Rising financial integration amplifies the global impact of financial market shocks

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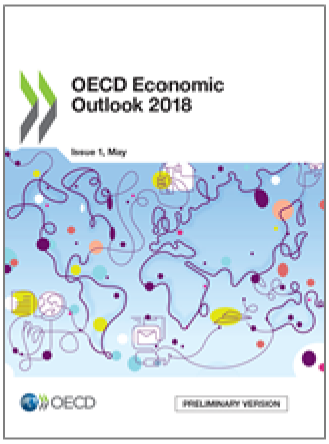


Stronger cross-border economic and financial integration implies that macroeconomic shocks in one country are increasingly likely to spill over into other economies. This is particularly true in national financial markets, where developments increasingly reflect common underlying factors, as shown in the special chapter of the latest OECD Economic Outlook. Thus, a change in risk sentiment in a major market, such as the United States, may spread quickly to other markets, with implications for activity and economic policy.

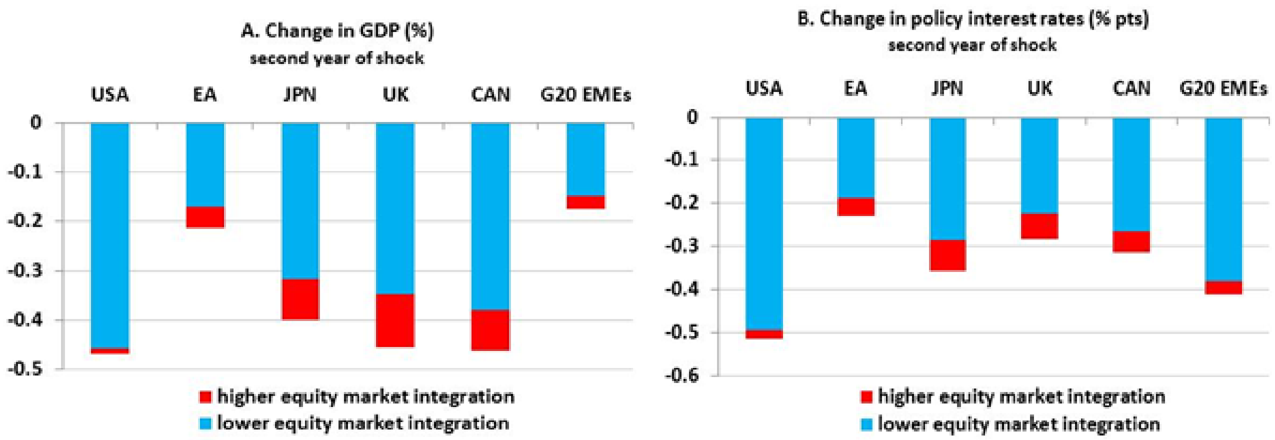
This is illustrated below, using simulations based on the global macro model NiGEM. The shock considered is a 1 percentage point rise for two years in the US equity risk premium – the compensation investors require for taking on more risk by investing in equities. To isolate financial transmission channels we assume that agents have adaptative expectations and exchange rates are fixed[1]. By itself the shock is relatively modest, reducing US equity prices (relative to baseline) by around 10%. However, linkages between financial markets around the world mean that the shock spreads to other markets, to an increasing extent over time as the linkages deepen.

Two different scenarios are considered to reflect the change over time in the importance of global factors in the equity markets, as estimated in the OECD Economic Outlook 103. In a lower integration scenario, based on the strength of equity market linkages up to the mid-1990s, equity risk premia also rise by 60 basis points in the major advanced countries, and by 40 basis points elsewhere. In a higher integration scenario, reflecting the estimated strength of linkages over the past decade, equity risk premia rise by 80 basis points and 60 basis points, respectively.

GDP declines in all major economies in both scenarios, reflecting the impact of lower net wealth on household spending and the hit to investment from the higher cost of (equity) capital (Panel A in figure). The adverse effects are greater in the higher integration scenario, particularly in open economies where the importance of equity finance for investment is relatively high, such as Canada and the United Kingdom.

The impact of the shock and the cross-border spillovers would be larger still if they were not cushioned by monetary policy easing. Since, in NiGEM, central banks react to the deviation of inflation and nominal GDP from their target levels, the fall in GDP leads them to cut policy interest rates by around ¼ percentage point in the major advanced economies by the second year, and by around ½ percentage point in the United States (Panel B in figure).

Spillovers from a rise in the US equity risk premium



Notes: Based on a rise of 1 percentage point in the US equity price risk premia for two years. The scenario with lower equity market integration is based on estimated linkages between global markets over 1984-95, and the scenario with higher equity market integration on estimated linkages over the past decade. Policy interest rates are endogenous in all areas. All shocks begin in 2018. The G20 emerging market economies are weighted together using PPPs.

Source: OECD calculations

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In practice, there could be challenges for monetary policy if this type of shock, or a larger one, were to occur at a time when policy interest rates are very low. If monetary policy did not respond to the shock at all, the fall in GDP would be steeper by between one-quarter and one half relative to the case where shocks are cushioned by monetary easing.

Increased financial integration brings benefits including more efficient resource allocation, but it also strengthens cross-border shock transmission channels. This exposes countries to greater harm from negative shocks abroad increasing the need for stronger monetary and fiscal buffers.

[1] Allowing for flexible exchange rates would soften the effect of the shock on GDP over the short term in all countries but increase its persistence in most G20 emerging markets.

Reference:

OECD (2018), OECD Economic Outlook, Volume 2018 Issue 1, OECD Publishing, Paris.