

Projeto #5
The spatial dynamics of Brazilian economic activity in the 20th century:
“path dependency” or “reversal of fortune”?
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The main objective of my research project is to evaluate the ways in which the spatial differences in the nineteenth century socio-economic structures in Brazil determined further regional development. Modern Brazil's deep regional disparities are a well-known and widely discussed problem.

An issue that has received less attention, however, refers to the root causes of these differences. Authors such as Celso Furtado (1968), Leff (1991), Denslow Jr. (1977) and Buescu (1979), among others, have sought to examine the differences in the spatial distribution of economic activity in Brazil and have outlined some explanations to the phenomenon, all of them basically analytical. Though relevant, these explanations lack a more integrated theoretical basis. A further problem of these analyzes is that they approached the issue on a state or macro-regional level. Given the sheer size of the Brazilian states, sharp internal differences are found within them, even in terms of social structure, which the studies tended to ignore.

The proposed research project seeks to discuss the origin of the regional disparities in Brazil by means of unprecedented methods and an under explored database. Puntoni (2004) consolidated the results of the General Census from 1878 and 1890 that were available in the IBGE archives. The first Census, especially, contains a wealth of information about the occupational distribution of the Brazilian population at that time, which is both highly detailed and focused on the local and municipal level. Furthermore, the database provides figures such as age distribution and the free and slave population. Based on this information, one can obtain an accurate view of the economic activity and the social structure in Brazil.

Comparing such data with the current distribution of the Brazilian economic activity, we obtain an adequate test for long-term economic development theories. Engerman and Sokoloff (1994, 2005) and Acemoglu et alii (2002) argued that economies rich in natural resources tended to create institutions contrary to economic growth. Their elites, as a rule, created regulations and practices that preserved the initial social inequities and, in the long run, restricted the dynamics of the economy. On the other hand, new settlements that were originally poor tended to create more egalitarian institutions, which led to better long-term economic performance. Thus, as Acemoglu et alii puts it, a “Reversal of Fortune” took place, rich places became relatively poor and poor ones, relatively rich.

The New Economic Geography (Krugman, 1991a; 1991b), in turn, predicts quite distinct paths. Roughly speaking, it claims that the initially rich areas will tend to maintain their position. The rationale behind this assertion is that companies will tend to seek economies of urbanization, agglomeration and proximity with existing markets. This would lead to increasing economic concentration and to the establishment of center-periphery structures. Areas that were initially poor and low growth would not, therefore, be able to catch up to the richer ones. In an economy that works according to the usual assumptions of this theory, the ranking of different regions in terms of income would tend to remain unaltered in the long run.

Comparing the social structure of Brazilian cities in 1872 with the current situation will make it possible to establish which of these two theories is more appropriate to represent the Brazilian experience in each state. Geoprocessing aspects will have to be taken into account in order to adjust the current municipal distribution with the city limits in 1872. This will allow a statistical comparison of municipal characteristics of today with those observed in the nineteenth century. Following that, spatial analysis methods (Rey and Montouri, 1991, and Anselin, 1988) will be applied to better evaluate the two theories under study.

It is worth pointing out that we have made a similar analysis for the state of Rio Grande do Sul, which clearly indicated a pattern of “Reversal of Fortune”. The dynamic and exporting regions were based on slave labor, and the free population had high per capita income in 1872. In 2000, however, they were among the poorest in the state (Monasterio and Zell, 2005). This research project will make it possible to determine whether this pattern occurred in other Brazilian states.

References

- ACEMOGLU, D., JOHNSON, S., ROBINSON, J.. Reversal of Fortune: Geography and Institutions in the Making of the Modern World Income. **Quarterly Journal of Economics** v.117, n.4, November 2002.
- ANSELIN, L. **Spatial econometrics: Methods and models**. Boston: Kluwer Academic, 1988.
- BUESCU, Mircea. Brasil: disparidades de renda no passado. Rio de Janeiro: ANPEC, 1979.
- DENSLOW Jr., David. As origens da desigualdade regional no Brasil. In: Versiani e Barros. *Formação Econômica do Brasil*. São Paulo: Saraiva, 1977.
- ENGERMAN, S.; SOKOLOFF, K. Factor endowments, institutions, and differential paths of growth among New World Economies: A view from economic historians of the United States. In: HABER, S. **How Latin America fell behind**. Stanford CA: Stanford University Press, 1997.
- FURTADO, Celso. *Formação Econômica do Brasil*. 8ª ed. São Paulo: Companhia Editora Nacional, 1968.
- KRUGMAN, P. **Geography and Trade** (Cambridge, Mass.: MIT Press). 1991a
- KRUGMAN, P. **Increasing Returns and Economic Geography**, *Journal of Political Economy* 99, 3: 483-99. 1991b
- LEFF, Nathaniel H. *Subdesenvolvimento e desenvolvimento no Brasil*. Rio de Janeiro: Expressão e Cultura, 1991. 2v.
- MONASTERIO, L. e ZELL, D. Uma estimativa de renda per capita na Província de São Pedro do Rio Grande do Sul em 1872. *Revista Análise Econômica*, 2005. Under revision.
- PUNTONI, Pedro. *Medindo a crise do Império: os recenseamentos gerais e o perfil do eleitorado brasileiro, 1870-1890*. São Paulo: CEBRAP/Fapesp, 2004.
- REY, S. J.; MONTOURI, B. D. U.S. Regional income convergence: A spatial econometric perspective. **Regional Studies**, v. 33, p.143-156, 1999.