Determinants of US financial fragility conditions

Fabio C. Bagliano\textsuperscript{a,b}, Claudio Morana\textsuperscript{b,c,d,e,*}

\textsuperscript{a} Università di Torino, Torino, Italy
\textsuperscript{b} CeRP-Collegio Carlo Alberto, Moncalieri, Italy
\textsuperscript{c} Università di Milano Bicocca, Milano, Italy
\textsuperscript{d} Fondazione Eni Enrico Mattei, Milano, Italy
\textsuperscript{e} International Centre for Economic Research (ICER), Torino, Italy

\textbf{A R T I C L E   I N F O}

\textbf{Article history:}
Received 10 February 2012
Accepted 6 August 2012
Available online 24 August 2012

\textbf{JEL classification:}
C22
E32
G12

\textbf{Keywords:}
Financial fragility
US
Macro–finance interface
International business cycle
Factor vector autoregressive models
Financial crisis
Great Recession

\textbf{A B S T R A C T}

The recent financial crisis has highlighted the fragility of the US financial system under several respects. In this paper the properties of a summary index of financial fragility, timely capturing changes in credit and liquidity risk, distress in the mortgage market, and corporate default risk, is investigated over the 1986–2010 period. We find that observed fluctuations in the financial fragility index can be attributed to identified (global and domestic) macroeconomic (20%) and financial disturbances (40–50%), over both short- and long-term horizons, as well as to oil-supply shocks in the long-term (25%). Overall, differently from financial shocks, macroeconomic disturbances have generally had a stabilizing effect.

© 2012 Elsevier B.V. All rights reserved.

\* Corresponding author at: Università di Torino, Torino, Italy.
E-mail addresses: fabio.bagliano@unito.it (F.C. Bagliano), claudio.morana@unimib.it (C. Morana).

1. Introduction

As recent global macroeconomic and financial events have powerfully shown, strong interlinkages relate financial and macroeconomic dynamics, also across countries, due to financial and economic integration. Indeed, the 2007–2008 financial crisis and the ensuing “Great Recession” is an important example of a domestic (US) financial crisis, whose depressive effects quickly spilled over worldwide.
amplified by the leading role of the US economy. The originating mechanism of the crisis can be traced back to excess debt creation in the US subprime mortgage market, leading to a boom-bust cycle in credit volumes and house and stock prices. Procyclical bank loans, a benign price stability environment, accommodative monetary policy, growing external debt, and deregulated financial markets all worked as amplifying mechanisms (see Bagliano and Morana, 2012 for a recent account of the crisis).

One of the likely reasons for the unprecedented depth of the crisis is the mounting fragility of the US financial sector, associated with excessive leverage and overstretching of credit. Such a phenomenon presents a number of different but interrelated dimensions, involving, among others, credit and liquidity risk conditions, the amount of stress in the mortgage market and corporate default risk perceptions. A summary measure of financial market conditions is not readily available, many indicators providing useful information on specific aspects of the financial system’s state of health.

In this paper we analyze the properties of the synthetic index of US economic and financial fragility proposed by Bagliano and Morana (2012), obtained by combining the information conveyed by several indicators (return differentials) that are closely scrutinized by financial economists, professionals and policymakers. Specifically, we employ a factor vector autoregressive model to assess the relative importance of global (worldwide) and domestic (US) factors in determining fluctuations of the proposed US financial fragility measure over the 1986–2010 period.

The global factors include unobserved driving forces extracted from a large set of macroeconomic and financial quantities covering 50 countries and capturing worldwide developments in a wide range of real activity, labor market, liquidity, interest rates and financial price variables. In addition, a number of domestic variables are included in order to account for several sources of US financial disturbances and fundamental economic imbalances. Finally, a set of variables concerning global oil demand and supply conditions are added to allow for potential effects of oil market developments on US economic and financial conditions.

To preview the main results of the paper, we find that the bulk of fluctuations in the financial fragility index can be attributed to identified macroeconomic, financial (of both a global and local nature) and oil market structural disturbances, over both short- and long-term (10-year) horizons. Fundamental financial shocks yield the largest contribution, accounting for about half of the index variability in the short-term and 40% over the 10-year horizon, whereas the corresponding figures for macroeconomic disturbances are 25% and 15%, and 5% and 25% for oil market supply side disturbances. Moreover, the analysis of specific episodes of financial distress, occurred in 1987, 1998 and 2000, and, more recently, over the 2007–2009 period, shows that sizable fluctuations in the index are largely determined by fundamental financial shocks (risk factors shocks in particular), while macroeconomic disturbances have generally had a stabilizing effect on the fragility index. Actually, consistent with the Great Moderation phenomenon, macroeconomic shocks had a stabilizing impact on the fragility index until the occurrence of the recent financial crisis, dominating over financial shocks until the mid 1990s, and offsetting the latter thereafter.

The rest of the paper is organized as follows. In Section 2 the econometric methodology is outlined, while Section 3 describes the construction of the US financial fragility index and the data used to model the most relevant global and local factors determining its behavior. Section 4 discusses specification issues, and Section 5 presents empirical results. Finally, the main conclusions are drawn in Section 6.

2. Econometric methodology

The econometric model is composed of two blocks of equations. The former describes the dynamics of the main macroeconomic and financial determinants of an index capturing US financial system’s fragility conditions (presented in detail in the following section), including both unobserved global factors and observed US variables. The second block, which is used in order to estimate the unobserved global macro–financial factors, captures the dynamics of the main macroeconomic and financial variables for a large set of developed and emerging economies.
دریافت فوری
متن کامل مقاله

امکان دانلود نسخه تمام متن مقالات انگلیسی
امکان دانلود نسخه ترجمه شده مقالات
پذیرش سفارش ترجمه تخصصی
امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
امکان دانلود رایگان ۲ صفحه اول هر مقاله
امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
دانلود فوری مقاله پس از پرداخت آنلاین
پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات