



CONSIDERATIONS FOR EVALUATING TAX CREDITS

NEW OR EXPANDED INDUSTRY CREDIT

**Montana Revenue Committee
November 19th, 2019**

Opportunity Cost



Q: At what cost is the credit accomplishing the purpose?

Q: To what extent does the credit benefit some taxpayers at the expense of others?

- In other words: to what extent does new business cannibalize existing business
- Consider REMI 'firm sales' vs. 'exogenous sales' – firm sales accounts for industry type (ex. Retail vs. manufacturing) and fixed local demand

Example: W.E. Upjohn Institute
 “National Economic Impact of
 Manufacturing Extension Partnership”

- Assuming net new: 575k jobs, 35.8 ROI
- Assuming cannibalization: 142k jobs, 8.7 ROI
- Assuming cannibalization: 142k jobs, 8.7 ROI → **4:1 difference**

The Results

Forecast	Jobs	GDP	Output	Personal Income	Returns to Treasury	ROI Return on Investment
Unconstrained Model Using Industry Variables	575,870	\$63.04'	\$130.15'	\$34.64'	\$4.66'	35.8:1
Constrained Model Using Firm Variables	142,381	\$15.40'	\$29.89'	\$8.44'	\$1.13'	8.7:1
11.5% Solution Using Firm Variables	16,532	\$1.79'	\$3.46'	\$0.98'	\$-132'	1:1

*Dollars in billions

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Opportunity Cost



Q: Are there adverse impacts of the credit or its elimination?

- ❑ In other words: what is the counterfactual?
 - Investment fund collecting interest?
 - General fund spending? Specific type of appropriation?
 - Lower taxes? What kind?
- ❑ Other fiscal impact: population influx drives additional demand for government services
- ❑ Counterfactual is never certain, so users take different approaches:
 - Foregone spending can be done in any input-output model: general approach is reduce state gov. spend, can go into more or less detail
 - Reducing taxes requires dynamic model: corporate or PIT at state level, sales or property taxes at local level

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But-For Assumption



Q: Does the credit change taxpayer decisions?

Q: Does the credit reward decisions that may have been made regardless of the existence of the credit?

- ❑ Flipside of the same coin: to what extent is the reported economic activity attributable to the incentive, or how much wouldn't have taken place 'but for' the incentive?
- ❑ Obviously not 100%, but how much? 50%? 5%? Experts disagree, so use sensitivity analysis

Example: April 2019 NE LPA Audit of 'Advantage Act' used 12.5, 25, 100% but-for assumption, from Tim Bartik/W.E. Upjohn

100% - \$7k/job

25% - \$30k/job

12.5% - \$62k/job

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Senator Suzanne Geist
Committee Chair
P.O. Box 94604, State Capitol
Lincoln, NE 68509
402-471-2731

*Legislative Performance Audit
Committee*

Legislative Audit Office
Martha Carter, Legislative Auditor
P.O. Box 94604, State Capitol
Lincoln, NE 68509
402-471-1292

FOR IMMEDIATE RELEASE
CONTACT: Senator Suzanne Geist, (402) 471-2731

April 11, 2019

Nebraska Advantage Act Performance on Selected Measures

The Legislative Audit Office today released a report on the performance from 2008 – 2017 of the Nebraska Advantage Act on seven measures. Performance Audit Committee chair Senator Suzanne Geist noted that the report provides the Legislature with new information on Advantage Act projects. "This report gives us critical new information that will help us as we discuss the future of tax incentives in the State."

The Performance Audit Committee report shows a larger than expected impact on the state budget. In four of the last five years reviewed in the report, the program exceed the \$60 million per year impact discussed by the Legislature when the program was created by LB 312 in 2005, according to the report.

But-For Assumption



- Can also use break-even approach: how much of the activity would need to be 'net new' in order for the benefit to outweigh the cost?
 - Decision rule: does the necessary 'but-for' seem plausible?

- Example: REMI broadly modeled Montana's New or Expanded Industry Credit claims using Tax-PI model of Wyoming economy, budget
 - Assumed offset by reducing state government spending

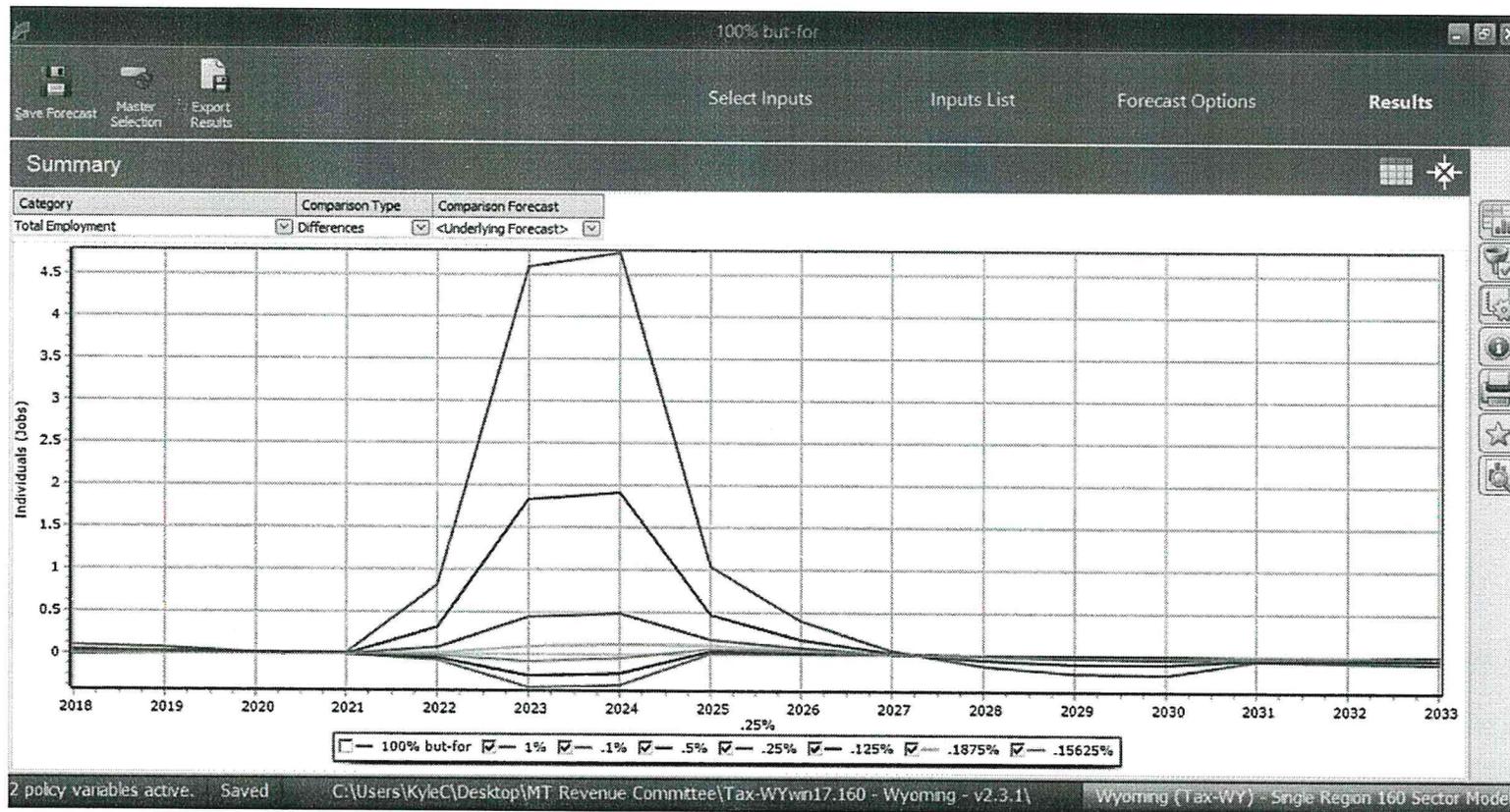
- Result: net neutral economic impact somewhere around 0.175% 'but-for' assumption
 - Think: \$179k credit to stimulate 619 jobs, not many need to be 'net new' in order for credit to offset counterfactual

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But-For Assumption



Jobs Impact by 'But-For' Assumption



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Net Economic Impact



Q: To what extent do benefits of the credit affect the larger economy?

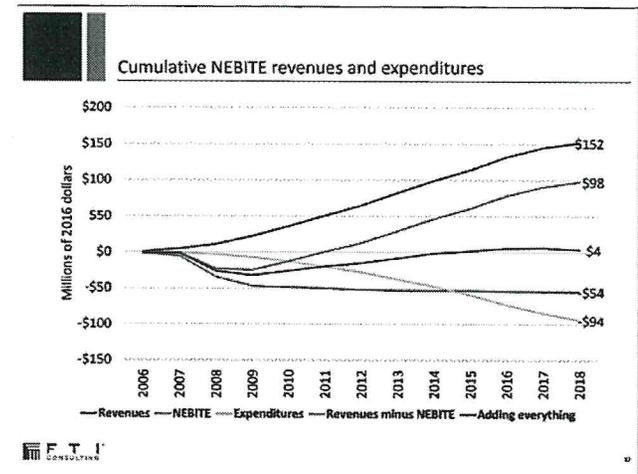
- ❑ Spending impacts can be done in any input-output model, incentives that affect biz production cost (ex: payroll tax exemption, w/o associated FTE data) require dynamic model

Q: Do the benefits of the continuance/elimination outweigh the costs?

- ❑ Requires careful consideration of everything: cannibalization, opportunity cost, population increase, 'but-for' assumption

Example: FTI Consulting 'New and Expanding Business Income Tax Exemption' (NEBITE) fiscal impact analysis on behalf of Bank of North Dakota

- 12 years: revenues – NEBITE – expenditures = \$4m net fiscal benefit



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About REMI



Regional Economic Models, Inc. (REMI) is the industry leader in dynamic economic policy analysis

Software

- **PI+** is our industry standard economic and demographic impact model.
- Additional modules include:
 - **Tax-PI**
 - **TranSight**
 - **E3+**
 - **Metro-PI**
 - **Custom builds**

Support

- **Unlimited technical advisory** and training
- **Access** to expert REMI Economists, Regional Associates, R&D staff, senior leadership
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Services

- **Macroeconomic impact consulting...**
 - State and federal legislation
 - Litigation support
 - Principal or Sub roles
- **Diverse team** of expert REMI Economists, Project Managers, and Analysts

REMI is trusted by over 100+ state and federal agencies, universities, consultants and policy advocates across 45 states and 3 continents

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About REMI



REMI's 39-year history of rigorous academic research and software development has led to the development of the state of the art model in macroeconomic research methodology:

Input-Output

Close analysis of inter-industry relationships

General Equilibrium

Estimate of long-run stability of the economy allows for analysis of policy decisions

Econometrics

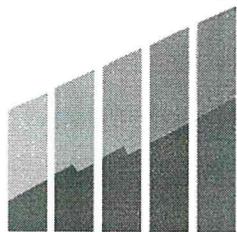
Advanced statistical analyses underpinning the model

Economic Geography

Effects of geographic concentration of labor and industry



Integrated REMI economic modelling approach

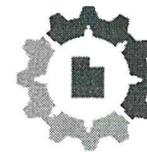
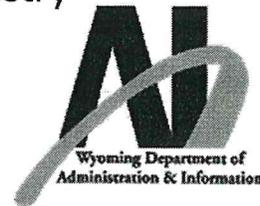


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Leeds School of Business
UNIVERSITY OF COLORADO BOULDER



Bank of North Dakota

Questions?



Kyle Compton

Economic Associate

REMI

433 West Street

Amherst, MA 01002

Main: 413-549-1169

Direct: 413-362-8890

Cell: 413-230-1132

kyle.compton@remi.com

www.remi.com

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