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PERSPECTIVE

Best Practices in Twenty-First-Century Rural Development and Policy

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ABSTRACT The combination of less than perfectly mobile resources (human and other), pervasive urbanization trends with potentially significant (positive and negative) externalities, and an environment of fiscal restraint suggests the need for more effective rural development and policy. In contrast to historical sectoral or fad-based policies, place-based rural development programs and policies focus on rural populations in the context of a realistic assessment of the opportunities and constraints they face. Among the most promising opportunities are 1) improving integration (possibly through connective infrastructure) with urban economies in order to access agglomeration economies, 2) enhancing rural amenities, and 3) increasing entrepreneurial capacity.

Motivation

onsideration of best practice in rural development (RD) and policy is timely for a number of reasons. First, there is little evidence that the concentration of economic activity in response to agglomeration economies is abating; thus, growth in both developed and developing countries will continue to be uneven (World Bank 2009). Yet, new technologies and increasing demands for regionalization have led to new forms of rural—urban interdependence with significant policy implications. Within countries, uneven growth largely translates into gains in and near urban centers with remote rural communities left behind (Partridge et al. 2008b; Pezzini 2001). The reallocation of resources into higher productivity areas increases economic growth and improves standards of living. In a setting of

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perfectly mobile resources and no externalities, the spatial distribution of economic activity is the outcome of people and firms "voting with their feet" to reflect their preferred locations based on economic outcomes and quality of life considerations. However, reality includes both barriers to mobility and external costs and benefits (spatial and temporal). Where these imperfections arise, RD policy may be called for.

A second impetus for this issue is the environment of tighter budget constraints and increased skepticism regarding the advisability of spatially targeted interventions (Glaeser 2007; Glaeser and Gottleib 2008; World Bank 2009). Questions regarding the effectiveness of stimulus packages and increased scrutiny in areas of public expenditure apply not only at the national level, but also at sub-national levels. If there is a case to be made for development efforts targeting rural areas, rigorous empirical evidence will be increasingly required. Indeed, alongside the litany of costly, failed, and ill-conceived RD initiatives and policies, successes are the exception (Drabenstott 2003; OECD 2009). Aside from standard economic efficiency arguments, in a scarce public funds environment, higher standards will be imposed for accurate discernment of the conditions under which RD policy is warranted and how it may succeed.

A third and related reason for this issue is the concern that a range of "fads" (green jobs, local grown foods) are replacing sound RD policy. These fads are likely to be ineffective and, perhaps more importantly, seriously distract from sound RD policy. A clear focus on the goals, metrics, and instruments of good RD and good rural policy is necessary to avoid confusion with other pursuits where rural areas are used to achieve particular national objectives, often ones that are fleeting.

This special issue is novel in that it focuses on twenty-first-century manifestations of good RD policy basics. Infrastructure provision is a common means of ensuring equity in access to markets and services, one of the conditions necessary (though not sufficient) for rural economic development. Among the modern infrastructure requirements necessary for RD will be Internet access, pointing to the need for assessing the feasibility and impact of Internet access in order to inform good RD policy. Human capital is another standard and long-standing economic development prescription. However, a relatively high rate of geographic mobility of young adults and an increasing concentration of knowledge-intensive economic activity in urban areas alter the basis for this human capital enhancement. Amenity-driven growth clearly holds an attraction for many rural communities. Yet, further investigation is required regarding the possible endogenous nature of these amenities, crime rates, for example, and how their erosion may be offset with good local RD policy. Further, the type and geographic extent of positive spillovers of urban-centered growth in terms of commuting possibilities

is fundamentally important to RD, though not all rural areas are equally affected and the commuting patterns are not necessarily urban centered, some displaying more of a network pattern.

Infrastructure, human capital, quality of life, and access to urban employment are not new topics in RD and policy, but their forms and manifestations are evolving, and more importantly, the standards for theoretical and empirical rigor for investigating their relationships are higher, as exemplified by the papers in this issue. Yet, one special issue cannot cover all elements of best practice RD and policy. Below, we provide the context to understand best practices in RD policy by describing how the various factors such as human capital, access to urban agglomerations, amenities, and social capital weave together and alter the growth dynamics of regions and their communities.

Place-Based Policy and Metrics for Success

Policy discussions often revolve around the somewhat artificial distinction between *people-based* and *place-based* policy (Partridge and Rickman 2008). People-based policies entail building human capital and providing mobility assistance to workers and households to improve the employability of *poor* people. Examples include education, workforce training, child-care assistance, transportation to work, or relocation assistance to places with better employment prospects. People-based policies can be administered in a spatially neutral manner such as the U.S. federal earned income tax credit or education funding administered on a per capita basis. Proponents note that spatial neutrality allows equal access to public funding while allowing resources to flow to the most productive places—often places with high agglomeration economies (World Bank 2009). As long as the benefits exceed the costs, economists are enthusiastic supporters of people-based policies.

Place-based policies are aimed at improving the competitiveness of *poor* places with the expectation that doing so will benefit their residents. While such initiatives may also be locally initiated and financed, we focus on those that originate from a senior level of government. Examples include infrastructure, governance reform, spatially targeted business incentives, wage subsidies, etc. Even in its most innocuous form, the particular form and administration of place-based policy will vary across rural areas because of spatial heterogeneities (Blank 2005). For example, rural school districts have different transportation needs than urban districts. Place-based policies and their justification are closely related to the propositions of the spatial mismatch literature that seeks to describe poverty in inner cities—i.e., there is a mismatch between the residence of the poor in inner cities and the abundant jobs in the suburbs (Ihlanfeldt and Sjoquist 1998). The

spatial mismatch hypothesis and possible policy remedies have been extended to thin rural labor markets in which there is a mismatch of workers' skills and employer needs, where the employers could be over an hour drive away (Blumenberg and Shiki 2004; Partridge and Rickman 2008).

Most economists are skeptical of place-based policies because they may slow needed economic adjustments to more vibrant locations, and they can encourage wasteful government spending that cannot be justified on a benefit-cost basis (Glaeser 2007). For example, Harvard economist Ed Glaeser strongly made this argument after Hurricane Katrina by contending that it would be far better to give each resident of the city of New Orleans \$200,000 than to provide federal support to rebuild the city (Pettus 2006). The argument is that it would be more effective and less expensive for poor residents to relocate to more vibrant locations (Vigdor 2007). Of course, the basis for evaluating place-based policy will be different for local policies than national policies, for example. In the case of locally financed projects, the range of alternative uses of the (local) public funds will be more limited.

RD policy is, by definition, place-based policy to the extent that the intended incidence of the policy is the rural population, that is, population residing in rural places. Opting for (rural) place-based policies may be justified as a response to spatial frictions that limit labor mobility to better job opportunities, or externalities (Houston 2005a,b; Kilkenny and Kraybill 2003; Partridge and Rickman 2008). Spatial frictions include information costs about labor market opportunities, distance costs that limit migration and commuting, and frictions in the housing market that limit worker relocation closer to employment opportunities. Supporting place-based intervention, there is evidence that regional labor markets are somewhat sluggish to adjust (Bartik 1991, 1993; Gallin 2004; Partridge and Rickman 2006; Rowthorn and Glyn 2006). Likewise, there is evidence of spatial immobility that also suggests that it may be better to support poor residents where they reside. For example, Bartik (1991, 1993) and Partridge and Rickman (2006) find that while 80 percent of new jobs are filled by new residents, 20 percent are filled by non-employed original residents. Likewise, Partridge and Rickman (2008) find additional evidence that in more remote areas, an even greater share of original residents takes the newly created jobs, while Renkow (2003) provides evidence for more proximate urban-adjacent locations. Thus, there is evidence that RD place-based policies can be effective when optimally applied, but there are caveats and exceptions to indiscriminate application of place-based policies.

One-size-fits-all RD policy is inappropriate because of the heterogeneity of rural North America. Place-appropriate policy recognizes that rural communities have different assets and face different challenges that include

transportation, location relative to major markets, local capacity and institutions, and amenities and quality of life (Blank 2005; Hewings 2001; Irwin et al. 2010; Kilkenny 2010).

RD policy as place-based policy should not be confused with sectoral policy that targets particular activities that are concentrated in rural areas. Agricultural policies aimed at increasing farm incomes are an example (Drabenstott 2003; Goetz and Debertin 1996; Pezzini 2001). Successful farm sector policy has long translated into increased farm productivity, enhancing sectoral competitiveness through labor-shedding technologies and management practices. While improving North American farm competitiveness in global markets, the newly "redundant" farm labor has often migrated to urban areas. Yet, the requisite exit of labor leaves many rural places/regions in general decline if there is no new accessible (local or within commuting distance) source of income. Thus, policies aimed at improving the competitiveness of what are perceived to be key rural industries such as agriculture, manufacturing, mining, lumber, fishing, etc., may have unintended consequences and negatively affect rural communities.

Environmental or national security policies, though sited in rural areas, should likewise not be confused with RD policy; their primary objectives are unrelated to the well-being of the rural population. They may have positive or negative spillovers for rural populations and communities, but they are not designed for rural populations, and their success or failure is measured across both urban and rural areas.

Best practice RD policy is also not about implementing the latest fads with little research evidence (Johnson 2007). A recent example is the rush to develop alternative energy based on hopes that it will be a major job creation for rural America. These contentions are not based on tangible evidence, let alone recognition that alternative energy would not be sustainable if it was "bloated" with high labor costs. Alternative energy is the latest of a very long list of economic development fads that have included bio-technology, artificial creation of clusters without the requisite conditions (Barkley and Henry 1997), attracting the creative class, value-added agricultural processing, etc.

Another policy that is often used in support of sectoral policies or fad-based economic development is offering government incentives to footloose firms that promise to create jobs. Economists have long been skeptical of these efforts, pointing to a host of problems. First, if it is truly footloose, the firm may have located in the given location without any incentives. Second, when taxes are lowered for a favored firm, they usually have to be raised on other firms and households, or public services have to be cut. The offsetting job losses could overwhelm any job gains from the favored firm—i.e., public service cuts and tax increases may cause other firms and residents to relocate. Third, there are

with high opportunity costs.

displacement effects. For example, if a community offers tax breaks to Wal-Mart, then other local businesses such as hardware stores or grocery stores will likely lay off workers (Edmiston 2004). Of course, displacement effects are exacerbated when wages and land costs are bid up. Finally, absentee owners are often clear beneficiaries of these incentives, further reducing local benefit. Not surprisingly then, studies tend to find that tax incentives provide limited benefits and may lead to net losses (Gabe and Kraybill 2002). In sum, business incentives often come

Consideration of best practices in RD policy suggests the need for policy evaluation and related metrics to appraise "success." Among the potential metrics are an array of economic and quality of life indicators. However, the ultimate adjudicators of the attractiveness and "success" of a rural community are the people who migrate to, or from, or stay in rural areas. The location decision lies with the households who "vote" as to where they believe they will receive the highest utility. In this sense, impacts on net migration or population change are the ultimate reduced-form metrics of the success of RD policy, with supplementary measures including income distribution and low poverty. Good policy also calls for the most current approaches for policy evaluation (Irwin et al. 2010). These include descriptive, structural, and experimental econometric approaches (Holmes 2010), and simulation approaches that include computable general equilibrium approaches (Rickman 2010). Beyond sound analysis, there is also the imperative for effective communication of results to policy makers who can effect change. The papers in this special issue, while neither comprehensive nor exhaustive, illustrate current best practices.

To Do or Not to Do Place-Based Policy

Rural policy directed at stimulating or fostering economic (or other) development is not needed in all rural areas. Some rural areas fare well because of existing or evolving economic bases related to amenities, or integration into urban-based growth, for example. For these areas, no particular RD policy or programs may be required, only a permissive regulatory and institutional framework.

However, some rural areas, typically those with historical economic bases in fisheries, forestry, mining, agriculture, or routine manufacturing, face long-term decline. Long-term population decline, in turn, leads to struggles with access to basic services such as health and education facilities, and limits the potential for future economic activity in these communities, as their population sizes successively slip below threshold sizes, starting a downward spiral (Johnson 2001; Stabler and Olfert 2002). Yet, long-term decline is not a sufficient condition for targeted intervention or RD policy. Population decline may signal a healthy

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reallocation of labor from areas of low to areas of higher productivity (Polèse and Shearmur 2006).

Indeed, discerning the conditions under which RD may be warranted is a significant challenge (Drabenstott and Henderson 2006; Johnson 2007; Kilkenny and Kraybill 2003; Partridge and Rickman 2008; Weber et al. 2005). One of the possible occasions for RD policy is relative immobility of all or a portion of the local population, occupationally and/or geographically. Cultural barriers, human capital, information, institutional and governance failures, or lack of local capacity may result in reduced mobility and persistent poverty. The particular circumstances and sources of poor economic outcomes may vary greatly from one community to the next. Rural areas that would yield a positive return on RD policy are potential candidates for targeted intervention or place-based policy.

Policy intervention is, however, costly, and its application must thus be selective. A detailed and rigorous investigation should be the basis for determining the RD candidates where there will be a return on public investment. Rural areas where there is empirical evidence of existing or potential local capacity, perhaps as illustrated by population growth or lower-than-expected rates of decline, along with poor economic outcomes (high poverty, for example), may be candidates for place-based policy (Kilkenny and Kraybill 2003; Partridge and Rickman 2008). The cost of relocation, mobility assistance, retraining, etc., must be weighed against the immediate and long-term costs of local economic incentives. Instances where place-based policies and programs alone are the preferred option, without a people-based component, are probably rare. Further, the high degree of heterogeneity among rural communities suggests that place-based policy needs to be tailored to suit local circumstances, in both eligibility assessment and evaluation.

What Makes for Good Place-Based RD Policies?

We have already noted that sectoral policy should not be confused with place-based policy. Likewise, jumping on the latest fad in economic development policy is not a best practice strategy. So, what makes good RD policy? The answer is that "it depends." Some conditions for success are necessary, though not sufficient, while some that are sufficient are not necessary. An example of a necessary condition would be meeting a threshold size in local agglomeration economies, workforce quality, or innovation, thus having the potential for some sort of endogenous growth (Duranton 2007; Duranton and Puga 2001; Romer 1989). A sufficient condition, we argue below, is access to agglomeration economies facilitated by proximity to urban centers. Other factors may exert varying influence individually or in combination.

Education and human capital can be key in promoting endogenous rural growth through their impact on productivity, altering industry composition and encouraging innovation (Faggian and McCann 2009; Gibbs 2005; Goetz and Rupasingha 2004; Henry, Barkley, and Li 2004). If rural communities are to participate in the rapidly growing sectors based on knowledge workers, an appropriately educated labor force is required. Closely associated with standard human capital effects is the notion that creative occupations are also linked with faster economic growth in rural areas (McGranahan and Wojan 2007).

However, educating the local labor force does not necessarily translate into a better educated local labor force, or to local growth. In less populated rural areas that cannot achieve agglomeration economies and thick labor markets, policies that increase workforce training or education may simply lead to a brain drain because workers with more human capital are more geographically mobile (Artz and Yu 2009; Faggian, McCann, and Sheppard 2007; Yankow 2003). Corcoran, Faggian, and McCann (2010) show that government subsidies may be required to attract workers to rural areas. The absence of local agglomeration economies as a barrier to retaining an educated labor force will inhibit innovation activities in rural areas (Barkley, Henry, and Nair 2006). To some extent, rural communities may be able to access the benefits of agglomeration economies by tapping into urban growth through connective infrastructure or other linkages.

While access to urban agglomeration economies is not necessary for rural growth, it is increasingly a sufficient condition for North American rural growth (Wu and Gopinath 2008). The relationship between rural community growth and proximity to agglomeration economies is represented by the concepts of spread and backwash (Henry, Barkley, and Bao 1997; Henry, Schmitt, and Piguet 2001). Backwash occurs when urban growth pulls productive resources such as workers from rural areas through migration and capital flows, as exemplified by the rapid mechanization of agriculture along with the growing industrialization of urban North America circa 1920–1970. Spread effects occur when urban growth creates rural—urban commuting opportunities or access to urban markets for rural businesses. With improving automobile transport since World War II (and diminishing backwash effects because of restructuring in the natural resource sector), spread effects are increasingly common.

The geographic reach of urban agglomeration effects, including spread effects, can be extensive. Partridge et al. (2007) show that positive rural population effects of urban growth can extend hundreds of kilometers into the countryside. Partridge et al. (2008b, 2009) also show that urban access impacts rural population growth, wages, and housing costs in complex ways. Specifically, it is not just "distance" to the nearest urban center that matters, but also distance to all of the higher tiered

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urban areas that form the central place hierarchy (Polèse 2010). Olfert and Stabler (2002) further show that investing government resources in remote communities induces virtually no local multiplier effects as expenditures are largely "leaked out" to higher level centers. In sparsely populated areas, rural communities are more likely to benefit from investment in urban areas through commuting opportunities and new markets.

Trying to link rural communities to urban growth centers has long captivated regional and rural economists (Berry 1970; Fox and Kumar 1965). Facilitating the implied rural—urban linkages calls for a host of policy changes and initiatives, including governance reform to reflect the socio-economic interdependencies of the twenty-first century rather than of the nineteenth century (when most government jurisdictions were formed). The tremendous transportation and communication improvements of the past century have increased the geographic extent of spillovers, calling for governance arrangements that can internalize these spillovers. Yet, Isserman and Rephann (1995) describe the policy pitfalls of an urban growth center approach. Foremost, politicians are subject to pressures to declare too many communities as growth centers, many of which are far too small to generate either endogenous growth or spread effects.

Probably the most tangible link between rural communities and urban growth is through rural-to-urban commuting that allows the rural workforce to remain in their communities (or attract former urban residents who prefer the rural lifestyle). Larger rural communities support more local businesses, supporting more local employment (Partridge, Ali, and Olfert 2010). For rural communities to be attractive, they need to provide amenities and public services such as high-quality schools and parks (Henry, Barkley, and Bao 1997). Probably related to these successful rural—urban linkages, there is evidence that rural infrastructure investments including broadband Internet have their most favorable effects in exurban areas and in rural areas adjacent to metropolitan areas (Kandilov and Renkow 2010). Yet, commuting patterns are more complicated than just simple functions of relative wages and travel costs, as illustrated by Goetz et al. (2010), who find that a network arrangement of bidirectional commuting dependencies may be more appropriate.

Other than agglomeration economies, natural amenities such as an amenable climate, pleasant landscape, oceans, and lakes can be a major force in rural community viability. Amenity-led growth was a major force in U.S. regional population dynamics as early as World War II and became a major force in rural growth in the early 1970s (Irwin et al. 2010; McGranahan 1999). However, Deller et al. (2001) and Kim, Marcouiller, and Deller (2005) show that natural amenities alone may be insufficient without a complement of built amenities. A beautiful

mountain combined with skiing and other recreation facilities will have stronger growth effects than the mountain alone. Built amenities, however, are closely related to agglomeration economies, showing the difficulty in disentangling amenity effects from agglomeration effects.

With most amenities being normal or superior goods, rising incomes will perpetuate their growth influence. Further, high-amenity rural areas appear able to attract workers employed in creative occupations and/or more educated workers (Partridge et al. 2008a; Wojan, Lambert, and McGranahan 2007). Marcoullier, Kim, and Deller (2004) and Green, Deller, and Marcouiller (2006) describe ways to attract recreation-based growth to rural communities while countering the tendency for these jobs to be low-paying service jobs. One strategy is to first attract recreation-based firms, then, as the quality of life improves (e.g., good restaurants), more educated or creative occupations may be attracted by adding firms in other industries (e.g., see Wojan, Lambert, and McGranahan 2007). This is a particular instance where fostering an entrepreneurial climate to tap into "home-grown" endogenous growth may then have significant payoffs (Deller and McConnon 2009; Drabenstott and Henderson 2006; Goetz and Rupasingha 2009; Loveridge and Nizalov 2007). Yet, looking further into the twenty-first century, one would expect that housing prices and wages would fully capitalize the effects of amenities, eventually stemming amenity migration (Irwin et al. 2010; McGranahan 2008). A successful strategy in the latter twentieth century may not be as promising going forward.

As already acknowledged, natural amenities are but one dimension of a community's general quality of life. Others include urban amenities, good public services, low crime, etc. (Ferguson et al. 2007). Two additional aspects that have been the focus of rural research are poverty levels and "social capital." Low poverty is an important contributor to quality of life, such that alleviating rural poverty would be a policy priority in high-poverty clusters (Chokie and Partridge 2008; Crandall and Weber 2004; Weber et al. 2005). Likewise, and perhaps related, social capital provides the capacity, leadership, and glue that allows communities to prosper (though it can also keep communities closed to outsiders and new ideas). Rupasingha, Goetz, and Freshwater (2002) provide empirical evidence that positive social capital is conducive to local economic growth, while Goetz and Rupasingha (2009) and Goetz and Shrestha (2009) show how it can nurture business start-ups and entrepreneurial capacity. Deller and Deller (2010) illustrate how some types of social capital can help reduce rural crime, further enhancing local quality of life.

To synthesize, access to agglomeration economies appears to be a sufficient condition for rural community growth. The implied rural policy is, where possible,

facilitating this access through connective infrastructure, governance, or other institutional arrangements, and removing barriers. This avenue is, however, not open to all rural communities. Human capital investments are globally essential, though in the absence of critical mass, access to agglomeration economies or a high level of amenities, and other forms of quality of life, they may not be sufficient to retain this highly mobile population. In all cases, existing potential can be mobilized through fostering entrepreneurship.

Summary of the Best Practices Special Issue

Our first paper, "Infrastructure Investment and Rural Economic Development: An Evaluation of USDA's Broadband Loan Program," by Kandilov and Renkow (2010) assesses the local economic impact of USDA's Broadband Loan Program, initiated in 2002. Federal government support for the provision of universal access to a means of communication is certainly not new, and in a modern economy, broadband would seem to be a likely target. The finely detailed analysis is instructive, both in terms of the substantive outcomes and also in terms of the importance of rigorous evaluation techniques. Using state-of-the-art program evaluation techniques, preliminary findings were positive. Yet, a more spatially disaggregated analysis revealed that urban proximity was primarily responsible for the initial illusory findings. The authors note that lags in the expected impact may account for the absence of positive economic effects. Of course, in spite of the lack of simulative economic impact, the authors acknowledge that deployment of broadband into underserved rural communities may well enhance the quality of life for residents of those communities through improvements in health, education, and even entertainment.

In the second paper, "Human Capital in Remote and Rural Australia: The Role of Graduate Migration," Corcoran, Faggian, and McCann (2010) examine the spatial distribution of human capital in Australia as a possible driver of spatial population distributions. Citing the depletion of human capital in rural areas as a major motivation, they examine the spatial employment patterns of Australia's university graduates, where places of employment are distinguished by degree of "rurality." Based on a 2006 data set for 65,661 university graduates 6 months after their graduation, a multinomial logit model is used to estimate how individual characteristics affect the probability of selecting a particular settlement area in a migration decision. The results confirm the predominance of major cities as attraction poles for recent graduates; they also have the highest retention rates. However, the major cities' attraction can apparently be at least partially overcome by much higher salaries in very remote areas. Thus, a focus on only people-based policies such as education can have very uneven spatial impacts.

The complex relationship between economic growth and development of rural areas and crime motivates the investigation of the role of social capital in rural crime rates in our third paper, "Rural Crime and Social Capital," by Deller and Deller (2010). Building on three theories of criminology, the role of social capital in the rural crime rate (differentiated into seven types) is modeled in a rational economic choice framework. The challenge of an informative and useful measure of social capital is confronted by using four separate sets of measures from secondary data, in separate model estimations for each crime type. While finding that social capital matters in the determination of rural crime, the recommended policy response is not straightforward. They find evidence that higher concentrations of organizations that allow for networking, such as professional, business, and labor organizations, as well as civic, social, and community benefit-focused organizations, are associated with lower rural crime rates. However, other types of organizations appear to have the opposite effect. The authors conclude that social capital may be too broad a concept for their purposes and that a focus on notions of collective value or social norms would be preferred. In summary, they suggest that social capital is necessary though not sufficient to deter crime.

Our fourth paper is "U.S. Commuting Networks and Economic Growth: Measurement and Implications for Spatial Policy," by Goetz et al. (2010). Conceptualizing commuting flows as tacit flows of knowledge embodied in workers, they use network analysis of commuting patterns to assess the impact on income growth. Entropy measures capture the centrality of a county in terms of the spread of flows through in- and out-commuting. They find that both counties with greater in-commuting entropy (diversity, popularity, or attractiveness from multiple counties) and those with greater out-commuting entropy experience less economic growth compared with counties that experience commuting from just a few counties (i.e., from a more narrow geographic diversity). However, the negative effects of the in- and out-entropy measures are offset by having both high in- and out-entropy. That is, counties that are predominantly a bedroom community or a business hub are penalized, but counties that have the status of being both a bedroom community and a business hub benefit in terms of economic growth. Goetz et al. suggest that from a policy perspective, the commuting network structure suggests the potential for a new regional form of public governance (regionalism) that better reflects the local realities of cross-county and cross-state border flows of workers and economic activity.

Concluding the issue, "Rural-to-Urban Commuting: Three Degrees of Integration," by Partridge, Ali, and Olfert (2010), examines commuting patterns as forms of rural—urban integration. Overall trends include increasing commuting rates and

longer commuting distances surrounding urban areas. However, rural areas vary greatly in terms of their location relative to not just their nearest urban center but also to the top of the urban hierarchy. Using Canadian data, and a framework that identifies urban centers according to their position in the urban hierarchy, the influences of local rural population and job growth on rural commuting rates are estimated. They find support for the hypothesis that rural-to-urban commuting is the result of deconcentration of urban population to surrounding rural areas for lifestyle and quality of life reasons. While distance from the nearest urban center exerts a negative influence on rural commuting rates, remoteness from the largest urban centers, those at the top of the urban hierarchy, appears to *increase* rural out-commuting rates, possibly because of a weaker rural economy in remote areas. Unraveling these complex forms of rural–urban linkages through commuting is essential for the design of rural policy and targeted programs that may effectively support local rural populations.

While the papers in this issue represent a selection of best practice papers in RD and policy, this introduction shows that they are but a sampling of the issues and the approaches that hold promise for a better understanding of the RD process and the policies that may be successful as RD place-based policies. Nonetheless, they give an excellent view from three different countries of the key policy challenges facing the development of best practice RD policy, and they provide a sketch of best practice empirical methodology in rural research.

NOTES

- 1. A good example of this at the U.S. federal level is when President Obama's 2008 campaign Web site said: "[Renewable energy] will transform the economy, especially in rural America, which is poised to produce and refine more American biofuels and provide more wind power than ever before, and create millions of new jobs across the country" (emphasis added). Source: Obama and Biden (2008:46) Blueprint for change: Obama and Biden's plan for America, available at: http://www.barackobama.com/pdf/ObamaBlueprintForChange.pdf (accessed January 31, 2010).
- Low and Isserman (2009) show how the positive employment effects of ethanol have been greatly overstated by its advocates.
- 3. Renkow's (2007) finding illustrates why a rural infrastructure policy is likely to fail if it is not supported by other features such as accessibility to urban centers or strong amenity base. "Build it and hope they will come" approaches are no substitute for agglomeration economies or amenities.
- 4. Amenity-led growth recalls the long-running "jobs versus people" debate—i.e., do businesses create jobs and the people follow, or do places with high quality of life attract people and the jobs follow in suit? Partridge and Rickman (2006) show that the answer is both—firm side growth creates about one-half of U.S. state jobs and people-led growth create about one-half of the jobs, but the relative size of each effect greatly varies across the country. Yet, Cheshire and Magrini (2006) show that amenity-led ("people") growth is a much smaller phenomenon in Western Europe, which is also the conclusion of Ferguson et al. (2007) for Canada.

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