

BUSINESS TAX REFORM: THE ECONOMIC EFFECTS OF A “BORDER ADJUSTMENT” TAX

FEBRUARY 2, 2017

Overview



- Background and Political-Economic Context
- Border Adjustment Considerations
- Hypothetical Scenario: Import/Export Cost Changes – Industry and State Implications

The Trump Plan



“Fixing a tax code that is outdated, overly complex, and too onerous will unleash America’s economy, creating millions of new jobs and boosting economic growth.”

White House Economic Plan



Photo: Whitehouse.gov

- ❑ As a candidate, Trump proposed:
 - ❑ Cutting the corporate tax from 35% to 15%
 - ❑ Apply 15% to small businesses and pass-through entities currently paying individual rate
 - ❑ Consider tariffs on companies that move jobs overseas
 - ❑ Trump initially expressed skepticism about border adjustments
 - ❑ Administration officials recently indicated they are open to idea

Ryan-Brady Blueprint



- House Republicans released tax reform plan in June 2016
- Reform taxes on business
 - Reduce corporate rate from 35% to 20%
 - Adopt “cash-flow based approach” to replace “income-based approach” to taxation
 - Replace current worldwide tax system, exempting dividends from foreign subsidiaries
 - **Border adjustments exempting exports and taxing imports**



Source: paulryan.house.gov

Sources: House Republican’s “A Better Way”, KPMG

Political-Economic Context

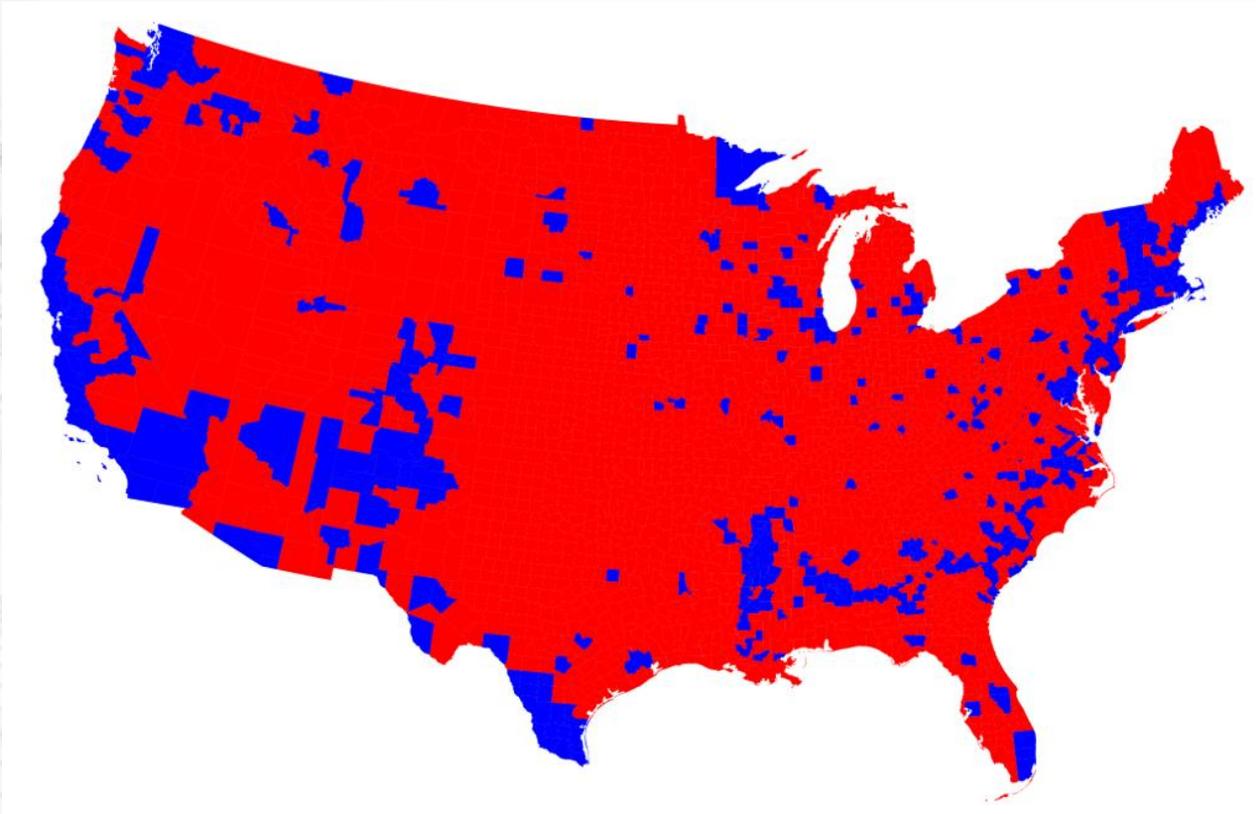


- Tax reform is about economic growth, but it is also a political decision
 - Need to understand not only the total macroeconomic effects, but also:
 - Industry effects
 - State and Regional Effects
- State and industry dynamic analysis is critical to informing Congress

A House Divided: Rural-Urban Split



2016 Election Results by County



Mark Newman, Department of Physics and Center for the Study of Complex Systems, University of Michigan

what does REMI say? sm

Border Adjustments



- Border-adjusted corporate tax
 - ▣ Revenues from the sale of exports would not be taxed
 - ▣ Costs of imported parts and goods for use or resale would no longer be deductible
- Border adjustment could raise an additional \$1 trillion over 10 years – Tax Foundation estimate
- However, change could be coupled with tax rate cuts, so overall business revenue could fall

Sources: Tax Foundation, Reuters

Border Adjustment Issues



- Border adjustment reduces export costs, increases import costs
 - The effects of this policy depend on other components of tax reform, such as the corporate profits tax
- Full employment and the Fed
 - If the economy is at “full employment,” then job gains in one sector must be offset by job losses elsewhere
 - Can hysteresis effect be reversed?

Exchange Rate Adjustment



- Exchange Rate Adjustment
 - If dollar increases, this will offset the import cost increase/export cost decrease.
 - If the border adjustment is 10% and the exchange rate is 10%, relative cost differences are offset
 - The primary effect of the border adjustment may then be in the shift away from income-based taxation towards a consumption-based taxation
 - Questions regarding exchange rate adjustment:
 - What is the timing? Immediate or long-term?
 - Does exchange rate adjustment offset 100%? 50%? 75%?

Modeling Impacts



- Scenario for simulation
 - Increase import costs, lower export costs
 - Constructed as balance where change in import costs = change in export costs, approximately “revenue neutral”
 - Other factors need to be considered; scenario is intentionally oversimplified
 - No exchange rate change

Simulation: Border Adjustment

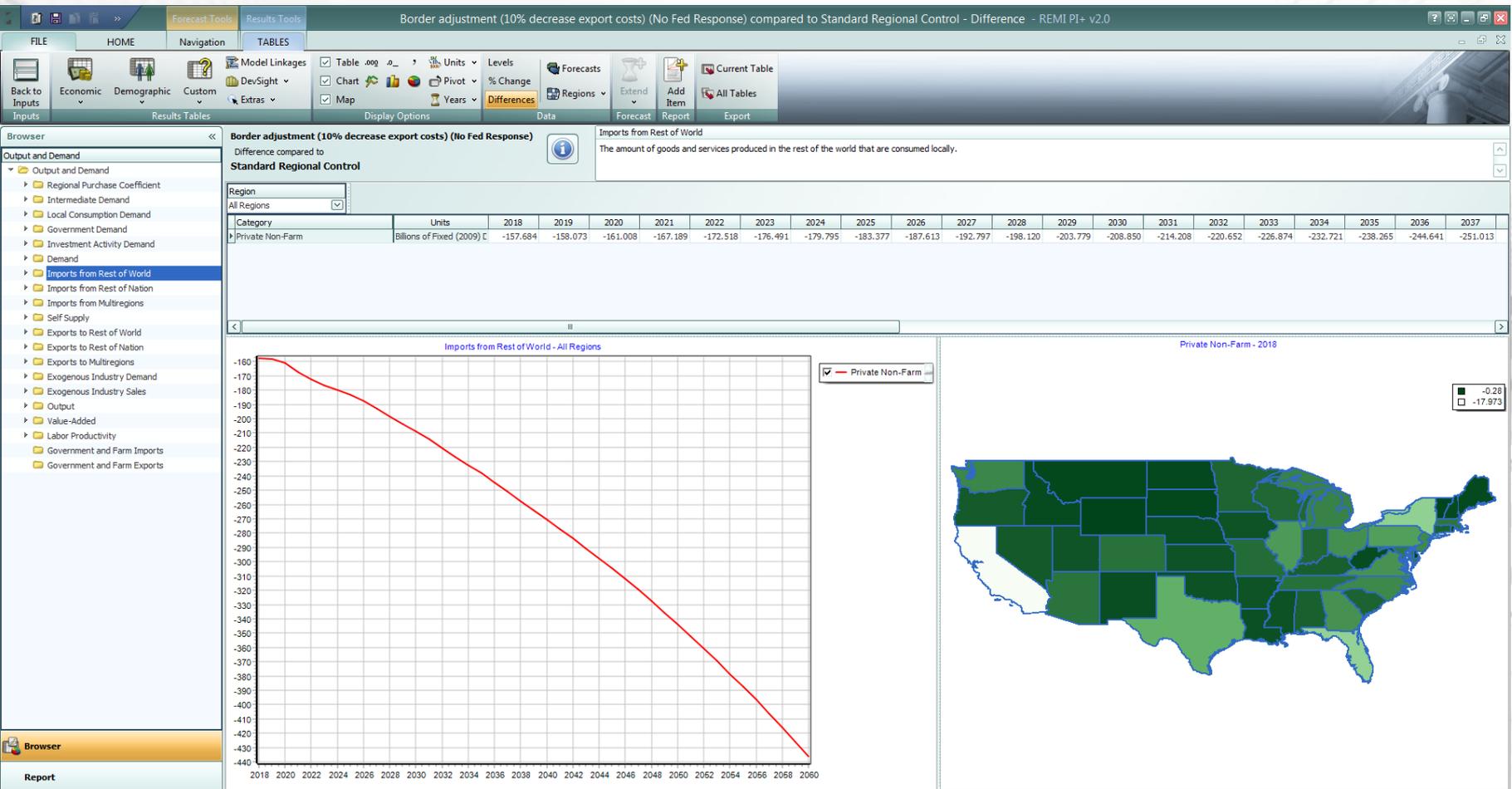


- Simulation: increase import cost, decrease export costs
 - Adjusted direct export cost savings to equal import cost increase (revenue neutral)
 - Decrease export costs by 10%, increase import costs by the same dollar amount
 - Baseline exports (2015): \$1.67 trillion
 - Baseline imports (2015): \$2.18 trillion
 - 10% of exports: \$167 billion
 - $\$167 \text{ billion} / 2.18 \text{ trillion} = 7.64\%$
 - In 2015, export costs are decreased by 10% and import costs increased by 7.64%

Border Adjustment (No Fed Response): Imports



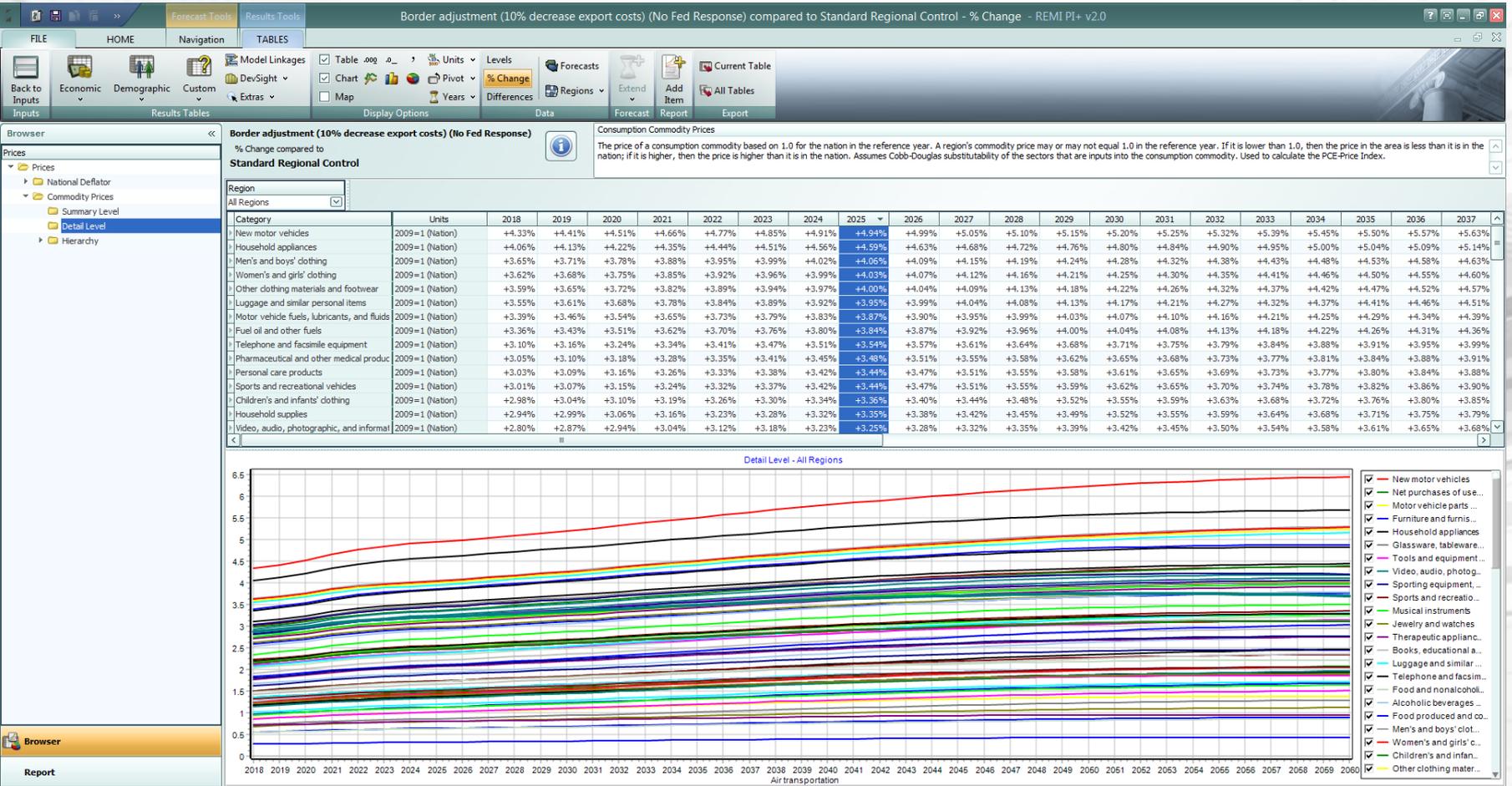
States affected most by changes in imports from the border adjustment are in darker shades of green



Border Adjustment (No Fed Response): Prices



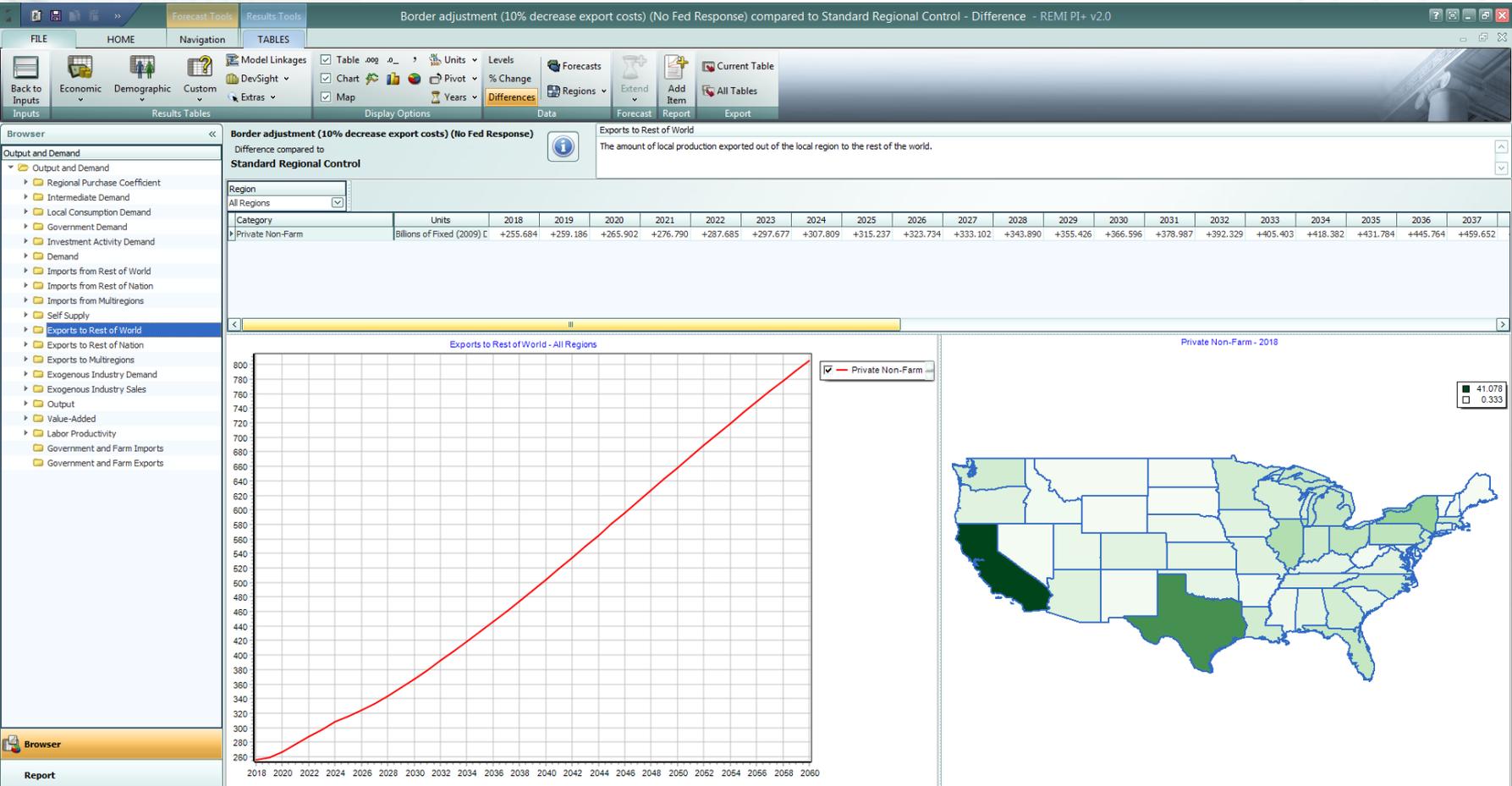
States affected most by changes in imports from the border adjustment are in darker shades of green



Border Adjustment (No Fed Response): Exports



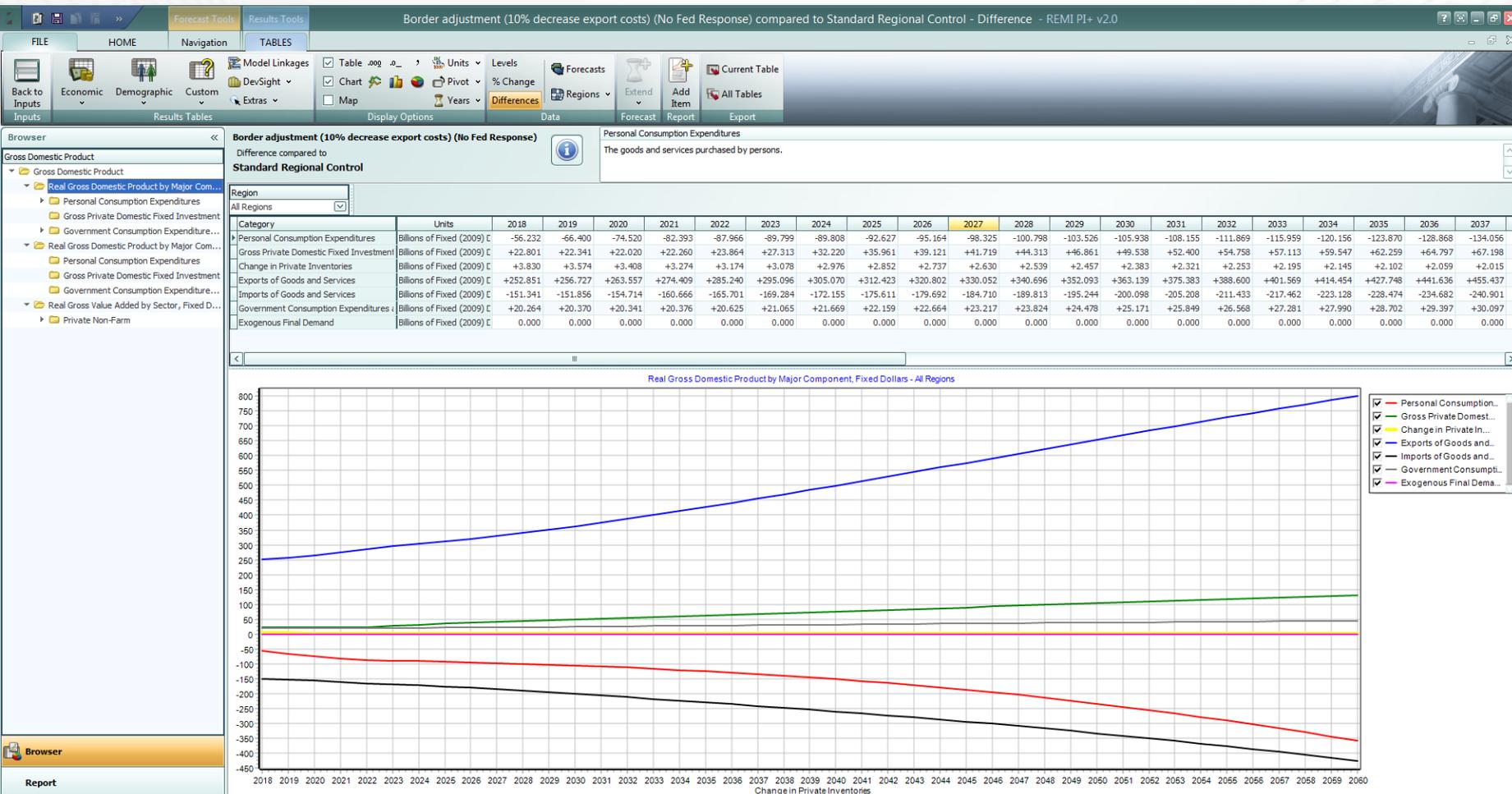
States affected most by changes in exports from the border adjustment are in darker shades of green



Border Adjustment (No Fed Response): GDP Impact



States affected most by the border adjustment are in darker shades of green



Border Adjustment (No Fed Response): Employment Impact



Forecast Tools | Results Tools | Border adjustment (10% decrease export costs) (No Fed Response) compared to Standard Regional Control - Difference - REMI PI+ v2.0

FILE HOME Navigation TABLES

Model Linkages | Table .log | Units | Levels | Forecasts | Current Table

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Browser | **Border adjustment (10% decrease export costs) (No Fed Response)** | Private Non-Farm Employment

Employment | Industry | Private Non-Farm Employment | Sector Level | Summary Level | Hierarchy | Intermediate Demand Employment | Local Consumption Demand Employment | Government Demand Employment | Investment Activity Demand Employment | Exports to Multiregions Employment | Exports to Rest of Nation Employment | Exports to Rest of World Employment | Exogenous Industry Sales Employment | Exogenous Industry Demand Employment | Government | Occupation

Difference compared to Standard Regional Control

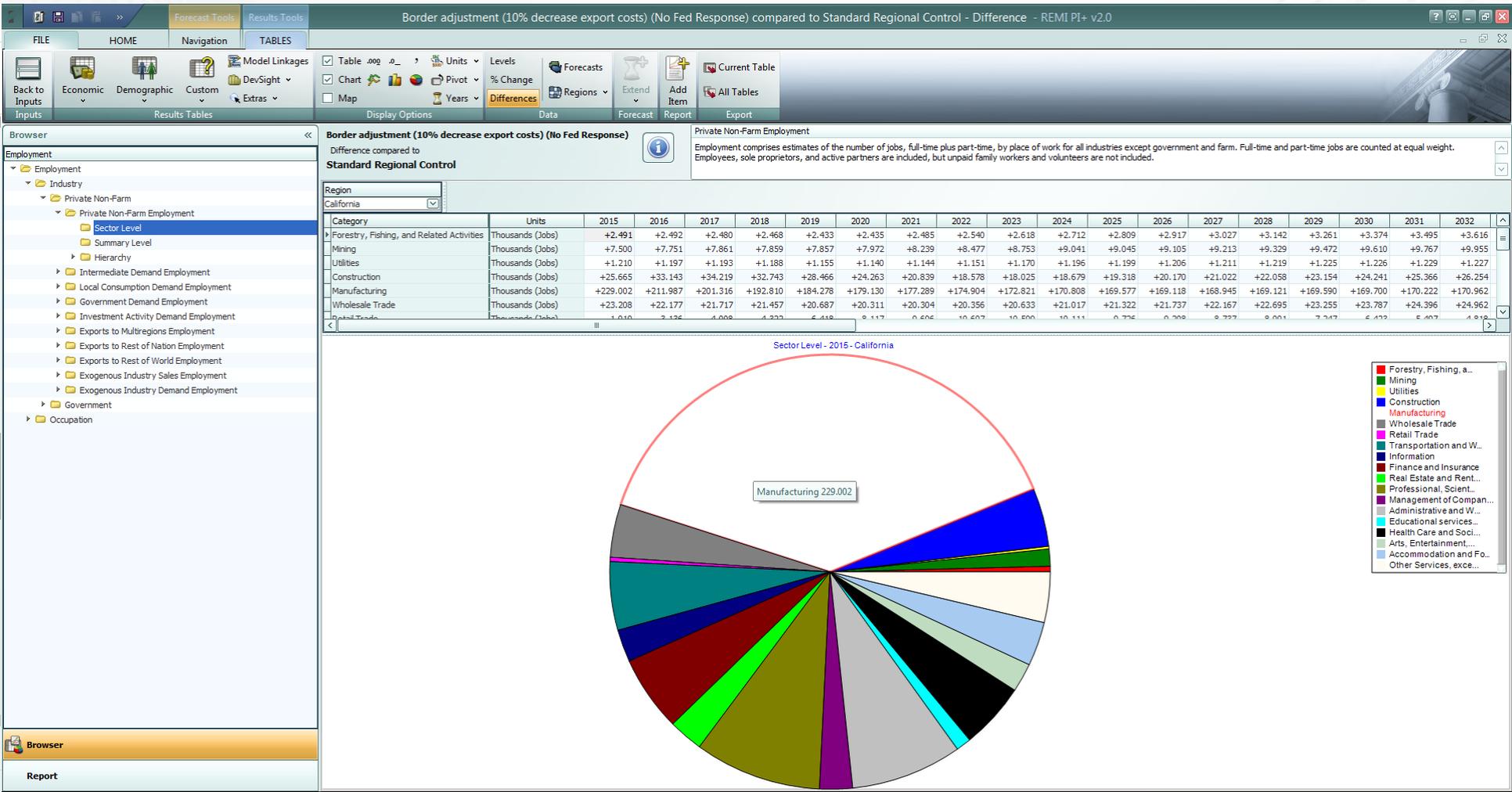
Employment comprises estimates of the number of jobs, full-time plus part-time, by place of work for all industries except government and farm. Full-time and part-time jobs are counted at equal weight. Employees, sole proprietors, and active partners are included, but unpaid family workers and volunteers are not included.

Region	Units	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037
California	Thousands (Jobs)	+545.410	+521.717	+508.106	+504.796	+503.805	+510.417	+520.948	+529.447	+540.939	+552.669	+566.652	+581.409	+595.184	+610.591	+625.047	+638.072	+650.460	+663.010	+675.769	+687.641
Texas	Thousands (Jobs)	+503.979	+483.630	+469.013	+463.637	+461.895	+469.451	+482.651	+484.242	+487.574	+491.911	+498.215	+506.154	+514.761	+524.998	+534.696	+544.518	+554.343	+564.397	+574.234	+583.520
New York	Thousands (Jobs)	+152.508	+148.872	+149.134	+152.656	+156.765	+162.716	+169.565	+175.001	+181.039	+186.732	+193.135	+199.578	+205.588	+212.271	+218.387	+224.002	+229.398	+235.159	+240.722	+245.996
Illinois	Thousands (Jobs)	+115.467	+110.634	+108.762	+109.421	+110.818	+113.877	+117.854	+120.783	+124.104	+127.320	+130.918	+134.514	+137.859	+141.556	+144.881	+147.851	+150.568	+153.530	+156.190	+158.618
Ohio	Thousands (Jobs)	+97.395	+91.845	+89.141	+88.751	+89.016	+90.896	+93.628	+95.497	+97.680	+99.730	+102.053	+104.334	+106.419	+108.726	+110.621	+112.303	+113.782	+115.363	+116.695	+117.806
Pennsylvania	Thousands (Jobs)	+81.895	+78.640	+78.130	+79.635	+81.649	+85.017	+89.092	+91.789	+94.594	+97.050	+99.784	+102.417	+104.839	+107.633	+110.014	+112.124	+114.086	+116.424	+118.510	+120.364
Massachusetts	Thousands (Jobs)	+84.804	+82.267	+81.337	+82.193	+83.354	+85.308	+87.838	+90.032	+92.635	+95.144	+97.974	+100.899	+103.779	+107.068	+110.098	+112.983	+115.555	+118.231	+120.855	+123.339
Michigan	Thousands (Jobs)	+88.757	+83.918	+81.489	+81.021	+81.028	+82.411	+84.520	+86.261	+88.381	+90.484	+92.832	+95.200	+97.442	+99.920	+102.066	+104.003	+105.834	+107.722	+109.458	+111.018
North Carolina	Thousands (Jobs)	+74.631	+69.635	+67.152	+66.603	+66.533	+67.770	+69.669	+71.601	+73.851	+75.926	+78.213	+80.469	+82.476	+84.712	+86.590	+88.132	+89.478	+90.896	+92.138	+93.180
Minnesota	Thousands (Jobs)	+71.653	+68.475	+66.723	+66.256	+66.236	+67.055	+68.443	+69.442	+70.736	+72.078	+73.695	+75.426	+76.993	+78.754	+80.277	+81.605	+82.787	+84.030	+85.142	+86.199
Oklahoma	Thousands (Jobs)	+70.978	+68.330	+66.484	+65.864	+65.621	+66.537	+68.115	+67.805	+67.687	+67.764	+68.093	+68.700	+69.465	+70.497	+71.535	+72.682	+73.867	+75.082	+76.320	+77.494
New Jersey	Thousands (Jobs)	+58.288	+56.733	+56.913	+58.423	+60.340	+63.068	+66.237	+68.642	+71.216	+73.555	+76.173	+78.749	+81.175	+83.879	+86.242	+88.384	+90.422	+92.698	+94.810	+96.804
Indiana	Thousands (Jobs)	+70.556	+66.414	+64.075	+63.335	+63.024	+63.790	+65.146	+66.196	+67.526	+68.860	+70.381	+71.962	+73.419	+75.039	+76.441	+77.703	+78.837	+80.021	+81.087	+82.007
Wisconsin	Thousands (Jobs)	+64.306	+61.152	+59.294	+58.709	+58.624	+59.309	+60.474	+61.532	+62.876	+64.231	+65.821	+67.394	+68.825	+70.412	+71.787	+72.990	+74.071	+75.214	+76.282	+77.311
Colorado	Thousands (Jobs)	+53.069	+51.726	+51.276	+51.825	+53.049	+55.116	+57.768	+59.122	+60.502	+61.810	+63.274	+64.853	+66.511	+68.372	+69.987	+71.514	+72.972	+74.508	+75.951	+77.395
Georgia	Thousands (Jobs)	+53.461	+49.393	+47.708	+47.537	+47.947	+49.547	+51.714	+53.739	+55.921	+57.816	+59.863	+61.775	+63.473	+65.314	+66.785	+67.953	+68.981	+70.132	+71.029	+71.771
Louisiana	Thousands (Jobs)	+47.078	+45.649	+45.183	+45.711	+46.573	+48.425	+50.819	+51.351	+51.873	+52.289	+52.846	+53.457	+54.121	+54.944	+55.620	+56.277	+56.917	+57.626	+58.233	+58.759

Private Non-Farm Employment - 2024

Report

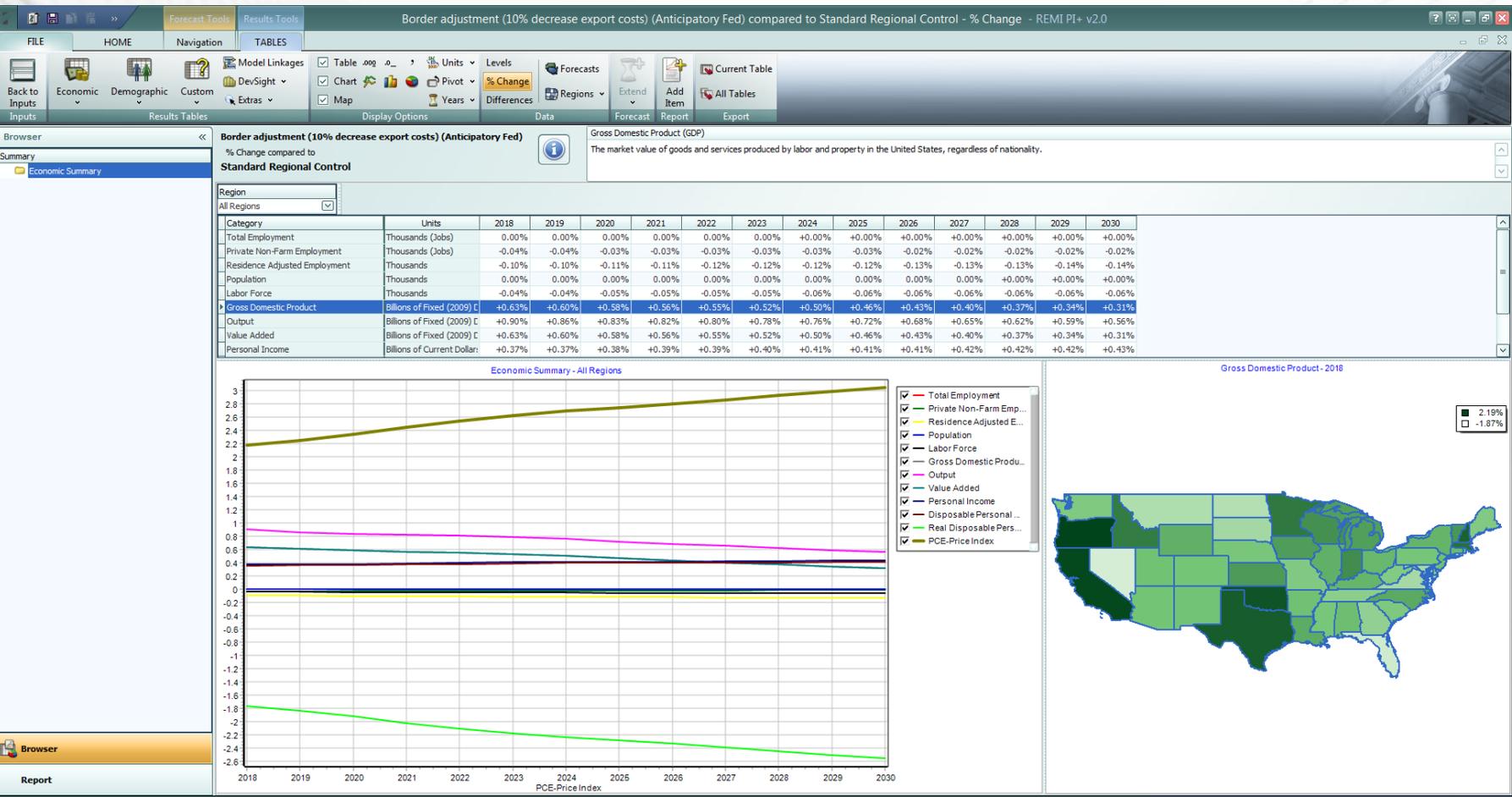
California Industry Employment Impact



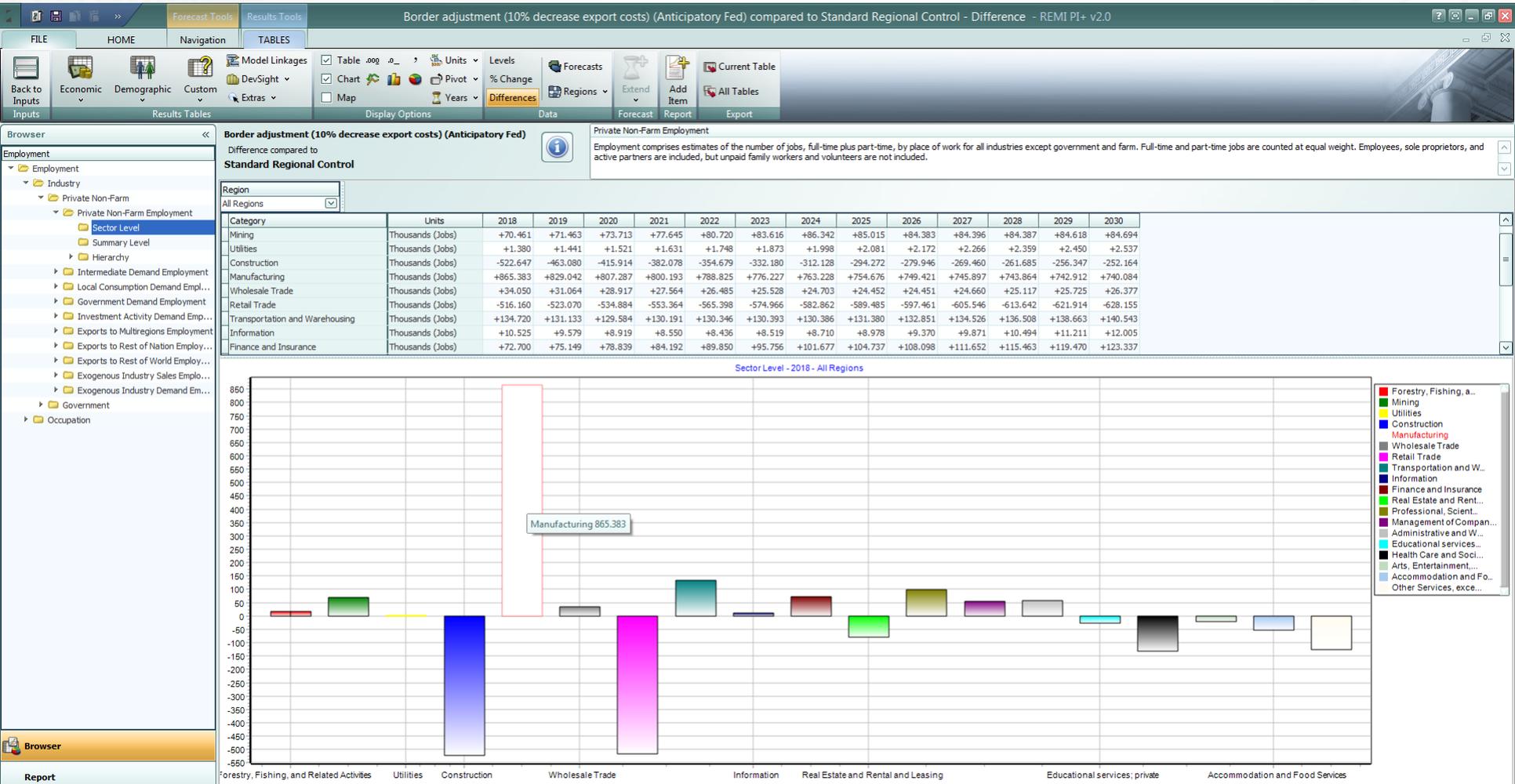
Border Adjustment (Anticipatory Fed): Summary



Anticipatory Fed: Employment no change from baseline, GDP increase



Anticipatory Fed: Employment



Conclusion



- Simplified scenario identifies potential industry and regional gains and losses
- Additional considerations: context of overall tax plan, exchange rate adjustment, labor force constraints and hysteresis
- Political Economy:
 - Economy: tax reform and economic growth
 - Political: inform Congress of industry effects, and what it means at the state and district level