

Report Type

Mid Term Award Report

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Project Title

Product Market Competition and Corporate Trademarks

Project Start Date

Dec 01, 2015

Project End Date

Dec 01, 2018

Project Abstract

We investigate how product market competition influences the creation of firms' trademarks, which represent the innovative output of firms' product development activities and marketing strategies. On one hand, intensified competition threat motivates firms to create more trademarks to enhance their competitive position and deter the entry or expansion of their rivals. On the other hand, increased product market competition may discourage firms from undertaking risky product development innovation, resulting in fewer trademark applications.

To test these hypotheses, we use trademark filing data supplied by the US Patent and Trademark Office (USPTO) to construct measures of firms' trademark creation. In addition, we employ substantial reductions of US import tariffs in the past three decades as a natural experiment setting for intensified product market competition.

This project will contribute to the literature by identifying product market competition as a critical factor that affects firms' incentive to create trademarks, a class of intellectual properties that is becoming increasingly important but is often neglected. It will also have good policy implications for knowledge-based economies such as the UK where greater emphasis is put on the efforts to commercialize the research output.

Activities and Achievement

I have collected the US import and export data from the Center for International Data at the University of California at Davis and Schott's International Economics Resource Page at the Yale University, which cover the periods from 1974 to 1988 and 1989 to 2005, respectively. Import data are classified according to the 1972 version of SIC code during 1974-1988, but are classified according to the 1987 version of SIC code during 1989 to 2005. I have used the 1972 SIC-1987 SIC concordance table provided by the NBER-CES Manufacturing Industry Database to link the data between the two periods. Finally, I have obtained accounting data from the Compustat database and stock price and return data from the CRSP database. To construct the measure for large reductions in import tariffs, I first calculate industry level tariff rates as the duties collected by US Custom divided by the Free-on-Board value of general imports for each 3-digit SIC industry in each year. I then define a shock to import tariffs in a specific industry-year as a binary variable that takes the value of one if a negative change in import tariffs is 2, 2.5, or 3 times larger than its median change, and zero otherwise.

Based on the trademark data collected, my preliminary analysis reveals that foreign rivals' entry threat affect firms' product introduction to the market. I also find that firms tend to apply for fewer product development trademarks once the import penetration in a particular industry goes deeper. I believe that firms tend to adopt conservative product development strategies when facing higher competitive pressure from their foreign rivals. I feel I need additional data to better classify trademarks so that I could conduct more cross-sectional analysis. I will also need to contrast the results obtained using trademarks with those obtained using patents. My RA in Singapore is currently assisting me to collect the data and we will perform the final analysis soon.

Dissemination

To promote the papers arising from the research project, I plan to present the working paper in workshops of several universities in Hong Kong, Singapore, the UK and the US in 2018. The ultimate expected outcome of this project is published journal articles in top-tier finance or economics journals, such as Quarterly Journal of Economics, and Journal of Finance.

Outputs

Research paper is not available yet.

Major Difficulties and Any Other Issues

So far, there are no major difficulties.

Web Links

No links available yet.