Box 3

ASSESSING EQUITY AND PROPERTY PRICES IN SELECTED LARGE EMERGING MARKET ECONOMIES

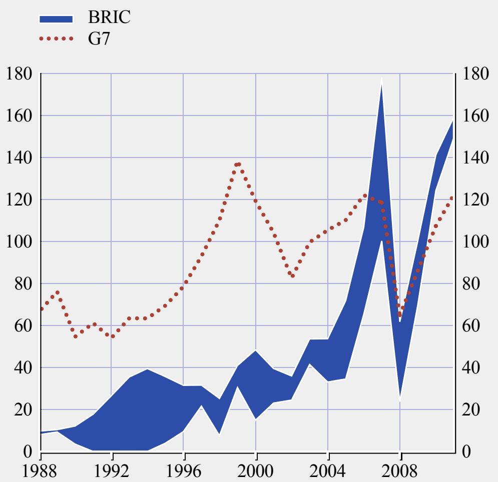
Over the past decade, emerging markets have been growing as a share of world output. The so-called BRIC economies (Brazil, Russia, India and China), in particular, have outperformed advanced economies in terms of economic growth. The strong economic performance has, however, partly been fuelled by strong credit growth, coupled with booming asset and property prices. These developments have raised concerns that the economies could overheat, thereby presenting numerous financial stability risks associated with an unwinding of imbalances, with resulting potential for aggregate global shocks and contagion. Most relevant for the euro area could be those risks transmitted through trade, financial and – more generally – confidence channels. Making use of two selected early-warning indicators on equity and residential property markets, this box takes an aggregate view of the BRIC economies and analyses the potential for the group as a whole to be subject to costly asset price busts.

Although the box focuses on the common risks shared by the BRIC economies as a whole, it is also important to be aware of a number of country-specific financial stability risks. To mention a few, a fall in oil prices would represent an important shock for Russia given its dependence on the export of energy commodities. In Brazil non-financial corporations have rapidly increased their borrowing in foreign currency over the past years and may not be well cushioned against a strong depreciation of the domestic currency. The growth model of China is to a large extent export-driven and thus dependent on developments in advanced economies, whereas in India downside risks mainly emanate from domestic demand. One indicator which tracks the linkages between asset prices and the real economy is the so-called "equitisation ratio", which compares the stock market capitalisation of a country (or region) to its gross domestic product. This metric is a useful tool to gauge stock price developments as, in the long run, stock prices should not deviate significantly from macroeconomic performance. The linkages between stock prices and economic growth can best be seen using the insights from the so-called dividend discount formula, which tells us that a broad-based stock market index for an economy is determined by the expected future dividends of the constituents included in the index (using an appropriate discount factor that incorporates the risk-free rate and the expected risk premium). The firms' dividends are usually a direct function of their aggregated earnings capacities, which in turn are closely dependent on the overall demand in the economy. Thus, the higher growth of stock prices compared with the gross domestic product for a prolonged period may signal a potential for overvaluation in stock prices and downside risks for future stock price developments. Needless to say, stock price valuation tools are in general surrounded by large uncertainty and should thus be interpreted with some caution.

Equitisation ratios for the BRIC economies suggest that, sparked to a large extent by foreign investors, the value of the BRIC economies' stock markets has increased at a faster rate than the growth rate of total production over the past decades (see Chart A). In the late 1980s the total value of BRICs' stock markets was around 10% of GDP. The shares have steadily risen to around more than 150% in 2011, compared with around 120% on average for the G7 advanced economies. Part of the increase over the past decades can be seen as a catching-up process and the result of improved financial infrastructure in the BRIC economies. However, the current high equitisation ratios in comparison with advanced economies, which are swiftly recovering to the levels seen

Chart A Equitisation ratios for the BRIC and G7 economies

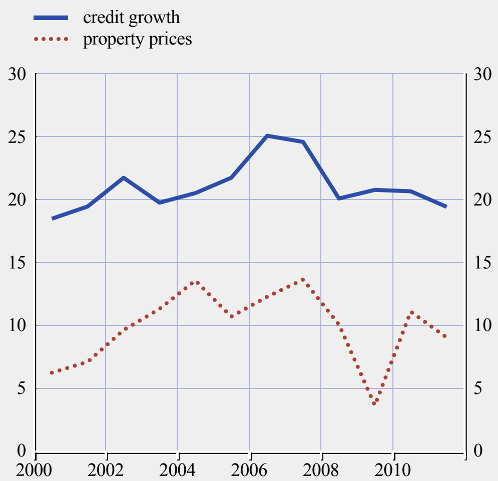
(1988 – 2010; percentage of GDP)



Source: World Bank.
Notes: The "equitisation ratio" is computed as the stock market capitalisation expressed as a percentage of nominal GDP. For the BRIC economies the (min-max) range is shown and for the G7 economies the weighted average GDP is shown.

Chart B Private sector credit and property price growth for the BRIC economies

(2000 – 2011; percentage change per annum)



Sources: Haver Analytics and CEIC.
Note: Both credit growth and property price growth are GDP-weighted.

prior to the outbreak of the financial crisis, coupled with an expected slowdown in global economic growth, suggest that risks for stock prices in the BRIC economies are tilted to the downside.

Another potential indicator to gauge the likelihood of costly asset price booms and busts concerns strong private sector credit growth, particularly if coupled with high residential property prices (see Chart B). Having several caveats in mind,[1] growth in credit to the private sector and property prices have moved broadly in tandem at high growth rates over the past decade, which suggests that part of the increase in property prices has been fuelled by the relatively easy access to credit. Throughout the financial crisis, however, the growth rates of the two indicators have started to normalise, but are still hovering at close to double-digit levels.

While asset prices in the BRIC economies have declined in line with global developments, credit and property prices are still growing fairly rapidly and stock prices may be stretched in comparison with the economies' economic growth prospects. In the short run, if a sharp correction takes place, it could have adverse implications also for the euro area via trade, confidence and in particular asset price spillover channels. In the medium run, the main financial stability risks emanating from emerging markets in general and the BRIC economies in particular continue to be related to the levels and volatility of capital inflows and their impact on domestic credit expansion. Sound macroeconomic and macro-prudential policies, as well as a robust financial regulatory framework fostering a resilient financial system, could play a role in cooling these economies down and holding back the build-up of financial imbalances.

1 Several caveats apply regarding the property price index. First, data are not easily collected for the BRIC economies. Second, country averages of property prices for large economies may conceal important regional developments. Third, averaging the four BRIC economies into a single index fails to give due regard to country-specific fundamental supply and demand considerations driving property prices. Fourth, the property price index for the BRICs is a combination of construction indices and city price indices available for the four economies.