TH10.50.05 Understanding the Values Behind Infrastructure Investments

Do Municipal Bond Elections Privilege Certain Infrastructure Investments over Others?: The Case of San Antonio, Texas

Presenter: Jacqueline Peterson, University of Toronto (jacqueline.brown@mail.utoronto.ca)
Authors: Jacqueline Peterson, University of Toronto

Infrastructure investment decisions can have profound consequences for economic development, sustainable growth, and social equity in cities. While these connections have been well established, the impact of how cities pay for infrastructure has not. Can the revenue sources that cities draw on to pay for large capital projects affect the infrastructure in which they invest? This paper explores the widespread use of municipal bonds by cities across the United States, many of which require public approval before the bond can be issued. The case of municipal bond elections in San Antonio, Texas, is used to present empirical evidence as to the indirect effects municipal bond elections have on investment decisions. Data gathered through interviews with stakeholders and government officials suggest that municipal bond elections affect infrastructure investments in three important ways: 1) the size of bond issued, 2) the contents of the bond package, and 3) project implementation and oversight. This paper advances research on the politics of municipal finance and urban infrastructure policy while highlighting the need for additional research into the social and political dynamics of municipal bonds in urban environments.

Why Are We Lagging Behind? An Empirical Analysis of Capital Spending in U.S. Cities

Presenter: Wen Wang, Rutgers University - Newark (wenwang@gmail.com)
Authors: Wen Wang, Rutgers University - Newark; Yonghong Wu, University of Illinois at Chicago

The infrastructure in the United States has lagged behind other major economies in recent decades. Due to the poor quality of U.S. infrastructure, Americans spend considerably more time commuting than most Europeans; the road fatality rate in this country is 60 percent above the OECD average. Various estimates indicate that the U.S. infrastructure is not keeping pace with the demands of growing economy. As state and local governments provide the bulk of the total public sector investment in infrastructure construction, it is imperative to improve evidence-based decision-making with regard to state and local government capital investment.

Similar to the lagged investment in infrastructure, the academic research on capital investment is also surprisingly limited with relatively little academic inquiry on this topic in recent decades. We intend to fill a niche in this literature by examining the determinants of capital spending by large cities in the United States. Based on the existing literature, we develop an econometric model to investigate how local capital stock, revenue structure, political ideology, and fiscal institutions affect municipal capital spending. The data come from two sources: one is a newly completed dataset from the Fiscal Policy Space project, which includes a large number of financial, socio-economic, demographic, political and institutional variables about 100 large U.S. cities over a 20-year period; the other dataset is compiled based on the U.S. Census Bureau's Census of Government, which covers financial data of over 700 cities annually during 1987-2012. Taking advantage of the breadth and depth of the two data sources, we attempt to provide a comprehensive analysis on the factors that have significantly influenced municipal decisions on capital spending. We anticipate that the empirical results of such a study will shed light on how to reverse the lag of critical investment in infrastructure in the United States.

Are Overlapping Local Governments Competing With Each Other When Issuing Debt?
Presenter: Spencer Brien, Naval Postgraduate School (stbrien@nps.edu)
Authors: Spencer Brien, Naval Postgraduate School; David Swindell, Arizona State University

Local services are provided by a series of overlapping jurisdictions. Municipalities, school districts, counties, fire and water districts and many other special purpose entities all operate with varying degrees of coordination within the same space. This study will examine the impact of overlapping jurisdictions' fiscal policies on the decision to issue public debt. Using a panel of data spanning over 25 years, this study analyzes the stock and flows of general obligation debt issued by Georgia municipalities to assess the impact of the overlapping jurisdictions' fiscal policies. A variety of factors are considered including the aggregate property tax burden, the adoption of Local Option Sales Taxes, issuance of debt by other jurisdictions, and the overall economic health of the community. The findings of this study will have implications for the timing of investment in infrastructure by local governments.
This paper builds on an existing literature that examines strategic interaction among overlapping and neighboring jurisdictions (See for example Brueckner & Saavedra, 2001; G. Burge & Rogers, 2011; G. S. Burge & Piper, 2012). Previous studies have focused primarily on tax policy. This paper extends the study of strategic interactions to the issuance of public debt. Anecdotally, city officials have expressed concern about being constrained by the fiscal policies that school districts and counties have enacted. This study seeks to measure empirically how significant are these effects and how long they last.

What Drives Urban Infrastructure Investment in American Cities? A Panel Data Analysis
Presenter: Can Chen, Florida International University (cchen@fiu.edu)
Authors: Can Chen, Florida International University; Yanbing Han, Florida International University

Infrastructure is the foundation of modern economies and societies. In the US, cities play a key role in funding, operating, and maintaining local roads and streets, bridges, airports, transit facilities, drinking water and sewer systems, and other types of infrastructure. Given the relatively large amount of local infrastructure investment and the vital role of public infrastructure in promoting economic development, understanding how urban infrastructure spending decisions are made is crucial. This research is an attempt to contribute to our understanding of why some cities devote more resources to investment in physical capital than others. Drawing from public finance theories (the median voter model and the interest group model), we first construct a theoretical model to understand the political economy of public infrastructure investment. Then, we empirically investigate the economic, political, and institutional factors underlying the decisions for urban infrastructure investment. Our sample size consists of 150 of the nation's largest central cities from the period of 1995 to 2012. Data was collected from Lincoln Institute of Land Policy's Fiscally Standardized Cities Database, US Census Bureau Local Government Finance, US Bureau of Economic Analysis, and ICMA Municipal Yearbook. A panel two-way fixed-effects method was utilized for model estimation. The empirical analysis identifies substantial intercity variations in infrastructure spending both across and within the regions of US. Further panel regression analysis finds that American urban infrastructure investment is explained by the macroeconomic environment, urban population growth and density, fiscal capacity, and form of government. This research improves our understanding of what determines city infrastructure spending in the US and offers valuable insights into the current challenges that American city governments face in financing urban infrastructure.

TH10.50.05 Understanding the Values Behind Infrastructure Investments

Can Business Dollars Advance Social Equity? How Public and Private Objectives Collide in the M-1 Rail Streetcar Project in Detroit

Presenter: Joe Grengs, University of Michigan (grengs@umich.edu)
Authors: Joe Grengs, University of Michigan; Kate Lowe, University of Illinois at Chicago

Public officials are increasingly turning to the private sector to finance transportation projects when faced with fiscal shortfalls. Corporate and philanthropic leaders have long leveraged some influence over public infrastructure choices. But their new role in directly financing substantial shares of transportation projects may alter longstanding checks and balances of a planning process that has typically been under the control of public agencies. If the accountability of public decisions is diminished, then social equity goals may be threatened as a result of shifting objectives for transportation projects. This case study analyzes a new streetcar project in downtown Detroit, with a focus on the emergence and influence of private and foundation financing by a group of business and philanthropic leaders called M-1 RAIL. The study uses interviews with business, government, non-profit, university, and media sectors at the local, regional, state, and federal levels. It also relies on review of plans, reports, and media accounts of the project. The study seeks to identify how the interests of private sector leaders shaped choices differently than might otherwise have occurred under standard procedures. We find that the private donors influenced key decisions in ways that both help and hinder the creation of a regional transit system in Metro Detroit. The M-1 RAIL streetcar project has advanced the interests of low-income and racial minority transit users in some respects, but it has also damaged the prospects of achieving improved regional access to opportunities in other respects. The case offers lessons for projects elsewhere with recommendations for public intervention to protect social equity goals in a decision-making process under the influence of private-sector leaders.