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Volume Title: Regional and Global Capital Flows: Macroeconomic Causes and Consequences, NBER-EASE Volume 10

Volume Author/Editor: Takatoshi Ito and Anne O. Krueger, editors

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-38676-7

Volume URL: [http://www.nber.org/books/ito\\_01-1](http://www.nber.org/books/ito_01-1)

Conference Date: June 10-12, 1999

Publication Date: January 2001

Chapter Title: Comment on "Credibility of Hong Kong's Currency Board: The Role of Institutional Arrangements"

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Chapter URL: <http://www.nber.org/chapters/c13069>

Chapter pages in book: (p. 259 - 262)

- Kwan, Yum K., and Francis T. Lui. 1999. Hong Kong's currency board and changing monetary regimes. In *Changes in exchange rates in rapidly developing countries: Theories, practice, and policy issues*. Vol. 7 of NBER East Asian Seminar on Economics, ed. Takatoshi Ito and Anne O. Krueger, chap. 15. Chicago: University of Chicago Press.
- Kydland, Finn E., and Edward C. Prescott. 1977. Rules rather than discretion: The inconsistency of optimal plans. *Journal of Political Economy* 85 (3): 473–91.
- Lindberg, Hans, and Paul Soderlind. 1994. Testing the basic target zone model on Swedish data 1982–1990. *European Economic Review* 38 (7): 1441–69.
- Lindberg, Hans, Paul Soderlind, and Lars E. Svensson. 1993. Devaluation expectations: The Swedish krona 1985–92. *Economic Journal* 103 (September): 1170–79.
- Lui, Francis T., Leonard K. Cheng, and Yum K. Kwan. 2000. Currency board, Asian financial crisis, and the case for structured notes. Working Paper, Department of Economics, Hong Kong University of Science and Technology, and City University of Hong Kong, May 2000.
- Miller, Merton. 1998. Transcript of testimony at the legislative council. Hong Kong: Legislative Council, 14 November.
- Mundell, Robert. 1961. Theory of optimum currency areas. *American Economic Review* 51 (4): 657–65.
- Nugee, John. 1995. A brief history of the exchange fund. In *Money and banking in Hong Kong*, 2–24. Hong Kong: Hong Kong Monetary Authority.
- Rose, Andrew K., and Lars E. Svensson. 1994. European exchange rate credibility before the fall. *European Economic Review* 38 (6): 1185–216.
- Schuler, Kurt. 1992. *Currency boards*. Ph.D. diss. Department of Economics, George Mason University, Fairfax, Va.
- Schwartz, Anna J. 1993. Currency boards: Their past, present and possible future role. *Carnegie-Rochester conference series on public policy* 39:147–87.
- Svensson, Lars E. 1991. The term structure of interest rate differentials in a target zone. *Journal of Monetary Economics* 28 (1): 87–116.
- . 1993. Assessing target zone credibility: Mean reversion and devaluation expectations in the ERM, 1979–1992. *European Economics Review* 37 (4): 763–802.
- Williamson, John. 1995. *What role for currency boards?* Washington, D.C.: Institute for International Economics.
- Yam, Joseph. 1991. The development of monetary policy in Hong Kong. In *Monetary management in Hong Kong: The changing role of the exchange fund*, ed. Andrew F. Freris, Y. C. Jao, and Joseph Yam, 54–83. Hong Kong: Chartered Institute of Bankers, Hong Kong Centre.

## Comment      Shin-ichi Fukuda

This paper is an interesting case study on credibility and the currency board in Hong Kong. After providing a compact yet comprehensive historical overview on the Hong Kong currency board, the paper presented a sophisticated empirical study of the Hong Kong dollar devaluation risk

based on the daily data of exchange rates since the early 1980s. The paper makes an important contribution in showing that even under a currency board, a different institutional arrangement has a different effect in establishing governmental credibility.

In order to test whether rules are better than discretion in strengthening the credibility of a currency board, the paper divided the sample period into three regimes: regime 1 (1 November 1983 to 31 March 1992), a rule-bound regime; regime 2 (1 April 1992 to 6 September 1998), a regime with active discretionary interventions; and regime 3 (7 September 1998 to 21 April 1999), a rule-based regime. The paper then demonstrated that switching from a discretionary regime to a rule-based regime—that is, switching from regime 2 to regime 3—reduced devaluation risk suddenly and drastically. The result is interesting in showing that a rule-based system is better for establishing credibility. It also provides important policy implications for the desirability of different currency systems. I have three comments.

My first comment is on the usefulness of the currency board system for East Asian countries. Citing a successful story in Argentina, the introduction of this paper proposed the system's usefulness as a government commitment device. Although it is true that Hong Kong's current currency board system is one possible commitment device for the government, Hong Kong's experience may be different from that of Argentina from the view point of the optimal currency area theory.

That is, in terms of economic integration, the U.S. economy has a dominant effect on Argentina's economy. Thus, it is natural for Argentina to form a U.S. dollar currency block not only from the credibility perspective but also from various economic points of views. However, in the case of Hong Kong, the United States is only one of a number of important foreign partners. In other words, although the U.S. economy has strong impacts on the Hong Kong economy, East Asian economies—particularly those of Japan and China—also have significant effects on the Hong Kong economy. Therefore, putting aside the credibility issue, it is not necessarily clear whether fixing the Hong Kong dollar to the U.S. dollar is a desirable exchange rate system.

For example, suppose that there was a large depreciation of the Japanese yen against the U.S. dollar. In this case, fixing the Hong Kong dollar to the U.S. dollar makes the real effective exchange rate of the Hong Kong dollar appreciate a lot, and may lead to undesirable effects on Hong Kong's trade balance. Similarly, the stability of the Chinese yuan against the U.S. dollar may be an important factor for sustaining Hong Kong's currency board system. If the Chinese yuan devaluates against the U.S. dollar, the sustainability of Hong Kong's currency board system would be difficult even under the current credible system.

My second comment is on what kind of credibility the Hong Kong Mon-

etary Authority (HKMA) needs to establish through the currency board system. In the first-generation currency crisis model, the rule was desirable to establish the credibility such that the government would not create excessive money supplies in response to huge fiscal deficits. Argentina's currency board system was a successful story in establishing this type of credibility. On the other hand, in the second-generation currency crisis model, the rule was desirable to establish the credibility such that the government would not cause excessive inflation to restore macro imbalances such as unemployment.

In Hong Kong, however, what type of credibility does the government need to establish? In a model of time consistency such as Kydland-Prescott, the government's policy objective needs to be different from that of the market equilibrium. Then, what makes Hong Kong's government objective different from the market objective? Because Hong Kong did not have a huge fiscal deficit, the story of the first generation model is not helpful in this sense. Furthermore, because domestic macroeconomic imbalances such as unemployment rates seem not to be large, the story of the second generation model is not useful either.

The paper implicitly assumes that Hong Kong's economic stability can be achieved by stabilizing the Hong Kong dollar against the U.S. dollar. From a practical point of view, this implicit assumption might be true, but it can be tested with actual data by looking at the stability of various macro variables under three alternative currency board regimes. The paper discussed this for interest rate stability and showed that the credible currency board system was actually consistent with the interest rate stability. For other macro variables, however, the paper provided no discussion.

If the only source of economic instability is the loss of HKMA's credibility, the nominal exchange rate stability would be consistent with the stability of other macro variables, such as domestic price level, domestic output level, unemployment rate, and so on. If various external real shocks are sources of economic stability, however, it is highly possible that fixing the Hong Kong dollar to the U.S. dollar may destabilize other macro variables in Hong Kong.

In particular, real shocks in East Asian economies are not necessarily closely correlated to those in the U.S. economy. If real shocks affect East Asian economies and the U.S. economy differently, the credible currency board system can stabilize the nominal exchange rate but may destabilize other macro variables in Hong Kong.

My final comment is on the drastic drop of estimated devaluation risk on 5 September 1998. This is one of the most interesting findings in the paper, and it may imply that a return to a rule-based system can calm the speculative behavior in the market. In fact, looking at the estimated devaluation risk in panel D of figure 7.4 we can see that the devaluation risk dropped by half overnight after 5 September.

Theoretically, the drop can arise either from a shock drop of forward premium or from a drop in the expected rate of drift within the target zone. My question is, which caused such a drastic change of devaluation risk? When we look at HIBOR-LIBOR interest differentials in figure 7.2, we can see a large but relatively gradual decline of interest differentials after September 1998. If there was a sharp drop of forward premium on 5 September 1998, how can we reconcile this with relatively gradual decline in interest differentials? If there was an intensifying drop in the expected rate of drift within the target zone, we probably can give some intuitive interpretation for why this happened in terms of the target zone theory. By contraction, however, the expected rate of drift can change drastically when the regime changes because the coefficients were estimated separately for each regime. Although it is true that there was a big structural change from regime 2 to regime 3, the actual change in coefficients may be more gradual than what was supposed in calculating the devaluation risk in the simulation.

**Comment** Takatoshi Ito

This paper combines ideas in the literatures of currency board, target zone, and rule versus discretion, and then applies an empirical model to the case of Hong Kong. The idea of the currency board became a focus of attention in recent years, as currency board economies have ridden currency crises well. Argentina stood well against the tequila crisis in 1995. Hong Kong has maintained the dollar peg despite fierce attacks by speculators in 1997 and 1998. Indonesia's announcement of considering to adopt a currency board became a source of contention between the Indonesian government and the International Monetary Fund (IMF) in February 1998.

In the postcrisis discussion, the so-called two-corner solution became a popular argument. According to this argument, the two corners—that is, a freely floating exchange rate regime and the currency board system—are the only stable exchange rate regimes. Hong Kong and Argentina, both under a currency board arrangement, have survived repeated attacks on their currencies in the second half of the 1990s. Such successes are usually proof that the currency board is stable. This is the first paper, to my knowledge, that looks into details of the workings of a currency board. The reader learns that the currency board in Hong Kong has experienced different regimes within the currency board arrangement.

The paper argues that the Hong Kong Monetary Authority (HKMA)