Equitable Growth tariff tracker: Appendix

By Chris Bangert-Drowns

This analysis draws from several sources: Input-Output, or I-O, tables published by the U.S. Bureau of Economic Analysis, which show how commodities are used and imported by various industries; annual commodity-level import data by country of origin, published by the U.S. Census Bureau through its USA Trade Online portal; national employment data collected in the Current Employment Statistics dataset from the U.S. Bureau of Labor Statistics; and county-level employment data collected in the County Business Patterns dataset from the Census Bureau.

These datasets are woven together to help estimate how different tariff regimes on imported inputs can impose costs differently across U.S. industries and potentially impact employment in those industries. The datasets use various methods to categorize U.S. industries, but all are commensurable with the widely used North American Industrial Classification System. This interlinked data can be used to estimate industry-level tariff costs, informing policy debates about the effectiveness and fairness of trade taxes.

Assumptions about the data used

The findings in this analysis rely on a few basic assumptions inherent to these interlinked data. First, the analysis assumes that industry-level import decisions are largely unchanged over the short to medium term. The I-O tables used in this analysis are published every 5 years, with the most recent edition covering data from 2017. The benchmark tables are preferred because they offer a higher level of industrial specificity compared to their annual counterparts.

This assumption—that the 2017 benchmark table can be useful in understanding today's industry-commodity use situation—can be tested by showing that industry-level imported shares of inputs do not change meaningfully in the years following 2017. This test does not say anything about whether industries switch imports from one country to another but does specify whether industries switch from imports to domestic sourcing.

The second assumption is that industry-level patterns about where to source inputs are consistent with economywide patterns. The I-O tables detail the value of commodity imports by industry but say nothing about where specifically those commodity imports are sourced. Similarly, the Census import data sheds light on the value of commodity imports from a source country but says nothing about how those imports flow to various U.S. industries.

This analysis therefore assumes that a domestic industry importing a particular commodity input will import that commodity from the same group of source countries from which the United States as a whole imports that commodity. For example, if the

United States in aggregate imports a commodity from three countries—50 percent from country A, and 25 percent from both countries B and C—we assume that any industry importing that commodity input does so at the same rate—50 percent from country A, and 25 percent from both countries B and C.

The Census import data also suffers from a domestic geographic distortion in that its state-of-destination data does not capture an import's final destination, but rather the location where an import is initially shipped. Some knowledge of interstate trade flows would be necessary to correct this distortion and add domestic geographic specificity to the project, as discussed in the brief.

Finally, this analysis assumes that an industry in any given state uses and imports inputs at the same rate that the industry uses and imports inputs at the national level. For example, if an industry uses two inputs in a certain ratio at the national level—say, 75 percent of costs attributable to input A and 25 percent of costs to input B—and imports them in a certain ratio—50 percent of input A is imported while 60 percent of input B is imported—then we assume that same industry in any given state uses and imports inputs A and B at the same rates. This assumption allows us to make predictions about the state-level incidence of tariff costs in terms of the relative industrial composition of that state's employment.

More on the tariff regime studied

The tariff regime modeled in this analysis includes reciprocal tariffs due to take effect in August 2025, as found in the <u>Trade Compliance Resource Hub</u> maintained by Reed Smith LLP, on top of the 10 percent flat tariff for all imports.

The only exception to this approach are tariffs on goods from Canada and Mexico, which are subject to varied rates: a 0 percent tariff on USMCA-compliant goods (which ranges from 38 percent to 94 percent of Canadian goods, depending on the calculation used to determine compliance with country-of-origin requirements), 10 percent on potash, and 35 percent on other products, except those subject to the higher auto import tariff. Given the uncertainty around the value of goods compliant with the U.S.-Mexico-Canada Agreement, and given the data limitations of this analysis with regard to commodity-specific tariff rates, this analysis simply sets the average tariff rate for Canada and Mexico at 10 percent.