

# Intelligence MEMOS



From: Dan Ciuriak and Jingliang Xiao  
To: Canadians Concerned About Tariffs  
Date: June 6, 2018  
Re: **THE EFFECTS OF STEEL AND ALUMINUM TARIFFS**

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The Trump Administration signalled from the very beginning that it intended to reshape America's trade and has consistently acted on this pledge, pulling out of the Trans-Pacific Partnership, launching the NAFTA renegotiation with an offer designed to be rejected, and dusting off every US protectionist measure available. All of these special measures allow tariffs to be imposed that are much higher than the maximum tariffs to which the United States has committed under the WTO Agreement.

On May 30 the Administration announced that the import duties of 25 percent on steel and 10 percent on aluminum would be imposed on imports from Canada, Mexico and the European Union, based on (implausible) national security grounds.

The trade wars thus appear to have been launched in earnest. There is no obvious containment strategy since war, once started, is open-ended. Retaliation is being prepared; escalation is as well (the United States is considering a 25 percent tariff on auto imports, also on national security grounds).

Against this background, our forthcoming paper for the C.D. Howe Institute contributes to the quantitative analysis of the steel and aluminum tariffs by simulating the impact of the US measures in a computable general equilibrium (CGE) model to estimate the economic implications of the new US tariffs.

The results suggest that the US measures will work to substantially restrict US imports of the subject goods and induce a substantial increase in US production of these goods. At the same time, the measures promise to substantially increase US prices of these goods, which will raise the nominal value of the expanded US domestic shipments beyond the value of imports restricted.

Higher prices have a number of consequences, including reducing US exports, even in the absence of retaliation by third parties, and undermining the competitiveness of US user sectors – principally automotive, transportation equipment, machinery and equipment and electronic machinery.

This loss of competitiveness is visible in reduced US exports of these products and increased import penetration. The overall impact on the US economy is negative, with real GDP reduced by -0.06 percent, economic welfare by \$6.3 billion (US), and jobs by about 22,700 compared to the no-tariff case.

Canada suffers the largest negative impact from the tariffs of all US trading partners. Real GDP falls by -0.11 percent and, taking into account the negative impact on Canada's terms of trade, the value of GDP falls by -0.33 percent or \$8.1 billion (US). The lower prices mitigate the welfare loss in Canada, restricting it to \$3.7 billion (US). Job loss in Canada projects to about 6,000 (notably, these losses are not short-term unemployment due to structural adjustment – which might be smaller if fiscal measures are used to counter the effects – but reflect the long-run labour market adjustment to lower real wages).

Not all sectors in Canada lose: the main user sectors for steel and aluminum all see expansion of sales, including through increased exports to the United States and through increased domestic sales as Canadian products capture market share from more expensive US competing products. The downward pressure on Canadian costs also work to the advantage of other Canadian sectors, many of which see small gains. However, the overall negative income effects are reflected in declines in sales overall, with the main impact concentrated on services sectors.

Paradoxically, other trading partners of the United States targeted by the tariffs are not negatively impacted overall: the resulting damage to US trade competitiveness drives competitive gains for China, Japan, the EU and Korea in global trade, notwithstanding the reduction of some of their exports of the subject goods to the US market.

While we do not assess the impact of retaliation – which remains to be defined – it is possible to draw some inferences from the existing literature on protectionism and retaliation, including our C.D. Howe Institute [paper](#) last year. First, for the retaliating countries, the retaliation would have negative economic impacts on their own economies. For Canada, it could double the pain, based on earlier simulations of a general 10 percent US surcharge and a retaliation in kind by Canada. For the United States, the imposition of retaliatory tariffs would eliminate the terms of trade gains that the US obtains from unilateral tariffs, worsening the welfare impacts.

The situation remains fluid, but the early news is not good. Stay tuned.

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