

COMPLETION REPORT

How Do Exchange Rates Affect Import and Domestic Prices in China and Japan?
A Study of Exchange Rate Pass-through Across-Country at Industry Level

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1. Outcomes:

The research project aims to research the foreign exchange rate exposure in Japanese firms and exchange rate pass-through in China and Japan. Even with the reduced budget amount, the project has been conducted closely with my research collaborators and led to the completion of about three papers, with two published and one more conditionally accepted for publication by the reputable academic journals.

In particular, since April 2013 we have gone through a hard data collection process and undertaken a number of research activities/measures to ensure the collection of quality and impartial data for this research project, and also work intensively on this project with great output. Thanks for the grant which has facilitated this process.

As I've email informed the Foundation, by far we have already completed three papers and got two accepted and just published by two very reputable academic journal, one is *Economic Modelling* (which is an "A"-ranked journal on both Australia's ERA and ABDC journal ranking lists and published by Elsevier North-Holland with an ISI Impact Factor: 0.699), and another one is *Pacific Economic Review* (published by Wiley-Blackwell Publisher with an ISI Impact Factor: 0.722). Our third article is conditionally accepted for publication with minor revision request by *Economic Modelling*. I will update your information in due course.

2. The Future Plan:

We are extending our current research to study the exchange rate risk issue in the East Asian economies. We look forward to your continued support in the future.

Once again, many thanks for the financial support from the Sumitomo Foundation which made this research project a great success.

Publication of the Results of Research Project:

Verbal Presentation (Date, Venue, Name of Conference, Title of Presentation, Presenter, etc.)

Thesis (Name of Journal and its Date, Title and Author of Thesis, etc.)

1. P. Jayasinghe, A. K Tsui and Z.Y. Zhang (2014), “Exchange Rate Exposure of Sectoral Returns and Volatilities: Further evidence from Japanese industrial sectors”, *Pacific Economic Review* (Wiley-Blackwell), vol. 19 (2), pp. 216-236.

Main findings: Using data from 10 Japanese industrial sectors, this study identifies and finds strong evidence of all the four levels of exchange rate risk which would not otherwise be caught by using the conventional models. We conclude that taking the conventional exposure coefficient as the sole measure of exchange rate exposure of firms/sectors may provide us with misleading results, and there are cases which are not exposed to currency risk under the conventional measure, but are found significantly exposed to the currency risk through the four alternative routes identified in this study.

2. L. Long, A. K Tsui and Z.Y. Zhang (2014), “Conditional Heteroscedasticity with Leverage Effect in Stock Returns: Evidence from the Chinese Stock Market”, *Economic Modelling* (Elsevier, North-Holland) (10.1016/j.econmod.2013.11.002), Vol. 37, pp. 89–102.

Main findings: We find the conditional dynamic correlation between the Chinese and the U.S. stock markets is quite low and highly volatile, and the Chinese stock markets are found to be highly regimes persistent with significant leverage effect. These findings have important implication for investors seeking opportunity of portfolio diversification.

3. P. Jayasinghe, A.K. Tsui and Z.Y. Zhang, “New Estimates of Time-Varying Currency Betas: a trivariate BEKK-GARCH approach”, conditionally accepted for publication in *Economic Modelling* (Elsevier, North-Holland).

Main findings: This is the first study using trivariate BEKK-GARCH-M model to estimating the time-varying currency betas with most updated dataset. We find evidence that there is a strong causal relationship between stock returns and changes in exchange rate returns. We also find the presence of strong persistence and volatility clustering in each stock market, the world market and the exchange rate markets, and the existence of strong volatility spillover effects in these three markets. The currency betas are found to be more volatile than the world market betas, and are more volatile in the emerging markets than in the developed markets. These findings have important implication for international fund management and for firms’ investment and hedging strategies. It is also found that the estimated currency betas have long-memory and are also mean-reverting, which has important implications for formulating trading strategies against currency risk in the exchange rate markets.

Book (Publisher and Date of the Book, Title and Author of the Book, etc.)