

# Regulatory Policy Impact: Empirical Analysis

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## Agenda

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- Measurement Problems
- Empirical Analysis
  - ▶ Choice
  - ▶ Effects
  - ▶ Results
- Summary & Conclusions

David E. Sappington & Dennis L. Weisman  
*Designing Incentive Regulation for the  
Telecommunications Industry, Chapter 9 & 10*

## Measurement Problems

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- Yardstick
  - ▶ Unidimensional Measure

## Measurement Problems

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- Yardstick
- Causality
  - ▶ Correlation problem
  - ▶ AT&T rate decline, e. g.

## Measurement Problems

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- Yardstick
- Causality
- Competitive Effect
  - ▶ Jointly with incentive regulation
  - ▶ Usually linked

## Measurement Problems

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- Yardstick
- Causality
- Competitive Effect
- Mandated v. Motivated
  - ▶ Modernization required
  - ▶ Rates frozen

## Measurement Problems

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- Yardstick
- Causality
- Competitive Effect
- Mandated v. Motivated
- **Demonstration Effects**
  - ▶ Prove experiment
  - ▶ USWest in Nebraska, e. g.

## Measurement Problems

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- Yardstick
- Causality
- Competitive Effect
- Mandated v. Motivated
- Demonstration Effects
- **Timing**

## Measurement Problems

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- Yardstick
- ...
- Demonstration Effects
- **Timing**
  - ▶ Transitions take time
  - ▶ Investment take time

## Measurement Problems

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- Yardstick
- Causality
- Competitive Effect
- Mandated v. Motivated
- Demonstration Effects
- Timing
- **Sequencing**

## Measurement Problems

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- Yardstick
- ...
- Timing
- **Sequencing**
  - ▶ Intertemporal effects

## Measurement Problems

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- Yardstick
- Causality
- Competitive Effect
- Mandated v. Motivated
- Demonstration Effects
- Timing
- **Sequencing**

## Agenda

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- Measurement Problems
- Empirical Analysis
  - ▶ Choice
  - ▶ Effects
  - ▶ Results

David E. Sappington & Dennis L. Weisman  
*Designing Incentive Regulation for the  
Telecommunications Industry, Chapter 10*

## Empirical Analysis: Effects

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- Choice
  - ▶ Donald, Stephen and David E.M. Sappington, (1994), "Explaining the Choice Among Regulatory Plans in the US Telecommunications Industry," *Journal of Econ. & Mgt. Strategy*, 1995

## Empirical Analysis: Effects

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- Prices
- Cost Savings
- Productivity Improvements
- Infrastructure
- Service Quality
- Profits
- Universal Service
- New Services

## Summary: Incentive Regulation

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- Prices Reduced
- Cost Savings?
- Productivity Improvements
- Infrastructure Improvements
- Service Quality?
- Profits Improvement
- Universal Service Improvements
- New Services?

## Summary & Conclusions

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- No Undesirable Impacts
  - ▶ Prices decrease or unchanged
  - ▶ Productivity, Universal Service, and Profits improved or unchanged
  - ▶ Cost saving not demonstrated
  - ▶ Infrastructure improvements
  - ▶ Service quality??

## Summary & Conclusions

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- No Undesirable Impacts
- Superior to ROR
- Additional Research Needed