Made in America Again

Modeling the Economic Impacts of Manufacturing Reshoring

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Agenda

- REMI Background
- Introduction
- Reshoring Case Studies
- REMI Models Overview
- What are we modeling?
- Results
- Conclusion & Next Steps
- Q&A

REMI Background

Founded in 1980, based on research from UMass Amherst

Pioneer in dynamic regional economic modeling

Trusted by:
Federal and state agencies
Universities and research institutions
Economic development organizations

Focus on long-term policy analysis and economic forecasting

Introduction

Reshoring History: The CHIPS and Science Act

The CHIPS and Science Act was signed into law by President Biden on August 9, 2022. It aimed to revitalize the U.S. semiconductor industry, boosting domestic chip manufacturing and R&D, partly as a response to the economic and national security fallout from semiconductor production having largely moved overseas over previous decades, made worse by pandemic-era chip shortages.

Key mechanics:

- $52 billion for building, expanding, or modernizing U.S. chip fabrication, assembly, testing, and packaging facilities, plus funding for national R&D centers.
- A 25% investment tax credit for semiconductor manufacturing, plus $200 million for worker training and $1.5 billion for wireless supply chain innovation.
- Safeguards blocking recipients from building advanced chip facilities in countries of national security concern (e.g., China).

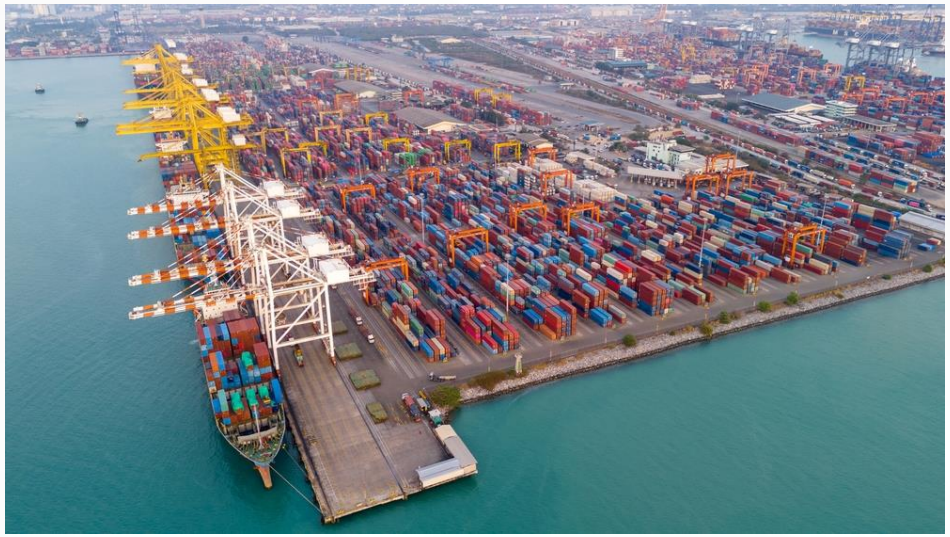
Introduction

Reshoring History: The 2025 Tariffs

The 2025 tariffs were the third major policy push to boost domestic production, following the CHIPS Act and the Inflation Reduction Act, raising the cost of imported goods in the US to make domestic production more competitive.

Key mechanics:

- **2025:** Tariffs on China, Canada, Mexico, plus 25% Section 232 tariffs on steel/aluminum, targeting core manufacturing inputs and signaling intent to rebuild U.S. metals production
- **April 2025:** "Reciprocal" tariffs (10% baseline + country-specific rates) raised import costs broadly; extended to autos, semiconductors, copper, and lumber by mid-2025, with steel/aluminum raised to 50%
- **Feb 2026:** Supreme Court struck down IEEPA tariffs (6-3), but the administration reinstated a 10% global tariff under Section 122 the same day, keeping the strategy alive
- **Mid-2026:** Section 232 metals tariffs revised to favor allies (EU, UK, Japan capped at 15%) and reshoring sectors (ag equipment, HVAC); Section 301 forced-labor tariffs (10–12.5%) replaced the expired Section 122 tariff



Case Study 1: Texas Automotive Manufacturing

Policy Context

- 25% tariff on imported automobiles
- 25% tariff on certain imported auto parts
- Lower tariff burden for U.S.-assembled vehicles
- Growing focus on domestic production and supply chains

Toyota San Antonio Expansion

- $3.6B investment in Toyota's San Antonio facility
- Adds a second assembly line and 2,000+jobs
- Tacoma production shifting from Mexico to Texas
- Production expected around 2030

Tax-PI & PROSERIS Overview

- Built on the PI+ engine, but with limited/streamlined access to full PI+ capabilities
- Includes CGE modeling, but more focused on input-output relationships and multiplier effects
- Models direct, indirect, and induced effects on jobs, output, and GDP year by year
- Guided, browser-based workflow, fast scenario analysis without building a model from scratch

- A PI+ add-on purpose-built for tax and fiscal policy analysis
- Full, comprehensive access to sophisticated CGE dynamic modeling (not limited like PROSERIS)
- Captures direct, indirect, and induced fiscal and economic effects of tax/policy changes
- Models effects dynamically over multiple years (up to 2060)
- Built for state revenue departments and legislative budget offices

Modeling simulation: Inputs

Using Toyota's expansion as a real-world reference, we modeled a hypothetical investment in automotive manufacturing facility in Texas, including construction, equipment, and long-term operational activity from 2026–2041.

Texas Toyota Sim — policy variable inputs

REMI PROSERIS inputs used to run the simulation

Investment & demand inputs (2026–2030, $ millions)

Variable	Detail	Units	2026	2027	2028	2029	2030
Demand	Construction	Nominal $ (M)	50	125	175	100	75
Demand	Motor vehicles, bodies and trailers, and parts mfg	Nominal $ (M)	14	42	70	91	63
Demand	Other transportation equipment manufacturing	Nominal $ (M)	6	18	30	39	27

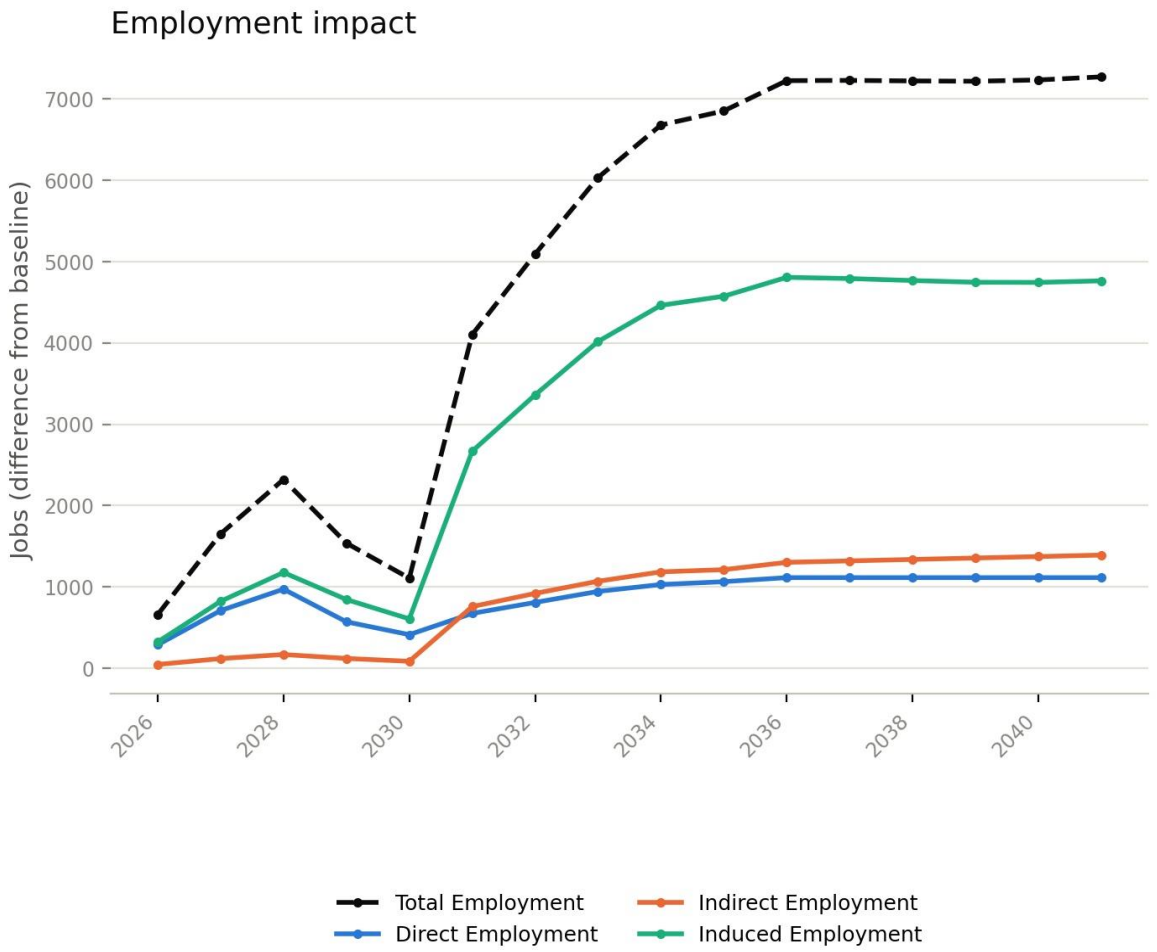
Employment inputs (jobs added, 2031–2041) — 2026–2030 held at 0 for all three sectors

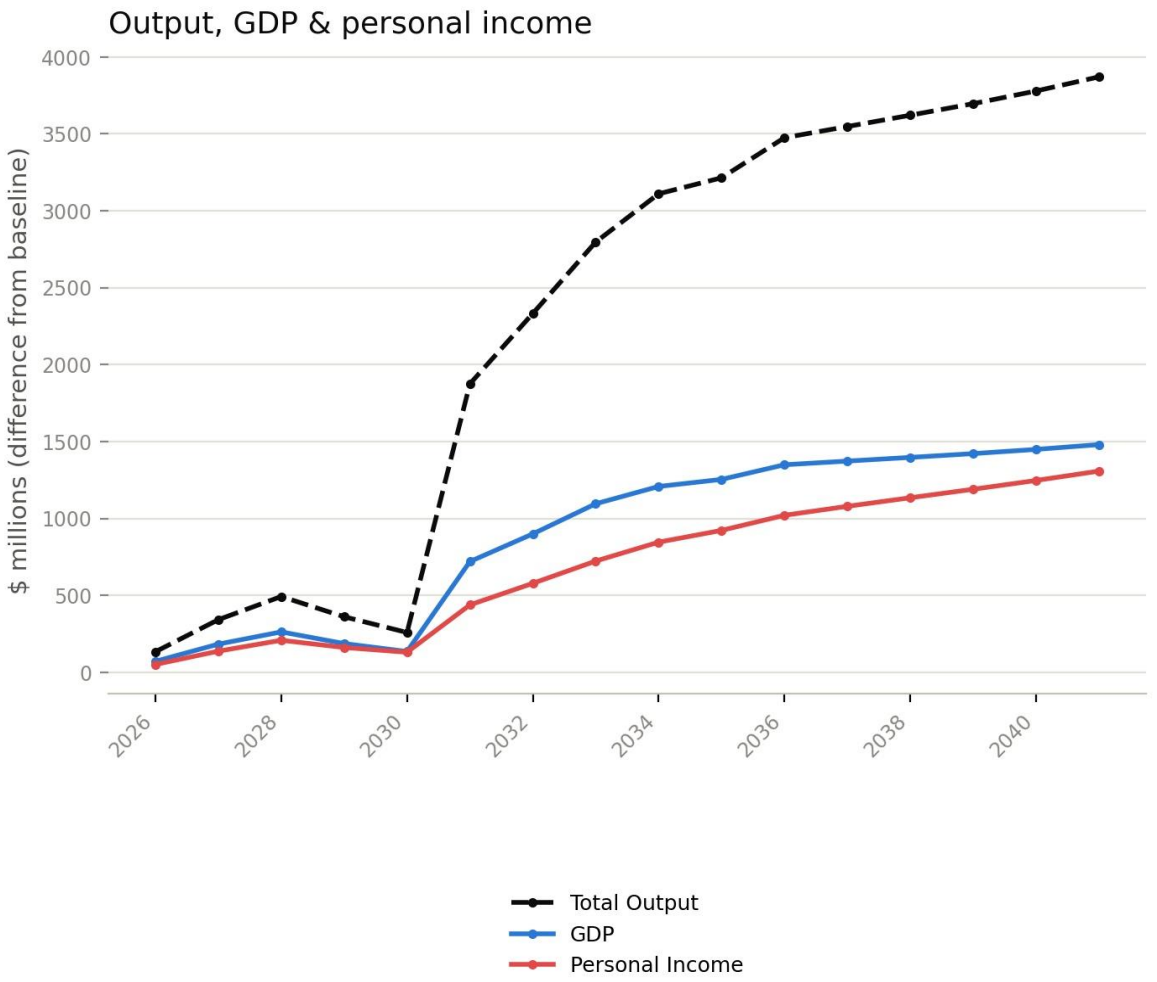
Sector	Units	2031	2032	2033	2034	2035	2036	2037	2038	2039	2040	2041
Motor vehicles, bodies and trailers, and parts mfg	Jobs	500	600	700	750	750	800	800	800	800	800	800
Fabricated metal product manufacturing	Jobs	50	60	70	80	90	90	90	90	90	90	90
Management of companies and enterprises	Jobs	125	150	175	200	225	225	225	225	225	225	225

Source: user-provided PROSERIS policy variable inputs, Texas Toyota Sim

Economic Summaries

Texas Toyota Sim — Impact summary (2026–2041)





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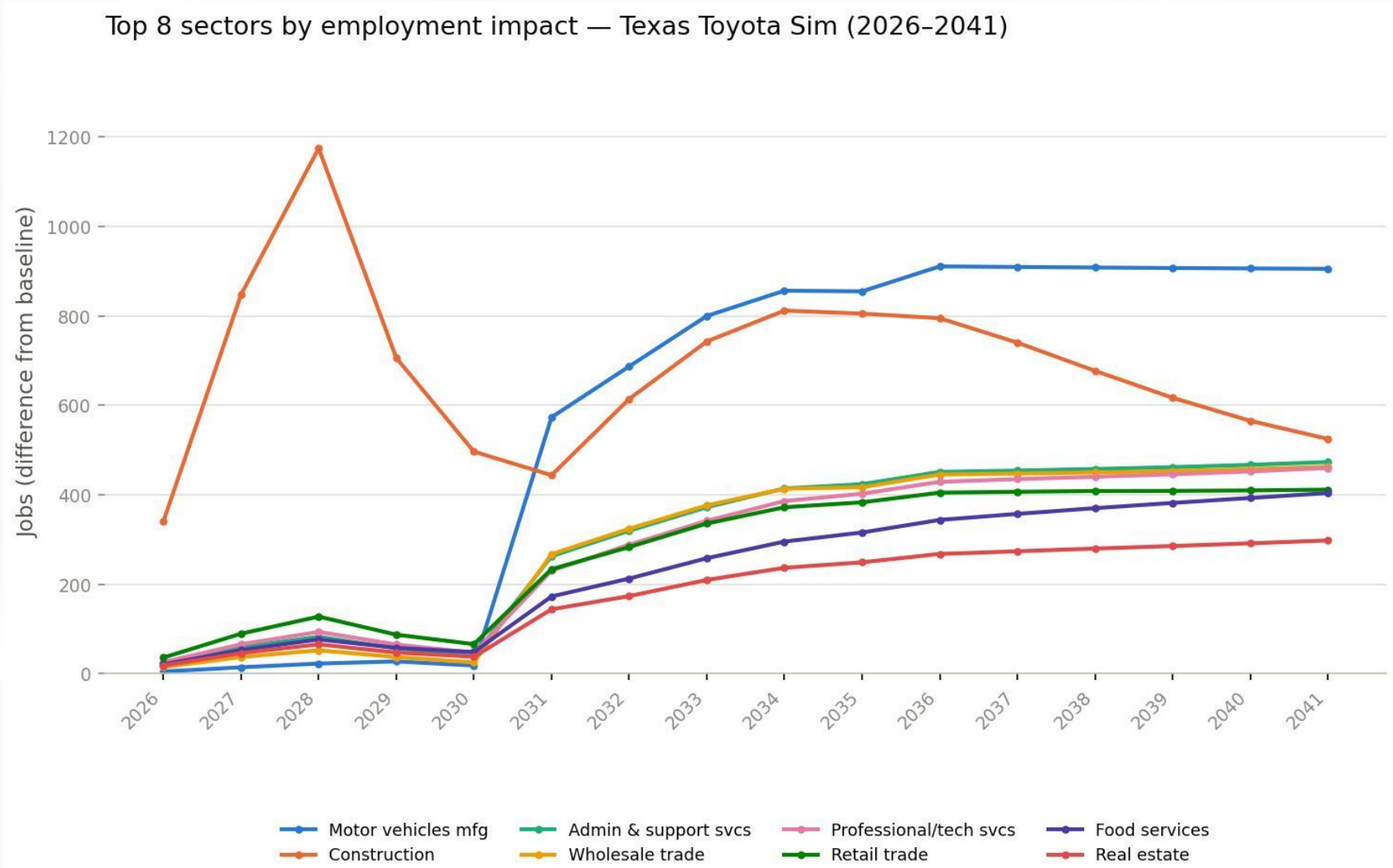
Impact on Employment



Case Study 2: Arizona Current Manufacturing Landscape

Policy Background

- **CHIPS (2022) $53 billion investment, reduce reliance on foreign suppliers, supply chain impacts** during pandemic

Intel's manufacturing in Arizona

- Arizona was already home to Intel manufacturing facilities, now becoming global semiconductor hub due to tax credits aiming to continue reshoring efforts.
- Intel investing more than $32 billion to construct Fab 52 and Fab 62 while modernizing existing facilities.
- One of the few places in the world capable of manufacturing the most advanced logic chips.

Economic Impact

- Reduction in production cost easing effect on consumer price
- More money and need for labor, raising employment
- Avoided Import costs due to domestic manufacturing

Arizona Case Study Inputs

What would be the economic impact of a $1 billion tax credit fund for manufacturing in Arizona?

Simulation Set Up

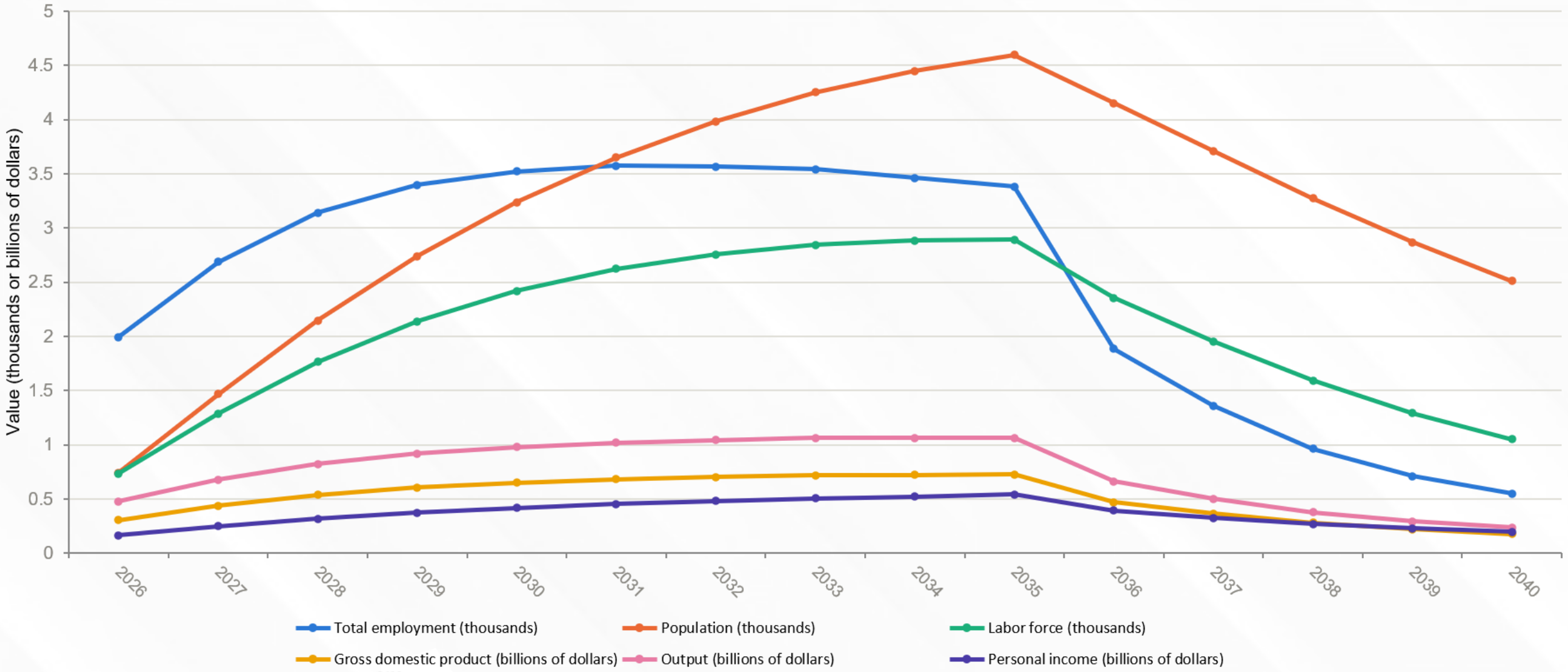
Corporate Tax Revenue Reduction

Tax Revenue	Reduction	Year
	($20,000,000)	2026
	($20,000,000)	2027
	($20,000,000)	2028
	($20,000,000)	2029
Corporate Tax	($20,000,000)	2030
	($20,000,000)	2031
	($20,000,000)	2032
	($20,000,000)	2033
	($20,000,000)	2034
	($20,000,000)	2035

AZ Tax Credit Shock on Production cost

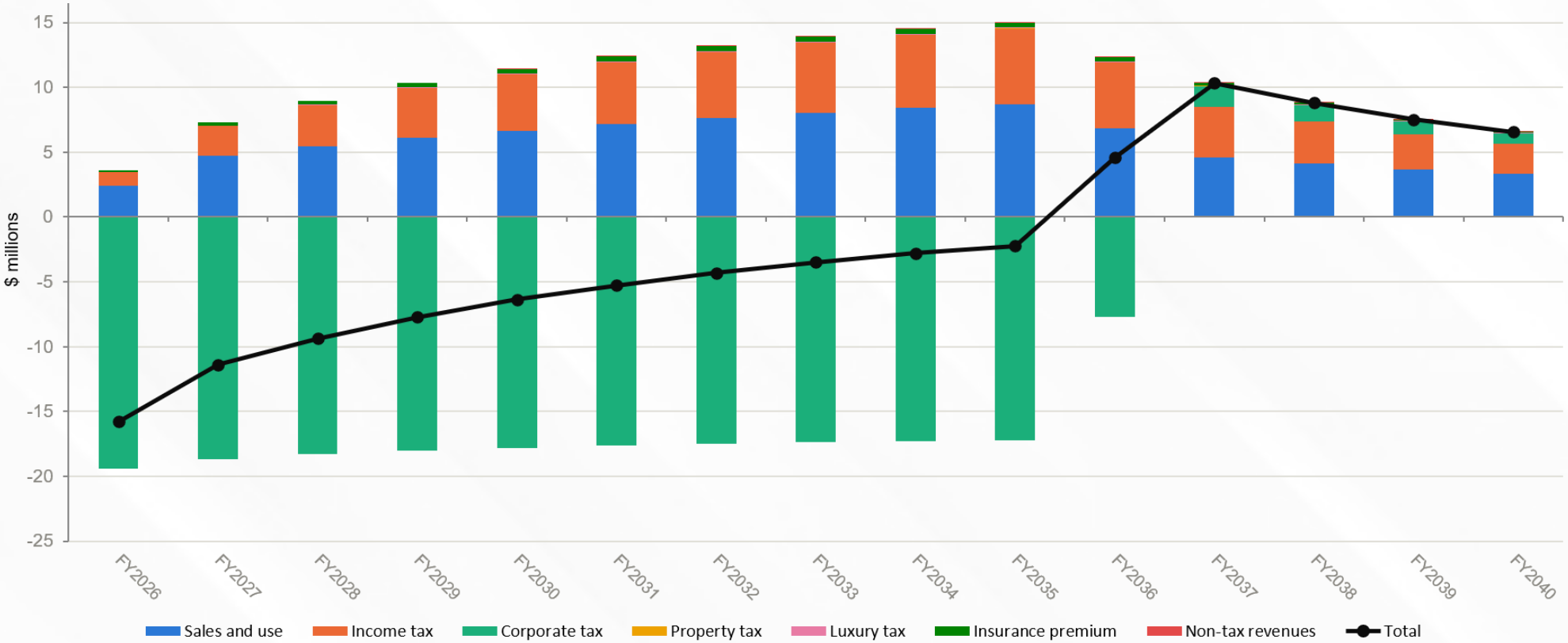
Policy Variable	Industry	Total Cost	Year
		($100,000,000)	2026
		($100,000,000)	2027
		($100,000,000)	2028
		($100,000,000)	2029
Production Cost	Computer and Electronic product Manufacturing	($100,000,000)	2030
		($100,000,000)	2031
		($100,000,000)	2032
		($100,000,000)	2033
		($100,000,000)	2034
		($100,000,000)	2035

Economic Summary

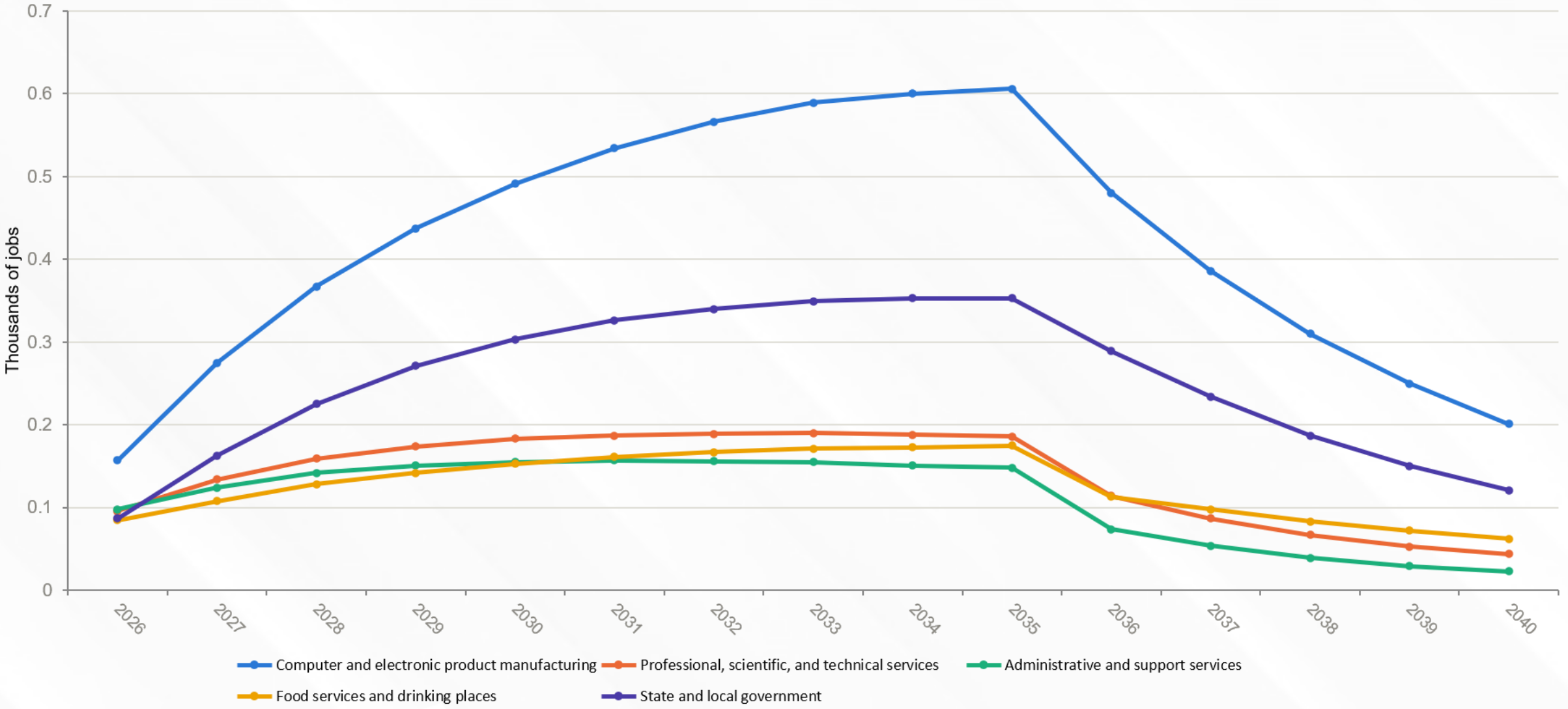


Simulation Tax Revenue Results

- Budget deficit progressively being closed by spark in production and employment
- Sales and Income tax revenues gradually offset the corporate tax revenue loss



Employment Results



Conclusion

Texas Automotive Manufacturing

Investment creates an immediate boost
-Construction drives early employment and economic activity during the 2026–2030 build phase

Operations create sustained growth
-Once automotive production begins, manufacturing becomes a major long-term source of employment

Impacts extend beyond the plant
-Supplier activity and household spending support jobs across numerous Texas industries

Long-term economic impact
-By 2041, the scenario supports **~7,300 jobs, ~$3.9B in output, and ~$1.5B in GDP.**

Arizona Chip Manufacturing

Manufacturing made even more prominent
-Funding from CHIPS and Science Act drove AZ to a leading semiconductor manufacturer.

Tax credits aiding domestic manufacturing are feasible
-Tax revenue as a result of production spike make up for the lack of corporate tax revenue and manufacturing costs

Labor Market Impact
-Spike in labor demand as a result of domestic manufacturing puts upward pressure on wages and more employees needed.

Total Economic Impact
-Spike in most macroeconomic indicators and then gradually declines after production cost falls back to normal.

Expected Effects & Next Steps

Reshoring Manufacturing

- **Production** → Domestic manufacturing typically carries a higher cost base than overseas production; tax credits and macroeconomic stimulus are mechanisms that can narrow or offset that cost differential
- **Employment** → Reshoring activity is associated with an increase in U.S. job creation, which can place upward pressure on wages as labor demand rises
- **Import costs** → Reduced import volume lowers spending on foreign goods, while higher domestic production costs partially offset that saving, with a tax incentive in place, the balance tends to tip toward a net benefit.

Next steps: modeling the other side of the equation

- Model how reduced import dependence flows through to consumer prices and domestic sourcing costs
- Quantify output and investment spillovers into supplier industries beyond the reshored sector
- Map which states have the industrial capacity to supply growing domestic demand, vs. which states (e.g., California, a top import market) would drive that demand
- Extend the fiscal/employment analysis to supplying states, not just the credit-granting state

Thank you for attending!

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