COMPREHENSIVE WEALTH MEASUREMENT AND SPATIAL HEDONIC ANALYSIS:
SOCIAL CAPITAL AND SOCIAL AMENITIES

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ABSTRACT

The last decade has seen a growing interest in the concept of comprehensive wealth, which is defined as including intangible and non-market as well as tangible and market assets. This dissertation responds to this rising interest by developing explicit concepts, indicators, and sources of data necessary to measure comprehensive wealth at various spatial scales. It achieves this by generalizing the general spatial equilibrium model proposed by Roback (1982).

The key contributions of this research are the extension and application of the comprehensive wealth concept to measure the value of social amenities generated as a result of public and private investments in social and other types of capital. This dissertation extends the Roback model by identifying appropriate data on local income, land values, and place-based amenities at the county level in the contiguous 48 states of the United States.

This dissertation reports substantial findings based on the empirical analysis. While the results are largely consistent with those of Roback and other, more recent papers and with theoretical expectations, this study found significantly different effects of amenities on wages and land values between metro and non-metro counties due to different marginal effects on wages and land values. The analysis also found significant the spatial interaction effects, which influence the magnitude of the full implicit price for social amenity variables, again with significant differences between metro and non-metro counties. Finally, the extended model is able to determine whether the social amenities are at optimal levels.

There are important implications of this research. Policies to enhance social amenities from immobile social capital and local public services can reduce both real costs of production and the societal opportunity costs of development in the long term. Well-designed policy and investment in immobile and non-marketed amenities of a location will make a place more attractive and sustainable, conferring benefits to residents and local businesses. The proposed typology can be useful for designing policy and investment plans for sustainable regional economic development. The model can also be used to conduct simulations to predict the effects of policy on comprehensive wealth given locally unique and dynamic combinations of regional assets.

Keywords:
Comprehensive Wealth; Spatial Equilibrium Model; Non-market Valuation; Social Amenities; Social Capital