Accessibility to Amenities and Urban Inequality*

Alessandra Michelangeli†
Department of Economics, Management and Statistics (DEMS), University of Milan-Bicocca

Eugenio Peluso‡
Department of Economics, University of Verona

July 20, 2015

1 Introduction

This paper provides an innovative methodology to assess inequality at the city-level. We focus on urban inequality generated by an uneven distribution of amenities between cities. Individuals are assumed to be averse to an unequal distribution of amenities and their preferences are combined through a social welfare function, which gives a welfare level for each distribution of amenities across cities.

A multidimensional inequality index is derived as a combination of unidimensional inequality indexes, one for amenity, plus a residual term summarising any correlation among the distribution of amenities. The index is able to disentangle the contribution of each amenity to the overall inequality from the joint effect of amenity distributions. The multidimensional inequality index depends on a set of parameters measuring the level of citizens’ aversion to the unequal distribution of amenities. We determine the value of parameters exploiting the available information on the willingness to pay for each

*We gratefully acknowledge the Osservatorio del Mercato Immobiliare for data on housing transactions and the Fondazione Rodolfo De Benedetti for labor market data. Financial support by the Italian Ministry of University and Research is gratefully acknowledged.
†DEMS, University of Milano Bicocca
‡Vcolo Campofiore, 2, 37129 Verona (Italy). E-mail: eugenio.peluso@univr.it.
amenity, estimated through a hedonic model referred to the housing and labor market. The suggested methodology is illustrated through an empirical application to the main Italian cities observed over the period 2001-2010. We consider a set of amenities collected at the city level, such as educational and health services, recreational activities, public transports, economic and environmental conditions. Data on amenities were taken from public authority records. Data on housing and labor markets are provided by the Real Estate Observatory of the Agenzia del Territorio and the Italian National Social Security Institute, respectively. Housing market data refer to individual house transactions occurred in 103 province capitals between 2001 and 2010. In addition to housing market values, the data set provides a detailed description of structural attributes of the surveyed housing units. Labor market data refer to individual workers in the private sector of the 103 province capitals for years 2001 and 2002. The data set provides information on annual earnings, type of occupation, full-time or part-time work status, contract length and province of work. The dataset also provides information on worker characteristics and firm characteristics.