LAMORGESE, Andrea

Essays on the Economics of the Economics of Cities
Directors: Lucrezia Reichlin and Philippe Weil
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My thesis analyses some macroeconomic issues related to cities, namely issues of growth, business cycle, and risk-sharing.

In the first part of the thesis I study the determinants of the observed differentials in growth rates of local income among the cities of the United States. The empirical literature on regional growth in the first half of the 90's proposes knowledge spillovers as the unique factor explaining such differentials. But these results are at odds ---as I show--- with both the theory of endogenous growth and widely recognised empirical regularities. The most relevant drawback is that the effect of knowledge spillovers does not fade across time, as if knowledge spillovers stayed bounded within a certain geographic regions. I test a richer dynamic model, and I obtain that the effect of knowledge spillovers fades away as long as they diffuse across space, according to the results of the literature on patent citations. Pecuniary externalities and local economies appear to influence local growth in the longer run, jointly with the so called urbanisation economies as infrastructure and business services.

The second chapter of the thesis is concerned with problems of risk-sharing and localisation. I develop a theoretical model of Schumpeterian growth in which the geographical dimension is explicitly taken into account in modeling the technological race. Competition across cities for technological leadership and supremacy in the market for goods explains city life cycles: specialisation and excessive technological homogeneity can be shown to increase wages and employment volatility, though non linear returns in research technology, knowledge spillovers and pecuniary externalities should matter in shaping the importance of this trade off between specialisation and the sustainability of long-run growth. The prediction of this chapter about the relation between specialisation, labour market and income volatility is shown to be consistent with the literature in risk-taking and consumption smoothing: more diversification allows for higher R&D and risk-bearing.

In the third chapter I try to assess the importance of further channels of risk-sharing among the cities of the United States. Economic theory predicts that cross-ownership of shares of activities and productive assets as well as flows of migration are effective devices of risk-sharing among different geographical locations. Asdrubali, Sorensen and Yoshia (1996) use the distinction between output produced in a state and output owned by its inhabitants to evaluate how much of income volatility is smoothed by cross ownership through the stock market. They further decompose income volatility to consider the share which is smoothed by budget policy and savings. I provide estimates of the ways income volatility risk is shared at the level of U.S. cities, uncovering a new channel of income smoothing, namely risk sharing occurring through commuting. I also provide estimates of the amount of risk shared through secondary income sources, investment income, contributions and transfers, and - for a subsample of cities --- credit markets.

An empirical evaluation of the amount of income smoothing occurring within and across states is also presented, as well as an estimation of smoothing within and across regions. All channels of income smoothing are shown to work better within states than across, as well as within regions than across. Though no explicit spatial econometric modelling is attempted, there seems to be evidence of a decreasing effectiveness of all devices of risk sharing, as long as agents are further apart.

Finally, the analysis in the frequency domain shows that income smoothing is achieved via different channels and to a different extent over the business cycle.