

# Sovereign crisis Prediction

**Teacher:** Chung-Hua Shen;

**Goal:** This is an advanced seminar course for the early warning signal of the sovereign crisis. Our discussion covers two parts, one is related to international finance with the particular focus on crisis prediction and prevention; the other is related to the global banking issues. Because this is a seminar course, we focus on demonstrating how to ask a good question and present it.

**Perquisites :** Students should have taken undergraduate Money and Banking, undergraduate international finance or graduated macroeconomics. This is particularly suitable for students who have some themes or issues in mind.

## Evaluations

- A. Class presentations: This is a lecture well as seminar course.
- B. Reports: each student needs to hand in a complete term paper (Word file) around 15~20 pages.
- C. Participation Rate: students need to participate the discussion in the class.

**Referenced Books:** discussed in the class.

## Course Outline:

I will present how to use KLR's Signal Approach to construct early warning signals for the future crisis, including currency crisis and debt crisis (below 1 and 2). At the same time, I share my experience of writing a paper. Also, you can choose the topics to present in the class

### 1. Signal Approach: KLR model

Graciela Kaminsky, Saul Lizondo, Carmen M. Reinhart, 1997, "Leading Indicators of Currency Crises," International Monetary Fund Western Hemisphere Department.

Graciela L. Kaminsky, 1999, "Currency and banking crises : The early warnings of

distress," George Washington University.

Hali J. Edison, 2000, "Do indicators of financial crises work? an evaluation of an early warning system," *Board of Governors of the Federal Reserve System International Finance Discussion Papers*, July, 675.

## **2. Applications of KLR**

Patricia Alvarez-Plata, Mechthild Schrooten, 2004, "Misleading indicators? The Argentinean currency crisis," *Journal of Policy Modeling*, 26, 587-603.

Duan Peng, Claustre Bajona, 2008, "China's vulnerability to currency crisis: A KLR signals approach," *China Economic Review*, 19, 138-151.

Anders Lundström and Joakim Tiberg, 2010, "Characteristics of the 2009/2010 financial crisis in Greece and the probability of a bank run," University of Gothenburg.

Lestano, Jan Jacobs and Gerard H. Kuper, 2003, "Indicators of financial crises do work! An early-warning system for six Asian countries," Department of Economics, University of Groningen.

## **3. Suggested Readings**

Arteta, C., and G. Hale (2008), "Sovereign Debt Crises and Credit to the Private Sector", *Journal of International Economics*, 74, 53-69.

Becker, Torbjorn and Mauro, Paolo (2006), "Output Drops and the Shocks that Matter", IMF Working Paper, Vol. , pp. 1-43.

Berg Andrew and Sachs Jeffery (1988), "The Debt Crisis Structural Explanations of Country Performance", *Journal of Development Economics*, Vol. 29, pp. 271-306.

Bongini, P., G. Ferri and T. S. Kang (1999), "Financial Intermediary Distress in the Republic of Korea :Small is Beautiful", Policy Research Working Paper Series: 2332.

Bordo, Michael D., Cavallo, Alberto and Meissner, Christopher M. (2010), Sudden Stops: Determinants and Output Effects in the First Era of Globalization, 1880-1913 . NBER Working Paper No. w13489.

Catão, Luis (2006), "Sudden Stops and Currency Drops: A Historical Look", IMF

- Working Paper, Vol. , pp. 1-61, 2006
- Calvo, A. Guillermo (1998), "Capital Flows and Capital Market Crises: The Simple Economics of Sudden Stops", *Journal of Applied Economics*, Vol. 1, No. 1, pp. 35-54.
- Calvo, Guillermo A., Leonardo Leiderman, and Carmen M. Reinhart (1993), "Capital Inflows and Real Exchange Rate Appreciation in Latin America: The Role of Exchange Factors", *IMF Staff Papers* 40(1):108-151.
- Caprio, Gerald, Jr. and Klingebiel, Daniela (1996), "Bank Insolvencies: Cross Country Experience", *World Bank Policy and Research WP* 1574.
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- Calvo, Guillermo A, (1996), "Capital Flows and Macroeconomic Management: Tequila Lessons," *International Journal of Finance & Economics*, vol. 1(3), pages 207-23.
- Calomiris, W. Charles (2007), "Bank Failures in Theory and History: The Great Depression and Contagious Events", *NBER Working Paper No.* 13597.
- Celasun, Oya and Harms, Philipp (2011), "Boon or Burden? The Effect of Private Sector Debt on the Risk of Sovereign Default in Developing Countries", *Economic Inquiry*, Vol. 49, No. 1, pp. 70-88.
- Cowan, K., De Gregoria, J., Micco, A. and Neilson, C. (2008), "Financial diversification, sudden stops and sudden star", *Central Bank of Chile, Santiago*, pp. 159-94.
- Corsetti, Giancarlo, Pesenti, Paolo A. and Roubini, Nouriel (1998), "What Caused the Asian Currency and Financial Crisis? Part I: a Macroeconomic Overview", *NBER Working Paper No.* w6833
- Daniel, P. (2004), "Estimating Probabilities of Default for German Savings Banks and Credit Cooperatives", *Deutsche Bundesbank, Research Centre, Discussion Paper Series 2: Banking and Financial Studies*.
- Deb, S. (2005), "Output Growth, Capital Flow Reversals and Sudden stop Crises", working paper, Rutgers University, Newark, NJ.
- DeJuan, and Aristobulo (1996), "The Roots of Banking Crisis: Microeconomic issues and Regulation and supervision," in Hausmann and Rojas-Suarez( Ed.,1996a), pp.83-102.
- Demirgüç-Kunt, A., and Detragiache, E. (1998a), "The Determinants of Banking Crises in Developing and Developed Countries." *International Monetary Fund Staff Papers*, Vol.45, No.1, pp.81-109.
- Edison, Hali J. (2000), "Do Indicators of Financial Crises Work? An Evaluation of an Early Warning System ", *FRB International Finance Discussion Paper No.* 675

- Edwards, S. (2004), "Thirty years of current account imbalance , current account reversals and sudden stops", NBER Working Paper No.10276.
- Eichengreen, Barry, Rose, Andrew K. and Wyplosz, Charles (1996), "Contagious Currency Crises", NBER Working Paper No. w5681
- Frankel, Jeffrey A. & Rose, Andrew K. (1996), "Currency crashes in emerging markets: An empirical treatment," *Journal of International Economics*, Elsevier, vol. 41(3-4), pages 351-366.
- Frankel, Jeffrey A. and Saravelos, George (2010), "Are Leading Indicators of Financial Crises Useful for Assessing Country Vulnerability? Evidence from the 2008-09 Global Crisis", NBER Working Paper No. w16047.
- Frankel, Jeffrey A. and Cavallo, Eduardo A. (2008), "Does Openness to Trade Make Countries More Vulnerable to Sudden Stops, or Less? Using Gravity to Establish Causality", *Journal of International Money and Finance*, Vol. 27 No. 8, pp. 1430-52.
- Friedman, Milton, and Schwartz, Anna Jacobson, *A Monetary History of the United States*(Princeton: Princeton University Press, 1963).
- Gavin, Michael and Hausmann, Ricardo (1996), "The Roots of Banking Crises: The Macroeconomic Context", IDB Working Paper No. 262.
- Gavin, Michael, Hausmann, Ricardo and Leiderman, Leonardo (Oct. 1995), "Macroeconomics of Capital Flows to Latin America: Experience and Policy Issues ", IDB Working Paper No. 254.
- Goldfajn I. and R. Valdés (1995) "Balance of Payments Crises and Capital Flows: The Role of Liquidity", manuscript.
- Goldstein Morris, Graciela L. Kaminsky and Carmen M. Reinhart (2000), *Assessing Financial Vulnerability: An Early Warning System for Emerging Markets*, Institute for International Economics, Washington, DC, June.
- Hyun E. Kim (1999), "Was the credit channel a key monetary transmission mechanism following the recent financial crisis in the Republic of Korea?", *World Bank Publications*, pp.32
- John F. Boschen and Leonard O. Mills (1991), "The effects of countercyclical monetary policy on money and interest rates: an evaluation of evidence from FOMC documents", *Federal Reserve Bank of Philadelphia, Working Papers*, No.91-20, 1991.
- Kaminsky, L. Graciela and Reinhart, M. Carmen (1999), "The Twin Crises: The Causes of Banking and Balance-of Payments Problems", *The American Economic Review* 89 (3):473-500.
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- Kaminsky, Graciela L. (1998), "Currency and Banking Crises: The early warnings of Distress," International Finance Discussion Paper, No. 629, Washington: International Monetary Fund.
- Kaminsky, Graciela L., and Carmen M. Reinhart (1999), "The Twin Crises: The Causes of Banking and Balance-of-Payments Problems. American Economic Review, Vol. 89, No 3, June, pp. 473-500
- Kamin, Steven B., Schindler, John W. and Samuel, Shawna L. (Sept. 2001), "The Contribution of Domestic and External Factors to Emerging Market Devaluation Crises: An Early Warning Systems Approach", FRB International Finance Discussion Paper No. 711
- Laeven, Luc A. and Valencia, Fabian V., "Systemic Banking Crises: A New Database", IMF Working Papers, No. 08/244, 2008
- Laeven, Luc A. and Valencia, Fabian V., Systemic Banking Crises Database: An Update , IMF working paper 12/163,2012
- Mishkin, S. Frederic, White, N. Eugene (2002), "U.S. STOCK MARKET CRASHES AND THEIR AFTERMATH: IMPLICATIONS FOR MONETARY POLICY", NBER Working Paper 8992.
- Pill, H. and Pradhan, M. (1995), "Financial Indicators and Financial Change in Africa and Asia," IMF working Paper, No. 23.
- Reinhart , Carmen and Kenneth Rogoff, (2009), "This Time is Different : Eight Centuries of Financial Folly", Princeton University Press.
- Reinhart, Carmen M. and Reinhart, Vincent R. (2008), "Capital Flow Bonanzas: An Encompassing View of the Past and Present", NBER Working Paper No. w14321
- Romer, Christina D. and Romer, David H. (1989), "Does Monetary Policy Matter? a New Test in the Spirit of Friedman and Schwartz", NBER Working Paper No. w2966
- Rothenberg, Alexander D. and Warnock, Francis E. (2006), " Sudden Flight and True Sudden Stops ", NBER Working Paper No. w12726.
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- Shen, Chung-Hua (1995), "Monetary policy as a decision-making hierarchy: The case of Taiwan", Journal of Macroeconomics, Volume 17, Issue 2, Pages 357–368
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monetary policy reaction function", *Journal of Economic Studies*, Vol. 29 Issue 3, p222-p239.

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