

# **Infrastructure and Regional Development (September 28 Session)**

**Professor Karen R. Polenske**

# REGIONAL ANALYSES

- Compared to national-level analyses, why is it important to conduct economic analyses at a regional level?
- What new insights do analysts reveal?
- What conclusions that we already know from national-level analyses do regional analyses confirm, reject, or refine?

# Regional Economic Development in China

## Fan and Zhang: *Infrastructure and Regional Economic Development in China*

- How does the empirical research of Fan and Zhang on China confirm or refine the findings by Ali and Permia?
- What do the regional differences portray in terms of roads, electricity, and telephones?
- What might cause the differences between the different data sources?
- Why are the number of telephones so low in several of the provinces?

# Regional Economic Development in China

Fan Shenggen is the Director General of the International Food Policy Research Institute (IFPRI) since December 2009

Zhang Xiaobo joined IFPRI in 1998.

He has published widely in the fields of economic growth, income distribution, public investment and rural industrialization in China and other developing countries. He is a Co-editor of *Chinese Economic Review*. He was selected as the president of Chinese Economists Society from 2005 to 2006.

# Regional Economic Development in India

Ghosh, B., and P. De. *Investigating the linkage between infrastructure and regional development in India: era of planning to globalization*

- According to the authors, “the most strenuous task of the policy makers must be to undertake policies by which to reduce regional inequalities in various economic and social infrastructure facilities rather than simply to target equalization of public investment across regions.” (p.1046)
  - What is the cyclical connection between infrastructure and regional levels of per-capita income?
  - How do you think that policy makers can solve these disparities?

# REGIONAL ECONOMIC PERFORMANCE

**Munnell: How does public infrastructure affect regional economic performance?**

Munnell finds that the "major impact on output from public capital comes from highways and water and sewer systems, while other public capital, which consists primarily of buildings, such as schools and hospitals, has virtually no measurable impact on private production."

- Is this conclusion something you expected, from your own experience and/or from readings from previous sessions?
- Why?
- What reasons underlie your findings?
- What does Munnell determine are the major impacts of public capital on private investment? Is this a rational finding?

# REGIONAL ECONOMIC PERFORMANCE

## Munnell (continued)

Examine the percentage distribution:

- Between public and private investment
- Across regions
- Among types of infrastructure
- In different time periods

Examine determinates of employment growth

# MUNNELL

Alicia H. Munnell, PhD is the Peter F. Drucker chair in management sciences - Finance Department at Boston College's Carroll School of Management. She also serves as the Director of the Center for Retirement Research at Boston College.

Previously, Prof. Munnell was a Member of the President's Council of Economic Advisers (1995-1997) and Assistant Secretary of the Treasury for Economic Policy (1993-1995). She spent most of her professional career at the Federal Reserve Bank of Boston, where she became Senior Vice President and Director of Research in 1984.



# Regional Economic Development in the United States

Eberts: *Public Infrastructure and Regional Economic Development*

- Eberts examines the connection between public infrastructure and regional economic developing centers using the concept “locational advantage”.
- What is “locational advantage”?
- Does infrastructure strengthen the locational advantage of a place? If so, how?

# Regional Economic Development in the United States

Eberts argues that the effect of public infrastructure on regional development depends on

- (1) the type of investment, and
- (2) economic conditions of the region (economically lagging region or more advanced regions).

For example, economic overhead capital (public works—roads, bridges, streets, waterways) has a significant effect on gross domestic product (GDP) for intermediate regions but not for lagging regions; social overhead capital (education, health facilities, police station etc) exhibits the opposite effect.

- **What reasons may cause this?**

# Regional Economic Development in the United States

Prior to assuming the role of Executive Director of the W.E. Upjohn Institute in 1993 and then President in 2008, Eberts served as Assistant Vice President and Economist at the Federal Reserve Bank of Cleveland, directing research on issues related to labor markets, regional economic development, productivity, and public finance. He was Senior Staff Economist on the President's Council of Economic Advisers (1991-1992), where he was responsible for policy issues related to unemployment insurance.

Content removed due to copyright restrictions.

To view the figure, go to page 4 of  
“Infrastructure and Poverty Reduction – What is the Connection?”  
by Ifzal Ali and Ernesto M. Pernia.

[www.adb.org/publications/infrastructure-and-poverty-reduction-what-connection](http://www.adb.org/publications/infrastructure-and-poverty-reduction-what-connection)

MIT OpenCourseWare  
<http://ocw.mit.edu>

11.165 / 11.477 Infrastructure and Energy Technology Challenges  
Fall 2011

For information about citing these materials or our Terms of Use, visit: <http://ocw.mit.edu/terms>.