Does the U.S.-China Tariff War Benefit or Hurt the U.S. Economy?
A large scale tariff war broke out between the United States and China covering billions worth of goods.

Stakeholders in the U.S. have divided views on the tariff action.

There is a possibility that the tariff war may continue to escalate and affecting all products traded between the two countries.
Research Questions

How will the U.S.-China tariff war affect the **macro U.S. economy** in the short and medium runs?

How will the U.S.-China tariff war affect the **U.S. agriculture and manufacturing sectors**?
Methods—Aggregation

- 6 Countries/regions
  - USA
  - China (including Hong Kong)
  - Canada
  - Mexico
  - EU(28)
  - Rest of the world

- 5 Sectors
  - Agriculture
  - Manufacturing
  - Processed good
  - Extraction
  - Service

- Duration (10 years): 2011-2021
We also assume *year-on-year capital accumulation*

Methods—Base shock

- **Real GDP per capita growth**
- **Workforce growth**
- **Population growth**
- **Capital growth**
Policy shock 1—tariff war

• Assume a 25% tariff was imposed on goods traded between the U.S. and China in 2017 and stayed from 2018 to 2021.

  shock tms = file PolScen.har header "RTMS";

• Closure
  year-on-year capital accumulation
  swap qe("capital",REG) = capadd(REG);

  sloping supply curve for sector-specific factor
  swap qesf = qesfsupply;

  Upward sloping supply curve for sluggish factor
  swap qe(ENDWS,REG) = qelsupply(ENDWS,REG);
Difference of Policy vs. base rerun

% change of GDP growth (qgdp)
Difference of Policy vs. base rerun
Trade balance (del_tbal)

Unit: $million USD

Year on year U.S. trade balance: difference of policy vs. base rerun

U.S. trade balance: policy vs. base run

Unit: $million USD
Difference of Policy vs. base rerun
% change of investment (qinv)
Difference of Policy vs. base rerun
% change of output (qo)
Difference of Policy vs. base rerun

% change of export (qwx)
Difference of Policy vs. base rerun

% change of imports (qms)

Agriculture
Manufacturing
Policy shock 2—tariff war ended in 1 year

• Assume a 25% tariff was imposed on goods traded between the U.S. and China in 2017 and ended in 2018.

  shock tms = file PolScen2.har header "RTMS";

• Closure
  year-on-year capital accumulation
  swap qe("capital",REG) = capadd(REG);

  sloping supply curve for sector-specific factor
  swap qesf = qesfsupply;

  Upward sloping supply curve for sluggish factor
  swap qe(ENDWS,REG) = qelsupply(ENDWS,REG);
Macro Results (Baseline vs Policy Shock 2) Year-on-Year
Macro Results (Baseline vs Policy Shock 2)
Year-on-Year

Trade Balance

Investment

[Graphs showing Trade Balance and Investment over years with Baseline and Policy Shock lines]
Macro Results (Differences-Policy v Rerun Shock 2)
Sector Results (Baseline v Policy Shock 2) Year-on-Year

Agriculture Output

Manufacturing Output
Sector Results  (Baseline v Policy Shock 2)  
Year-on-Year

Agriculture Imports

Manufacturing Imports

- Base (Agr)  |  Policy (Agr)
- Base (Mnf)  |  Policy (Mnf)
Sector Results  (Baseline v Policy Shock 2)  
Year-on-Year

Agriculture Exports

Manufacturing Exports
Conclusions and implications

• The U.S.-China tariff war hurts the U.S. economy overall.
• The tariff war may create both sectoral winners and losers in the United States.
• The longer the tariff war lasts, the more impacts it will exert on the United States.
Limitations and future research agenda

• The dynamic CGE model may not accurately reflect the short-term impact of the policy change.

• The actual long-term impacts of the U.S.-China tariff war could be even larger than findings of this study because of other factors not captured by the model.

• Future studies can continue to evaluate the impact of the trade war at the more disaggregated sectoral or agent level.

• It may also be interesting to explore the impact of the U.S.-China tariff war on other regions of the world.