

The Current State of Regional Economic Impact and Policy Modeling in the U.S. and Beyond

Topic: (5.6) Special Session: Shifting Scales of Macro-econometric Modelling to State-Level Economic, Energy and Environmental Policy Analysis for India(E3-India)

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Within the realm of applied regional economic analysis, practitioners have seen drastic changes over the last fifty years in types of models they use to provide guidance on economic development and public policy issues. We have gone from the use of simple economic-base and shift-share modeling to aid in the estimation of benefits and costs to the regular application of so-called "hybrid" regional policy analysis models that offer the highly detailed sectoral analysis based on input-output models that are linked to partial-equilibrium timeseries econometric models. As the tools have improved, the depth and breadth of analysis has grown sizeably. We will discuss is whether our improved tools have really taken us beyond the benefit-cost analysis and the ratios that were once the determinants of policy choice to evaluate complex development projects or investments that significantly alter markets and improve the lot their participants.

In this paper, we will:

1. Review the application of Post WWII regional models, beginning with benefit-cost models of evaluating potential public actions and ending with the newest policy and forecasting models that combine input-output modeling and econometric timeseries analysis.
2. Examine the nature of the analysis performed with each of the broad model-types. What is measured, for where is it measures, what is estimated, and most importantly, what is assumed away?
3. Discuss what is missing in our current approach and identify the concepts that are both critical and still missing in our models today.