

## **Financial Crises: Concepts and Evidence**

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Location: Kiel Institute for the World Economy

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### **Syllabus**

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These are the readings for this course which tries to balance theoretical concepts, empirical applications and policy issues. There is an emphasis on the historical experience. For each topic you will find theoretical and empirical papers, some are older classics and others are of more recent vintage.

In addition to the readings, you are expected to follow current events in the financial press, such as *The Economist* and the *Financial Times*. Regular visits to the International Monetary Fund's website, <http://www.imf.org/external/index.htm>, and news and readings therein are encouraged.

#### **Description:**

This course covers topics on currency, banking, inflation, and debt crises as well as international financial contagion. Issues pertaining to monetary/financial, exchange rate, debt restructuring, and fiscal policy in connection with the antecedents and aftermath of crises are studied at both the theoretical and empirical levels. The role of current account dynamics, international capital flows, financial integration, and world commodity price cycles as these relate to recurring economic booms and busts are analyzed. The empirical evidence studied is global in scope, drawing from the experiences and crises episodes of advanced and emerging market economies across all regions. The historical coverage spans many of the pre-World War II crises episodes to the modern-day emerging market crashes of the 1990s and the unfolding banking and debt crises of the advanced economies.

#### **Participation:**

You are expected to select a country for which you should read up on (in connection with past crises) and monitor throughout the course. We will set aside some time at the end of each of the sessions to review, clarify, and connect the concepts to unfolding economic developments (ie., those relevant to the topics covered). Participation is strongly encouraged.

## Information sources on the web

You will find some of my recent papers and data at my web site:  
<http://www.carmenreinhardt.com>. Many of the articles in this reading list are available through JSTOR and REPEC. The Advanced Studies Program team of the Kiel Institute will provide you access to the IfW cloud and easy access to most of the references.

### Readings:

**Please note that I will also distribute the lecture notes.  
We are not covering all the readings in the syllabus; but will flag in the first day those that will be emphasized.**

### *Required:*

Carmen M. Reinhart and Kenneth S. Rogoff (2009) *This Time It's Different: Eight Centuries of Financial Folly*. (Princeton: Princeton University Press, September 2009) is required for this course.

Carmen M. Reinhart, (2010) [This Time is Different Chartbook: Country Histories on Debt, Default, and Financial Crises](#), NBER Working Paper 15815.

### *Recommended but not required:*

Goldstein, Morris, Graciela L. Kaminsky, and Carmen M. Reinhart (2000) *Assessing Financial Vulnerability: An Early Warning System for Emerging Markets*, (Washington, DC: Institute for International Economics). Particularly relevant for first memo.  
Chapters: [One](#), [Two](#), [Three](#), [Four](#), [Five](#), [Six](#), [Seven](#), [Eight](#)

Kindelberger, Charles. *Manias, panics, and crashes*. (1978) New York, NY: Basic Books Inc. A classic for historical episodes involving financial centers.

### **Day 1. *Financial crises and exchange rate arrangements, varieties and definitions***

Reinhart and Rogoff, Part I, Chapters 1-3, pages 1-48.

Reinhart and Rogoff, Chapters 16 pages 248-274.

Kaminsky, G., 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 1999, 473-500.

Reinhart, Carmen M and Kenneth S Rogoff (2011). [From Financial Crash to Debt Crisis](#). *American Economic Review*, Vol. 101, No. 5, August, 2011, 1676-1706.

## ***Review on Current Account and Exchange Rate Arrangements***

**Class Notes to be distributed are particularly important for this topic.**

Calvo, Guillermo A. and Carmen M. Reinhart, [Fear of Floating](#) *Quarterly Journal of Economics*, Vol. CXVII No. 2, May 2002, 379-408.

Ethan Ilzetki, Carmen M Reinhart, and Kenneth Rogoff “Exchange Rate Arrangements in the 21<sup>st</sup> Century: Which Anchor Will Hold?”, National Bureau of Economic Research, Working Paper 23134, February 2017.

Ethan Ilzetki, Carmen M Reinhart, and Kenneth Rogoff “The Country Chronologies to Exchange Rate Arrangements into the 21st Century: Will the Anchor Currency Hold?” National Bureau of Economic Research, Working Paper 23135, February 2017. Look-up the post-1946 exchange rate arrangement history of your country.

### **Day 2. *First and second generation currency and banking crises***

Dooley, Michael. (2000). [“A Model of Crises in Emerging Markets”](#), *Economic Journal*, January, 110 256-272. Early paper emphasizing the role of moral hazard

Velasco, Andres. "Financial and Balance-of-Payments Crises." *Journal of Development Economics*, October 1987, 27(1/2), 263-83.

This is first model of the twin crises; it is a variant of the Krugman (1978) framework.

Chang, Roberto and Andres Velasco, (2001). [A Model of Financial Crises in Emerging Markets](#), *Quarterly Journal of Economics* 116(2), 2001, 489-517.

An open economy Diamond and Dybvig setting.

Obstfeld, Maurice, [The Logic of Currency Crises](#). *NBER Working Paper* No. 4640, February 1994. *Cahiers Economiques et Monétaires* (Banque de France), no. 43, 1994. These models emerged from the ERM crisis in Europe 1992.

Reinhart, Carmen M. and Kenneth S. Rogoff, Chapters 10, pages 141-173 and Chapters 13-14, pages 203-239

Diaz-Alejandro, Carlos. [Good-Bye Financial Repression, Hello Financial Crash](#).

*Journal of Development Economics*, February 1985, 19(1/2), pp. 1-24.

A classic on the role of contingent liabilities.

Eichengreen, B., Rose, A.K. and Wyplosz, C., (1996) [Exchange Market Mayhem: the Antecedents and Aftermath of Speculative Attacks](#). *Economic Policy*, October 1996, 21(21) pp. 249-312.

### Day 3 *Sovereign debt crises: Domestic and external debt*

Reinhart and Rogoff, Part II, Chapters 4-6, pages 49-100.

Reinhart and Rogoff, Part III, Chapters 7-9, pages 101-138.

Eaton, Jonathan, and Mark Gersovitz (1981) “[Debt with Potential Repudiation: Theory and Estimation,](#)” *Review of Economic Studies* 48 (2), April: 289-309.

A classic

Bulow, Jeremy and Kenneth Rogoff, (1989) [Sovereign Debt: Is to Forgive to Forget?](#) *American Economic Review* 79 (March), 43-50.

Another classic

Aart Kraay & Vikram Nehru, 2006. [When Is External Debt Sustainable?](#), *World Bank Economic Review*, Oxford University Press, vol. 20(3), pages 341-365.

Cruces, Juan and Cristoph Trebesch, 2012. [Sovereign Defaults: The Price of Haircuts,](#) March 2013, with Juan Cruces (Paper, Appendix) *American Economic Journal: Macroeconomics*.

Default is NOT a 0/1 phenomenon.

Carmen M. Reinhart & Christoph Trebesch, 2016. "Sovereign Debt Relief And Its Aftermath," *Journal of the European Economic Association*, European Economic Association, vol. 14(1), pages 215-251, February.

The debtor's perspective on haircuts.

Reinhart, Carmen M. and Christoph Trebesch. “The Pitfalls of External Dependence: Greece, 1829-2015,” *Brookings Papers on Economic Activity*, Fall 2015.

Connection to serial default.

Reinhart, Carmen and Vincent R. Reinhart and Kenneth S. Rogoff (2012) [Public Debt Overhangs: Advanced Economy Episodes Since 1800,](#) *Journal of Economic Perspectives*, Summer.

Bova, Ekva, Marta Ruiz-Arranz, Frederik Toscani, and H. Elif Ture (2016) “The Fiscal Costs of Contingent Liabilities: A New Dataset IMF Working Paper WP/16/14.

Big problem in the past and even bigger one in the future.

Guillermo A. Calvo, 1989. [Is Inflation Effective for Liquidating Short-Term Nominal Debt?](#), *IMF Staff Papers*, vol. 36(4), pages 950-960, December.

This paper helps explain the Reinhart-Rogoff puzzle of why countries inflate when the apparent tax base (high-powered money) is so small.

Reinhart, Carmen M. & M. Belen Sbrancia, "The Liquidation of Government Debt," *Economic Policy*, Vol. 30(82), March 2015, 291-333.  
Financial repression as a means to reduce debt.

**Day 4. *Early warning systems, credit cycles, and and cross-border contagion***

Reinhart, Carmen M. and Kenneth S. Rogoff, Chapter 17, pages 277-292.

Kaminsky, G., S. Lizondo, and C.M. Reinhart, [Leading Indicators of Currency Crises](#), *IMF Staff Papers*, Vol. 45 No. 1, March 1998, 1-48.

Also includes a survey of the empirical literature. Will recap the Kaminsky and Reinhart twin crisis approach.

Manasse, Paolo and Roubini, Nouriel and Schimmelpfennig, Axel, Predicting Sovereign Debt Crises (November 2003). IMF Working Paper, Vol. , pp. 1-41, 2003.

Debt crisis complement to KR's twin crises.

Frankel, Jeffrey and George Saravelos (2012) [Are Leading Indicators Useful for Assessing Country Vulnerability? Evidence from the 2008-09 Global Financial Crisis](#), in *Journal of International Economics* 87, no.2, July, pp.216-31.

Enrique G. Mendoza & Marco E. Terrones, 2014. [An Anatomy of Credits Booms and their Demise](#), *Journal Economía Chilena (The Chilean Economy)*, Central Bank of Chile, vol. 15(2), pages 04-32, August.

Schularick, Moritz and Alan Taylor. (2012) [Credit Booms Gone Bust: Monetary Policy, Leverage Cycles and Financial Crises, 1870–2008](#), *American Economic Review* 102 (April): 1029–61.

***Contagion***

Allen F. and D. Gale (2007) *Understanding Financial Crises*, Oxford University Press, 2007– chapter 10.

Calvo, G., "Understanding the Russian Virus: A Technical Supplement", in Guillermo Calvo *Emerging Capital Markets in Turmoil: Bad Luck or Bad Policy?* (Cambridge, MA: MIT Press 2005).

Information asymmetries

Chari, V. V., and Patrick J. Kehoe, "Hot Money," *Journal of Political Economy* 111 (December 2003): 1262-92.

Herding

Gerlach, Stefan & Smets, Frank, 1995. [Contagious speculative attacks](#) *European Journal of Political Economy*, vol. 11(1), 45-63, March.

Early paper motivated by ERM crisis; Competitive devaluations

Kaminsky, G., and C.M. Reinhart, (2000) [On Crises, Contagion, and Confusion](#), *Journal of International Economics*, Vol. 51 No. 1, June, 145-168.  
Emphasis on financial channels links-especially banks.

Kaminsky, G., C.M. Reinhart, and C.A. Végh, [The Unholy Trinity of Financial Contagion](#), *Journal of Economic Perspectives*, Vol. 17 No. 4, Fall 2003, 51-74.  
Role of surprises and leverage.