

SPATIAL DEVELOPMENT OF SIBERIA IN POST-SOVIET PERIOD

Evgeniya A. Kolomak

Institute of Economics and Industrial Engineering SB RAS (IEIE SB RAS), 17, Lavrentieva Av., Novosibirsk, 630090, Russia, D. Sc., Head of Department of Territorial Systems, phone: (383)330-05-32, e-mail: ekolomak@academ.org

Market reforms in the country were associated with significant spatial transformations affecting the Eastern territories. The aim of the work was to assess the validity of these predictions. The paper uses empirical methods of analysis and studies the changes in the spatial proportions of the development of Siberia for the period from 1991 to 2017. The following characteristics for Russia, Siberia and individual Siberian regions are compared: dynamics of GRP, population, employment, number of enterprises, urban population, level of urbanization, correlation of the number and population of small, medium and large cities. The results of the analysis showed that, despite significant population losses, Siberia was not inferior in dynamics and quality of spatial development. Urbanization was more rapid, and the structure of the urban system of Siberia was close to the proportions of the country as a whole. The spatial development of Siberia was highly dependent on the resource economy and migration of people from rural areas. Market mechanisms worked in favor of large cities and agglomerations, which found a competitive model of development. At the same time, industrial cities with a narrow specialization in markets with declining demand were losing population. Thus, the forecasts of the spatial development of Siberia, made on the eve of the reforms, were only partially realized.

Key words: spatial proportions, population, urbanization, urban system, empirical analysis, Siberia, regions.

REFERENCES

1. Gaddy, C. G., & Hill, F. (2003). *The Siberian Curse: How Communist Planners Left Russia Out in the Cold*. Brookings Institution Press: Washington, D.C., 240 p.
2. Clayton, E., & Richardson, T. (1989). Soviet control of city size. *Economic Development and Cultural Change*, 38(1), 155–165.
3. Koritnii, L. M., & Vorobiev, N. V. (Eds.). (2011). *Otsenka sovremennikh faktorov razvitiia gorodov i urbanizatsionnikh izmenenii v Sibiri [Evaluation of modern factors of urban development and urbanization changes in Siberia]*. Novosibirsk: "GEO" Publ., 213 p. [in Russian].
4. Belkina, T. D., Minchenko, M. M., Nozdrina, N. N., Protokolistova, L. V., & Stcherbakova, E. M. (2011). Monitoring the state and problems of the development of Russian cities in the years of reforms. *Problemi prognozirovaniia [Forecasting Problems]*, 2, 83–102 [in Russian].
5. Efimova, E. A. (2014). Regional Aspects of Urbanization in Russia. *Regionalnaia ekonomika: teoriia i praktika [Regionalnaia ekonomika: teoriia i praktika]*, 43(370), 2–12 [in Russian].
6. Zayonchkovskaya, Zh. A., & Nozdrina, N. V. (2008). Migration experience of the population of regional centers of Russia (case of a sociological survey in 10 cities). *Problemi prognozirovaniia [Forecasting Problems]*, 4, 98–111 [in Russian].
7. Zubarevich, N. V. (2006). Russian cities as growth centres. *Rossiiskoe ekspertnoe obozrenie [Russian Expert Review]*, 2, 19–23 [in Russian].
8. Leksin, V. N. (2006). "Regional capitals" in the economy and social life of Russia. *Voprosy ekonomiki [Voprosy Ekonomiki]*, 7, 84–93 [in Russian].
9. Leksin, V. N. (2009). Cities of power: administrative centers of Russia. *Mir Rossii [Universe of Russia]*, 1, 3–33 [in Russian].
10. Nefedova, T. G., & Treivish, A. I. (2002) The theory of differential urbanization and the hierarchy of cities in Russia at the turn of twenty-first century. In *Problemi urbanizatsii na rubezhe*

vekov [Problems of Urbanization at the Turn of the Century] (pp. 71–86). Smolensk: Oikumena Publ. [in Russian].

11. Treivish, A. I. (2009). *Gorod, raion, strana i mir. Razvitie Rossii glazami stranoveda [City, district, country and world. Development of Russia through the eyes of a country historian]*. Moscow: Novii khronograf Publ., 376 p. [in Russian].

12. Jacobs, J. (1969). *The Economy of Cities*. New York: Vintage, 288 p.

13. O'Sullivan, A. (2011). *Urban Economics* (8th ed.). McGraw-Hill, 529 p.

14. Duranton, G., & Puga, D. (2004). Micro-foundations of Urban Agglomeration Economies. *Handbook of Regional and Urban Economics: Vol. 4.* (pp. 2063–2117). J. H. Henderson, & J. F. Thisse (Eds.).

15. Békés, G., & Harasztosi, P. (2013). Agglomeration premium and trading activity of firms. *Regional Science and Urban Economics*, 43(1), 51–64.

16. Bruhart, M., & Mathys, N. (2008). Sectoral agglomeration economies in a panel of European regions. *Regional Science and Urban Economics*, 38(4), 348–362.

17. Ciccone, A. (2002). Agglomeration effects in Europe. *European Economic Review*, 46(2), 213–227.

18. Ciccone, A., & Hall, R. (1996). Productivity and the density of economic activity // *The American Economic Review*, 86(1), 54–70.

19. Nakamura, R. (1985). Agglomeration economies in urban manufacturing industries: a case of Japanese cities. *Journal of Urban Economics*, 17(1), 108–124.

20. Gan, L., & Li, Q. (2016). Efficiency of thin and thick markets. *Journal of Econometrics*, 192(1), 40–54.

21. Henderson, J. V. (1974). The Size and Types of Cities. *American Economic Review*, 64(4), 640–656.

22. Nefedova, T. G., & Treivish, A. I. (2010) Cities and rural areas: state and value in the space of Russia. *Regionalnie issledovaniia [Regional Studies]*, 2, 42–56 [in Russian].

23. Nefedova, T. G., Polian, P. M., & Treivish, A. I. (2001). *Gorod i derevnya v Evropeyskoy Rossii: sto let peremen [City and village in European Russia: a hundred years of change]*. Moscow: OGI Publ., 558 p. [in Russian].

24. Riakhovskaia, A. N., & Poliakova, A. G. (2016). Modernization of Russian single-industry cities: strategic guidelines for institutional reform. *Effektivnoe antikrizisnoe upravlenie [Effective Crisis Management]*, 4(97), 54–65 [in Russian].

25. Gusev, V. V. (2014). Single-industry settlements (mono-cities): foreign experience in solving social problems. *Izvestiya Saratovskogo universiteta. Novaya seriya. Seriya: Sotsiologiya. Politologiya [Izvestia of Saratov University. New Series. Series: Sociology. Politology]*, 4(14), 5–8 [in Russian].

Received 10.06.2019

© E. A. Kolomak, 2019