

August 24, 2016

AEM/ECON 7670

Topics in International Finance

Fall 2016
Wednesdays 4:30-7:00 p.m.
Warren Hall 113

Professor Eswar Prasad

This course will provide a selective overview of topics at the cutting-edge of academic research and policy debates about the international financial system. Main areas will include the effects of financial globalization on growth, volatility, and the transmission of business cycles. We will also examine the determinants of the direction and composition of capital flows. We will then discuss the causes and effects of the financial crisis and what implications it has for the research agenda in international finance and macroeconomics, with particular emphasis on the implications for monetary policy and financial regulation.

This course is intended for advanced Ph.D. students, especially those in search of thesis topics, and will require extensive student involvement in preparing research proposals and critiques of existing literature. Students will be expected to have basic graduate-level training in modeling techniques and familiarity with empirical tools (both panel data and time series).

There will be no exams. All registered candidates will be required to write a paper in order to receive a passing grade. The course will be graded S/U only.

Course Support: Erika Rose (ear245)
201 Warren Hall

Office Hours: By appointment (through Erika Rose)

Teaching Assistant: Isha Agarwal (ia233)

Background Readings

Foundations of International Macroeconomics, Maurice Obstfeld and Kenneth Rogoff, MIT Press.

Kose, Ayhan M., Eswar Prasad, Shang-Jin Wei, and Kenneth Rogoff, 2009, "Financial Globalization: A Reappraisal," *IMF Staff Papers*, Vol. 56:1, pp. 8-62. [KPRW]

The Dollar Trap, Eswar Prasad, Princeton University Press, 2014.

Gaining Currency: The Rise of the Renminbi, Eswar Prasad, Oxford University Press, October 2016.

Structure of Course

Topic 1: Measurement of Financial Openness

A. Measures of Asset Market Integration Based on Price Data

B. Capital Controls

C. De Facto Measures of Integration Based on Quantities—Flows, Stocks

D. Evolution of De Facto Measures

E. Brief Presentation on Sources of International Macro Data

References for this lecture can be found in Section III of KPRW. For a different approach to construction of capital control indexes and for detailed chronologies of capital controls in specific emerging markets, see the relevant chapters in: *Capital Controls and Capital Flows in Emerging Economies: Policies, Practices, and Consequences*, 2007, Sebastian Edwards, ed. Chicago, IL: University of Chicago Press.

The Dollar Trap, Chapters 3-6.

Gaining Currency, Chapter 3

Chinn, Menzie, and Hiro Ito, 2006, "What Matters for Financial Development? Capital Controls, Institutions, and Interactions," *Journal of Development Economics*, Vol. 61, No. 1, pp. 163-192.

Fernandez, Andres, Michael W. Klein, Alessandro Rebucci, Martin Schindler, and Martin Uribe, 2015, "Capital Control Measures: A New Dataset," *IMF Economic Review*, forthcoming

Lane, Philip R., and Gian Maria Milesi-Ferretti, 2007, "The External Wealth of Nations Mark II: Revised and Extended Estimates of Foreign Assets and Liabilities, 1970–2004," *Journal of International Economics*, Vol. 73: 2, pp. 223-250.

Lane, Philip R., and Gian Maria Milesi-Ferretti, 2008, "The Drivers of Financial Globalization," *American Economic Review*, Vol. 98:2, pp. 327-332.

Schindler, Martin, 2009, "Measuring Financial Integration: A New Data Set," *IMF Staff Papers*, Vol. 56:1, pp. 222-238.

Prasad, Eswar, 2012, "Role Reversal in Global Finance," *Proceedings of the 2011 Jackson Hole Symposium*, Federal Reserve Bank of Kansas City.

Klein, Michael W., 2012, "Capital Controls: Gates versus Walls," *Brookings Papers on Economic Activity*

Klein, Michael W., "Capital Controls and Real Exchange Rate," *Managing Capital Flows*, Oxford University Press, forthcoming

Topic 2: Financial Integration and Growth

A. Macro Evidence

B. FDI and Growth

C. Equity Market Liberalizations and Growth

D. New Thinking on Capital Controls

References for this lecture can be found in Sections V and VI of KPRW. Additional readings:

The Dollar Trap, Chapter 10.

Bekaert, Geert, Campbell R. Harvey and Christian Lundblad, 2005, "Does Financial Liberalization Spur Economic Growth," *Journal of Financial Economics*, Vol. 77, pp. 3-55.

Forbes, Kristin J., 2007, "The Microeconomic Evidence on Capital Controls: No Free Lunch," in *International Capital Flows*, ed. Sebastian Edwards (Chicago, IL: University of Chicago Press).

Gourinchas, Pierre-Olivier, and Olivier Jeanne, 2006, "The Elusive Gains from International Financial Integration," *Review of Economic Studies*, Vol. 73:3, pp. 715-41.

- Henry, Peter Blair, 2007, “Capital Account Liberalization: Theory, Evidence, and Speculation.” *Journal of Economic Literature*, Vol. 45:4, pp. 887-935.
- Magud, Nicolas, Carmen Reinhart, and Kenneth Rogoff, 2011, “Capital Controls: Myth and Reality – A Portfolio Balance Approach.” Peterson Institute of International Economics. WP 11-7.
- Ostry, Jonathan, Atish Ghosh, Karl Habermeier, Marcos Chamon, Mahvash Qureshi, and Dennis Reinhardt, 2010, “Capital Inflows: The Role of Controls.” IMF Staff Position Note 10/04.
- Ostry, Jonathan, Atish Ghosh, Karl Habermeier, Luc Laeven, Marcos Chamon, Mahvash Qureshi, and Annamaria Kokenyne, 2011, “Managing Capital Inflows: What Tools to Use?” IMF Staff Discussion Note SDN/11/06.
- Prasad, Eswar, Raghuram Rajan, and Arvind Subramanian, 2007, “Foreign Capital and Economic Growth,” *Brookings Papers on Economic Activity*, Vol. 1:2007, pp. 153-230.
- Rodrik, Dani, 2008, “The Real Exchange Rate and Economic Growth,” *Brookings Papers on Economic Activity*, 2008:2, pp. 365-412.

Topic 3: Risk Sharing

- A. International Risk Sharing—Patterns and Channels
- B. Intrastate Risk Sharing as a Benchmark
- C. Risk Sharing, Specialization and Growth
- D. Risk Pooling and GDP-Linked Bonds

- Asdrubali, Pierfederico, Bent Sorensen and Oved Yosha, 1996, “Channels of Interstate Risk Sharing: United States 1963-1990,” *Quarterly Journal of Economics*, Vol. 111, pp. 1081-1110.
- Athanasoulis, Stefano, and Robert Shiller, 2001, “World Income Components: Measuring and Exploiting Risk Sharing Opportunities,” *American Economic Review*, Vol. 91:4, pp. 1031–54.
- Gourinchas, Pierre-Olivier, Helene Rey, and Kai Truempler, 2012, “The Financial Crisis and the Geography of Wealth Transfers,” *Journal of International Economics*, Vol. 88(2), pp. 266-83.
- Kalemli-Ozcan, Sebnem, Bent E. Sørensen, and Oved Yosha, 2001a, “Risk Sharing and Industrial Specialization: Regional and International Evidence,” *American Economic Review*, Vol. 93 (3), pp. 903–18.

Kose, M. Ayhan, Eswar Prasad, and Marco Terrones, 2009, "Does Financial Globalization Promote International Risk Sharing," *Journal of Development Economics*, Vol. 89:2, pp. 258-270.

Lewis, Karen K., 1996, "What Can Explain the Apparent Lack of International Consumption Risksharing?" *Journal of Political Economy*, Vol. 104, No. 2, pp. 267-297.

Obstfeld, Maurice, 1994, "Are Industrial-Country Consumption Risks Globally Diversified?" in *Capital Mobility: The Impact on Consumption, Investment and Growth*, eds. L. Leiderman and A. Razin (Cambridge University Press), pp. 13-47.

Obstfeld, Maurice, 1994, "Risk-Taking, Global Diversification and Growth," *American Economic Review*, Vol. 84, pp. 1310-29.

Prasad, Eswar, Kenneth Rogoff, Shang-Jin Wei and M. Ayhan Kose, 2003, "Effects of Financial Globalization on Developing Countries: Some Empirical Evidence," *IMF Occasional Paper No. 220*. [Appendix III: Calculating the Potential Welfare Gains from International Risk Sharing]

Topic 4: Volatility, Crises

A. Financial Integration and Macroeconomic Volatility

B. Financial Crises

C. Globalization and the Growth-Volatility Relationship

Acemoglu, Daron, Simon Johnson, James Robinson and Yunyong Thaicharoen, 2003, "Institutional Causes, Macroeconomic Symptoms: Volatility, Crises and Growth," *Journal of Monetary Economics*, Vol. 50, pp. 49-123.

Calvo, Guillermo, Alejandro Izquierdo, and Ernesto Talvi, 2006, "Sudden Stops and Phoenix Miracles in Emerging Markets," *American Economic Review*, Vol. 96:2, pp. 405-410.

Frankel, Jeffrey, and George Saravelos, 2011, "Can Leading Indicators Assess Country Vulnerability? Evidence from the 2008-2009 Global Financial Crisis", Working paper 2011-0007, Weatherhead Center for International Affairs, Harvard University.

Kose, M. Ayhan, Eswar Prasad, and Marco Terrones, 2003, "Financial Integration and Macroeconomic Volatility," *IMF Staff Papers*, Vol. 50, pp. 119-41.

Kose, M. Ayhan, Eswar Prasad, and Marco Terrones, 2006, "How Do Trade and Financial Integration Affect the Relationship between Growth and Volatility," *Journal of International Economics*, Vol. 69:1, pp. 176-202.

Levchenko, Andrei A., Romain Ranciere, and Matthias Thoenig, 2008, "Growth and Risk at the Industry Level: The Real Effects of Financial Liberalization," *Journal of Development Economics*, Vol. 89:2, pp. 210-222.

Martin, Philippe, and Helene Rey, 2006, "Globalization and Emerging Markets: With or Without Crash?" *American Economic Review*, Vol. 96:5, pp. 1631-1651.

Ranciere, Romain, Aaron Tornell and Frank Westermann, 2007, "Systemic Crises and Growth," *Quarterly Journal of Economics*, Vol. 123:1, pp. 359-406.

Rose, K. Andrew and Mark M. Spiegel, 2011, "Cross-Country Causes and Consequences of the Crisis: An Update" *European Economic Review*, Vol. 55:3, pp. 309-324.

Topic 5: A New Framework: Collateral Benefits and Thresholds

The framework is summarized in Section VII of KPRW. We will go over the specifics of this framework in detail, and critically examine its theoretical basis and empirical relevance. Sections VIII and IX of KPRW contain the key references.

For some evidence and more detailed discussion of a key collateral benefit, see:

Goldberg, Linda S., 2007, "Financial Sector FDI and Host Countries: New and Old Lessons," *Federal Reserve Bank of New York Economic Policy Review*, Vol. 13, No. 1, pp. 1-17.

Mishkin, Frederic S., 2006, *The Next Great Globalization: How Disadvantaged Nations Can Harness Their Financial Systems to Get Rich* (Princeton, N.J.: Princeton University Press).

For a detailed literature survey and related evidence on threshold effects, see:

Kose, M. Ayhan, Eswar Prasad, and Ashley D. Taylor, 2011, "Thresholds in the Process of International Financial Integration," *Journal of International Money and Finance*, Vol 30:1, pp. 147-179.

Topic 6: International Business Cycle Transmission

A. Properties of Business Cycles in Emerging Markets

B. How Does Financial Integration Affect Domestic Business Cycles

C. Implications of Financial Integration for Business Cycle Transmission

D. Decoupling or Convergence of International Business Cycles?

Aguiar, Mark, and Gita Gopinath, 2007, "Emerging Market Business Cycles: The Cycle is the Trend," *Journal of Political Economy*, Vol. 115(1), pp. 69-102.

- Heathcote, Jonathan, and Fabrizio Perri, 2004, “Financial Globalization and Real Regionalization,” *Journal of Economic Theory*, Vol. 119:1, pp. 207-243
- Kose, M. Ayhan, Eswar Prasad, and Marco Terrones, 2003, “How Does Globalization Affect the Synchronization of Business Cycles,” *American Economic Review*, Vol. 93:2, pp. 57-62.
- Kose, M. Ayhan, Christopher Otrok, and Eswar Prasad, 2012, “Global Business Cycles: Convergence or Decoupling?” *International Economic Review*, Vol. 53:2, pp. 511-538.
- Kose, M. Ayhan, Christopher Otrok, and Eswar Prasad, 2015, “Macro-Financial Linkages in an Era of Globalization,” Manuscript, Cornell University.
- Kose, M. Ayhan, Christopher Otrok, and Charles Whiteman, 2003, “International Business Cycles: World, Region, and Country Specific Factors,” *American Economic Review*, Vol. 93, pp. 1216–39.

Topic 7. Understanding the Causes and Dynamics of the Global Financial Crisis

The Dollar Trap, Chapters 1-2, 7-8, 11.

- Boz, Emine, and Enrique Mendoza, 2014, “Financial Innovation, the Discovery of Risk, and the U.S. Credit Crisis,” *Journal of Monetary Economics*, Vol. 62, pp. 1-22.
- Caballero, Ricardo J. and Pablo D. Kurlat, 2009, “The “Surprising” Origin and Nature of Financial Crises: A Macroeconomic Policy Proposal, Financial Stability and Macroeconomic Policy,” Manuscript, Federal Reserve Bank of Kansas City.
- Claessens, Stijn, M. Ayhan Kose, and Marco Terrones. 2010. “The Global Financial Crisis: How Similar? How Different? How Costly?” *Journal of Asian Economics*, Vol. 21, No. 3, pp. 247–64.
- Claessens, Stijn, Ayhan Kose, and Marcos E. Terrones, 2011, “What Happens During Recessions, Crunches and Busts?” *Economic Policy*, pp. 653–700.
- Eggertsson, Gauti and Paul Krugman, 2012, “Debt, Deleveraging, and the Liquidity Trap: A Fisher-Minsky-Koo Approach,” *Quarterly Journal of Economics*, Vol. 127:3, pp. 1469-1513.
- Gourinchas, Pierre-Olivier and Maurice Obstfeld, 2012, “Stories of the Twentieth Century for the Twenty-First,” *American Economic Journal: Macroeconomics*, Vol. 4:1, pp. 226-265.
- Kose, M. Ayhan, and Eswar Prasad, 2010, *Emerging Markets: Resilience and Growth Amidst Global Turmoil*, Brookings Institution Press.

Krugman, Paul, 2008, "The International Financial Multiplier" Manuscript, Princeton University.

Lane, Philip R., and Gian Maria Milesi-Ferretti, 2014, "Global Imbalances and External Adjustment After the Crisis," IMF Working Paper No. 14/151.

Mendoza, Enrique G., Jose-Victor Rios-Rull and Vincenzo Quadrini, 2009, "Financial Integration, Financial Deepness and Global Imbalances," *Journal of Political Economy*, Vol. 117:3, pp. 371-410.

Topic 8: Implications of Financial Globalization (and the Crisis) for Monetary Policy Frameworks in Emerging Markets

A. Monetary Policy: The New Neoclassical Synthesis

B. Does Financial Openness Make Monetary Policy Less/More Effective, Less/More Relevant

C. Optimal Monetary and Exchange Rate Policies for Emerging Markets

Anand, Rahul, Eswar Prasad, and Boyang Zhang, 2015, "What Measure of Inflation Should a Developing Country Central Bank Target?" *Journal of Monetary Economics*, September 2015.

Brunnermeier, Marcus K., and Yuliy Sannikov, 2012, "Redistributive Monetary Policy," paper presented at the Federal Reserve Bank of Kansas City's Jackson Hole Economic Policy Symposium on "The Changing Policy Landscape".

Prasad, Eswar, and Boyang Zhang, 2015, "Distributional Effects of Monetary Policy in Emerging Market Economies," NBER Working Paper No. 21471.

Schmitt-Grohé, Stephanie, and Martín Uribe, 2015, "Downward Nominal Wage Rigidity, Currency Pegs, and Involuntary Unemployment," *Journal of Political Economy*, forthcoming.

Rose, Andrew, 2007, "A Stable International Monetary System Emerges: Inflation Targeting is Bretton Woods, Reversed," *Journal of International Money and Finance*, Vol. 26:5, pp. 663-81.

Woodford, Michael, 2007, "Globalization and Monetary Control," in J. Gali and M. Gertler, eds., *International Dimensions of Monetary Policy*, Chicago: University of Chicago Press, 2010.

Woodford, Michael, 2012, "Methods of Policy Accommodation at the Interest-Rate Lower Bound," paper presented at the Federal Reserve Bank of Kansas City's Jackson Hole Economic Policy Symposium on "The Changing Policy Landscape".

Topic 9: Capital Flow Management, Safe Assets

A. Managing Volatile Capital Flows When Capital Markets are Integrated

B. Models of Safe Assets

Caballero, Ricardo J., and Emmanuel Farhi, 2015, “The Safety Trap,” Manuscript, MIT.
Revised version of NBER Working Paper No. 19927.

Farhi, Emmanuel, and Ivan Werning, 2013, “Dilemma not Trilemma? Capital Controls and Exchange Rates with Volatile Capital Flows,” *IMF Economic Review*, 62: 569-605

He, Zhiguo, Arvind Krishnamurthy, and Konstantin Milbradt, 2015, “A Model of the Reserve Asset,” Manuscript, Stanford University.

Rey, H el ene, 2013, “Dilemma not Trilemma: The Global Financial Cycle and Monetary Policy Independence,” Federal Reserve Bank of Kansas City Economic Policy Symposium (2013).

Klein, Michael W. and Shambaugh, Jay C., “Rounding the Corners of the Policy Trilemma: Sources of Monetary Policy Autonomy,” *American Economic Journal: Macroeconomics*, *American Economic Association*, Vol. 7:4, pp. 33-66

Topic 10: Integrating Macroeconomics and Finance

A. Macroeconomic Models with a Financial Sector

B. Macro-Prudential Policies

Brunnermeier, M. K., T. Eisenbach, and Y. Sannikov, 2012, “Macroeconomics with Financial Frictions: A Survey,” in *Advances in Economics and Econometrics*, 10th World Congress of the Econometric Society, ed. by D. Acemoglu, M. Arellano, and E. Dekel. Cambridge University Press, Cambridge, UK.

Brunnermeier, Markus K., and Yuliy Sannikov, 2014, “A Macroeconomic Model with a Financial Sector,” *American Economic Review*, Vol. 104:2, pp. 379-421.

Markus Brunnermeier, and Yuliy Sannikov, 2016, “The I-Theory of Money,” NBER Working Paper No. 22533

Farhi, Emmanuel, and Ivan Werning, 2013, “A Theory of Macroprudential Policies in the Presence of Nominal Rigidities,” *Econometrica*, forthcoming

Hahm, Joon-Ho, Frederic Mishkin, Hyung Song Shin, and Kwanho Shin, 2012, “Macroprudential Policies in Open Emerging Economies,” *Proceedings, Federal Reserve Bank of San Francisco*, Issue Nov, pp. 63-114

Key Dates**Friday, October 14: Paper proposals due @ noon****Friday, November 11: First drafts of papers due @ noon****Monday, December 5: Final drafts of papers due @ noon**

Please adhere strictly to deadlines. I will not be able to provide detailed feedback if you do not get your assignment in on time.

Research Proposals

Maximum length of proposal: 10 pages of double-spaced text including cover page and appendixes but excluding references, charts and tables (use 12 point font, at least 1 inch margin on all sides).

Preliminary Drafts of Papers

Maximum length of draft: 20 pages of double-spaced text including cover page and appendixes but excluding references, charts and tables (use 12 point font, at least 1 inch margin on all sides).

Structure, Format for Research Paper

Final draft of paper is due on **Monday, December 5 at 12 noon**. No exceptions.

Maximum length of final draft: 25 pages of double-spaced text including cover page and appendixes but excluding references, charts and tables (use 12 point font, at least 1 inch margin on all sides). Cover page should contain an abstract—maximum of 150 words.

Introduction should clearly convey the objective of your paper, provide a clear motivation (why the questions you are addressing are of interest), what the main original contribution of your paper is, and the key results.

Do not include an extensive literature survey. In the text, discuss only a few key papers that you are building on. Footnote the remaining papers.

Tables and figures should have self-explanatory titles and footnotes, with axes labeled clearly and showing relevant units.

Empirical work should be described clearly (dataset, variable transformations, exact specifications etc.) in a manner that allows for easy replication by other researchers. Theoretical work should have clear and consistent notation.

Email all documents to me (eswar.prasad), with cc to Isha Agarwal (ia233) and Erika Rose (ear245), with the subject line indicating “7670: Proposal” (or whatever the relevant document is).