UNDERSTANDING "WHAT IF?" POLICY QUESTIONS WITH PI⁺

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Presented by Jungjun Park, Economist

Agenda

- Introduction

- Overview of PI+

- Model Structure

- Major Economic Data Sources

- Model Demonstration

- Q & A

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About REMI

Regional Economic Models, Inc. (REMI) is a World Leader in Economic Policy Modeling

Software

- REMI PI+ is the **state of the art** for policy analysis.
- Other Customized Models
  - **TranSight**
  - **Tax-PI**
  - **E3+**

Support

- REMI licenses include **unlimited** telephone and email technical support.
- REMI users have access to vast resources to enhance their understanding and skill in the model.

Services

- Macroeconomic impact consulting
- Analysis of prominent state and federal legislation
- Led by REMI's team of highly experienced and qualified research economists

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About REMI

Answers to "what-if...?" questions about the economic and demographic effects of events and policies

- **Economic Results:**
  - Employment by Industry and/or by Occupation
  - Output by Industry
  - Gross Regional or State Product
  - Personal Income
  - Total wages, compensation, earnings
- **Demographic Results:**
  - Population, by 808 age-ethnicity-gender cohorts
  - Migration, by 808 age-ethnicity-gender cohorts

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About REMI

REMI's 40-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

Integrated REMI economic modelling approach

Econometrics

Advanced statistical analyses underpinning the model

Economic Geography

Effects of geographic concentration of labor and industry

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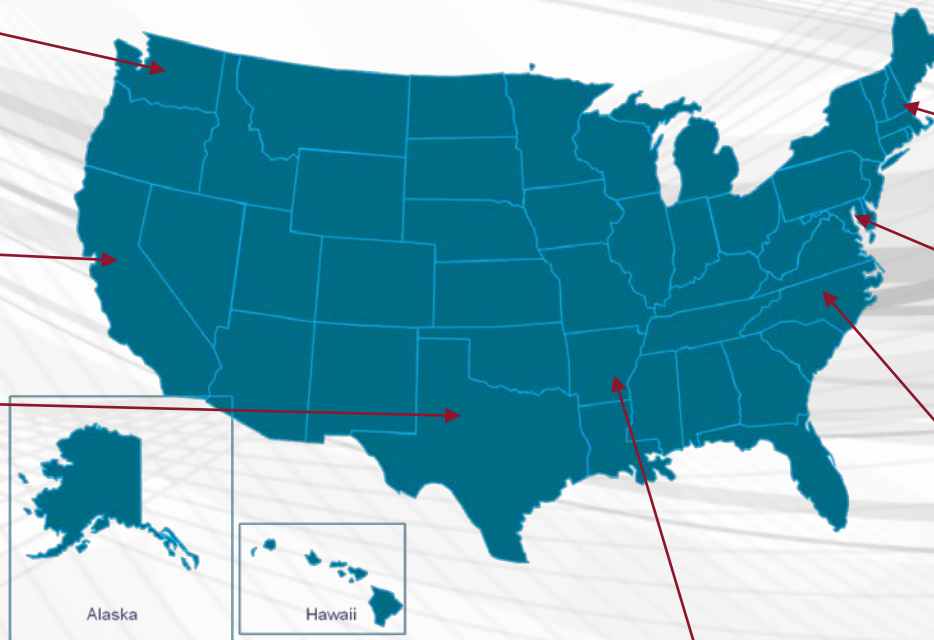
Prior Policy Analyses

REMI's PI+ is a versatile tool for public policy and economic development projects across topic areas and regions.

Washington: Aerospace tax credit analysis

California: Impact of CalRecycle program

Texas: Statutory impact analysis requirement for appropriations legislation

New England: Regional Greenhouse Gas Initiative

Maryland: Corporate tax rate reduction analysis

North Carolina: Medicaid expansion analysis

Arkansas: Big River Steel manufacturing facility analysis

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Topics/Studies

1. Economic Development, Planning, and Forecasting

2. Tax and Fiscal

3. Energy, Environment, and Economy

4. Transportation

What is PI+?

□ PI+ is a structural economic forecasting and policy analysis model.

□ It integrates input-output, computable general equilibrium, econometric, and economic geography methodologies.

What is PI+?

□ The model consists of thousands of simultaneous equations with a structure that is relatively straightforward.

□ The overall structure of the model can be summarized in five major blocks:

(1) Output and Demand

(2) Labor and Capital Demand

(3) Population and Labor Supply

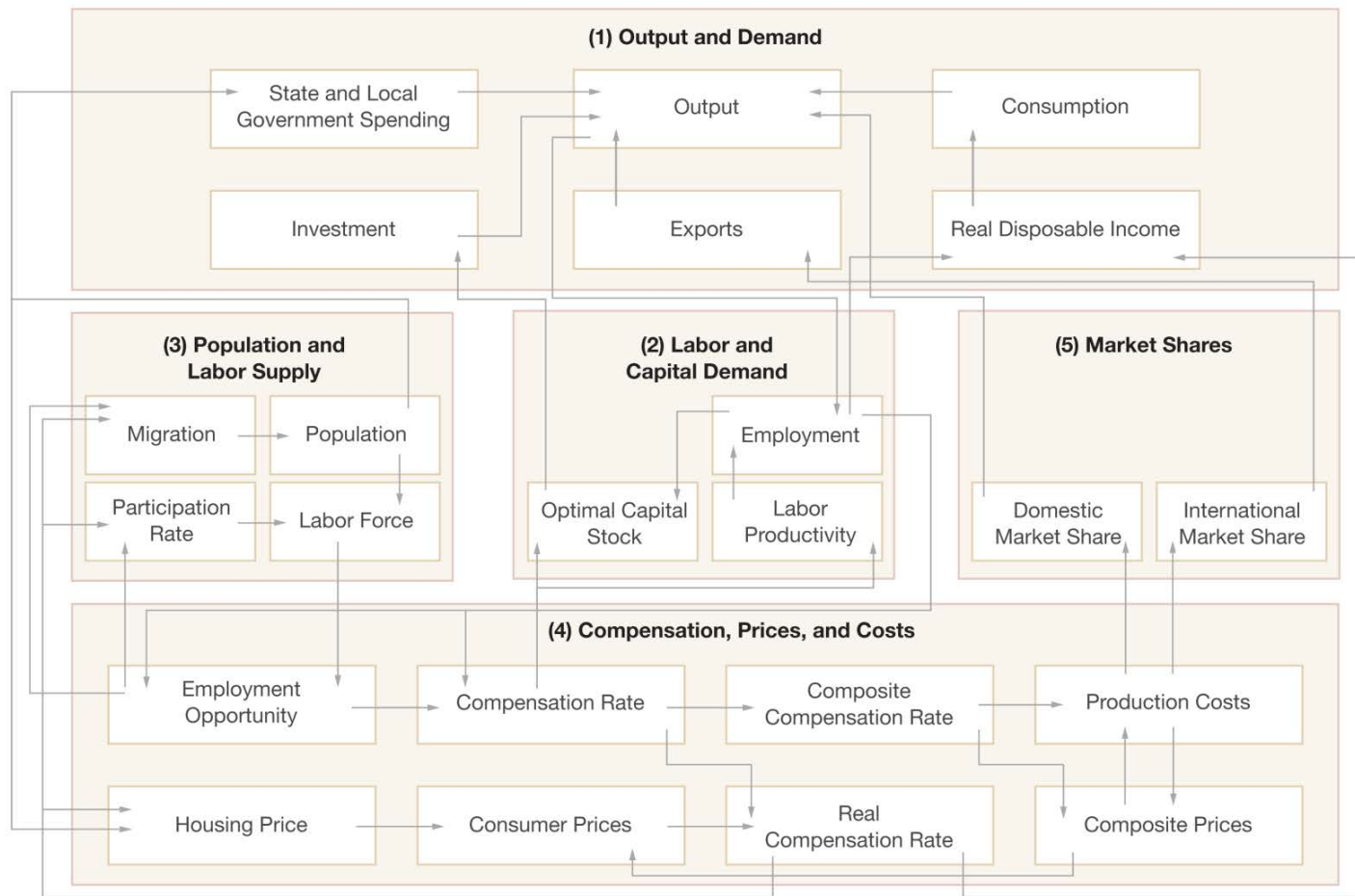(4) Compensation, Prices, and Costs

(5) Market Shares.

What is PI+?

□ PI+ allows users to understand the relationship between a policy and its economic foundation.

□ Model users can answer "what if" questions about the economic effects of policies in areas such as economic development, energy, transportation, environment, and taxation.

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What is PI+?

- Models can be built as single region, multi-region, or multi-region national models.

- Single-region models

- Multi-regional models

Model Linkages

Model Linkages

- Block 1: Output and Demand

- Block 2: Labor and Capital Demand

- Block 3: Population and Labor Supply

- Block 4: Compensation, Prices, and Costs

- Block 5: Market Shares

Major Economic Data Sources

- Employment

- Compensation

- Wages

- Personal Income and Earnings

Major Economic Data Sources

□ Final Demand

□ GDP by Industry

□ Price Deflators

Major Demographic Data Sources

☐ Population

☐ Labor Force

☐ Natality Rates

☐ Birth Rates

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Model Demonstration

- Impact Study 1: an increase in employment.

- Impact Study 2: state budget cuts in higher education.

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Q & A

Thank you so much!