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. As it is unclear a priori which effect will prevail, there is a need for empirical evidence to inform theory.

# Activities and Achievement

I have finished the data collection in Singapore for the US and international trademark data for the project. During my visit at Development Bank of Japan in June-July 2016, I have collected the trademark data in Japan as well. 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.

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.

Dissemination

After finishing the data collection, I have conducted more empirical analysis outlined in the grant proposal. I still need to partition the sample in several ways to explore the cross-sectional differences. I will also need to contrast the results obtained using trademarks with those obtained using patents. I will present the research findings at CERF Cavalcade in May. To promote the papers arising from the research project, I will present working papers in workshops of top universities in the world in 2017-2018, especially those with experts on the topic. Through workshops and conference presentations, I can obtain constructive comments from world-class finance/accounting scholars, and may also achieve possible collaborations or enhancements of research findings based on the suggestions offered by conference discussants.

The ultimate expected outcome of this project is published journal articles in top-tier finance or economics journals, such as Quarterly Journal of Economics, Journal of Finance, and Journal of Financial Economics.

Outputs

Research paper is not available yet.

Major Difficulties and Any Other Issues

So far, there are no major difficulties.

Web Links

N.A>

Additional Information

Declaration

This award has not yet produced any relevant outputs, but details of any future publications will be submitted to the CERF database as soon as they become available.

Signature - Main Award Holder