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International (spillovers in) macrofinancial linkages and the decoupling phenomenon

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ABSTRACT

This paper contributes to the debate on the decoupling of emerging economies (EEs) from advanced economies (AEs), by measuring how the resilience of EEs to external shocks (i.e. shocks spreading from AEs) has changed over time and whether EEs are relatively more vulnerable to real or financial external shocks. A time-varying panel VAR model with factorisation of the co-efficients was used to perform counterfactual experiments over a period of about 30 years for a large sample of countries. Allowing for time-varying coefficients permitted the decoupling phenome-non to be examined as a slow-moving evolution process over a long time, rather than as a structural break at a specific moment. The factorisation of coefficients allowed a large dynamic panel to be managed, with interdependences across many countries. Consequently, the experiment was more realistic, in terms of evaluating the response of EEs to shocks hitting the AEs within a global framework. The resilience of EEs has improved over time; however, this increasing resilience was discontinuous over the approximately 30-year sample period, tracing a 'wave path'. In the whole sample period, the EEs were relatively more vulnerable to credit shocks than to real ones. This greater vulnerability increased over time and peaked in the last 5 years of the sample period.

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1. Introduction

Emerging economies (EEs) have progressively increased their role in the international economic context, with the share of EEs and developing economies (DEs) in the global economy reaching 50.9% in 2013 compared to 30.9% in 1980.[1] With the growing importance of EEs, there is a fierce debate as to whether the national economic cycles are converging, or whether cycles of EEs and advanced economies (AEs) are becoming disconnected—the so-called 'decoupling of EEs from AEs'. The convergence argument is linked to the idea that all economies have become more closely intertwined through trade and finance, which should make the national economic cycles more strongly connected and synchronised (correlated). In contrast, the decoupling argument is linked to the strengthening of the economic fundamentals of EEs, together with the progressive development of real and financial linkages among EEs. These phenomena may have reinforced economic ties within EEs, while favouring the movement of EEs away from AEs.

Some key stylised facts have encouraged the decoupling debate. Despite the relatively modest economic growth of AEs between 2004 and 2007, the growth of EEs remained strong during this time. A simple analysis of the historical gross domestic product (GDP) dynamic (see Fig. 1; information from the International Monetary Fund [IMF]) suggests that the economic growth of AEs and EEs, although similar until 2001, differed from 2000 to 2010. Moreover, EEs, in contrast to AEs, spent more time in expansions than contractions during 2000–2010[2]

Decoupling implies a break in a relationship that was previously more coupled and closely linked. The basic idea is that the economic growth of one area becomes progressively less dependent on growth in another area (Rossi, 2009). If the decoupling hypothesis is correct, then an increasing resilience of EEs to external shocks (i.e. shocks spreading from AEs) should be observed. This paper aims to measure how the resilience of EEs to external shocks has changed over time.

A time-varying Bayesian panel VAR model with factorisation of the coefficients[3] was used, as proposed by Canova and Ciccarelli (2009).[4] The panel VAR model was estimated from the real GDP growth rates and real bank-lending growth rates of a sample of 78 countries (21 AEs, 43 EEs, and 14 DEs), covering an approximately 30-year period between 1983 and 2010. The model was used to perform counterfactual analysis (CA) experiments to evaluate the reaction of the GDP of EEs to shocks spreading from the AEs. The intensity of the impact suggests the degree of resilience of the EEs to shocks from AEs and can be used as an indicator of the EEs' resilience. The CA experiments were implemented for different years of the sample period. The results were compared to determine whether the EEs showed a tendency to become more (or less) resilient to shocks spreading from the AEs (i.e. to determine whether the shocks' impact intensity showed a weakening or strengthening tendency in the EEs over the sample period).

This paper is related to literature measuring the sensitivity of EEs to AEs, including Guimarães-Filho et al. (2008) and Dées and Vansteenkiste (2007). These authors studied the impact of US economic performance on the economies of emerging nations. They estimated the repercussions that a shock in the USA (first paper) or G7 countries (second paper) would have had, prior to and after the globalisation era, on EEs in Asia (first paper) or Asia and Latin America (second paper).

This paper extends empirical research on decoupling in different dimensions. First, it considers the bank-lending variable. Most empirical literature on decoupling has focused on GDP growth, as one of the main indicators of economic dynamics in a country, or a set of real indicators, such as industrial

[1] Data refer to the gross domestic product based on the purchasing-power parity share of the world total. Source is the International Monetary Fund (IMF), World Economic Outlook Database, April 2013.

[2] See the IMF World Economic Outlook, October 2012.

[3] Coefficients of the model depend on a low-dimensional vector of time-varying factors, which can capture coefficient variations that are common across countries ('global' effect); variations that are specific to the group to which the country belongs, namely the advanced or emerging group ('group' effect); variations that are specific to each geographical region ('region' effect) and to a specific country ('country' effect); or variations that are specific to the economic variable ('economic variable' effect).

[4] Canova Ciccarelli (2009) changed the model proposed in Canova and Ciccarelli (2004) by providing a coefficient factorisation that facilitates the estimation process.