

**Discussion of:
Assessing Economy-wide Effects of Health
and Environmental Interventions in Support
of Benefit-Cost Analysis**

By

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Deep Links in Development Economics

- **Baum, W.C. and S.M. Tolbert. 1985. *Investing in Development: Lessons of World Bank Experience*. London and New York: Oxford University Press for the World Bank.**
- **Brent, Robert J. 1990. *Project Appraisal for Developing Countries*. Hertfordshire, UK: Harvester Wheatsheaf.**
- **Gittinger, J.P. 1984. *Economic Analysis of Agricultural Projects*. Baltimore: Johns Hopkins University Press.**

Recognition of economywide implications in these texts

- Spillovers that benefit non-participants
- Enhanced competition for finite resources
- External balance and exchange rates
- Fiscal policy

-We now have the capability to rigorously consider these factors.

-Could perceive CGE models as big BCA tools.

***Ex-post* Evaluation Using an Economwide (CGE) Approach**

- **Dyer, G.A. and J.E. Taylor. 2011. “The Corn Price Surge: Impacts on Rural Mexico.” *World Development* 39(10):1878–1887.**
- **Horridge, M., J. Maddan and G. Wittwer (2005), “The impact of the 2002–2003 drought on Australia.” *Journal of Policy Modeling* 27: 285–308.**
- **Arndt, C., M.A. Hussain, E.S. Jones, V. Nhate, F. Tarp, and J. Thurlow. 2012. “Explaining the Evolution of Poverty: The Case of Mozambique.” *American Journal of Agricultural Economics* 94(4):854-872.**

Common Question

- **Can the model plausibly track key observed outcomes in an economy following:**
 - A global maize price increase (A village in Mexico)
 - A drought shock (Australia)
 - A confluence of productivity trends, weather, and price shocks (Mozambique)?

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YES. And, we learn a lot by doing so.

Note the clarity of the counterfactual.

Advanced Application in an *Ex-Post* BCA Mode

- **Malawi's farm input subsidy program (FISP)**
 - FISP budget ranged from 3-6 percent of GDP
 - 40% of population direct beneficiaries
- **Spillovers**
- **Resource constraints**
- **External balance and exchange rate effects**
- **Fiscal implications**

Use CGE as a BCA Tool

- Malawi without FISP
- Malawi with FISP

- Does the model reasonably track observed outcomes in the with FISP scenario?

Use CGE as a BCA Tool

- Malawi without FISP
- Malawi with FISP

- Does the model reasonably track observed outcomes in the ‘with FISP’ scenario?

YES

Arndt, C., Pauw, K. and Thurlow, J., 2015. The economy-wide impacts and risks of Malawi's farm input subsidy program. *American Journal of Agricultural Economics*, 98(3), pp.962-980.

Conclusions

- ***Ex-post* economywide evaluation of major health and/or environment initiatives would advance BCA.**
 - Shine a light on the implications of past interventions
 - Improve tools/techniques
 - Generate greater confidence in *ex-ante* analyses
- **What were the implications of HIV/AIDS interventions?**
- **Generally, the literature on the macroeconomic implications of HIV/AIDS could come into the paper.**