

# Regional Development

XINGJIAN LIU

University of Hong Kong, Hong Kong

YIMIN ZHAO

London School of Economics and Political Science, UK

## DEVELOPMENT, REGION, AND REGIONAL DEVELOPMENT

We have witnessed a significant (re)surgence of interest in regions and “regionalism.” Ideas about regions are sometimes transformed into normative policies and plans, as exemplified by the European Regional Development Fund, “megaregions” in America 2050, and “city clusters” in China’s regional plans. Given that the inquiry into regional development spans many fields, this review will only focus on major theoretical perspectives and debates in the literature. Following Dawkins (2003) and Dunford (2010), our review starts with definitions of “development” and “region” and uses neoclassical theories as a reference point to introduce selected theories of regional development. We will focus on individual theories’ positions in the convergence–divergence debate as well as their policy implications.

Conventional definitions of development focus on the quantitative increase of economic outputs. In other words, “growth” and “development” are often conflated. More recently, the notion of development was broadened to encompass social, cultural, political, and environmental improvements such as longer life expectancy and improved environmental quality. These definitions are often value-laden, historically dependent, and context-specific, pointing to different

ways of measuring, assessing, and inducing development. Empirical studies used to employ such variables as per capita gross domestic product (GDP) to measure the level of development and the changes therein, while recent alternative measures such as the United Nations’ Human Development Index (HDI) often go beyond economic conditions (Liu, Derudder, and Liu 2011). For example, while development was and still is largely measured by GDP in some emerging economies (e.g., one can speak of “GDP-ism” in China), there seems to be an increasing awareness of the social and environmental dimensions of development. Put differently, the choices of measurement reflect how one defines, values, and pursues development (Pike, Rodríguez-Pose, and Tomaney 2017). In this regard, the essence of development should be reflected upon critically, for example in the light of David Harvey’s discussions on “social justice” and of Amartya Sen’s notion of “substantive freedom” (or, going back further, of Aristotle’s concept of “human flourishing”).

Regional development concerns the well-being and development conditions of a region. In social sciences, regions are socially constructed entities that represent certain areas of the world. Region can be a multiscale concept, indicating both intranational and international units, with or without territorial attributes. A universal and single-stranded definition of “region” is therefore difficult to give. There are three widely used definitions of region (see Dawkins). First, a formal region is a certain area of the earth that is internally homogeneous in some social, cultural, and physical aspects, which could be exemplified by ecoregions or the sunbelt in

*The Wiley Blackwell Encyclopedia of Urban and Regional Studies*. Edited by Anthony Orum.

© 2019 John Wiley & Sons Ltd. Published 2019 by John Wiley & Sons Ltd.

DOI: 10.1002/9781118568446.eurs0533

the United States. Second, a functional region can be identified when regional boundaries are significant in distinguishing between different levels of functional connection, interaction, and interdependence. Functional urban regions and hinterlands are examples in this category. The third type, administrative region, emphasizes the significance of political-administrative power in determining the boundary. In this sense, all governance units, from municipality to nation-state, are administrative regions. A potential source of conflict in defining the region and, subsequently, regional development is that the administrative boundaries do not necessarily line up with formal or functional attributes. Still, increasing attention has been paid to examining regional development relationally, because the well-being of a region is also tied to transregional and global flows of information, people, and goods (e.g., city-regions within global networks).

There are two related central concerns in the study of regional development (Nijkamp and Abreu 2009): the positive one is to explain (disparities in) regional development; and the more normative quest is to understand what, how, and to what extent actions can be taken and changes can be made to promote regional development (as a desirable outcome). Theoretical models have been developed to explain regional development in relation to selected core variables, such as natural endowment, industrial structures, infrastructure, technology, entrepreneurship, investment, trade, as well as social and political organizations (Scott and Storper 2003). While not mutually exclusive, these theories differ in their definitions of development and regions, analytical foci and units, agency and actors, values, assumptions, core variables and dynamics, as well as policy implications.

## MAJOR REGIONAL DEVELOPMENT THEORIES

A substantial part of the literature on regional development has been produced around or against the neoclassical trade and growth theories and their convergence hypotheses. These theories emphasize that regional development depends on exogenous factors, which are crucial in that they predict interregional economic convergence. They usually hinge on several key assumptions such as perfect competition, constant return to scale, efficient use of resources, and exogenous technological factors (see Jones and Vollrath 2013 for a comprehensive introduction).

In neoclassical trade models, regional development disparities are only temporary and convergence among regions takes place through free trade and mobile factors of production. For example, it is argued that trade and economic specialization will ensure that wages, factor prices, and interests (in real terms) become equalized across regions, thus producing a long-run convergence of economic development (Jones and Vollrath 2013). Neoclassical exogenous growth theories differ between absolute and conditional convergence. In absolute convergence, all regions will have the same long-run economic conditions, while in conditional convergence individual economies converge to their own steady states. The policy implications of neoclassical trade and growth models tend to be straightforward. Market-oriented policies such as trade liberalization, improved factor mobility, and economic devolution are believed to be conducive to economic convergence.

Criticisms of neoclassical theories often point to their (over)simplified assumptions and to inconsistencies between the predicted convergence and observed rising disparities. For example, radical approaches such as postcolonial, dependency, and world-systems

theories often problematize neoclassical thinking about free trade, comparative advantage, and convergence and call for national trade and industrial policies (Prebisch 1950). Many of these theories suggest that the benefits of international trade and technological innovations tend to concentrate in the more developed “core” regions rather than in regions of the “periphery,” which lags behind.

Unlike convergence models, endogenous growth models most noticeably incorporate technological change as an endogenous parameter – that is, as a parameter congenial to or emerging from the economic system (Jones and Vollrath 2013). More specifically, these theoretical models usually assume nondiminishing returns to human capital, technology, and knowledge (Romer 1986; Lucas 1988). In endogenous growth models, there can be a persistent difference in rates of development between regions, which implies an enlarging regional disparity and divergent development trajectories. The potentially conflicting predictions from exogenous and endogenous growth models have triggered the economic convergence–divergence debate (Nijkamp and Abreu 2009).

Since knowledge and innovation are increasingly considered critical drivers of regional development, it becomes decisive to attend to regional institutions, infrastructure, and dynamics that are conducive to knowledge production, sharing, and transfer (Pike, Rodríguez-Pose, and Tomaney 2017). Related processes that are often discussed in the literature include research and development (R&D) investment, “local buzz” and “global pipeline,” and “learning by doing, by using, and by interacting” (DUI). The relevance of entrepreneurship is also recognized, which emphasizes being entrepreneurial, innovative, and creative in economic activities (Acs and Armington 2006). In practice, policies have been proposed to improve knowledge-related soft and

hard infrastructures; such policies include government subsidies in research and education, cultural policies that attract talent and facilitate a creative environment, and the development and employment of information and communication technologies (ICT).

Another deviation from neoclassical models is a set of theories labeled Keynesian and developmentalist, which is influenced to various degrees by the work of John Maynard Keynes. The Keynesian approach differs from neoclassical models in its focus on the long-run and aggregate demand, the identification of imperfect information and competition, and the treatment of nondiminishing returns (Pike, Rodríguez-Pose, and Tomaney 2016). While Keynesian theories recognize the importance of market forces, they also see the intrinsically unstable and uneven nature of market-driven economies (Myrdal 1957). Policy recommendations often highlight state intervention and management in the economy (see, for example “the big push” in Rosenstein-Rodan 1943). Hence the Keynesian prescriptions for economic development often include state-led infrastructure development and expansionary monetary policy.

The normative focus is usually on achieving balanced regional development patterns through state intervention and redistribution. Furthermore, Keynesian theories often conceptualize economic development as a circular, cumulative, and “multiplying” process, which is reflected in models of export base, cumulative causation, and growth poles (Dunford 2010; Hirschman 1958; Perroux 1955). In the Global North, the Keynesian approach is criticized against the backdrop of neoliberalization and rollback of welfare state policies. Nevertheless, Keynesian thinking is still influential, as evidenced by recent large-scale state investments in infrastructure (e.g., high-speed rail development in China) and in various stimulus packages.

The new economic geography (NEG) is the label applied to another response to neoclassical theories that aims to explain the formation of industrial clusters and increasingly uneven regional development. It is developed through critical reflections on both location theories and neoclassical trade and growth theories. The outcome is that external economies and increasing returns to scale are reconciled with traditional trade models. Drawing on the Dixit–Stiglitz model of monopolistic competition, the NEG approach incorporates transport costs and external economies into a general equilibrium framework, in order to explore the spatial distribution of economic activities (Krugman 1991; Fujita, Krugman, and Venables 2001). In this way geographical distance and transport costs are recognized as key factors in shaping economic dynamics. Hence the NEG approach significantly extends the scope of neoclassical economic models and signals major progress in explaining the geography of economic activities.

In this approach, the agglomeration of firms is crucial in shaping both intranational and international inequalities, as well as the potential for regional development (Venables 2008). However, the agglomeration can only be achieved when the agglomeration forces (e.g., demand and cost linkages) exceed the dispersion forces (e.g., competition between factor supply and product markets) together with falling trade costs (Krugman and Venables 1995). In line with other cluster theories, NEG provides theoretical endorsement for plans and policies that target regional clusters and the specialization of industries. On the other hand, the NEG perspective also implies that enhanced connectivity could be a double-edged sword since roads can be used to “travel both ways” (Puga 2002, 401). Meanwhile, it should be noticed that differences between the NEG models advanced by economists and the “proper” economic

geography (Martin 2011) practiced by economic geographers can be identified both at the theoretical and at the methodological level.

There are also a number of theories that, instead of focusing on the convergence–divergence debate, emphasize structural changes in regional economies. These theories usually adopt concepts and terms that symbolize structural changes such as “modernization,” “stages,” “sectors,” “waves,” and “(product) cycles” (Dawkins 2003; Pike, Rodríguez-Pose, and Tomaney 2016). These seemingly diversified theories share the view that regional development is a path-dependent and evolutionary process (toward economic maturity); and they hence aim to explain how regions evolve through various modes, stages, or cycles of social, political, and economic organization. More specifically, regions and economies are often observed through the lens of a universal “ideal type.” Indeed, they are considered as being located at different positions along the same developmental trajectory (Dunford 2010): a “spatio-temporally neutral model for processes of social development in general” (Habermas 1987, 2–3) generated in developed (mature) economies.

In line with this view, developing regions have to follow the suit of developed regions and climb the “development ladder” once used by the latter (see also Chang 2002). However, this group of theories pays little attention to local and historical factors that also contribute to economic development, which are usually hard to be decontextualized, normalized, or mathematically modeled. For Doreen Massey (2005, 62–64), such views are problematic because they plant an epistemological trap that reduces the world’s geography to a single history, in which the Western way of imagining space is universalized. This critique is echoed by the recent call for provincialized and variegated

theories of regional development, as well as the advocacy of an evolutionary perspective in understanding regional dynamics (Boschma 2015; Neffke et al. 2018). In these latest reflections, researchers have been gradually registering the fact that experiences of development in different regions across the world are embedded in multiple and dynamic local-historical contexts.

## SUMMARY

This entry focuses on the principal theories of regional economic development, while social, cultural, and political aspects are incorporated at various points. Theories in this area are by no means exhausted here. Recent literature has introduced some new keywords and research directions, such as sustainability, regional economic resilience, smart specialization, regional adaptation, and the importance of institutions. Methodologically, there is also a new trend in the literature, that is, to engage with and integrate different theoretical perspectives simultaneously.

It should be noticed at this point that the comparison and integration of different theoretical perspectives have invited new debates on region development (for example, see Storper 2011). We want to highlight three policy-relevant debates that emerge this stream of literature. First, is it valid to reduce geography to purely physical distance and transport costs, if we admit that the “actually existing” spatial and regional economic patterns are much more complex and heterogeneous (see Martin 2011)? Second, how can we justify the formal modeling approach (which overlooks particularities), when contexts are crucial to observing and analyzing economic landscapes and dynamics (and, by the same token, they are crucial to observing regional development and disparities, too; Barca, McCann, and Rodriguez-Pose 2012)? Third,

if the issue of social justice is incorporated where can we draw intellectual and moral boundaries between core-periphery disparity, which is ad hoc, and uneven spatial development, which can be considered as an *ex post* outcome of unjust political-economic structures at regional, national, and global levels?

While this entry has focused on concepts and theories, the regional development literature has elicited a large array of policy responses. Different regions have pursued distinct policies with great spatio-temporal variations. The last reminder to be made here is that these shifts and differences in policy paradigms should be understood by attending adequately to political, cultural, and economic contexts. For example, growth pole theories were popular in the heydays of the Cold War, when welfare states were focusing on national economic planning, whereas the more recent, “competitive” policies can only be understood through the lens of neoliberal globalization, political decentralization, and the rise of entrepreneurial states.

SEE ALSO: New Economic Geography; Regional Planning; Regionalism; Uneven Economic Development

## REFERENCES

- Acs, Zoltan, and Catherine Armington. 2006. *Entrepreneurship, Geography, and American Economic Growth*. Cambridge: Cambridge University Press.
- Barca, F., P. McCann, and A. Rodriguez-Pose. 2012. “The Case for Regional Development Intervention: Place-Based versus Place-Neutral Approaches.” *Journal of Regional Science*, 52(1): 134–152.
- Boschma, Ron. 2015. “Towards an Evolutionary Perspective on Regional Resilience.” *Regional Studies*, 49(5): 733–751.
- Chang, H. J. 2002. *Kicking Away the Ladder: Development Strategy in Historical Perspective*. London: Anthem Press.
- Dawkins, Casey. 2003. “Regional Development Theory: Conceptual Foundations, Classic



- Works, and Recent Developments." *Journal of Planning Literature* 18(2): 131–172.
- Dunford, Michael. 2010. *Regional Development Models*. Brighton, University of Sussex. Accessed March 7, 2018, at <https://www.sussex.ac.uk/webteam/gateway/file.php?name=modelsrd.pdf&site=2>.
- Fujita, Masahisa, Paul Krugman, and Anthony J. Venables. 2001. *The Spatial Economy: Cities, Regions, and International Trade*. Cambridge, MA: MIT Press.
- Habermas, Jürgen. 1987. *The Philosophical Discourse of Modernity: Twelve Lectures*. Cambridge, MA: MIT Press.
- Hirschman, A. O. 1958. *The Strategy of Economic Development*. New Haven, CT: Yale University Press.
- Jones, Charles, and Dietrich Vollrath. 2013. *Introduction to Economic Growth*. London: Norton.
- Krugman, Paul. 1991. "Increasing Returns and Economic Geography." *Journal of Political Economy*, 99(3): 483–499.
- Krugman, P., and A. J. Venables. 1995. "Globalization and the Inequality of Nations." *Quarterly Journal of Economics*, 110(4): 857–880.
- Liu, Xingjian, Ben Derudder, and Yaolin Liu. 2011. "Featured Graphic: GDP, Livability, Population, and Income Inequality of World Cities." *Environment and Planning A*, 43(10): 2255–2256.
- Lucas, R. E., Jr. 1988. On the Mechanics of Economic Development. *Journal of Monetary Economics*, 22(1): 3–42.
- Martin, Ron. 2011. "The 'New Economic Geography': Credible Models of the Economic Landscape." In *The SAGE Handbook of Economic Geography*, edited by A. Leyshon, Roger Lee, Linda McDowell, and Peter Sunley, 53–71. London: SAGE.
- Massey, Doreen. 2005. *For Space*. London: SAGE.
- Myrdal, Gunnar. 1957. *Economic Theory and Underdeveloped Regions*. London: Duckworth.
- Neffke, Frank, Matté Hartog, Ron Boschma, and Martin Henning. 2009. "Agents of Structural Change: The Role of Firms and Entrepreneurs in Regional Diversification." *Economic Geography*, 94(1): 23–48.
- Nijkamp, Peter, and Maria Abreu. 2009. "Regional Development Theory." VU University Amsterdam. Accessed March 5, 2018, at <ftp://dlib.info/opt/ReDIF/RePEc/vua/wpaper/pdf/20090029.pdf>.
- Perroux, F. 1955. "Note sur la notion de pôle de croissance." *Economie appliquée*, 8: 307–320. (Translated as Perroux, F. 1970. "Note on the Concept of Growth Poles." In *Regional Economics Theory and Practice*, edited by D. McKee, R. Dean, and W. Leahy, 93–104. New York: Free Press.)
- Pike, Andy, Andrés Rodríguez-Pose, and John Tomaney. 2016. *Local and Regional Development*. London: Routledge.
- Pike, Andy, Andrés Rodríguez-Pose, and John Tomaney. 2017. "Shifting Horizons in Local and Regional Development." *Regional Studies*, 51: 46–57.
- Prebisch, Raúl. 1950. *The Economic Development of Latin America and Its Principal Problems*. New York, NY: United Nations.
- Puga, Diego. 2002. "European Regional Policies in Light of Recent Location Theories." *Journal of Economic Geography*, 2(4): 373–406.
- Romer, Paul M. 1986. "Increasing Returns and Long-Run Growth." *Journal of Political Economy*, 98(5): 71–102.
- Rosenstein-Rodan, Paul. 1943. "Problems of Industrialization in Eastern and Southeastern Europe." *Economic Journal*, 53: 202–211.
- Scott, Allen, and Michael Storper. 2003. "Regions, Globalization, Development." *Regional Studies* 37(6): 579–593.
- Storper, Michael. 2011. "Why Do Regions Develop and Change? The Challenge for Geography and Economics." *Journal of Economic Geography* 11(2): 333–346.
- Venables, Anthony J. 2008. "New Economic Geography." In *The New Palgrave Dictionary of Economics*, edited by Steven N. Durlauf and Lawrence E. Blume, 2nd ed. London: Palgrave Macmillan. DOI: 10.1057/978-1-349-95121-5\_2329-1.

## FURTHER READING

- Capello, Roberta. 2016. *Regional Economics*. London: Routledge.
- Cypher, James. 2014. *The Process of Economic Development*. London: Routledge.
- Krugman, Paul. 1991. *Geography and Trade*. Cambridge, MA: MIT press.
- Storper, Michael. 2013. *Keys to the City: How Economics, Institutions, Social Interaction, and Politics Shape Development*. Princeton, NJ: Princeton University Press.