

ESTIMATE OF THE IMPACTS OF THE FEBRUARY 2020 RAIL DISRUPTION



The indirect GDP impact of the disruptions to the affected industries (that is, rail transportation, support activity for transportation and urban transit systems) was estimated by using Statistics Canada's Supply and Use Tables at the detailed level. The indirect impacts capture the spillover of the disruption to other industries, as well as those industries directly affected, based on their linkages to activity in the transportation sector. Direct and indirect GDP impacts were estimated for 2020Q1 and 2020Q2.

To estimate the overall economic impact including macroeconomic feedback, we simulated PBO's macroeconometric model—the same model used to produce PBO's EFO projections—with the combined direct and indirect GDP impacts from the Supply and Use Tables that were mapped into GDP expenditure components. Given the supply-side nature of the economic shock, our model was simulated under the assumption that monetary and fiscal policy would not respond to these disruptions.

Sources of Uncertainty:

The real-time data used in constructing estimates of the direct GDP impact on rail transportation are of good quality. However, due to data limitations, the uncertainty surrounding our direct impact estimates of port disruptions is higher. Using past disruptions in port activity also introduces another source of uncertainty. Moreover, there is inherent uncertainty surrounding the counterfactual scenarios on which these impact estimates are based, as well as the assumed recovery from March through May.

Estimates of the indirect impacts based on the Supply and Use Tables assume no substitution across intermediate inputs and do not capture (potential) plant shutdowns.

PBO's macroeconometric model is estimated using historical data. The macroeconomic feedback from the responses of households and firms to the rail disruptions could differ from historical experience.

Estimate of the Impacts of the February 2020 Rail Disruption

Indicator	2020Q1	2020Q2	2020Q3	2020Q4	2020
Nominal GDP level (\$ millions)	-283	41	-21	-11	-275
Nominal GDP level (per cent)	-0.05	0.01	0.00	0.00	-0.01
Real GDP level (per cent)	-0.05	0.01	0.00	0.00	-0.01
Real GDP growth (percentage points)	-0.20	0.22	-0.04	0.01	0.00
Pre-tax corporate profits (\$ millions)	-236	78	12	14	-132
Compensation of employees (\$ millions)	-28	-35	-27	-20	-110
Employment (number of people)	-1,010	-840	-700	-540	-772
Full-time equivalents (number of work years)	-481	-290	-229	-170	-1,170

Notes:

The impact estimates represent the difference between the realized scenario and a counterfactual scenario in which the rail disruption did not occur. The real GDP (quarter/quarter) growth impacts are expressed at annual rates.