Trump Tariffs: Auto Industry and Beyond, Impacts on State and Local Economies

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what does REMI say?℠

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Agenda

- Introduction
- **Background**
- REMI MRUS Model
- Auto Industry Tariffs
- Additional Tariff Scenarios
- Conclusion
- Q&A

Narrative Against Tariffs

- Free trade allows for countries to produce based on their comparative advantage; participation in trade is a "win-win." (e.g. Canada produces maple syrup, the U.S. produces hospitality in Florida; consumers in particular benefit from trade).
- Take a look at the stock market and probability of recession.
- Countries will increase tariffs in response to Trump tariffs, lowering worldwide economic efficiency and hurting U.S. exporters.
- Unintended consequences: Smoot-Hawley Tariffs in 1930's were meant to protect American jobs, but instead exacerbated the Great Depression and led to U.S. job losses. (international trade declined by 65% from 1929 to 1934).
- A trade war disrupts the global order, with foreign relations implications.
- Tariffs increase inflation, which is a pressing economic concern. Higher inflation reduces the capacity of the Federal reserve to maintain full employment.

What are tariffs supposed to do?

Protect a mature industry

Example: textiles, to maintain U.S. employment in a mature industry

Protect an infant industry

Example: shielding emerging US EV industry from foreign competition

Raise revenue

3.8 trillion in imports in 2023; (10% tariff raises 380 billion in static revenues)

National security interest

Move toward U.S. self-sufficiency reduces vulnerability to disruption of imports

Narrative for Tariffs

- The U.S. needs to produce goods, not just services
- An economy can't just be lawyers, nurses, and cooks.
- Automotive design and engineering needs the manufacturing ecosystem to be viable.
- U.S. firms give technology to China to have access to the Chinese market; this works against U.S. interests in maintaining its technological advantage.
- Free trade only works if it is reciprocal.
- Uneven labor and environmental standards unfairly disadvantage U.S. workers.
- U.S. policy is not just about maximizing GDP; but also providing jobs across a broad base of skills, occupations, and geographic locations.
- Tariffs raise a lot of revenue; better to tax consumption and foreign producers than taxing domestic labor.

Trade and Budget Deficit Relationship

National Income = C+ I + G + (M - X)

National Income = Consumption (C) + Savings (S)

Then, equating the two equations

C + I + G + (M - X) = C + S

Simplifying,

S + (M - X) = I + (G – T)

To oversimplify, lets assume that savings is equal to investment

Then,

(M - X) = (G – T)

Trade deficit = Budget deficit

Thus, the fundamental reason for the trade deficit is that the U.S. borrows from the rest of the world, exceeding domestic savings.

Example: Reagan budget deficit increased value of U.S. dollar, reducing U.S. manufacturing competitiveness.

Key:

C: Consumption
I: Domestic Investment
G: Government Spending
S: Public and Private savings
T: Taxes
(M – X): Net Exports

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Regional Economic Effects of Tariffs

- Tariffs are a national policy that have differential effects on U.S. states

- We use a Multiregional US Model to illustrate how to model the impacts of tariffs on states
  - This allows an increase in import costs (tariffs) for all states; with economic interactions among states and Federal Reserve monetary policy responses to changing national macroeconomic conditions

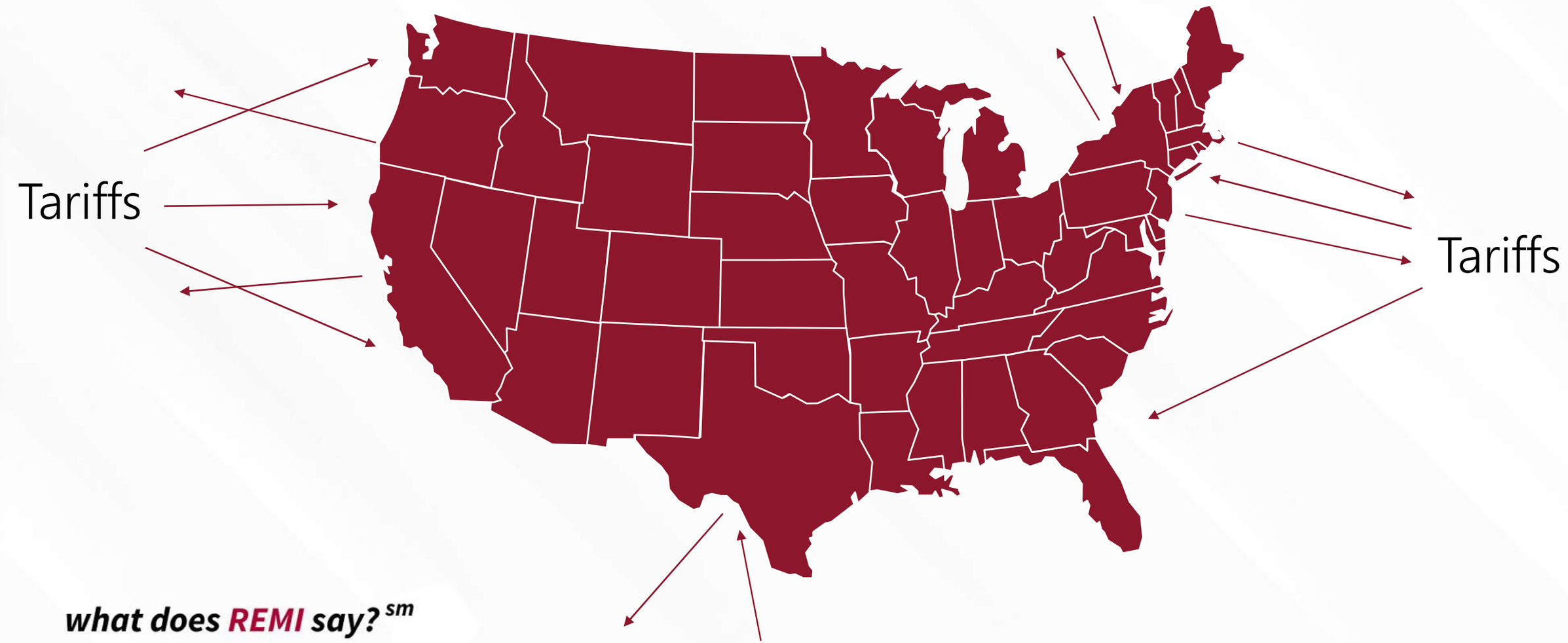
What is a MRUS Model?

- The Multiregional US (MRUS) Model is a REMI model with states and regions that add up to the entire United States.
  - This structure allows analysts to simulate national economic policies in a model that produces state and regional impacts
  - Model closures allow for a monetary policy response which is likely to occur with a major policy shift

- Applications: tariffs, immigration, federal tax policy

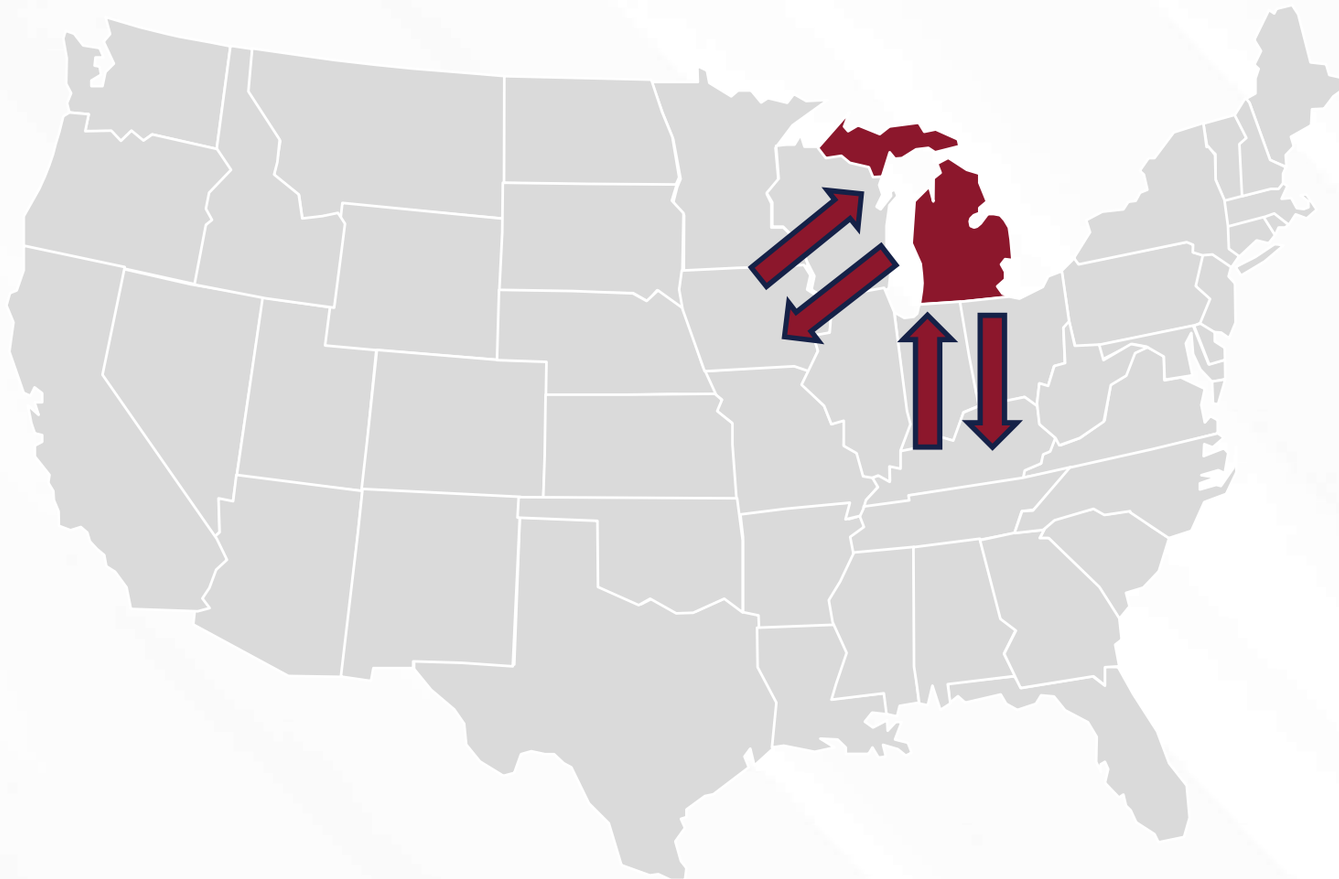
MRUS Model

This allows analysts to analyze the national economic impacts of tariffs



MRUS Model

Interregional interactions: primarily trade and migration



Scenario 1: Higher Import Costs for Specific Sector (Automobile Manufacturing)

Assumptions:

- No retaliatory effect
- Did not do anything with revenues
- Model closures applied: Keynesian and anticipatory fed
  - Keynesian – No response from federal reserve due to economic changes
  - Anticipatory Fed – Fed changes cost of capital to maintain "full-employment" or NAIRU

Auto Industry Results Summary – "Keynesian" Closure

No action from the Federal Reserve

- Higher import costs for automotive manufacturing
- Price of imports increases
- Domestic production increases (over time), due to less foreign competition
- Prices of imports increases consumer prices and input prices broadly
- Lower consumer demand due to direct and indirect consumer price increases (price elasticity of demand)
- Higher employment in protected industries, lower employment in other industries
- National macroeconomic job and GDP decline, a few states and industries are positive

Auto Industry Results – Anticipatory Fed Closure

- What is the "anticipatory fed" closure?
  - If employment declines significantly, the REMI model reduces the cost of capital to increase employment to the baseline national employment forecast
  - This assumes that the Federal Reserve will manage monetary policy to maintain employment at "full employment" or NAIRU.
  - These assumptions also focus on the **relative** output and employment impacts of tariffs for industries and regions

Auto Industry Results Summary – Anticipatory Fed Closure

Federal reserve reduces cost of capital to maintain "full-employment"

- Higher import costs for auto mobile manufacturing
- Price of imports increases
- Domestic production increases (over time), due to less foreign competition
- Prices of imports increase consumer prices and input prices broadly
- Lower consumer demand due to direct and indirect consumer prices (price elasticity)
- Higher employment in protected industry, lower employment in other industries, more mixed
- **With anticipatory fed, we see net increase in GDP gains, as it shifts employment from low-productivity sectors to high-productivity sectors, however real disposable personal income per capita goes down due to price increases**

Results in Live Model Demo

Additional Tariff Scenario

- Assumes 10% tariff on all private, non-farm imports
  - For demonstrative purposes, includes all goods and service producing sectors
  - Ran two scenarios with Keynesian and Anticipatory Fed model closures

Results in Live Model Demo

Conclusion

- Trump has levied tariffs, may continue to raise tariffs and nations around the world may issue more retaliatory tariffs
- States and regional economies need to know the economic and fiscal effects of these changes
  - Budget planning
  - Economic development planning
  - Influencing federal policy
- The REMI MRUS model provides the appropriate framework to evaluate the effect of tariffs on state and local economies

Q&A

Thank you for attending!

For more information, please contact info@remi.com.

Stay tuned for upcoming webinars on immigration and fiscal policy evaluating using the MR-US REMI model.