## Effects of Japanese Macroeconomic Announcements on the Dollar/Yen Exchange Rate: High-Resolution Picture with High-Frequency Data\*

Yuko Hashimoto\* and Takatoshi Ito\*

This version October 27, 2008

## Abstract:

This paper examines reactions of the yen/dollar exchange rate to macroeconomic news/statistical announcements using high-frequency data collected from the real trading platform. It investigates the exchange rate returns in reaction to a surprise component of various Japanese macroeconomic announcements. Tankan survey (a short-term business survey conducted by Bank of Japan) and GDP forecast were found to have consistently large impacts on the exchange rate returns. Price indices such as CPI and PPI reports were also found to have significant effects on the returns. On the other hand, Trade Balance announcement had little impact on the returns—which is contrast to findings of the U.S. news release on Trade Balance. We also examine the impacts of surprise components of news indicators on transactions. The number of deals also increases at the time of macroeconomic announcements. The number of deals in the 15 minute windows around the news release time, increased most prominently in response to GDP announcements and Tankan.

JEL: E44, F31, F41, G15

Key Words: Exchange Rate, High-frequency data, market microstructure, macro news announcement

<sup>\*</sup> The authors are grateful to Robert Feldman, Morgan Stanley, for his suggestions and making available the data of macro news announcements and market expectations prior to announcements.

<sup>\*</sup> Associate Professor, Faculty of Economics, Toyo University, 5-28-20 Hakusan, Bunkyo-ku, 112-8606, Tokyo.

<sup>&</sup>lt;sup>•</sup> Corresponding author: Professor, the Graduate School of Economics and Graduate School of Public Policy (GraSPP), University of Tokyo and National Bureau of Economic Research, 7-3-1 Hongo, Bunkyo-ku, 113-0033, Tokyo.

## References

Ito, Takatoshi and Yuko Hashimoto, (2004). "Microstructure of the Yen/Dollar Foreign Exchange Market: Patterns of Intra-day Activity in the Electronic Broking System" NBER working paper, no. 10856, October 2004.

Ito, Takatoshi and Yuko Hashimoto, (2006). "Intra-day Seasonality in Activities of the Foreign Exchange Markets:Evidence from the Electronic Broking System", Journal of The Japanese and International Economies, Vol.20, Issue 4, 637-664, Dec 2006.

Ito, Takatoshi and Yuko Hashimoto (2007, forthcoming). "Price Impacts of Deals and Predictability of the Exchange Rate Movement," in T. Ito and A. Rose (eds.), International Financial Issues in the Pacific Rim: Global Imbalances, Financial Liberalization, and Exchange Rate Policy, University of Chicago Press-NBER.

Ito, Takatoshi, Richard K. Lyons, and Michael T. Melvin, (1998). "Is There Private Information in the FX Market? The Tokyo Experiment" The Journal of Finance, vol. LIII, no. 3, June: 1111-1130.

Ito, Takatoshi and V. Vance Roley, (1987). "News from the U.S. and Japan: Which Moves the Yen/Dollar Exchange Rate?", Journal of Monetary Economics, vol. 19, March: 255-277.

Ito, Takatoshi and V. Vance Roley, 1991, "Intraday Yen/Dollar Exchange Rate Movements: News or Noise?", Journal of International Financial Markets, Institutions and Money, Vol. 1, No. 1, pp. 1-31, (1991).