Trade war could take 2.1% off global growth over next 4 years

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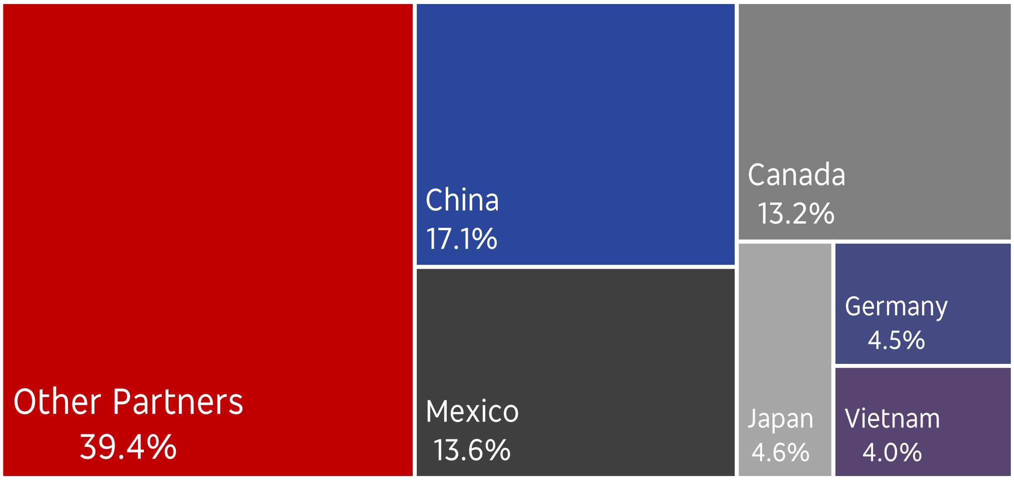
The adoption of protectionist measures reignites the risk of a global trade war. President Donald Trump announced last Saturday, February 1st, 25% tariffs on products imported from Canada and Mexico, as well as an additional 10% tariff on China. The exception was energy imports from Canada, which will have a 10% tariff. The first reaction of the international markets was negative, with the strengthening of the dollar and the fall of the stock markets, but much of the movement was reversed with the postponement of the measures. There is some consensus among economists about the negative effects of policies of this type, especially associated with efficiency and dead weight losses[1] from the widespread adoption of tariffs. We estimate that a trade war resulting from the adoption of a universal tariff of 25% among all countries would have the potential to remove 2.1 p.p. from global GDP and add 4.5 p.p. to global inflation in 4 years.

The initial signs are that Trump has moved out of rhetoric and has been pointing to an effective change in the dynamics of global trade. The new U.S. president had been threatening to adopt this type of policy since the campaign. However, analysts and observers believed that this discourse would serve more as a mechanism for negotiating pressure, as happened in his first term, than an effective generalized increase in tariffs. Especially in the case of Canada and Mexico, current trade agreements veto such measures and the commercial interdependence between them could have very negative effects for the US itself.

Chart 1: U.S. imports
Participation by country (2022)



Source: WITS, Bradesco

[1] The dead weight, or the social cost resulting from the application of tariffs, is the difference between the gain obtained by local producers benefiting from tariffs and the losses in consumer welfare due to rising prices and reduced employment.

Canada, Mexico and China promptly responded to the U.S. announcements. Canada was the first to take more forceful action, with the adoption of 25% tariffs on US$ 155 billion in products imported from the US – this number represents about 55% of Canadian imports from the US and almost 1/4 of the total. Mexico responded that it would take retaliatory measures, but without anything concrete. In any case, such reactions were enough to bring the US and its neighbors to the negotiating table, postponing the implementation of the measures on Canada and Mexico for 30 days. China, on the other hand, announced an additional tariff of 10% to 15% on selected American products (essentially energy and agricultural machinery), but with no retreat on the US side.

Chain reactions could have very negative impacts on the global economy. To assess the impacts of such an event, we used the Local Projections method to estimate the response of global GDP and inflation to the adoption of a universal and generalized tariff of 25% around the world. In this exercise, we used data on real GDP growth, consumer inflation, unemployment rate, trade balance (as a proportion of GDP), real exchange rate, and average tariff of 203 countries, from 1964 to 2023. The objective is to find the β coefficient in the following equation, which measures the response of the variable of interest to tariff shocks.

$$y_{i,t+k} - y_{i,t-1} = \alpha_i + \gamma_t + \beta \Delta T_{i,t} + \delta X_{i,t} + \varepsilon_{i,t}$$

Where $y_{i,t+k}$ it is the variable that we want to measure the effects of the tariff increase (GDP, inflation and unemployment); α_i e γ_t are fixed effects of country and year; $\Delta T_{i,t}$ is the tariff shock; $X_{i,t}$ is a vector of control variables, such as real exchange rate and trade balance; e $\varepsilon_{i,t}$ is a term of error. Table 1 shows the main results.

Table 1: Response to the adoption of a universal and generalized tariff of 25%
Cumulative effect over 4 years, t0 = year of fare implementation

	t0	t1	t2	t3	t4
GDP	0.2%	1.5%	-1.3%	-2.0%	-2.1%
Inflation	-2.7%	6.3%	4.8%	3.8%	4.5%
Unemployment rate	0.4%	1.9%	1.9%	1.6%	2.5%

Source: Bradesco

At first, tariffs could have a positive effect on the global economy. As the calibration of the model is done for a long period, from the 1960s to the present day, there is a relevant portion of the sample that considers trade relationships much less integrated and interdependent. On the other hand, a more extensive historical series brings greater variability of tariffs, allowing a more precise estimate of the sensitivity of the variables of interest to tariff wars. Currently, as global trade is much more interconnected and dynamic, even this initial protectionist effect may not be verified, since the increased costs tend to outweigh the benefits of the market reserve for companies locally. It is necessary to remember that with more integrated chains spread around the world, the global industry has managed to expand production and keep inflation under control in recent decades. With tariff barriers, these advantages will decrease.

The application of tariffs of 25% would lead to a cumulative drop in GDP of 2.1% in 4 years. If applied to our projection for world GDP, this reduction would lead to an average growth of 0.9% p.a., the worst performance since the pandemic and much lower than the average of 3.2% in the last decade. The social cost resulting from the loss of efficiency and deadweight of the adoption of protectionist measures is even more evident in the 2.5% increase in unemployment and 4.5 percentage points in global inflation in 4 years. The current exercise makes it clear, therefore, that the increase in protectionism leads to a worse, *ex post* equilibrium, with lower growth and employment, while inflation remains higher. Our estimates seem to represent the worst-case scenario in terms of tariffs, but they provide a parameter of where a retaliatory dispute in world trade could take us.

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