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Financial Crisis *(Introduction)*[*]

Martin ČIHÁK – International Monetary Fund (mcihak@imf.org)

Abstract
Since the bursting of the bubble in the U.S. mortgage market in 2007, the financial turmoil has spread to a wide range of other markets and economies around the world, morphing into a global financial crisis. The five articles in this special issue of the Czech Journal of Economics and Finance cover selected aspects of the crisis, including the contagion from advanced economies to emerging markets, the potential for contagion among European emerging markets, the differentiated impact of the crisis on European economies, and the negative spillovers between market liquidity and banking sector liquidity during the crisis. This introduction provides an overview of the articles in the special issue, putting them into a broader perspective.

1. Introduction

The recent financial crisis has triggered a massive wave of papers, articles, and books. Many central banks and other institutions have published documents analyzing the turmoil and discussing the policy responses. The crisis has become a topic of great interest for academics, policymakers, and the general public.

Why the increased interest? After all, financial crises have been anything but rare in the last four decades: around the world, there have been some 120 systemic banking crises since the early 1970s (Laeven and Valencia, 2008).

Three features stand out about this crisis (apart from the fact that it is the most recent one).

First, the crisis has been exceptional by its size and geographical reach. In terms of the financial shocks, it has been the largest since 1929–33, and it has become a truly global financial crisis, affecting virtually all the world's economies, from the United States to Ukraine.[1]

Second, the crisis erupted in advanced economies. Most of the past crises took place in emerging markets and developing economies. Consequently, empirical literature on crises (e.g., Demirgüç-Kunt and Detragiache, 2005, Čihák and Schaeck, 2007) has largely focused on emerging markets and developing economies. The literature on developed economy financial crises has been relatively thin, one of the exceptions being the Scandinavian crises of early 1990s (e.g., Eglund, 1999).

Third (and related to the previous two points), the crisis has been remarkable by the complexity and multiplicity of contagion channels. The financial shocks have spread quickly from one market to another and from one institution to another, and

[*] The views expressed here are those of the author and do not necessarily represent those of the International Monetary Fund (IMF) or IMF policy. My thanks go to Renata Nováková for her excellent support in preparing this special issue.

[1] Ukraine is mentioned only as an example (and also because of the alliteration). For a summary of the impact of the crisis on Ukraine, see for instance
http://www.imf.org/external/pubs/ft/survey/so/2008/CAR111008A.htm.

from one country to another via channels that in some cases have not existed or have been much less prominent only a few years ago. In comparison, most of the earlier crises have been confined to a single economy (or a small group of economies) at a time.[2]

Considering how much has already been written about the crisis, why should you read this special issue? What distinguishes the articles assembled here? One important distinguishing feature reflects the overall aims of the journal: the articles contain primarily empirical work, with an emphasis on cross-country analysis (and some case studies) of emerging markets, especially those in Europe. Another distinguishing feature is the choice of topics being covered: the assembled articles cover selected key aspects of the crisis, focusing on the contagion from advanced economies to emerging markets, potential for contagion among emerging markets, the differentiated impact of the crisis on European countries, and the negative feedbacks between market liquidity and banking sector liquidity during the crisis.

2. Overview of the Special Issue

The special issue is a collection of articles covering different aspects of the crisis, but there are some common themes that span several articles. One of the overarching themes relates to the role of contagion and spillovers during the crisis. Research and applied analytical work in the pre-crisis period tended to underestimate the extent of contagion and spillovers across markets, between markets and financial institutions, and across country borders. Several articles in this issue highlight the importance (and document the extent) of contagion.

Another overarching theme relates to oversight at the level of the financial system. One of the issues in the run-up to the crisis was that, even in jurisdictions where individual financial institutions and markets were competently supervised, systemic oversight was often inadequate, allowing the system (and the economy) to overheat. Going forward, it is clear that systemic oversight needs improvements in many countries in terms of the underlying data, analysis, as well as implementation and enforcement. Some of the articles provide useful pointers on improving the analytics of systemic oversight (macroprudential analysis) in the region.

The ***first article*** in this special issue, by Nathaniel Frank and Heiko Hesse, focuses on the topic of financial spillovers to emerging markets during the global financial crisis. Initially, the crisis did not fully affect emerging markets. There was an early period of apparent resilience, which led some observers to put forward the notion of "decoupling" between advanced and emerging markets. This initial period of resilience, however, gave way to a period of strong spillovers to the emerging markets. The authors use data from the crisis to analyze financial linkages between market liquidity and bank solvency measures in advanced economies and emerging market bond and stock markets. They employ a multivariate generalized autoregressive conditional heteroskedasticity (GARCH) model to measure the extent of co-movements of these financial variables across the various markets. They zero in on the above-mentioned notion that emerging markets may have decoupled from ad-

[2] Reflecting this feature, the literature on financial crisis modeling traditionally focused on single-country crises caused primarily by domestic factors, and it lacked explicit treatment of contagion across markets and country borders (Demirgüç-Kunt and Detragiache, 2005, Čihák and Schaeck, 2007)

vanced economy markets – something that has seem plausible in the early part of the crisis. They reject the hypothesis of de-coupling in the financial markets. Frank and Hesse find interlinkages between funding stress and equity markets in advanced economies and emerging market financial indicators were highly correlated, and have seen sharp increases during specific crisis moments. Namely, the linkages became especially apparent during the Shanghai stock market correction in February 2007, the beginning of the subprime crisis in summer 2007, the Bear Stearns rescue in March 2008 and the Lehman Brothers bankruptcy in September 2008.

A somewhat different, but related, type of interlinkages is the subject of the ***second article***, by Zsófia Árvai, Karl Driessen, and İnci Ötker-Robe. The article analyzes the magnitude of cross-border financial exposures between advanced and emerging economies in Europe through banks with significant cross-border operations, and discusses the associated risks in the form of exposure to potential regional contagion. Based on consolidated international banking claims data from Bank for International Settlements (BIS) reporting banks, it explores the extent of financial interlinkages between home and host countries and provides stylized facts that could help assess the extent to which shocks from foreign markets can affect a given country. The article follows up on an earlier *CJEF* piece, by Geršl (2007). It focuses on possible contagion through a "common lender" that may be present in a number of countries. Árvai, Driessen, and Ötker-Robe explore how the presence of a common lender could transfer a shock in one country to other countries in the region in which the parent bank has significant direct or indirect operations. They present indices of exposure to regional contagion that could help identify the likely pressure points and capture potential spillover effects and propagation channels of a regional shock originating from a given country.

The impact of the crisis has been very hard for some emerging European economies, while other European economies weathered the storm relatively well. What accounts for this differentiation? This is analyzed in the ***third article***, by Martin Čihák and Srobona Mitra. They analyze the performance of European emerging market economies, highlighting that the crisis has put an increased premium on sound macroeconomic and macroprudential policies: countries with lower inflation, smaller current account deficits, and lower dependence on bank-related capital inflows in recent years have fared better during the crisis. Their analysis also yields an interesting side result. In the pre-crisis period, spreads on sovereign bonds in countries that newly (in 2004 or thereafter) entered the European Union were lower than would be justified by fundamentals (this has become known as the "EU halo effect" in the literature). Čihák and Mitra show that during the crisis, the sovereign bond spreads in these have started to rise, leading to the disappearance of the "halo effect". At the same time, differentiation in the spreads across the countries has increased substantially, as markets started putting an increased premium on sound macroeconomic and macroprudential policies.

Among the hardest hit in Europe were the Baltic economies. The Baltics are the subject of the ***fourth article***, by Mejra Festić and Sebastijan Repina. In their article, they examine financial sector stability in the Baltics, focusing on the hypothesis of procyclicality of banking sector performance. They conclude that increased economic activity has significantly improved the loan portfolio quality of the banking sector, as indicated by a lower ratio of nonperforming loans (NPLs) to total loans;

conversely, the deterioration in economic performance associated with the crisis is bound to increase the NPLs in the Baltics. The authors' estimates also confirm that rapid growth of credit ultimately harms banking performance and deteriorates the NPL dynamics, most probably due to soft-loan constraints and overheating of economies. Festić and Repina also find that higher banking market concentration coincides with higher NPLs during the economic downturns, relative to low market concentration economies, and that higher quality of banking supervision (measured by compliance with the Basel core principles) is associated with a higher quality of the loan portfolio.

One of the key lessons from the crisis has been the importance of liquidity. The crisis experience has illustrated how quickly liquidity problems can spiral out of control via a negative feedback loop between market liquidity and funding liquidity. Ultimately, this can turn liquidity issues into a solvency problem. This is the motivation for the final, ***fifth article***, by Adam Geršl and Zlatuše Komárková. They make the point that even in countries that were not directly hit by the global financial crisis and where the banking system had a relatively strong liquidity position, there has been a negative spiral between the market and funding liquidity. The authors illustrate this on a case study of the Czech banking system. Geršl and Komárková construct indices of market and funding liquidity using daily market data, including data on banks' bidding behavior in repo operations of the Czech National Bank. They find some evidence of a negative feedback effect between market and funding liquidity, especially after the collapse of Lehman Brothers in September 2008.

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In response to our call for papers, we have received more texts than we could print in this special issue. There are more pieces in the pipeline that are likely to appear in future issues of the journal.

More substantively, although tensions in markets have somewhat subsided in 2009, the crisis has not yet been fully over at the time of writing of the articles for this issue. When the crisis is fully over, and more data becomes available from the crisis period, more definitive assessments of the crisis experience will be possible.

In an even broader sense, the crisis is likely to have a deep impact on the economic and finance literature. The standard macroeconomics was born in the 1940s as part of the intellectual response to the Great Depression (Lucas, 2003). In a similar vein, the Global Financial Crisis of 2007–09 is likely to have a profound impact on the economic literature in coming years and perhaps decades. Specifically, we are for instance likely to see more papers that explicitly incorporate financial intermediation into macroeconomic models and that in particular model more better the occurrence of defaults. Some work along these lines is already taking place, but much more is likely to come. In other words, the topic of the Global Financial Crisis is here to stay for some time.

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