IMPROVING TRADE MODELS AND MEASURING PRO-JOBS TARIFF IMPACTS

Jeff Ferry & Andrew Heritage August 2023



PRE-EXISTING GTAP/ITC MODEL PROBLEMS

- 1. Total employment cannot increase because full employment is assumed
- deemed to be at full capacity
- 3. Prices are primary driver of the whole economy, including demand and output.
- to increase "efficiencies"



2. Total capital stock (plant & equipment) cannot increase because economy

4. The model leaves policymakers with one lever to create growth – lower tariffs –

CPA IMPROVEMENTS TO GTAP MODEL

- 1. Tariff productivity elasticities: growth through production rather than cheap prices
- Tariffs provide domestic firms space to increase capacity and output
- Calculated by sector as change in output when tariffs increase by one percent •
- Supported by March USITC report showing Section 232 and 301 tariffs led to increased production.

2. Factor supply elasticities: jobs and capital stock can increase

- Economy-wide supply of capital (investment) and labor rise in response to demand
- Example: \$20B of investment in steelmaking following Section 232 tariffs.



SCENARIO 1 15%/35% TARIFFS ON NON-FTA COUNTRIES

Non-FTA countries

- Manufactured goods 35% tariffs
- Non-manufactured goods (agricult tariffs
- Minerals 0% tariffs

FTA countries

• No tariff change



Non-manufactured goods (agriculture, forestry, fishing) – 15% "revenue"

SCENARIO 1 RESULTS INCREASED ECONOMIC GROWTH, JOBS, INCOMES

\$30,000

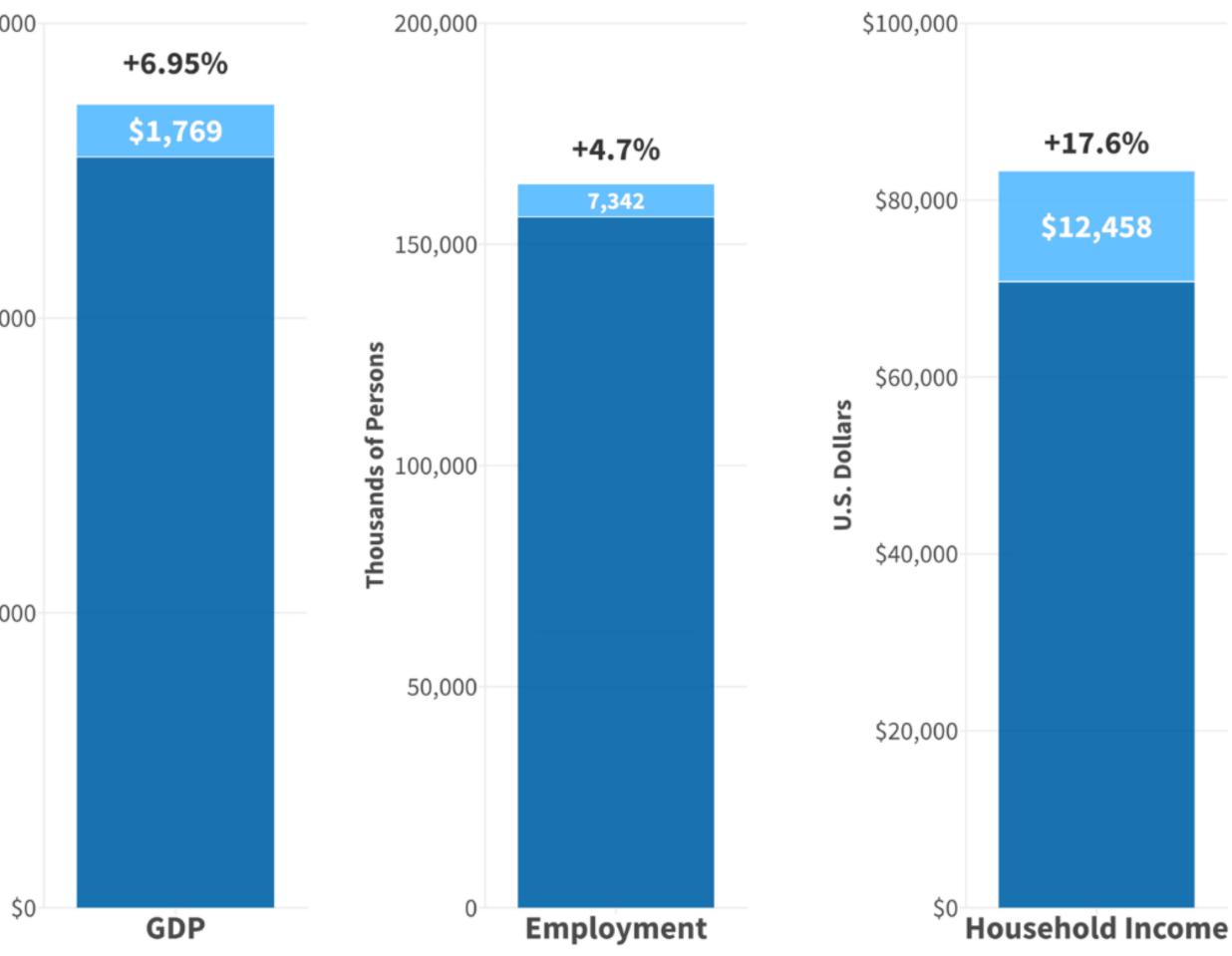
- GDP up by \$1.7 trillion (6.95%)
- 7.3 million new jobs **created (4.7%)**
- Real household incomes rise by \$12k per household (17.6%)

\$20,000

Dollars, Billions U.S.

\$10,000





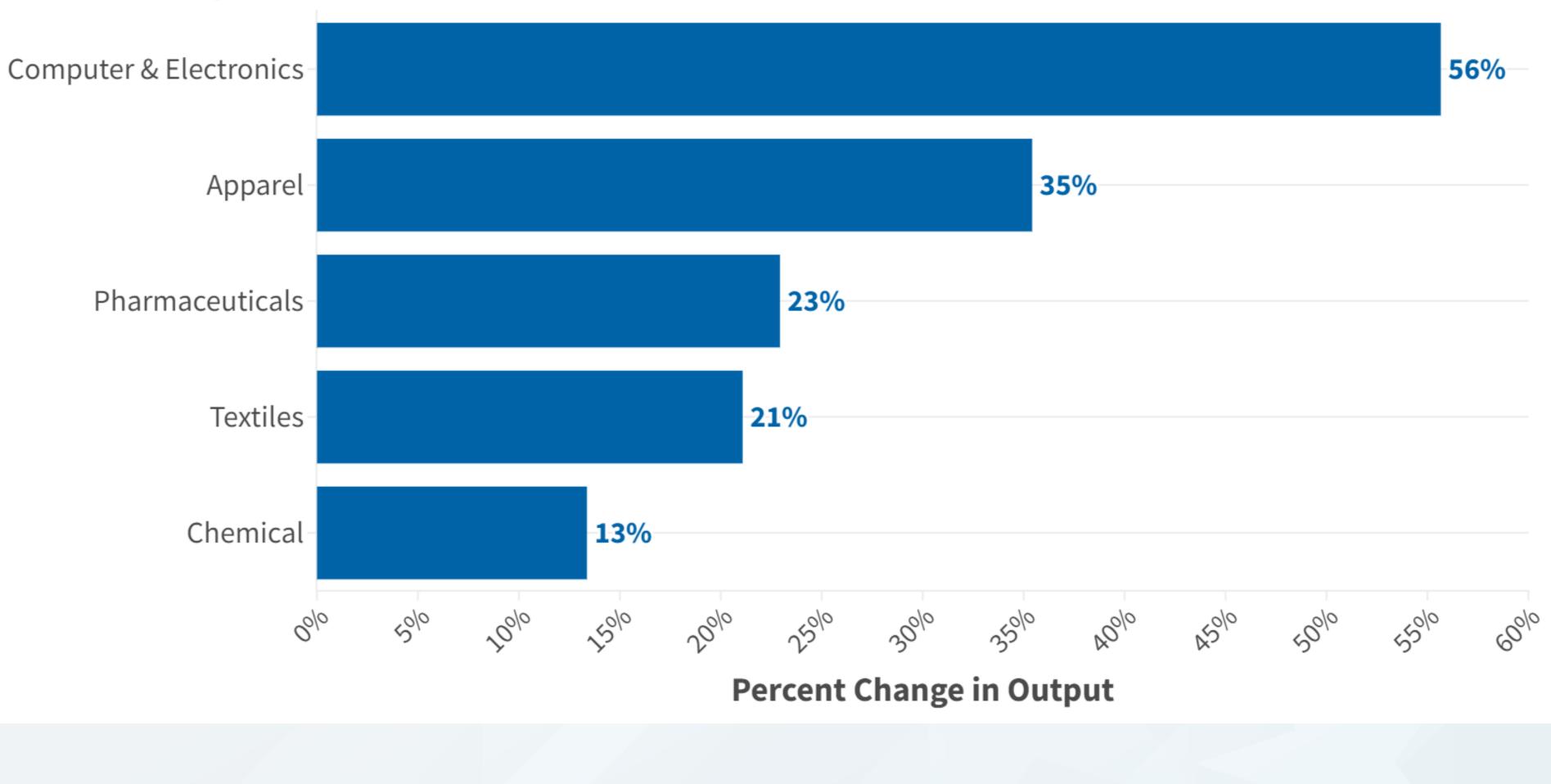
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SCENARIO 1 RESULTS INCREASED MANUFACTURING OUTPUT

Manufacturing Sector





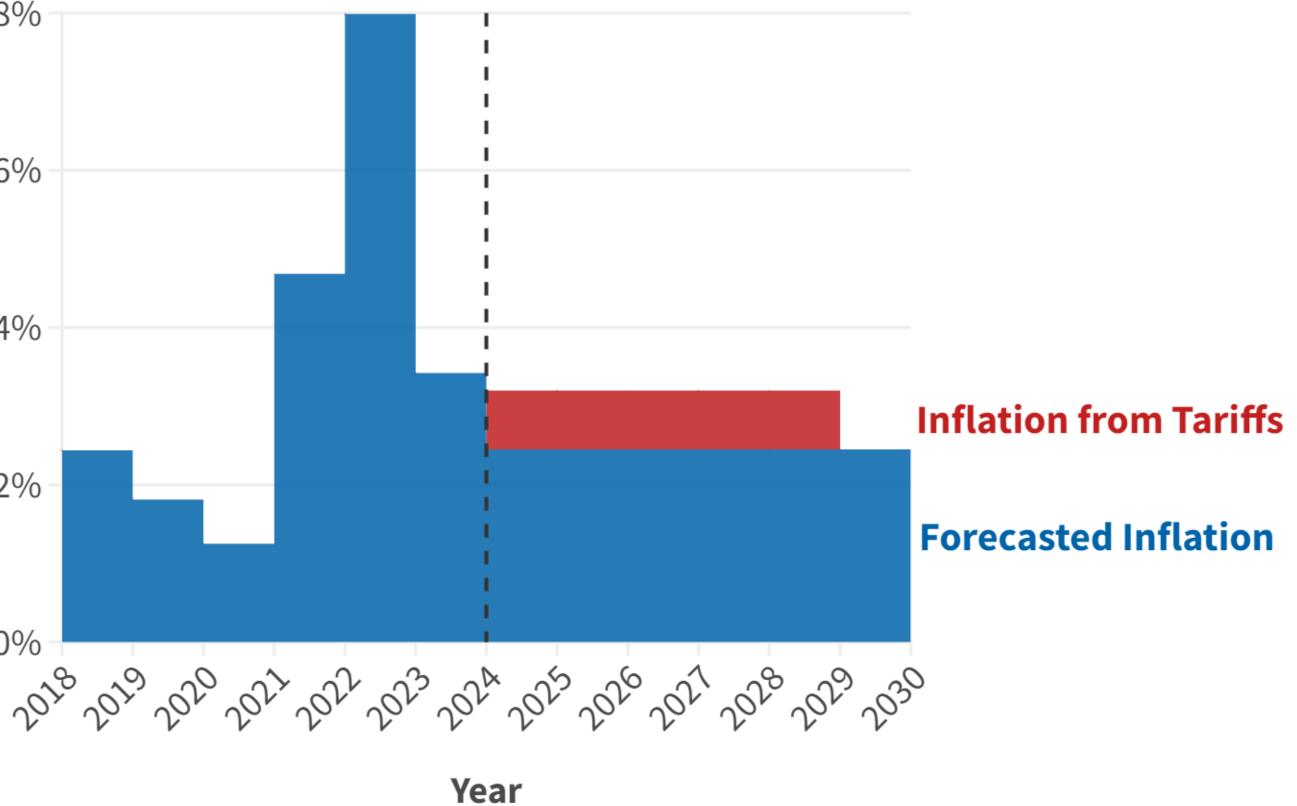
SCENARIO 1 RESULTS TEMPORARY/MODEST INFLATION DURING TRANSITION

•	4.5% total inflation over transition period	Infla 8%
•	0.75% annually assuming 6-year	6%-
	transition	4%-
(F	Price increases	2%-
dampened by decreasing unit costs as scale of		0%-

production increases)



ation Rate





SCENARIO 2 5%/10% TARIFFS ON NON-FTA COUNTRIES

Non-FTA countries

- Manufactured goods 10% tariffs
- Non-manufactured goods (agriculture, forestry, fishing) 5% "revenue" tariffs
- Minerals 0% tariffs

FTA countries

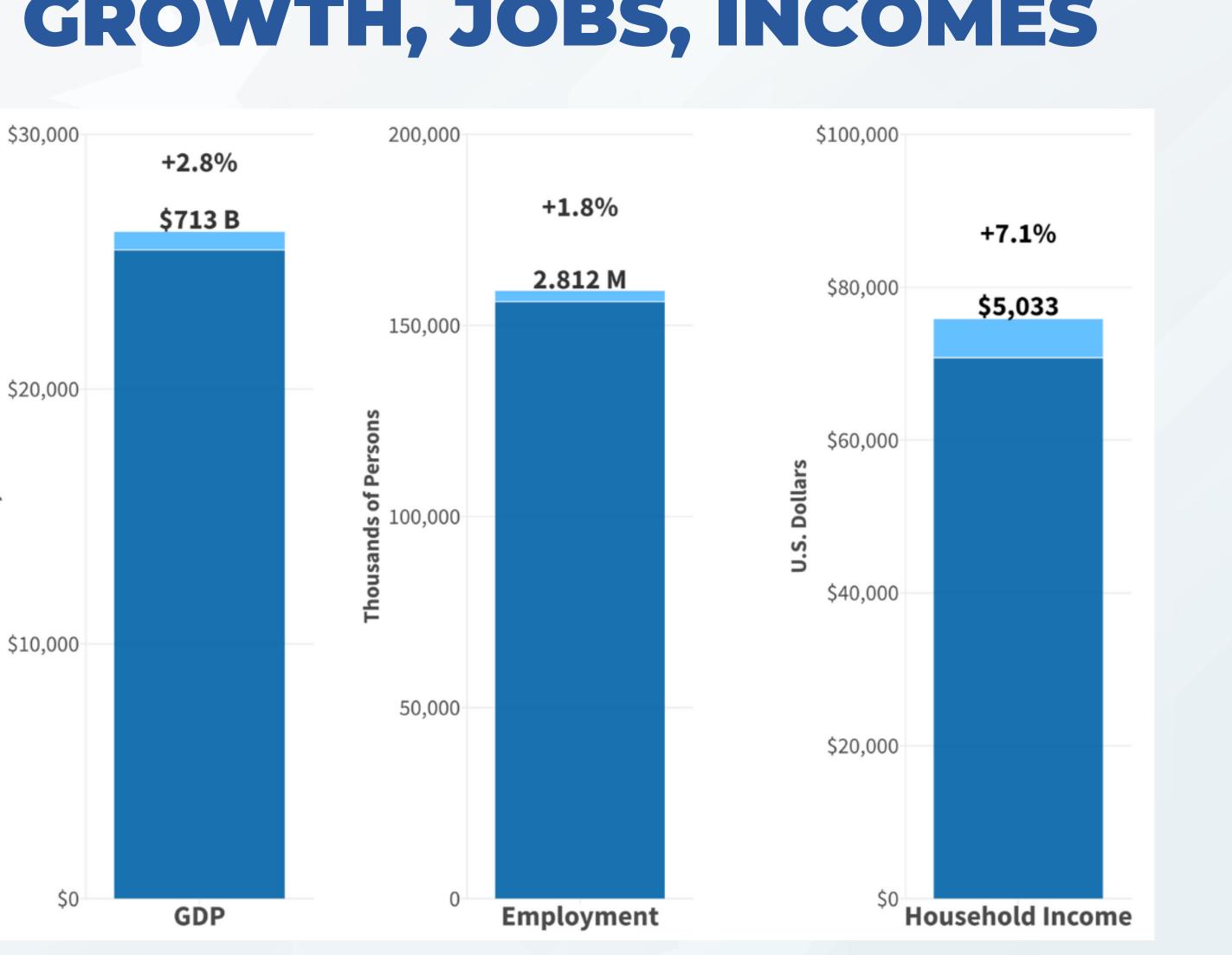
No tariff change



SCENARIO 2 RESULTS MODEST ECONOMIC GROWTH, JOBS, INCOMES

Results are similar but proportionately smaller by about 1/3:

- GDP up by 713 billion (2.8%)
- 2.8 million new jobs **created (1.8%)**
- Household incomes rise by \$5k per household (7.1%)



U.S. Dollars, Billions



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