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# Building a 21st Century Rural Workforce

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It is no secret that much of rural America is struggling economically. Despite similar employment growth rates, nonmetropolitan areas tend to have relatively higher unemployment and underemployment rates and slower population growth rates than their metropolitan counterparts.<sup>1</sup> Additionally, over the past 15 years, evidence from several states suggests that nonmetropolitan job losses have been in relatively high paying sectors, whereas growing sectors in the rural economy tend to pay relatively low-wages (Shields and Vivanco 2003).

One important consequence of this dynamic is an increase in the disparity between metropolitan and nonmetropolitan household incomes. For example, Bureau of Economic Analysis data show that over the period 1969-2002, the average state metropolitan nominal per capita income increased by 97.5 percent (to \$31,264) whereas the average nonmetropolitan state per capita income increased by only 91.5 percent (to \$24,635). The upshot? Many parts of rural America have lower incomes and are falling further behind.

The growing gap between metro and nonmetro incomes has potentially important consequences for rural places. For instance, it is well documented that rural areas have higher average poverty rates, and that most persistently poor counties are located in rural areas (Economic Research Service 2004). At the same time, research shows that high poverty concentrations can seriously hinder local economic prospects. For some places, then, there is the very real prospect of the emergence of low-wage traps, with many rural areas potentially finding themselves in a situation where poor economic performance reinforces itself.

Compounding this effect is the continued outmigration of the brightest young workers from rural areas....the so-called "brain-drain." Evidence from prior studies shows that nonmetro counties are experiencing a significant net out-migration of young, college-educated workers, who are believed to be moving to cities in search of better employment opportunities and cultural amenities (Brown 2002; Johnson 2003). As a result, there is a growing gap between the education attainment levels of metro and nonmetro areas, with metro areas having a significantly larger proportion of the labor force holding at least a bachelor's degree, and nonmetro areas having a lower educated and less skilled population (Gibbs 2005; Johnson 2003; Lichter, McLaughlin and Cornwell 1995).

Population gains and losses due to migration transform a community's social and economic structure (Brown 2002; Haller & Monk 1992), and it is not a stretch to suggest that there is a link between the divergence of metro and nonmetro per capita incomes and the migration of college educated workers to metro areas from the hinterland (Hammond and Thompson 2006). While the loss of this particular demographic cohort is not new, having long been lamented by rural development proponents, it is important to understand that the emergence of the "knowledge economy" may actually intensify the impacts of the brain drain on rural areas. This is due to the prospect that rural areas will be greatly disadvantaged in their efforts to compete in the new economy, where innovation and ideas are paramount (Wilkinson 1995).

Recognizing this dynamic, rural advocates have long sought ways to stem and even reverse the outmigration of the "best and brightest." For example, some have advocated offering recruiting incentives to certain professionals, such as physicians, and others have sought to promote regional recreational oppor-

<sup>&</sup>lt;sup>1</sup> Although some areas are thriving, rural growth seems to be concentrated in counties adjacent to metro areas or endowed with desirable natural amenities. Our recommendations here are targeted toward those rural areas that are struggling.

tunities and amenities. While these efforts have probably met with some success, their overall effectiveness is likely rather limited.

So, what should states do to help rural areas retain young, college educated workers? We suggest nothing, at least for those with bachelor's degrees. Although rural areas might be more appealing to college educated workers further along their life cycle, we frankly have little reason to expect that rural communities will be able to adequately compete with urban and suburban areas for younger workers--especially those who have little attachment to place (ie, footloose)--for at least two reasons. First, college educated workers will earn more ... much more ... in metropolitan areas than they will in nonmetro areas for similar jobs. If we have learned anything from the migration literature, it is that wage differences matter. Second, once an individual earns a 4-year degree, he or she effectively enters the national labor market. No longer does one face a relatively limited set of employment opportunities as defined by what is available locally. Rather, one now can search for work in every labor market in the United States. The 4-year degree opens up substantial opportunities. And, as the opportunity set grows, the likelihood of a migration is substantially enhanced. From a societal perspective, efforts to keep young, educated workers at "home" are clearly inefficient. If they really want to go, keeping them will likely require a rather substantial change in incentives. So, we say, wish them luck.<sup>2</sup>

Despite this rather stark position we are not writing off the importance of an educated labor force. Far from it. We believe that enhancing the human capital stock is the key to rural economic development in the United States. However, we also recognize that highly educated individuals are quite footloose. We suggest building the human capital of those young workers who are less likely to pick up stakes. Specifically, we call for a substantial increase in workforce development activities, especially focusing on the two-year community college and vocational training system. Our logic is straightforward.

First, the skills gained in pursuing a 2-year degree are going to be essential to help rural businesses remain competitive in a global economy. Consider manufacturing. If we look at occupational staffing patterns over time, we find that technological change, driven by the desire to reduce costs, has displaced millions of production workers across rural America. As a result, the demand for unskilled workers in manufacturing has declined greatly over time (Berman, Bound and Griliches 1994). Many new employment opportunities (and career ladders) in manufacturing require much higher skill sets, as the emphasis has shifted from basic production to directing, managing and maintaining production. For example, state-of-the-art machines and facilities require mechanics that are well versed in computer diagnostics and repair. Line supervisors are now being asked to manage production teams, including setting work schedules, assisting in logistics programming, enhancing workplace safety and setting production targets. Indeed, the staffing patterns of many manufacturing facilities are moving toward a bifurcation along the lines of 1) a growing core of long-term multi-talented and multi-tasking workers, and 2) transient production workers.

While the above example refers to manufacturing, the central issue is the increased demand for workers who are able to both adapt to and provide innovation in the workplace, regardless of industry. Accordingly, one key to the long-term viability of many rural businesses is their core of innovative workers. Although core positions do not necessarily require four year degrees, they do require critical thinking and problem solving skills, and, to some extent, management skills. The two-year colleges and technical schools across rural America are well equipped to meet these workforce needs.

This is a sound investment in not only rural businesses but rural people and places. With respect to people, it is well-known that the income gap between those with 4-year degrees and those without is steadily increasing. Yet this trend also holds true for those with and without 2-year degrees. For example, data from the *Current Population Survey* show that, in 1976, workers with 2-year degrees earned 5 percent more than workers with only a high school education. By 2003, this difference had grown to nearly 13 percent. Thus, investments in post-secondary education can help close the income gap between rural and metro areas, or at least slow down the rate of divergence.

And the benefits of education go beyond higher wages. For example, current research in Pennsylvania suggests that small businesses are more likely to provide health insurance benefits as skilled workers' share of total firm employment increases. Additionally, recent research by Partridge and Rickman (2005) suggests that poverty in non-metropolitan counties can be reduced through an increase in the proportion of population holding an associates degree.

Another reason to invest in two year colleges and technical education is that these workers are less likely to out-migrate than are workers with 4-year degrees. Thus, rural places are likely to see substantial benefits

<sup>&</sup>lt;sup>2</sup> Ron Shaffer often spoke of communities that wanted to create jobs to "keep our kids at home." His response was "Why? Let them see the world. They'll want to come back. And when they do, they will have all sorts of new ideas. THIS will be good for your economy."

from this type of initiative. According to the 2000 Census, for nonmetropolitan counties, more than 82 percent of the people aged 25-35 years old with a 2-year degree lived in the same county both years. By comparison, less than 75 percent of workers in this age category with a college degree lived in the same nonmetro county both years. A recent Census Bureau report states: "Whether married or single, young people with a college education [bachelor's degree] were more likely to move than those without a college degree" (Franklin 2003 p 3). This suggests that the issue of "brain drain" is not nearly as pressing for the 2-year degree cohort, a fact that should allay the commonly expressed concern that "why should we bother training them if they are just going to move?"

### **Three Policy Recommendations**

While education decisions are certainly made at the individual level, there is a very real role for state government in growing the capabilities of the rural workforce. First, states should increase both specialty and critical thinking skills of their workforce by strengthening and expanding the network of community colleges in rural areas. In the knowledge economy, nearly all workers are taking on increasingly important roles in terms of troubleshooting and logistical planning. It is not necessary to get a 4-year degree for workers to obtain these skills, but some postsecondary education is often required. While some states have done a good job of building their rural community college networks, particularly in the south, others have short-changed this investment. For example, Pennsylvania has 14 community colleges, 13 of which are located in metro counties. Understanding that many communities are unable or unwilling to support such an initiative through property taxes (often the primary funding mechanism) states will likely have to make substantial investments in order to build an adequate system in rural areas.3 When expanding this system it is imperative that community colleges are attuned to both existing and emerging workforce needs and develop appropriate programs in partnership with the private sector.

Second, we recommend that state governments support local pre-employment training partnerships with industry. Research in Pennsylvania shows that many of the state's employers would like to hire, but find the workforce lacks even the most basic skills and workplace attitude. One successful local program in the state has been spurred by a partnership between Penn State Cooperative Extension and local businesses, which together have developed a curriculum of basic workplace skills. In this program, participants must attend a series of classes where they learn basic worker and workplace skills. In return, businesses agree to give "completers" preferential consideration in hiring. Nearly all students who meet the requirements of the program are placed.

Third, we recommend supporting public/private training consortiums for targeted industry and occupation clusters. For many small businesses, the costs of training employees are prohibitively high, especially for small and rural businesses that may have only a handful of workers in each of several specialized positions. States should work with businesses in their targeted industry clusters to develop specialized training consortiums of small businesses.

Penn State and regional Workforce Investment Boards are pursuing such an initiative with the food processing sector, for example. In this initiative a number of the state's small-scale food processors have come together to identify common training needs and put together a training program where a few employees from each business participate in common workforce education programs. To date, more than 500 workers from some 20 small and medium sized companies have received specialized training.

In summary, we believe that human capital investment is the key to the future economic viability of rural America. However, we recognize the extreme difficulties that rural places have in competing with metro areas for college educated workers. Instead of pursuing young, college educated workers, then, we advocate a rural economic development policy that emphasizes enhancing the skills and capabilities of those innovative workers that are less likely to move.

### References

- Berman, Eli, John Bound and Zvi Griliches. 1994. Changes in the demand for skilled labor within U.S. manufacturing: Evidence from the Annual Survey of Manufacturers *Quarterly Journal of Economics* 109(2): 367-397.
- Brown, D. L. 2002. Migration and community: Social networks in a multilevel world. *Rural Sociology* 67(1): 1-23.
- Economic Research Service. 2004. Rural America at a Glance. Karen Hamrick, ed. Agriculture Information Bulletin No. (AIB793) 6 pp. September http://www.ers.usda.gov/Publications/AIB793/.
- Franklin, Rachel. 2003. Migration of the Young, Single, and College Educated: 1995 to 2000. US Census

<sup>&</sup>lt;sup>3</sup> Sarah Rubin and George Autry (1998) offer a good policy discussion of funding challenges and mechanisms for rural community colleges.

Bureau Special Report CENSR-12 September http://www.census.gov/prod/2003pubs/censr-12.pdf.

- Gibbs, Robert. 2005. Education as a Rural Development Strategy. *Amber Waves*, Economic Research Service, U.S. Department of Agriculture, November.
- Haller, E.J. and Monk, D.H.. 1992. Youth migration from rural areas. In J.G. Ward and P. Edwards (eds.). *Who Pays for Student Diversity?* Newbury Park, CA: Corwin Press, pp. 48-70.
- Hammond, George and Eric Thompson. 2005. Convergence and mobility: Personal income trends in U.S. metropolitan and nonmetropolitan regions. *International Regional Science Review* 29(1): 35-63.
- Johnson, K. M. 2003. Unpredictable directions of rural population growth and migration. In D. L. Brown and L. E. Swanson (eds.) *Challenges for Rural America in the Twenty-first Century*. The Pennsylvania State University Press, University Park, PA, pp. 19-31.
- Partridge, Mark and Dan Rickman. 2005. Highpoverty nonmetropolitan counties in America: Can economic development help? *International Regional Science Review* 28(4): 415-440.
- Rubin, Sarah and George Autry. 1998. Rural Community Colleges: Catalysts for Economic Renewal." Education Commission of the States http://www.communitycollegepolicy.org/pdf/22 65\_IP\_Rural.pdf.
- Shields, Martin and Carolina Vivanco. 2003. *Rural Pennsylvania's 'New-Economy': Identifying the Causes of Growth and Developing New Opportunities.* Final research report to the Center for Rural Pennsylvania.
- Wilkinson, K. P. 1995. Social forces shaping the future of rural areas. In L. J. Beaulieu and D. Mulkey (eds.) *Investing in People: The Human Capital Needs* of Rural America. Westview Press, Inc., Boulder, CO, pp.65-83.