Trade wars – any winners?

On 6 July Donald Trump's administration imposed new tariffs on goods worth $34bn of annual imports from China. China retaliated with a package matching the magnitude of that of the US. At the time of writing, further tariffs covering $16bn worth of imports are expected to follow by both countries in the coming weeks. As the tit-for-tat trade battle escalates, both the US and China have threatened to levy tariffs up to the full range of imports (worth about $500 billion per year in the case of US imports from China).

We use NIESR's Global Econometric Model (NiGEM)to run stylised scenarios to investigate the impact of these increases in tariffs on US and Chinese imports, continuing earlier work (Liadze and Hacche, 2017; Hantzsche and Liadze, 2018), which shows that tariff imposition not only harms the economies that the tariffs are aimed at, but also the country that imposes them, as well as spilling over to other economies who might be innocent bystanders in the trade dispute. [1] We consider only the direct effects of tariffs and do not take account here of the negative impact that uncertainly is expected to have on business investment, which may exacerbate the fall in output. The Bank of England governor's analysis of tariffs, also using NiGEM, does take account of this effect.[2]

In the simulations initially 25 per cent duties are assumed to be applied to $50bn worth of imports from both the US and China. This is followed by the introduction of a 10 per cent levy first on $200bn worth of US imports from China, then expanded further to cover the remaining $250bn worth of imports. We assume that higher tariffs work by raising import prices in the tariff imposing country which leads ultimately to lower demand and output through a number of channels including lower consumption, lower investment and lower exports to countries that are disadvantaged by higher tariffs. Shocks are applied exogenously for 3 years after which they are allowed to return back to their initial levels.

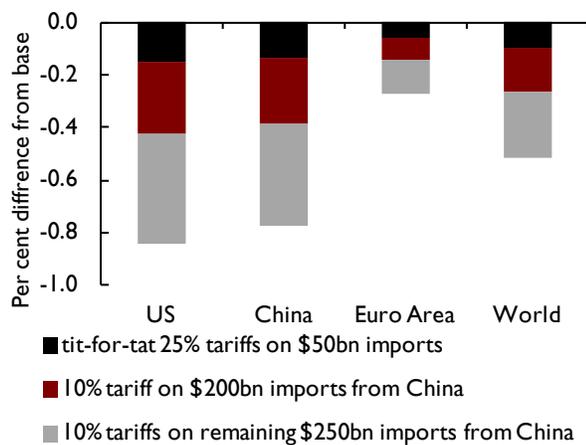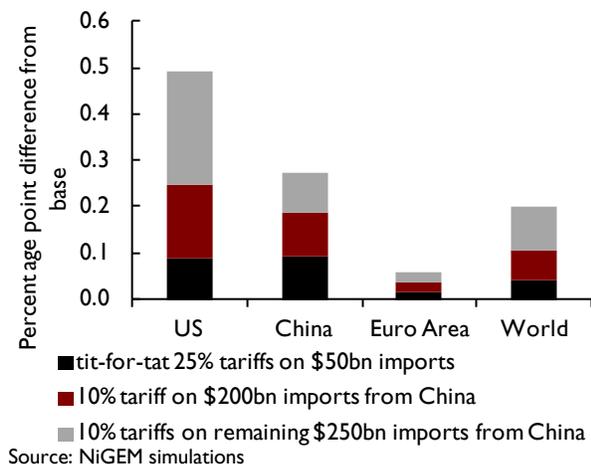## Figure 1. Impact on the level of GDP (in the third year)

- ■ tit-for-tat 25% tariffs on $50bn imports
- ■ 10% tariff on $200bn imports from China
- ■ 10% tariffs on remaining $250bn imports from China

Source: NiGEM simulations.

Figure 2. Impact on inflation (in the third year)

- ■ tit-for-tat 25% tariffs on $50bn imports
- ■ 10% tariff on $200bn imports from China
- ■ 10% tariffs on remaining $250bn imports from China

Source: NiGEM simulations

The simulation results (see figure 1) suggest that the loss of output from the first round of tariffs by both the US and China would be modest, reducing GDP by less than 0.2 per cent relative to what it would otherwise have been. However, the adverse impact on GDP in both countries is significantly higher if duties are imposed on a larger range of imports from China into the US. Even though the shocks are of a bilateral nature, given the share of the US and China in global output and trade (about 32 and 40 per cent respectively), there is a material negative spillover effect on other economies.

In all simulations, higher tariffs lead to an increase in domestic inflationary pressures via an increase in import prices (see figure 2). A tit-for-tat trade dispute leads to an increase in domestic prices of a comparable magnitude in both China and the US, but the impact on inflation in the US becomes more pronounced after the US levy tariffs on a wider range of imports from China.

NOTES

1 An expanded version of NiGEM v2.17b is used, enabling tariffs to be imposed between the US and all countries. Monetary policy reacts to deviations from nominal GDP and inflation targets; financial markets are forward looking and respond to expected changes in interest rates, so that if expectations of future interest rates are raised, following tariff imposition, then bond and equity prices will fall and the exchange value of the domestic currency will increase immediately, bringing some effects forward.

2 'From protectionism to prosperity', speech by Mark Carney, Governor of the Bank of England, 5 July 2018.

REFERENCES

Hantzsche, A. and Liadze, I. (2018), 'Box D, The World Economy', *National Institute Economic Review*, 244, F46–47.

Liadze, I. and Hacche, G. (2017), 'The macroeconomic implications of increasing tariffs on US imports', NiGEM Observations, No 12.

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