribution in the market. We estimate these statistics empirically using the ACNielsen Retail Scanner database. Our main findings are: 1) elasticities are large, but get lower as a firm's market share increases; 2) superelasticities are positive, in line with Marshall's Second Law of Demand; 3) individual firm's pass-through is affected negatively by the firm's share; 4) there is a positive elasticity of pass-through to the marginal cost shock that is larger for the larger firms. The last finding means that the total effect of marginal cost shock on the price is non-linear and that firm prices are more responsive to the marginal cost increases then the marginal cost decreases. This feature of price setting offers an explanation to the recent trend in inflation and points out how prominence of large firms in the economy can create both periods of relative price stability and large spikes in inflation in response to an increase in marginal costs.