

Firms in less competitive industries are riskier investments

blogs.lse.ac.uk/businessreview/2017/03/07/firms-in-less-competitive-industries-are-riskier-investments/

3/7/2017



The financial economics literature regularly assumes that the markets in which firms sell their products are perfectly competitive, i.e., that firms take product prices as given while making corporate decisions. Alternatively, many models in the literature assume that firms operate in isolation, and hence their decisions do not affect other firms. Reality lies in between. The most prominent firms in stock exchanges usually operate in industries which are oligopolies (i.e. pharma, petroleum, search engines).

The large firms which we regularly look at in stock markets are key market players that neither take prices as given nor operate in isolation. A reasonable question that arises is therefore how the degree of competition in the markets in which firms sell their products interacts with their *asset prices*. My paper entitled *Product Market Competition and Industry Returns* (a joint work with Professor Andres Donangelo from the University of Texas at Austin) contributes to the existing literature by addressing this question.

In financial economics, when we refer to *asset prices*, we actually refer to two related concepts: the *market value of the assets* of a firm (i.e., its valuation), and also its *expected returns*. The *market value of the assets* of a firm is defined as the sum of the market value of its equity and debt holdings. The *expected return* of a firm reflects instead the compensation captured by a firm's investors in reward for their exposure to systematic risk while holding a stake in such firm.

The questions addressed in our paper are therefore two. First, to what extent the degree of competition in the market in which a firm sells its products affects its asset value? And second, how does product market competition affect a firm's exposure to systematic risk? The paper answers these questions both theoretically (i.e., using a mathematical model) and empirically (using a working sample of US firms).

The answer on how product market competition affects a firm's value is fairly simple and unsurprising. Higher product market competition destroys firm value, since it reduces firms' operating margins today and also their future growth prospects. This result holds both in our model and also in our empirical analysis.

Our findings on how product market competition interacts with firms' expected returns or exposure to systematic risk

are less obvious and hence the key contribution of the paper. Many people would argue that firms in more competitive industries are riskier. Naturally, competition reduces a firm's operating profits, making the firm less capable of buffering adverse shocks and hence making firms riskier. This is indeed one prediction in our model and an effect that we do observe in the data.

However, our paper shows that there exist two other effects that go in the opposite direction, which in fact are also the dominant effects in the data – implying that firms in *less* competitive industries are actually riskier. On one hand, our model predicts that firms in less competitive industries are riskier because they are exposed to larger fluctuations in their expected profits. Intuitively, when demand is high firms with large market power generate large profits, and yet when demand falls these firms also bear the costs of excess capacity on their own. On the other hand, our analysis proves that more risky cash flows act as a barrier to entry. Intuitively, investors demand higher compensation for bearing systematic risk in riskier industries, and this by itself results in less entry of new firms and hence lower product market competition.

The main take away of the paper is therefore that although competition is *bad* (since it destroys firm value) it is also *safer*. On average, the empirical evidence shows that firms in less competitive industries are more exposed to business-cycle fluctuations in systematic shocks; and this higher exposure to systematic risk is, by itself, a barrier to entry.



Notes:

- *This blog post is based on the author's paper [Product Market Competition and Industry Returns](#), co-authored with Andres Donangelo, in the Review of Financial Studies, forthcoming*
- *The post gives the views of its author, not the position of LSE Business Review, the London School of Economics and Political Science.*
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