The global impact of weaker demand growth in China
by Nigel Pain and Elena Rusticelli,

Greater international integration has modified the transmission channels and the impact that external shocks have on domestic economies via increased trade openness and exposure to global financial developments. One important change, discussed in the special chapter of the latest OECD Economic Outlook, is that growth prospects in OECD economies have become more sensitive to macroeconomic shocks in non-OECD countries. This reflects the rising share of the emerging market economies (EMEs) in global trade and finance. EMEs now account for one-fifth of world trade, up from around one-tenth two decades ago.

Changes in trade patterns and also in the intensity of trade (trade openness) have implications for the strength of the spillovers from any shocks in the EMEs. One particular example – the size of spillovers from a negative demand shock in China – is discussed below, using simulations on the global macroeconomic model NiGEM. The scenario considered is a 2-percentage point decline in Chinese domestic demand growth that persists for two years.

The trade-related spillovers from this shock are considered using versions of the model with different sets of trade patterns and different levels of trade openness (the share of trade in GDP).

- In a first scenario, the shock is simulated at a single point in time with two different sets of bilateral trade linkages in the model – the linkages that existed in 1995 and those that existed in 2016. The share of China in total global trade rose by close to 8 percentage
points between these years. • In a second scenario, the shock is simulated using a single set of bilateral trade linkages – those for 2016 – but with the shock occurring at two different starting periods with very different levels of trade openness. On average across economies, trade openness is 11 percentage points higher in the second starting point for the shock than in the first. This change is broadly comparable to the rise in trade openness in the decade or so prior to the financial crisis.

The adverse effects of the China shock on GDP growth in other countries increase as China becomes more integrated into global markets and as each country becomes more open to trade (figure below). In the scenarios considered, negative spillovers increase by more when trade openness is changed than from the stronger role of China in global trade, thus indicating that the general rise in cross-border trade over recent history contributes more extensively to changing transmission of shocks than the increase in the weight of single countries. GDP growth in most major OECD economies is reduced modestly, by 0.1-0.2 percentage points per annum, with a stronger impact in Japan. Negative output spillovers are larger in open economies more exposed to China via tighter GVC linkages, such as East Asia or commodity exporters.

GDP growth in China declines by between 1¼-1½ per cent per annum, depending on the particular scenario considered, with import demand falling sharply. In the scenario with the higher level of trade openness, world trade growth declines by 1 percentage point per annum relative to baseline. At the same time, the slowdown in China puts downward pressure on export prices and import prices decline in all trade partners, partially helping to correct negative growth spillovers. Such effects become more important as the share of trade with China increases, and as economies become more open to trade.

The negative output spillovers would be larger still if
monetary policy did not react, or was unable to react, to offset the adverse demand shock. Central Banks, targeting the deviation of inflation and nominal GDP from their target levels, cut policy interest rates, which by the second year of the shock decline by 25-50 basis points on average in the OECD countries (depending on the scenario considered) and by more in the economies most heavily exposed to China.

Heightened financial market uncertainty and weaker commodity prices could intensify the adverse impact of a demand shock in China over and above the direct trade-related impact considered here (OECD, 2015).

References:
