Final Report for the AFAANZ 2018-2019 Research Grant

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(2) Project Title: The economic policy uncertainty premium: International Evidence

(3) Updated Project Summary

Intertemporal Capital Asset Pricing Model (ICAPM) indicates that state variables that are associated with changes in consumption and investment opportunities are important for investors and thus should be priced. Macroeconomic variables such as Economic Policy Uncertainty (EPU) in this project is a potential candidate for state variable. There is evidence that EPU directly affects capital investments of firms (Baker et al, 2016). A puzzle that remains unresolved in the extant literature is whether there is a premium associated with EPU around the world and if so, why. We also aim to investigate whether domestic, regional and/or global EPU are more important determinants of domestic stock returns. This examination uncovers whether EPU premium exhibits commonality around the world. To examine a stock's exposure to domestic, regional and global EPU, a monthly rolling regression using prior 60-month returns will be conducted. In this regression, the dependent variable is stock's excess return, the independent variables are: (1) domestic/regional and global change in EPU; and (2) other standard asset pricing factors including size, value, profitability and investment factors (Fama and French, 2015). Portfolio sorting and cross-section regressions are used to investigate whether there is a premium associated with EPU. To examine the pricing of domestic, regional and global EPU in a univariate analysis, stocks will be sorted into quintile portfolios based on their EPU exposures. We evaluate the forward raw and risk-adjusted returns of these portfolios. If there is a premium associated with EPU, we expect to observe a monotonic decreasing pattern in returns as we move from low EPU exposure portfolio to high EPU exposure portfolio. The return difference between the high and low EPU exposure portfolios provides a preliminary indication on whether EPU is priced in stock returns. In addition, we also conduct a Fama-Macbeth regression to evaluate whether EPU is priced in the cross-section of stock returns. There are two steps in the Fama-Macbeth regression. First, we run a 60-month monthly rolling regression in which the dependent variable is the excess return of stock i, and the independent variable is monthly change in the EPU (domestic, regional and global) index. Through this process, for each stock in every month, we will obtain its beta coefficient on change in EPU. In the second stage, we run a cross-sectional regression in which the dependent variable is one-month ahead monthly return of stock i, and the independent variables are stock i's beta coefficient on change in EPU as well as other standard control variables (e.g. size, value, momentum) in the asset pricing literature.

(4) Funds granted: $5,000 (AUD)

(5) Detailed Report on Expenditure of Funds against Budget Items: We proposed to obtain $7478 and was granted $5000. We proposed to hire research assistant for 165 hours if we were granted the full amount. With $5000, we hired research assistants for 95 hours to obtain and clean daily and monthly return data of 80 countries around the globe.

(6) Outcomes: working paper of 'The world price of economic policy uncertainty'

(7) Future intentions
   a. Conference submission: submit the working paper to FIRN annual conference 2020
   b. Journal submissions: submit the working paper to Accounting and Finance in 2021
   c. Grant applications: N/A
   d. Projects: The price of economic policy uncertainty in emerging markets; the price of economic policy uncertainty in China

(8) Summary of Outcomes and Benefits: The grant is highly appreciated as we were able to hire a research assistant to collect data for us. All data has been collected and we are now working on the data and writing up the draft concurrently.