Japanese Companies' Overseas Business Expansion and Impacts of Changes in

Exchange Rate*

Eiji Ogawa^a Naoki Shinada^b Masakazu Sato^c

Abstract

Japanese companies have been active in expanding business operations abroad. This paper focuses on the expansion of business operations of listed Japanese companies' overseas bases to analyze how differences in the asset size of overseas bases (share of overseas bases' assets) affect changes in the corporate value (PBR: price book-value ratio) due to changes in exchange rate. In addition, it analyzes the impact of changes in overseas bases' balance sheets and profits/losses due to changes in exchange rate on related performance indicators (equity capital, equity capital to total assets, and return on equity (ROE)). We use panel data to obtain the following estimation results. We find that there is a tendency that the larger the asset size of company's overseas bases is, the larger the company's volume of export is and the higher the company's corporate value rises when the Japanese yen depreciates before the Lehman Shock. We also find that the impact on the corporate value increases somewhat although the increase is smaller compared with the situation where the Japanese yen depreciates after the Lehman Shock. On the other hand, it becomes clear that the larger the asset size of company's overseas bases is, the larger the impact of changes in exchange rate caused to the company's equity capital and the equity capital to total assets through changes in the foreign currency translation adjustment is. An analysis of the impact of changes in exchange rate on the ROE shows that depreciation of the Japanese yen tends to increase the ROE because net profits have a larger positive effect on ROE. However, as the equity capital increases in this case, the positive effect is partially offset. These results suggest that it is necessary to conduct the study by taking into account not only the impacts on export and other trade activities but also the impacts on companies' overseas assets when we study the impact of changes in exchange rate on corporate value

Keywords: exchange rate, overseas business expansion, overseas base, corporate value, foreign currency translation adjustment, equity capital, ROE JEL Classification; F20, F31, M20, M40

^{*} This paper is prepared for *Public Policy Review* which is issued by the Policy Research Institute, Ministry of Finance. A paper in Japanese published at the *Financial Review* by the Policy Research Institute, Ministry of Finance was translated into English and revised for the *Public Policy Review*. All the contents and views of this article belong to the individual authors and are not related at all to the organization to which the authors belong.

^a Professor, Graduate School of Business Administration, Hitotsubashi University, e-mail: <u>eiji.ogawa@r</u>.hit-u.ac.jp.

^b Director, DBJ Securities Co., Ltd..

^c Senior Economist, Research Institute of Capital Formation, Development Bank of Japan Inc.. email: mssatou@dbj.jp.