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America's Job Crisis and the Role of Regional Economic Development Policy*

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Abstract: The biggest issue facing the United States in recent years is the poor economy, most dramatically illustrated by the lack of job creation. The lack of jobs is not a phenomenon that began with the 2007-2009 Great Recession and sluggish recovery, but has been a feature of the entire early 21st Century. There are federal fiscal and monetary policy responses that would help lift job creation. Yet, in lieu of federal efforts, state and local officials have aggressively promoted job creation by a host of schemes including cluster-based policies and tax incentives and subsidies. While data are hard to come by, anecdotal evidence suggests that state and local efforts to lure businesses with generous inducements have escalated to a feverous pitch. The distinctive feature of such efforts is that governments are increasingly more inclined to offer these inducements to individual firms or industries as opposed to general business tax cuts for all firms, in which the former is a case where officials are “picking winners,” while in the latter, markets and relative comparative advantage determine business location. State and local officials justify such “picking winners” as a way to fend off competition in neighboring jurisdictions and as a way to make their region more competitive. In this paper I examine whether these efforts have helped matters.

Keywords: great recession, regional economic development, regional clusters

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1. INTRODUCTION

There are two main themes in Southern Regional Science Association (SRSA) Fellows Addresses. The first focuses on a stream of the Fellow's research career. The second discusses a pressing policy issue related to state and local economic development. This second path seems to be the one most take, probably due to the association's tradition of policy-relevant research. I will follow the second approach as well because I too am committed to better state and local policymaking, mostly because I feel better policy can help those who most need it most.

The biggest issue facing the United States in recent years is the poor economy, most dramatically illustrated by the lack of job creation. The lack of jobs is not a phenomenon that began with the 2007-2009 Great Recession and sluggish recovery, but has been a feature of the entire early 21st Century. At 4.4 percent, the 2000-2007 period had the lowest seven-year rate of wage and salary employment creation dating back to at least 1939, and that was before the Great Recession. For each of the four years between 2010 and 2013, the seven-year wage and salary

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job creation rate was negative, compared to the average of 14.2 percent over the entire 1939-2013 period. As recently as 2000, the seven-year wage and salary growth rate was 18.9 percent. In fact, over the 2000-2013 period, wage and salary employment growth totaled only 3.1 percent in a period in which population grew 12 percent. Regardless of how one looks at the data, employment growth in the early 21st Century is sluggish, leading to declining employment rates that need to be addressed for many socioeconomic reasons.

There are federal fiscal and monetary policy responses that would help lift job creation. Yet, in lieu of federal efforts, state and local officials have aggressively promoted job creation by a host of schemes including cluster-based policies and tax incentives and subsidies. While data are hard to come by, anecdotal evidence suggests that state and local efforts to lure businesses with generous inducements have escalated to a feverous pitch. The distinctive feature of such efforts is that governments are increasingly more inclined to offer these inducements to individual firms or industries as opposed to general business tax cuts for all firms, in which the former is a case where officials are “picking winners,” while in the latter, markets and relative comparative advantage determine business location. State and local officials justify such “picking winners” as a way to fend off competition in neighboring jurisdictions and as a way to make their region more competitive. Have such efforts helped matters?

Generally economists are opposed to picking winners and instead favor competition among states and regions in order to promote better public service delivery with low tax burdens. One partial exception is Duranton (2011). While being highly critical of cluster policies, Duranton argues that tax and subsidy competition for individual firms is worthwhile in promoting economic efficiency because it promotes competition across jurisdictions. Others are quite skeptical. Following Partridge and Olfert (2011), most economists contend that picking winners is inefficient, pointing to tremendous information requirements for politicians and economic development officers that even the best-trained financial analysts lack. Partridge and Olfert further describe principal-agent problems in which voters may not fully understand the costs, which are often hidden, even as politicians take credit for the perceived benefits. Another problem identified by economists is that targeted subsidies and tax incentives create a culture of rent-seeking rather than a culture of entrepreneurship, in which “harvesting politicians” or “harvesting economic development officials” trump innovation and productivity enhancements. This rent seeking follows the pattern that “losers” know how to pick governments and/or pick their policies (Baldwin and Robert-Nicoud, 2007).

Given the dire need for local job creation, what should policymakers do? I argue that they should use evidence to support their economic development policy. With respect to policies for which there is little or no supportive evidence, I urge policymakers to just say “no” if their goal is choosing policies that have the highest likelihood of benefiting their local economies and constituents. Indeed, most prevailing local economic development policies have little evidence to support their use and it may be that they are doing more harm than good, while facilitating rent seeking by firms. Rather, I contend that state and local governments should do what they do best, and that is efficiently provide basic services such as security, transport, education, and recreation for their residents.

In what follows, I will first discuss the current state of local economic development policy, and I will suggest some improvements. One particular area I will discuss is the fad-based notion of economic development policy in which local officials jump on the latest unproven fad before moving onto the next fad without even knowing if the original one was successful. I will

discuss the problems of picking winners, a key ingredient of many fads. I will conclude with a discussion of what the proper role of government is in state and local economic development.

2. THE CURRENT STATE OF STATE AND LOCAL ECONOMIC DEVELOPMENT POLICYMAKING

2.1 Tax Incentives/Subsidies

The present state of state and local economic development policy relies heavily on the use of massive tax incentives and subsidies to attract businesses. This can be around attracting a single firm or in attracting an entire industry, with the latter being mainly through cluster-like efforts. Regarding the single firm case, it is not hard to find examples of governments providing large subsidies per job. I will take as an example the ethylene cracker Shell Dutch Oil proposed building in southwest Pennsylvania near the Ohio and West Virginia borders. An ethylene cracker converts certain liquid natural gasses into ethylene, a key feedstock in the petrochemical business. One can see basic indirect job gains in the supply chain from providing inputs to the cracker. There are also hopes that the cracker could supply a new petrochemical industry that uses the raw chemical feedstock. Of course, one constraint is that a new energy region (at least in recent in decades) such as Pennsylvania may have to import many of the inputs from Southwestern oil-patch regions with long-established supply chains, reducing local multiplier effects. Likewise, the Gulf Coast is home to a long-established petrochemical industry, to which it may be considerably less costly to pipe the Pennsylvania product to the Gulf as opposed to building a new petrochemical industry nearby. Thus, predictions that a whole new industry will spring up near the cracker seem unrealistic.

The states of Ohio, Pennsylvania, and West Virginia fiercely competed for the Shell plant with Pennsylvania winning the competition. Pennsylvania offered Shell \$1.65 billion in incentives and subsidies for the plant, which was expected to permanently employ 400 workers. That is, Shell would receive \$4.125 million per job over the life of the incentive (PA Budget and Policy Center, 2012). A key reason for Pennsylvania's generous subsidy was the hope of (temporary) construction jobs and other spin-off supply-chain jobs. Of course, given the cracker's proposed location, much of its workforce, suppliers, and customers may well derive from neighboring states of Ohio and West Virginia, substantially reducing the expected gains for Pennsylvania. Another consideration, which is often not in discussions surrounding such incentive schemes, is that the firm may opt to locate in a given location without subsidies or incentives. In this case, the firm finds that it is beneficial to start an incentive battle among competing jurisdictions in order to extract larger concessions from the final location.

At the moment, however, it is unclear whether Shell will actually construct the cracker facility (Harris, 2013). This points to another problem with incentive battles. Namely, there is often considerable hype about an activity's future growth prospects that later prove overoptimistic. One possible outcome is a winner's curse where the "winning" location overpays for the firm to locate there, and once the incentives are being paid, the firm's prospects and spillovers greatly dim. Fortunately, in this example, Pennsylvania does not appear to be on the financial hook, given that Shell does not appear to be willing to build the facility. Still, the example underlines some potential problems of engaging in tax incentives for individual firms.

2.2 Incredible Knowledge Requirements

Indeed, knowledge requirements for picking winners are quite high, especially given that the firms benefitting from tax incentives have an interest in providing optimistic forecasts to support their case. For example, it has long been known that even trained stock pickers are no better than using broad stock indexes in picking profitable firms (Malkiel, 2003). This suggests less success can be expected for politicians and economic development officials who have little experience in such matters. To be sure, politicians and economic development officials have to know even more than a stock picker because not only do they need to select the right firm or industry, they have to know whether the firm or industry will prosper in their particular location. They also need strong knowledge of local interindustry linkages and indirect job creation, keeping in mind that economic-impact modeling programs tend not to be anywhere as accurate as their point estimates might lead one to believe. Finally, state and local economic development officials need to understand other spillover effects including the role of agglomeration economies or congestion effects that may affect their growth. Just this latter point was enough for Glaeser and Gottlieb (2008) to be skeptical of place-based policies in general.

The other concern in attracting or retaining firms is the opportunity cost of incentives and subsidies. Unless the new firm directly or indirectly generates significant revenues beyond the subsidy, the costs of the incentive package must be borne by taxpayers or through cuts in existing services, both of which likely reduce the competitiveness of the local economy. There are other opportunity costs that are often overlooked. For instance, providing incentives to develop a new shopping center can place existing retail businesses near the shopping center at a competitive disadvantage, dampening net job gains. Another opportunity cost is that tax subsidies typically benefit larger firms, if only because they are large enough to have the resources to navigate the award process. Furthermore, politicians and economic development officials may ask why they should bother helping small firms that cannot generate news headlines. Interestingly, strategies that implicitly favor large firms may depress job growth because small businesses modestly create a disproportionate number of net jobs in the economy (Nuemark et al., 2011).

2.3 Chasing Hot Industry Fads

The above discussion focused on tax incentive schemes aimed at individual firms. But what about broader strategies aimed at building up entire industries? Or what of policies aimed at building up clusters of firms that possibly enhance interindustry linkages and their spillover effects? Such interest in cluster development policy dates to the work of Porter (1998) and others. Many of the same criticisms of tax incentive/subsidy policies can be levied at cluster policies, which have been appraised by Duranton (2011) and Fallah, Patridge, and Rickman (forthcoming), among others, so I will not repeat them here. However, I will further discuss the information requirements for a cluster policy. Namely, the economic development official or politician must not only have a keen understanding of the firm and industry's prospects as well as knowledge of whether the firm or industry will prosper in a particular location, but also intimate knowledge of the underlying linkages to the rest of the local economy and knowledge spillovers among the firms in the cluster. Clearly, this requires oracle-like knowledge if the goal is to lift the region's economic fortunes. For this reason, cluster policies tend to fail.

The Race for Information Technology. Many cluster-based policies focus on attracting a "hot" industry with strong growth prospects. A problem with trying to attract hot industries is

differentiating the latest fad industry from a true growth prospect. The difficulty is that by the time a fast-growing industry can be identified, its growth prospects begin to dim, if only because of reversion to the mean effects. Take the information technology (IT) industry, which includes computers and software. Attracting IT has long been a goal of local economic development officials dating back to at least the 1970s (Malecki, 1981). Yet, IT has undergone many transformations. Over the 1980s and 1990s, the computer hardware industry evolved from primarily producing mainframe computers and developing software for mainframes, to producing personal computers and supporting web-based activities. The excitement of the emerging web-based applications and the “dot.com” boom generated many efforts to attract such IT firms in the late 1990s and early 2000s.

IT employment trends in Figure 1 illustrate a key folly of chasing firms in “hot” or “fad” industries. Specifically, Figure 1 shows 1990-2012 relative total nonfarm U.S. employment, IT employment, and biotechnology employment (discussed below) benchmarked so that the year 2000 is indexed to 100. The figure shows that as mainframe computer technology wound down, IT employment grew slower than the national employment average in the first-part of the 1990s, but then as personal computer and web-based technologies gained in importance, IT employment grew considerably faster than the national average through the rest of the 1990s. Of course, this pattern attracted the attention of communities that desired to be the next “Silicon Prairie” or “Silicon Tundra,” or “Silicon” whatever. Yet, Figure 1 shows that IT’s employment performance since 2000 has considerably lagged the national average, which we have already described as quite dreary. Hence, regions successful in attracting IT firms in the late 1990s—undoubtedly with generous subsidies—experienced an IT industry suffering through the dot.com bubble and outsourcing to foreign sites. This pattern illustrates that, even ignoring the other opportunity costs, a strategy of applying scarce resources to attract a contracting industry is unlikely to have a high likelihood of success.

Figure 1: Biotech and Information Employment Relative to National Average

Source: U.S. BLS CES

2.4 The Race for Biotechnology

Figure 1 shows that the ensuing battle for biotechnology follows a similar path. After IT's luster began to fade with the dot.com bust around 2000, attention shifted to biotech as the savior. Its story is similar to IT's, but two or three years afterward with biotech's relative growth lagging as soon as it drew attention sometime after 2003 or so. Again, about the time regions chased after biotech firms, biotech job growth began to fall behind the national average.

2.5 The Race for Green Jobs

After biotech lost its appeal, green jobs were deemed the next panacea—particularly so-called green energy jobs. Their interest surge ran from about 2004-2010 and included biofuels, wind power, solar power, and myriad other alternative energy technologies. Green energy was a key feature of President Obama's job-creation strategies early in his administration, and it became the poster child of economic developers, in part due to subsidies in the 2009 federal stimulus package.

Green energy presents the typical problems for state and local development strategies aimed at picking winners (Weinstein, Partridge, and Francis, 2010). These technologies are poorly understood and generally uncompetitive in the marketplace without generous public subsidies. The other problematic feature, which should have been recognized by economic development officials, is that the numbers of jobs associated with green energy should be rather small because energy technologies are generally capital-intensive (Peters, forthcoming). Capital intensity is actually a good thing because it should help green energy technologies to eventually compete with fossil fuels. Indeed, the net job creation numbers of expanding green energy on a national basis would almost by definition be near zero as increases in green energy employment should be offset by corresponding losses in fossil fuel employment (particularly coal) since green energy displaces fossil-based energy. Thus, it should not have been surprising that job-creation numbers with alternative energy were disappointing even with generous public subsidies. Nevertheless, green energy should be judged on its full benefits and costs, particularly its environmental benefits. This is quite different than judging it on just potential net job creation. The moral here is that chasing fads is usually unsuccessful because of the uncertainties, besides the simple notion that about the time a new fad industry is identified is about the time when its surge ends.

2.6 Back to the Future with Brown Energy

In recent years, the growth in unconventional drilling in shale formations (i.e., fracking) has proven to be a boon to the domestic oil and natural gas industry. While its beginnings vary by region, employment data in the industry suggests it began in earnest on a national basis around 2006 with booms in places such as Texas, Louisiana, Pennsylvania, and North Dakota. Unlike green energy where tangible job successes are hard to identify, the recent fossil fuel boom is associated with clearer economic impacts that can be rather large (in a relative sense) in the most sparsely populated regions experiencing an extraction boom. So, does this mean "old" energy represents a viable economic development strategy for locations with the shale resource?

Figure 2 reports U.S. total employment in the broadly defined oil and natural gas sector over the 2001-2013 period. After bottoming out at 365,000 workers in 2003 the industry's employment rose to 704,000 in the first half of 2013, almost doubling its employment.

Figure 2: Wage & Salary Employment in Oil and Gas Sector including Pipeline Construction: 2001-2013

Source: U.S. Bureau of Labor Statistics, *Quarterly Census of Employment and Wages*. The four sectors included are: NAICS 211, Oil and Gas Extraction; NAICS 213111; Support Drilling oil and gas wells; NAICS 213112 Support activities for oil and gas; and NAICS 23712, Oil and Gas Pipeline Construction.

Removing related construction jobs, 577,000 jobs were in oil and gas extraction and drilling, including support workers in the first half of 2013. Is this enough of a surge to make a tangible impact on national employment?

In understanding how regions are affected by oil and gas development, it is important to separate the initial boom from what happens as production matures. After the initial flurry of infrastructure construction and drilling, the general trend is that job creation in the oil and gas sector slows because producing wells do not need large numbers of workers to monitor their progress. Of course, given the dreary national picture, job creation is welcome in any sector, especially in a high-paying sector such as oil and natural gas production. The concern is not that this job creation is unwelcome, but that its size and effect should be put into perspective. In 2012, the last full year of comparable data, total U.S. covered wage and salary employment gained nearly 2.3 million jobs, while the broadly defined oil and natural gas sector gained 80,000 jobs, or less than 4 percent of all jobs created in what has already been described as a sluggish national environment. Likewise, this does not count direct displacement effects. That is, more natural gas production implies fewer jobs in coal production and green energy industries. Further, as the boom matures, energy employment growth will begin to decline, as there is no longer a need to build the supporting infrastructure and mature wells need fewer support personnel.

A key constraint limiting oil and gas from being an engine for national job growth is its small relative size. This is actually a primary limitation of only betting on just a few sectors as economic engines of growth. Indeed, even with the heady growth of recent years, broadly defined oil and gas extraction employment was only 0.6 percent of total U.S. covered wage and

salary employment in the first half of 2013, illustrating why even double-digit employment growth in oil and gas extraction cannot tangibly affect national growth rates. In fact, according to U.S. Bureau of Economic Analysis data, oil and gas extraction employment (not including pipeline construction) peaked at 707,000 in 1982 during the 1970s to early 1980s energy boom (including proprietors), which compares to the aforementioned 577,000 wage and salary workers in the first-half of 2013. Thus oil and gas has an even smaller employment footprint today than it did during the last energy boom—mostly likely due to rapid productivity growth in the sector. The point is that successful economic development in terms of job growth should be diverse across a range of industries in order to avoid a boom-bust cycle and to offer sufficient employment opportunities for a region's labor force (Hammond and Thompson, 2004).

What about local areas in the midst of the energy boom? Well, the word is caution. Economic growth is most likely sustainable when it is well managed and when the full trade-offs are understood (e.g., Headwaters Economics, 2012). In terms of shale energy development, studies suggest that employment gains are relatively modest. Income gains are more robust, however. This is most likely due to royalty payments and the higher wage structure in the industry (e.g., Weinstein and Partridge, 2011; Weber, 2012; Brown, 2014). In terms of jobs, the features limiting job growth are the capital-intensive nature of the industry; the temporary nature of the initial construction phase of the industry in building supporting infrastructure and pipelines; a higher wage structure crowding out employment in other industries; an existing energy supply chain in the oil patch limiting new supply-chain opportunities where drilling takes place; the volatility of the energy economy makes it more risky for investors to invest in locales heavily vested in oil and gas economy.

Indeed, the crazy growth scenarios like the Bakken in northwestern North Dakota are relatively rare given the unique features of such areas. Foremost, the four key Bakken energy counties—Montrail, McKenzie, Richland (just across the border in Montana), and Williams—are quite sparsely populated, with their combined pre-boom 2006 population totaling just 42,000, with the center of activity being in Williston, located in William County. For decades, the Northern Great Plains region has been legendary for its low unemployment rates regardless of the state of the national economy (Partridge and Rickman, 1997). This suggests that there are few surplus workers who can be called upon during a boom. In 2006, as the boom began, unemployment rates averaged only 3.4 percent in the four main counties, in which workforce availability is further exacerbated by the region's small population. So, when (total covered) wage and salary employment in these four counties went from 20,121 in 2006 to 54,254 in 2012 (the last full available year in the QCEW), chaos and unprecedented growth was bound to occur. Can you imagine if a metropolitan area such as Minneapolis-St. Paul had undergone nearly a tripling of jobs in six years, what disruption would have taken place? By contrast, in most other energy regions, such as those in Pennsylvania or Texas, there have been much greater labor bases to draw upon and higher unemployment rates at the start.

There are also long-term problems with energy development that need to be managed to avoid the "resource curse" scenario—that is, the condition in which resource-intensive economies underperform vis-à-vis their non-resource-intensive equivalents. Resource-rich regions need to diversify their economies to mitigate the boom-bust cycle that can dominate their economies. Another clear challenge facing these oil-and-gas regions is avoiding environmental problems that would greatly reduce their appeal once the boom ends. Third, they need to avoid the institutional problems of corruption and poor governance associated with many resource

economies that undoubtedly arise because the industry excessively influences political decision making at the expense of the broader needs of the region. Fourth, these regions need to constrain public spending during the boom and not overbuild public infrastructure to avoid problems when the boom ends. Likewise, areas with energy development need to enact severance taxes to ensure that the short-term costs are covered and long-term education and infrastructure needs are maintained when the energy resource is depleted. For the U.S., evidence on the resources curse is mixed. James and Aaland (2011) found that counties with more natural resource-intensive economies underperformed, which is similar to the findings of Papyrakis and Gerlagh (2007) regarding energy-intensive states. Yet, Michaels (2011) found that Southwestern Oil Patch counties with significant oil reserves outperformed nearby Southern counties without oil reserves, though this gap shrank after 1960.

To summarize, the oil and gas boom points to several economic development quandaries. For the nation, robust job growth in very small sectors such as oil and gas extraction cannot appreciably improve national employment, and that is even without considering displacement effects of lost coal and green energy jobs that could have been created in the absence of the recent unconventional drilling revolution. Indeed, at both the national and local levels, it is best to have diversified growth across many sectors because no single sector can be the silver bullet for economic development. Second, communities experiencing growth from energy development need to keep in mind the offsetting negative effects and prepare for long-term issues including quality of life and environmental concerns. It could be the case that communities rationally forego oil and gas development because they see the tradeoffs as too imposing. At the very least, they may seek to regulate energy development to better promote their future.

3. WHAT IS GOOD STATE AND LOCAL ECONOMIC DEVELOPMENT STRATEGY?

The “unfortunate” answer to this question is that it is intuitive and straightforward, meaning there are no great consulting gigs for the author. Partridge and Olfert (2011) outline several possible elements of a good strategy. The general strategy can be summed up as “do not try to attract the next ‘hot’ industry, but try to make the hot industry want to be in your region.” The first tenet of this broad strategy is “do no harm” by engaging in wasteful strategies aimed at picking winners and engaging in incentive wars with competing jurisdictions.

The second tenet is to build or attract a capable workforce by improving education and workforce training. For example, there is a long literature documenting that places that have more-educated workforces subsequently grow faster than otherwise equal locations and that these effects can persist over many decades (Simon, 1998; Simon and Nardinelli, 2002; Glaeser and Shapiro, 2003). Of course, personal gains to education are high. In 2009, Current Population Survey data indicate that the average high school dropout earned \$20,000 whereas the average Bachelors degree graduate earned \$57,000 and the average Professional degree holder earned \$128,000. Likewise, besides earning more on average, college graduates work much more intensively. For the population at least 25 years of age or more, Current Population Survey data indicate that the college graduate employment/population rate was 73.2 percent in January 2014 versus only 40.2 percent among high school dropouts, with corresponding unemployment rates of 3.2 percent and 9.6 percent, respectively. Thus, it is clear that not only do the affected individuals gain from a college education but communities with more college graduates are likely wealthier and likely have lower unemployment rates than otherwise equal locations with lower average education levels among residents. There are also modest “social” spillovers in

which all workers in regions with higher educational attainment tend to be more productive (Moretti, 2004), further explaining why greater average educational attainment enables regional growth.

How does a community attract and retain a highly educated populace? Evidence is sketchy outside of large cities appearing to have an edge since 2000 (Betz, Patridge, and Fallah, 2014). Yet, since quality of life is a normal good, cities that provide it would appear to be attractive to wealthier, more-educated households. Likewise, good schools are not just worthwhile to train the workforce, but also in attracting educated parents who highly value education for their children. Communities should view quality schools as part of their economic development strategy.

Efficiently providing government services is another supportive feature of effective economic development. The particular services that state, regional, and local governments should provide are what state and local governments do best—e.g., enhance public safety; provide good schools, infrastructure, and recreational opportunities. Closely related is having a sensible regulatory framework that properly balances the needs of business with a good quality of life and a sustainable environment. Given that growth can occur across a wide range of industries, these regulations and tax policies should not discriminate across sectors or firms.

A reasonable regulatory environment supported by efficient public service provision would have the double dividend of supporting entrepreneurship and small business formation because too often tax and regulatory policies are aimed at supporting the largest firms. Entrepreneurship and small business development, as I have already noted, support faster local growth (McGranahan, Wojan, and Lambert, 2010; Goetz and Rupasingha, 2014; Goetz et al., 2014). Small business development has other possible advantages such as being more likely to be locally owned (allowing profits to remain local), purchasing more of their inputs from local suppliers, and leading to a more diverse local economy that can withstand economic shocks.

The next set of good economic development policies relate to good governance and mitigating externalities. North American urban areas are typically quite fragmented in terms of governance even though the broader regional economies are interdependent (Partridge et al., 2008; Partridge and Olfert, 2010, 2011). Communities in functional economic regions often wastefully compete with one another with unclear socioeconomic benefits. Often, the economic battles seem to simply move big-box stores from one suburb to the next—in which the battle produces no new wealth and appears to undercut both the loser's and the winner's tax base due to the loss of the business in the former and the tax subsidies given away in the latter. However, geographically widespread commuting patterns in which place-of-work can be far from place-of-residence implies that residents of broader functional economic regions are interested in economic conditions far away from their community of residence. Thus, if economic development is a regional concern, then economic development policy should be conducted at the broader functional economic area level to ensure that larger regional interests trump the parochial interests of individual communities.

Similar regional needs apply to regional infrastructure projects; recreation and cultural venues; regional planning; and environmental issues such as watersheds. Tangible regional spillovers suggest the need for widespread regional governance frameworks to internalize the externalities. To be sure, this does not rule out the need for smaller community governance arrangements, but their roles should focus on factors that enable few community spillovers.

Another rule for good development policy is to have firms pay for net development costs, whether environmental, infrastructure, etc., so that their entry costs are not incurred by the broader economy, which would make the region less competitive. Finally, regional policy needs focus on the long-term. This requires policymakers to focus past re-election or, if the decision maker is not a politician, beyond positioning for their next job. Indeed, the proposed policy guidelines require patience as the robust benefits take time to develop.

4. CONCLUSION

America faces a jobs crisis that dates back to 2000—a period during which job growth stagnated well before the Great Recession. It is not surprising that voters and residents have called upon their local politicians and policymakers to foster job growth in their communities and local regions. Politicians have responded with a flurry of aggressive regional economic development initiatives that typically have included generous tax incentives and subsidies to lure individual businesses to their region. Economists at best believe such efforts are a zero-sum exercise that rearranges where economic activity occurs. Yet, given that at least some firms are presumably moving in response to these incentives, it is not clear that economic activity is occurring in its most optimal location—i.e., rather than relocating to most-productive locations, firms are finding it more lucrative to move to locales from which they can extract the largest subsidies. This implies that the explosion in incentives has weakened U.S. economic performance since 2000. Indeed, if incentives and subsidies are associated with other factors such as rent seeking and propping up dying firms or industries, then the negative effects are more profound.

What *should* communities do? Before listing details, communities first need patience. They should realize there is no silver bullet, and that all good policies need time to take full effect, well beyond two to four years (the next election). Regional leaders also need to realize that there are some cities for which the economic fundamentals no longer support their existence or current size, and even the best policies cannot “save” them. In terms of good policy, the first rule is simply “do no harm” by engaging in the wasteful game of tax incentives and subsidies. Rather communities should strive to provide valued public services efficiently to dampen taxation. Low tax rates should be neutrally applied across all households, firms, and industries because successful firms are hard to identify and can arise from any sector. Such tax policy would not hinder the growth of small businesses, which provide a disproportionate number of new jobs.

Communities also need to be “smart”: they need to attract and retain a highly educated population that promotes higher earnings and productivity, as well as social benefits from knowledge spillovers, lower unemployment, and greater employment growth. Sensible regulations that allow businesses to prosper while promoting quality of life are also in order—one goal should be to internalize externalities. To further enable effective regulation and economic development, governance may need to be conducted at a more-inclusive geographic scale in order to internalize intercommunity externalities and spillovers that arise in a region's economy, environment, and planning. Sensible regulations, effective regional governance, and smart regions support entrepreneurship and innovation that can complete the virtuous circle of prosperity.

For America to solve its jobs crisis, self-inflicted wounds associated with state and local economic development policies that kill national productivity and job growth are simply too

costly. Too often, beneficiaries are companies seeking taxpayer subsidies, credit-claiming politicians who shirk responsibility for actual consequences, and economic development officials who pad their resumes through dealmaking. The losers are taxpayers and workers who need good jobs. The regional science community can play two positive roles in promoting good policy. First, it can take a more prominent role in pointing out that subsidizing private sector activities does not always pave a road to prosperity. A private company that resorts to public subsidies undoubtedly has a flawed business model. Second, there is a dearth of research that shows how such subsidy schemes fail benefit-cost analysis. This is because politicians and economic development officials do not keep clear records of the costs and benefits. It could be explicit action to avoid evaluation on their behalf. Regardless, such research would yield high social returns and would continue to demonstrate the value of regional science (for more, see Partridge, 2006). Despite some pessimistic appraisals in this speech, I point out some promising opportunities for regions that want to prosper. But first and foremost they must let go of the set of bad policies that are often currently implemented since they cause more harm than good.

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