

International Reserves: Precautionary versus Mercantilist Views, Theory and Evidence^{*}

by

Joshua Aizenman (UCSC and the NBER, jaizen@ucsc.edu) and Jaewoo Lee (IMF, JLEE3@imf.org)

Abstract

This paper compares the importance of precautionary and mercantilist motives in accounting for the hoarding of international reserves by developing countries, and provides a model that quantifies the welfare gains associated with optimal self insurance against sudden stops and capital flight. The variables associated with the mercantilist motive, while statistically significant, can only account for a small part of reserve accumulation. A more conspicuous variable is the degree of capital account liberalization, boding well for precautionary motives as they are strengthened by international capital flows. Further evidence of precautionary motives is provided by the strength of variables reflecting two past financial crises in Mexico and Asia. Overall, the empirical results suggest that precautionary motives played a more prominent role behind reserve accumulation by developing countries. We then investigate the micro foundation of precautionary demand in an open, emerging market economy where banks finance long term projects with short-term deposits, following Diamond and Dybvig (1983). A large precautionary demand for international reserves—self-insurance against sudden stop—arises when liquidity shocks can force a premature closing of long-term projects and impose large output costs on the economy. We show that the welfare gain from the optimal management of international reserves is of a *first-order* magnitude, reducing the welfare cost of liquidity shocks from a *first-order* to a *second-order* magnitude.

Joshua Aizenman
Economics Department and the NBER
University of California, Santa Cruz
Santa Cruz, CA 95064
jaizen@ucsc.edu

Jaewoo Lee
Research Department
International Monetary Fund
Washington DC, 20431
JLEE3@imf.org

Keywords: International Reserves, Precautionary Demand, mercantilist, financial crises
JEL specification: F15, F31, F43

^{*} We thank Hali Edison for sharing the data, and Aleksandra Markovic for research assistance in the earlier phase of the project. We thank Michael Dooley, Ann Harrison, Linda Goldberg, Pierre-Olivier Gourinchas, Maury Obstfeld, Brian Pinto, Ramkishan Rajan, Andy Rose, Partha Sen, Tom Willett and participants in the SERC conference (Singapore 2005), Berkeley seminar, and the FRBSF conference for their useful comments. The views expressed in this paper are those of the authors and do not necessarily represent those of the IMF or IMF policy.