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Marshall University Lewis College of Business February 22, 2000

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Research Schedule

√Estimate Baseline Forecast

 $\sqrt{Identify Policy Changes}$

 $\sqrt{Conduct Impact Evaluation}$

 $\sqrt{Conduct Legislative Requests}$



Economic Modeling of Tax Reform

1. Identify Theoretical Constraints

 $\sqrt{\text{Elasticity/responsiveness of input prices}}$ $\sqrt{\text{Productivity variations within West Virginia}}$

2. Identify Data Constraints

 $\sqrt{Proxies}$ $\sqrt{Incomplete data/interpolation}$

3. Compare Simulation Results to Other Experience

 $\sqrt{\text{Input substitution}}$ $\sqrt{\text{Growth & revenue neutrality}}$



Simulation Model

 $\sqrt{\text{REMI}}$ software

 $\sqrt{Dynamic model}$

 \sqrt{Input} substitution for long run analysis



Example Simulation

 $\sqrt{Personal Property Tax on Equipment}$

 $\sqrt{\text{GCFT}}$ recommends elimination



Simulation Inputs

 \sqrt{M} Modeled as direct cost reduction to firms

 $\sqrt{Disaggregated}$ across major industrial sectors

 $\sqrt{\text{Required estimated effective tax rates on capital}}$



Simulation Results

√Resulted in increased capital expenditures by firms in each industrial category

√Firms substitute additional capital expenditures for labor expenditures

 $\sqrt{Labor productivity rises}$

 $\sqrt{Wages increase: Better Jobs for West Virginians}}$



Remaining Research

 $\sqrt{Confirm}$ baseline forecast

 $\sqrt{Monitor literature/other examples}$

 $\sqrt{Perform}$ alternative scenario estimates

 $\sqrt{Share results}$ with tax community



Economic Analysis Team

 $\sqrt{4}$ Ph.D. Economists: Kent, Thompson, Burton, Hicks

 $\sqrt{\text{External Evaluation:}}$ Urban Institute, Tax Analysts, World Bank

 $\sqrt{\text{CBER Staff:}}$ Business Analysts, Data Experts, Research Assistants



Application to Romania

 \sqrt{Build} national model

 $\sqrt{\text{Seek External Evaluation: Urban Institute, Tax Analysts, World Bank}}$

 $\sqrt{\text{Employ Solid Economic Data to Calibrate Model}}$



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