

Policy Analysis Focus 18-1*
Economic Impact of US Tariff Hikes

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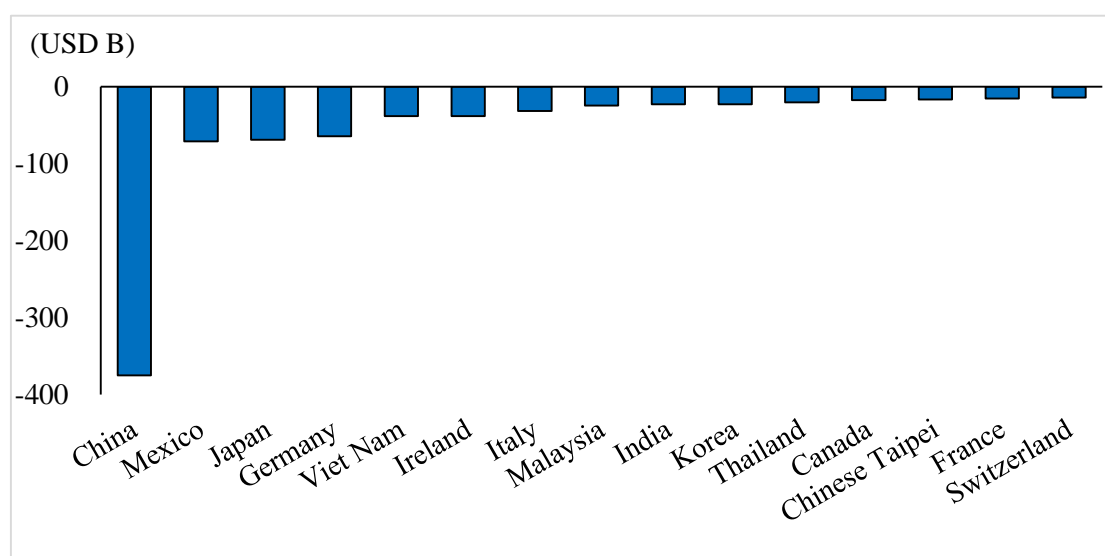
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I. Introduction

US President Trump issued a presidential proclamation on March 8, 2018 imposing a 25 per cent tariff on US steel imports and a 10 per cent tariff on aluminum imports. The White House Fact Sheets stated that “President Trump is taking action to protect America’s critical steel and aluminum industries, which have been harmed by unfair trade practices and global excess capacity.”¹

Chart 1. Top 15 US trade deficit partners



Source: “Foreign Trade,” The U.S. Census Bureau, The U.S. Department of Commerce

In response, on April 2, 2018 China increased by 15-25 per cent its tariffs on 128 import products from the US, including fruit, wine, pork products and stainless steel. The

* The views expressed in this article are the author’s own and do not represent those of GRIPS ALLIANCE or the organization to which the author belongs.

¹<https://www.whitehouse.gov/briefings-statements/president-donald-j-trump-addressing-unfair-trade-practices-threaten-harm-national-security/>

US trade deficit with China constitutes nearly 50 per cent of the total US trade deficit (see Chart 1). In that light, the focus here is on developments related to Chinese trade policy measures.

Emergent uncertainty caused by the UK's decision to leave the EU in June 2016 and the withdrawal of the US from the Trans-Pacific Partnership (TPP) in January 2017 appears to have eased somewhat during 2017, according to the agreement concluded by the eleven member (excluding the US) Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP) and the Japan-EU Economic Partnership Agreement (EPA). However, there is a need to monitor developments in global trade policy making.

In this article, the economic impact of tariff hikes is evaluated by means of simulation analysis using a Computable General Equilibrium (CGE) model of global trade. This estimation incorporates a dynamic capital formation mechanism in its analysis of data from the Global Trade Analysis Project (GTAP) database 10 (beta version) and its model.

II. The impact of the US metal tariffs

If the US were to impose an additional 25 per cent import tariff on all metal and metal products (including steel and aluminum) from all countries, US imports of metals would decrease. It is estimated that the US metal trade balance would improve by 59.4 billion US dollars and that US metal production would increase by 9.0 per cent.

That said, electronic, auto and other machinery manufacturers in particular, who use metals as input materials, would likely lose international competitiveness due to rising costs. Consumer real income and consumption would also be adversely affected by those higher import costs. The improvement of the US trade balance for all industries is estimated to be a relatively small 1.3 billion US dollars. On the other hand, real GDP is estimated to decrease by 0.2 per cent. It is shown here that import tariffs could protect the relevant sectors but would have a negative impact on the economy at the macro level.

The impact of US metal tariff hikes on other countries at the macro level could be limited, as in the case of the US. It is estimated that China's metal trade balance would deteriorate by 9.3 billion US dollars, but that China's trade balance deterioration for all industries would be limited to 1.0 billion US dollars. EU's trade balance deterioration for all industries (0.1 billion US dollars) would also be minor compared with the deterioration of its metal trade balance (9.3 billion US dollars). Meanwhile, metal production in Canada

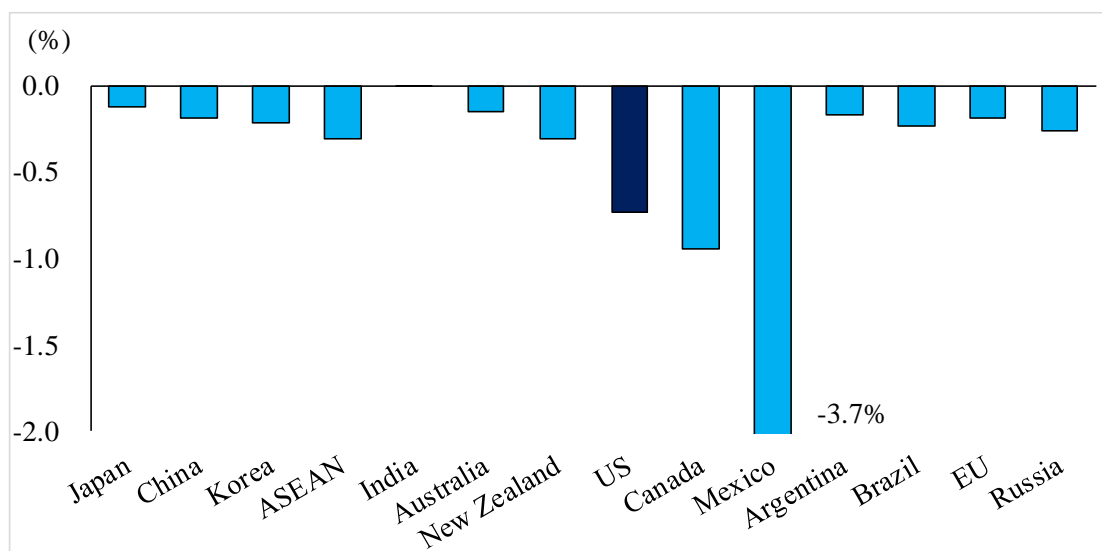
and Mexico could decrease by more than 10 per cent but their real GDP would decrease by less than 1 per cent.

III. The costs of protectionism

Several countries have made notification to the World Trade Organization (WTO) concerning US steel and aluminum tariffs. Future developments remain to be seen. In light of this situation, the potential impact of emergent protectionism is considered here.

It is estimated that if the US were to add a 10 per cent tariff on the US import of all goods from all countries, US real GDP would decrease by 0.7 per cent. Mexico and Canada would lose more than the US, 3.7 and 0.9 per cent respectively. On the other hand, Japan (0.1 per cent), China (0.2 per cent) and the EU (0.2 per cent) would lose less (see Chart 2). In addition, a breakdown of the impact on US real GDP suggests that the impact of US tariffs on imports from China would be the largest (0.20 per cent), followed by that on imports from the EU (0.14 per cent).

Chart 2. Impact of US tariffs on real GDP



Source: Author's simulations

Moreover, it is estimated that if import tariffs were hiked by 10 per cent worldwide, world trade would decrease by 17.2 per cent and world real GDP would decrease by 2.3 per cent. The impact would vary widely by country; it would be much more serious for Mexico (8.8 per cent) and ASEAN (7.1 per cent) than for the US (0.4 per cent), Japan (0.9 per cent) and China (2.0 per cent).

IV. Concluding remarks

US import tariffs could protect the relevant US sectors but would have a negative impact on the economy at the macro level. It is estimated that for an import tariff hike of one percentage point worldwide, global trade would decrease by around 1.7 per cent and global GDP would decrease by around 0.2 per cent. It is of concern that emergent protectionism would reduce the growth of both global trade and the global economy.

The above CGE model estimates are applied to an analysis of the general equilibrium mechanism of supply and demand in the goods markets. It must be noted that in the short-term, the impact could be much larger, depending on the response in the financial, foreign exchange and commodity markets.