# How Does Trade Evolve in the Aftermath of Financial Crises?

Published: 12 August 2014

Volume 62, pages 213–247, (2014) Cite this article

IMF Economic Review

Aims and scope →

Submit manuscript →

## Notes

1. See, among others, Baldwin (2009) and references therein, Alessandria, Kaboski, and Midrigan (2010), Bems, Johnson, and Yi (2010), Levchenko, Lewis, and Tesar (2010), Eaton and others (2011), and Chor and Manova (2012). There is also a rising literature that provides microevidence on trade adjustment following large depreciations in emerging economies (for example, Gopinath and Neiman, 2011; and Alessandria, Kaboski, and Midrigan, 2011).

2. Freund (2009) also takes a historical perspective by examining the decline in world trade following four previous global downturns. In this paper we focus not on global trade dynamics, but on what happens to trade of individual economies that experience a banking or debt crisis.

7. In the baseline specification, we include only the current value of the dummy for FTA. However, as Baier and Bergstrand (2007) have shown, FTAs can have strong cumulative effects on trade (we thank an anonymous referee for pointing this out). In order to address this issue, we estimate an alternative specification where we include current as well as five lags of the FTA variable. The coefficients on the importer and exporter crisis variables remain very similar to the baseline.

8. More precisely, it takes 11 years, because the coefficient of the eleventh lag is statistically indistinguishable from zero. The exact effect on imports in year $k$ can be calculated as $(1-e^{-k}) \approx -k$, because $k$ is small.

9. Several studies document substantial medium-term output losses following

cross-sectional, rather than time-varying, determinants of trade, because their exclusion variables are time invariant. Note also that we implement the HMR methodology in the specification with separate exporter and importer fixed effects (and not interaction), because the exclusion variable varies only across country pairs but not over time.

12. As in Cerra and Saxena (2008), we use the estimated coefficients on the crisis and its lags from a specification in which the dependent variable is the growth rate of the outcome of interest in order to construct the evolution of the level of the outcome of interest in the aftermath of a crisis.

13. See, for example, McKinsey (2010) and Tang and Upper (2010).

International Monetary Fund).

Abiad, Abdul, Giovanni Dell'Ariccia, and Bin Li, 2011, "Creditless Recoveries," IMF Working Paper 11/58 (Washington: International Monetary Fund).

Alessandria, George, Joseph P. Kaboski, and Virgiliu Midrigan, 2010, "The Great Trade Collapse of 2008–09: An Inventory Adjustment?," IMF Economic Review, Vol. 58, No. 2, pp. 254–94.

Article Google Scholar

Alessandria, George, Joseph P. Kaboski, and Virgiliu Midrigan, 2011, "Inventories, Lumpy Trade and Large Devaluations," American Economic Review, Vol. 101, No.

*Prospects*. Available via the Internet: www.voxeu.org/index.php?q=node/4297.

Baldwin, Richard and Daria Taglioni, 2006, "Gravity for Dummies and Dummies for Gravity Equations," NBER Working Paper No. 12516 (Cambridge, MA: National Bureau of Economic Research).

Beim, David and Charles Calomiris, 2001, *Emerging Financial Markets*, appendix to Chapter 1 (New York: McGraw-Hill/Irwin).

Bems, Rudolphs, Robert C. Johnson, and Kei-Mu Yi, 2010, "Demand Spillovers and the Collapse of Trade in the Global Recession," IMF Economic Review, Vol. 58, No. 2, pp. 295–326.

Braun, Matías and Borja Larrain, 2005, “Finance and the Business Cycle: International, Inter-Industry Evidence,” Journal of Finance, Vol. 60, No. 3, pp. 1097–128.

Article Google Scholar

Caprio, Gerard, Daniela Klingebiel, Luc Laeven, and Guillermo Noguera, 2005, “Appendix: Banking Crisis Database,” in Systemic Financial Crises: Containment and Resolution, ed. by Patrick Honohan, and Luc Laeven (Cambridge, U.K.: Cambridge University Press).

Google Scholar

Evenett, Simon J., 2009, “What Can Be Learned from Crisis-Era Protectionism? An Initial Assessment,” CEPR Discussion Paper No. 7494 (London: Centre for Economic Policy Research).

Feenstra, Robert, 2002, Advanced International Trade: Theory and Evidence (Princeton: Princeton University Press).

Google Scholar

Feenstra, Robert *et al*. 2005, “World Trade Flows: 1962–2000,” NBER Working Paper No. 11040 (Cambridge, Massachusetts: National Bureau of Economic Research).

Glick, Reuven and Alan M. Taylor, 2010, “Collateral Damage: Trade Disruption and the Economic Impact of War,” Review of Economics and Statistics, Vol. 92, No. 1, pp. 102–27.

Article Google Scholar

Gopinath, Gita and Brent Neiman, 2011, “Trade Adjustment and Productivity in Large Crises,” NBER Working Paper No. 16958 (Cambridge, MA: National Bureau of Economic Research).

Gourinchas, Pierre-Olivier and Maurice Obstfeld, 2012, “Stories of the Twentieth Century for the Twenty-First,” American Economic Journal: Macroeconomics, Vol. 4, No. 1, pp. 226–65.

Iacovone, Leonardo and Veronika Zavacka, 2009, “Banking Crises and Exports: Lessons from the Past,” Policy Research Working Paper 5016 (Washington, DC: World Bank).

International Monetary Fund (IMF). 2004, “A New Look at Exchange Rate Volatility and Trade Flows,” IMF Occasional Paper No. 235 (Washington: International Monetary Fund).

International Monetary Fund (IMF). 2009, “What’s the Damage? Medium-term Output Dynamics after Financial Crises,” *World Economic Outlook*, Chapter 4, October.

Levchenko, Andrei, Logan Lewis, and Linda Tesar, 2010, “The Collapse of International Trade during the 2008–2009 Crisis: In Search of the Smoking Gun,” IMF Economic Review, Vol. 58, No. 2, pp. 214–53.

Article Google Scholar

Ma, Zihui and Leonard Cheng, 2005, “The Effects of Financial Crises on International Trade,” NBER Conference Volume, International Trade in East Asia Seminar on Economics, Vol. 14 (Cambridge, MA: National Bureau of Economic Research).

Martin, Philippe, Thierry Mayer, and Mathias Thoenig, 2008, “Make Trade, Not War?,” Review of Economic Studies, Vol. 75, No. 3, pp. 865–900.

Article Google Scholar

Qureshi, Mahvash Saeed, 2009, “Trade and Thy Neighbor’s War,” IMF Working Paper 09/283 (Washington: International Monetary Fund).

Reinhart, Carmen and Kenneth Rogoff, 2008, “Banking Crises: An Equal Opportunity Menace,” NBER Working Paper No. 14587 (Cambridge, MA: National Bureau of Economic Research).

Reinhart, Carmen and Kenneth Rogoff, 2009a, This Time is Different: Eight Centuries of Financial Folly (Princeton: Princeton University Press).

Google Scholar

Reinhart, Carmen and Kenneth Rogoff, 2009b, “The Aftermath of Financial

World Bank, 2002, *Global Development Finance*, appendix on commercial debt restructuring (Washington: World Bank).

Yu, Miaojie, 2010, "Trade, Democracy and the Gravity Equation," Journal of Development Economics, Vol. 91, No. 2, pp. 289–300.



## Additional information

Laeven and Valencia (2008 and 2010). Additional data sources are listed in Table A1.

**Table A1 Data Sources**

Crisis indicators are from Laeven and Valencia (2008 and 2010). Laeven and Valencia (2010) present new and comprehensive data on the starting dates and characteristics of systemic banking crises over the period 1970–2009, building on earlier work by Caprio and others (2005), Laeven and Valencia (2008), and Reinhart and Rogoff (2009a). They update the Laeven and Valencia (2008) database on systemic banking crises to include the recent episodes following the U.S. mortgage crisis of 2007, and identify 129 episodes since 1970.

Data on imports and exports by product category are constructed from the NBER-UN *World Trade Flows* database (see Feenstra and others, 2005). The database is first extended using the UN *Comtrade* database. The Standard International Trade Classification, Revision 2 (SITC Rev. 2) codes that identify products in the NBER-UN trade data are matched to the UN Broad Economic Classification (BEC) codes. These are then classified into Capital Goods, Consumer Durables, Consumer Nondurables, Intermediate Goods, and Primary Goods, following Pula and Peltonen (2009).7

**Table A3 Imports and Exports Following Crises: Robustness**

The measure of trade liberalization is from the IMF Structural Reforms Database