Countering the geography of discontent



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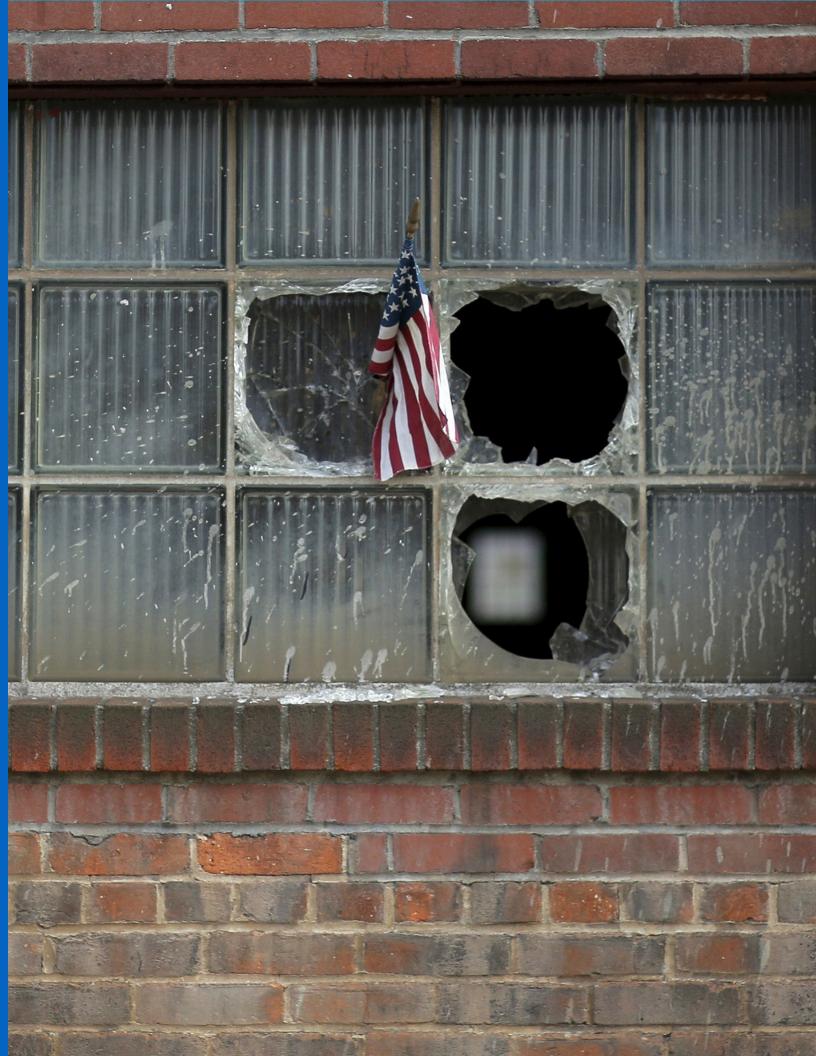


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I. INTRODUCTION

The 2016 election revealed a dramatic gap between two Americas—one based in large, diverse, thriving metropolitan regions; the other found in more homogeneous small towns and rural areas struggling under the weight of economic stagnation and social decline.

This gap between two American geographies came as a shock to many observers.

While it is true that some members of the media and policy analysts had grown disconnected from a significant portion of the country, something else had happened, too: the nation's economic trends had changed. For much of the 20th century, reality conformed to economists' predictions that market forces would gradually diminish job, wage, investment, and business formation disparities between more and less developed regions.

As recently as 1980, the wage gap between regions was shrinking while growth in rural areas and small towns led the country from recession to recovery in the 1990s.

Recent decades, however, have witnessed a massive shift in the relationship between the nation's biggest, most prosperous metropolitan and non-metropolitan areas. Globalization has weakened the supply chains that once connected these regions. The rise of the information economy has boosted the returns to urban skills and diminished the importance of the resources and manual labor that non-metropolitan areas provided during the heyday of the manufacturing economy.1 And for that matter, high-tech manufacturers that still depend on supply chains to produce physical goods-and might once have sourced from the American "heartland"-have instead moved production and assembly functions overseas.2



As a result, the lion's share of growth in the last decade has been concentrated—with relatively few exceptions—in a small cohort of urban hubs while the rest of the country has drifted or lost ground. Nearly a decade after the end of the recession, many small towns and rural areas have yet to return to their 2008 employment levels. If the half century after the New Deal was one of regional convergence, future historians may well regard the current era as a time of divergence.

Public policy has done little to halt or even mitigate this trend. Indeed, taken as a whole, the policies of recent decades have almost certainly exacerbated it. The deregulation of transportation and finance along with the failure to update and enforce antitrust policies worked against less densely populated areas. IIIconceived regulations in large cities have driven up housing costs, discouraging the movement of lower-skilled workers to rapidly growing areas. At the same time, no urgent digital skills or serious technology-oriented regional growth strategy has sought to promote what the investor Steve Case calls the "rise of the rest." Perhaps most importantly, our failure to craft effective, place-sensitive policies has allowed growth and opportunity to concentrate in fewer and fewer places while leaving others behind.

Now, the political impacts of these sins of omission and commission are clear. As the country has pulled apart economically, it is also pulling apart politically. Political parties that once brought voters together across regional lines now focus their appeal on the particular interests and outlook of a single kind of region. In the United States and throughout the West, parties with their principal support in metropolitan areas do battle with parties based in less densely populated areas. And while compelling research has underlined the strong role of racial and xenophobic cultural factors in explaining backlash politics, it has become clear that the backlash also has geographic and economic dimensions. One economic order, and set of places, wars with another one. Making matters even worse, these political divisions mirror widening differences

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between diverse, liberal, internationally minded cities and more homogenous, conservative, and locally focused small towns and rural areas, spawning a new culture war.

The crystallization of these dueling political identities has shaken the liberal democratic order in the United States and beyond. Throughout the West, parties representing those who feel that they have lost out stand opposed to parties representing those who have benefitted from the economic and cultural changes of recent decades. Not surprisingly, the "losers" have seen the ballot box as their last chance to reverse their declining fortunes. In the United States, their political voices are amplified by systems of representation that favor rural residents, triggering political resentment among urbanites that mirrors economic and cultural resentment in the countryside. In this way, the populist politics produced by economic change, and the polarization that results, constitute an externality few economists anticipated but can no longer afford to ignore.

To expand opportunity and reduce political polarization, we need new understandings and new policies unshackled from past assumptions. In the realm of understanding, greater recognition of the trends underway and their sources and drivers is imperative. Greater attention to the power and consequences of spatial dynamics is critical. In addition, three intellectual shifts are key.

First, we must reject the false choice between policies that target people and those that target places. We can do both, and both are needed. There is no contradiction between moving people to opportunity and bringing opportunity to people where they are. Each approach is valid for certain populations in particular places at particular times.

Second, we must reject the false assumption that adopting place-sensitive policies will necessarily come at the expense of economic efficiency. Indeed, there is evidence that our failure to think spatially has actually diminished aggregate economic output.

And third, we must discard economic myopia in favor of a broader view of costs and benefits. Leaving struggling places to fend for themselves may reduce public outlays today, only to increase them tomorrow as the consequences of neglect manifest themselves in increased costs for health care, disability, and substance abuse programs. Lower labor force participation, moreover, will restrict prospects for economic growth, a trend that will prove increasingly damaging as our population ages.

In keeping with these priorities, the discussion that follows describes the changing geography of prosperity and its drift toward regional divergence. We identify some of its sources and explore how the economics of divergence have helped produced a politics of divergence.

We then argue that inaction is no longer an option, note some of what won't work in mitigating the worst geographic divisions, and advance five strategies for responding to the current dynamics.

The nation is only in the earliest stages of developing the place-sensitive strategy our time requires. The recommendations we offer in this paper represent early sketches, designed to provoke additional creative thinking.

But if we do not yet know what will succeed, we already know what will fail. Neither nostalgia nor neglect offers hope for a better future.

Whatever we do, traditional mining and manufacturing will never again provide a future of opportunity for the majority of our population, certainly not in less-populated areas. We cannot turn the clock back, and the effort to do so will leave its intended beneficiaries no better off than they are today-only more frustrated.

We have tested the alternative to nostalgianamely, neglect based on the assumption that the market would suffice to spread opportunity across the country. It has not and cannot do so. While our place-sensitive policies must build on the economy of the present and future, not the past, they must also push against the forces that have produced-and, if left unchecked, will sustain—the Great Divergence that has polarized our politics and constrained life-chances for millions of Americans.

II. FROM CONVERGENCE TO DIVERGENCE

For much of the 20th century, economists projected that the disparities between regions—including differences in wages, unemployment, and business formation patterns—would dissipate as the economy grew. Even seriously lagging regions would "catch up," the argument went, as business ideas diffused and cost differentials motivated people and firms to relocate to lower-cost regions. For years, the facts stood on the side of economic theory. Until 1980, the wage gap between places was shrinking.³

But the emergence of new economic forces—globalization and technological change—along with relatively recent regulatory and policy changes have weakened the dynamics that once favored regional convergence. The prosperity generated in the new economy has failed to lift up all regions. Today, some places are the beneficiaries of economic change while others are its victims. Or, as the University of California, Berkeley economist Enrico Moretti has summarized, prosperity is now accumulating in a handful of cities with the "right" industries and pools of well-educated workers. By contrast, cities and towns at the other extreme, the ones with

the "wrong industries and a limited human capital base," are stuck with dead-end jobs and low average wages.⁴ The result is a distinct geography of growth and decline that challenges the longstanding, mainstream economic assumption of regional convergence.

What does this troubled new geography look like? Depictions of wage and employment data show several problems. Public policy professors Peter Ganong and Daniel Shoag, for their part, have displayed a dramatic decline of income convergence across states in the years since 1940; they see a breakdown of the incentives for particular migration paths that would otherwise promote convergence.

For our part, we see a significant parallel change across cities since 1969.⁵ Whereas a robust "convergence" or "catch up" to the national average of employment and wages in lower-ranking places was apparent through much of the 20th century, the pattern dissipates in the 1980s and, in fact, has reversed in the years since then, according to our analysis of metropolitan-area wage data.



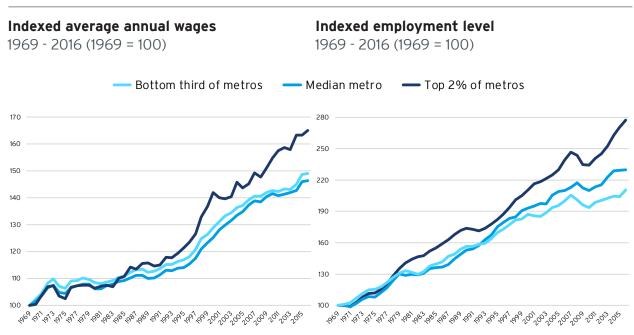
From 1969 to the mid-1980s, as is visible below, the average annual wage and employment changes of the bottom third of metropolitan areas, of the median metro, and of the top 2 percent of metros basically all track together. In many of these years the bottom third of cities actually saw *faster* wage and employment growth than the other groups, meaning that convergence was occurring.

Then the pattern changes. Beginning in the mid-1980s, the wages and employment of the uppermost set of metropolitan areas begin to consistently grow faster than the median and least prosperous cities. By the late 1990s, this group of metros—which includes cities such as San Jose, San Francisco, New York, Boston, and Washington, DC—began to see their wages and employment increase much faster than those of the median metro. Since then, after a pause in the mid-2000s, the cohort of "superstar" cities has been surging, pulling farther away from the median and trailing metros.

The story has not only revolved around the divergence of cities. It has also entailed a narrowing of the *types* of places that now dominate the "club" of winners. In this decade, especially, the widening adoption of digital technologies has contributed to a pronounced tilt toward big, populous places. Take a look at employment growth since 2000 as it occurred in large metros with populations over 1 million; middle-sized metros with populations between 250,000 and 1 million; small metros with populations between 50,000 and 250,000; "micropolitan" towns with populations between 10,000 and 50,000; and then rural areas both adjacent to metro areas and not adjacent.6

Initially, small- and medium-sized metropolitan areas saw the largest proportional increases in employment, as in the period from 2001-2007 before the Great Recession. During this period, micropolitan areas and rural counties adjacent to metropolitan areas also showed relatively strong growth.

FIGURE 1

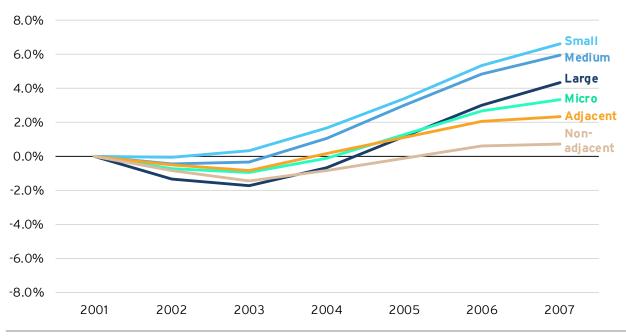


Source: Brookings analysis of BEA data

FIGURE 2

Employment by community size type

Percent change since 2001, 2001-07

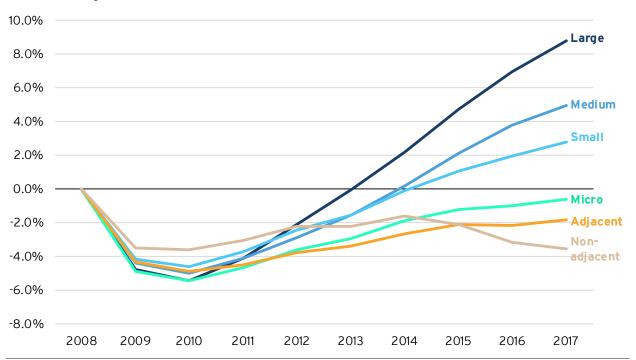


Source: Brookings analysis of QCEW data

FIGURE 3

Employment by community size type

Percent change since 2008, 2008-17



Source: Brookings analysis of QCEW data

In the post-crisis period, however, a clear rank-ordered performance by community-size emerged.7

On employment growth, for example, the 53 very largest metro areas (those with populations over 1 million residents) were pulling far away from the experiences of other communities. In fact, these big metros have accounted for 72 percent of the nation's employment growth since the financial crisis, and over three-quarters of it since 2015 (though they account for just 56 percent of the overall population in that year). Mediumsized metros followed them. By contrast, smaller metropolitan areas with less than 250,000 people-representing 9 percent of the nation's population-have lost ground. Since 2010, in fact, these scores of communities contributed less than 6 percent of the nation's growth. As for the 1,800-plus "micro" towns and rural communities, the trends have been negative.8 True, the past two years show some signs of economic revival

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in America's smaller places, likely driven by economic good times and the current surge of production.9 But overall, nearly a decade after the Great Recession, the outlook for the places that have been left behind appears dim. Employment in many non-metropolitan places remains below its pre-recession level while the longer-term patterns of growth and divergence remain troubling.

III. THE CAUSES AND CONSEQUENCES OF DIVERGENCE

What is causing the current epidemic of divergence? The geography of divergence in large part reflects the dynamics of trade and technology. Technology initially facilitated a vast expansion of global trade that in the decades before and after the new millennium imposed a steady onslaught of locally specific trade shocks on communities. While these shocks varied, maps compiled by economists David Autor, David Dorn, and Gordon Hanson demonstrate that the greatest negative trade impacts during the initial period of Chinese import penetration were visited upon smaller communities in the Midwest and Southeast that had accumulated denser clusters of vulnerable, lower-productivity manufacturing industries.¹⁰ Many of these locations were severely damaged by adverse trade shocks in the 1990s and 2000s and have never recovered.

At the same time, technology exacerbated an even more pervasive (and polarizing) set of dynamics—those that scholars call "skill-biased technical change" and "agglomeration" economies.

In the case of skill-biased technical change, the spread of digital technology expanded the economic benefits awarded to highly educated and digitally savvy individuals while reducing those conferred on individuals without such skills. As a result, the places most plugged into the digital economy attracted even more highly skilled workers by offering the greatest economic return to their skillsets, which itself was self-perpetuating.

As to the agglomeration dynamic, this is the age-old tendency of economic actors to cluster together to partake in the benefits of proximity. In this regard, the recent concentration of highly skilled, often technical workers in certain locations triggered further concentration as the presence of well-educated workers spawned or attracted new business establishments, which in turn attracted more talented workers. A feedback effect between a highly skilled workforce on the one hand and companies operating at the economic frontier on the other, led to rising productivity in these agglomeration hubs and substantial wage increases for the highly skilled workers clustered there.



As a result, Penn State economist Elisa Giannone finds that in the 1980s, the incomes of highly skilled workers began to diverge geographically, with highly skilled workers in the most vibrant, concentrated economies earning more than similarly skilled workers elsewhere.¹² At the same time, Enrico Moretti has found that the same dynamics are leading to divergent wages for low-income workers in different communities. With fewer highly skilled workers to drive labor demand for non-tradable activities that serve the local market, less educated and affluent cities see less demand for the work of teachers, lawyers, waiters, and grocers. 13 In other words, individuals with similar credentials and similar skillsets confront radically different economic opportunities depending on where they live and work.

Yet this is not the entire story. Federal and, in some cases, state and local policies (and their absence) have played a large role in the widening of the nation's spatial imbalances. For example, numerous scholars have regretted America's too-blithe management of China's opening into the world-accelerated by its accession into the World Trade Organization in 2001–with many pointing to Autor, Dorn, and Hanson's maps of the resulting small-town "carnage" as a record of the costs. Likewise, international benchmarking confirms that the United States has for years spent much less than other industrialized countries on programs supported by so-called "active labor market policies" aimed at helping workers and communities adjust to disruptive economic transitions. This has likely left stressed workers and communities less able to respond to disruption and divergence.¹⁴

Beyond this, the deregulatory policy push has almost certainly exacerbated divergence.

Many of America's smaller communities benefitted from a long-standing legal and regulatory regime that tacitly cross-subsidized regions. Policies such as the Rural Electrification Act or the regulation of airline routes helped

ensure all regions possessed the infrastructure they needed to participate in the modern economy, not just the places well-positioned to benefit from the prevailing market forces.

Along with the onset of globalization and technological change, however, the nation's long deregulatory push has worked to the disadvantage of small-town and rural communities. In 1978, Jimmy Carter signed the Airline Deregulation Act into law. The law dismantled the Civil Aeronautics Board, which ensured the cost of flying to and from small and midsize cities was roughly on par with flights to and from large cities. The CAB also prohibited airlines from eliminating unprofitable routes to less populous areas. The passage of the Airline Deregulation Act thus permitted the emergence of distinct geographic disparities in the cost and convenience of air travel, benefitting cities serving as domestic and international travel hubs while hurting passengers in many smaller periphery markets.¹⁵ As antitrust experts Phillip Longman and Lina Khan write:

If you're a member of the creative class who rarely does business in the nation's industrial heartland or visits relatives there, you might not notice the magnitude of economic disruption being caused by lost airline service and skyrocketing fares. But if you are in the business of making and trading stuff beyond derivatives and concepts, you probably have to go to places like Cincinnati, Pittsburgh, Memphis, St. Louis, or Minneapolis, and you know firsthand how hard it has become to do business these days in such major heartland cities, which are increasingly cut off from each other and from the global economy.¹⁶

Deregulation of the banking sector has also disadvantaged many of America's smaller communities by precipitating the decline in the number of community banks in the U.S. The passage of the Interstate Banking and Branching Efficiency Act of 1994 (also known as the Riegle-Neal Act) lifted regulations on

interstate branching, inaugurating an era of rapid consolidation as banks acquired subsidiaries across state lines. As a result, small community banks lost market share to larger institutions as the pace of consolidation accelerated, giving way to a more "top-heavy" industry.¹⁷ While small community banks are not the sole source of capital for local ventures, they have historically served an important role in helping new businesses get off the ground and small enterprises grow.

Similarly, the shift away from vigorous antitrust enforcement has hurt the economies of many small towns. In the late 1970s and early 1980s, the adoption of a lax antitrust framework at the Department of Justice's Antitrust Division and the Federal Trade Commission catalyzed a wave of corporate consolidation. The Reagan administration even prohibited antitrust enforcers from considering regional equity concerns in its decisions.¹⁸ The resulting rise of monopoly power has hurt local entrepreneurs that play an important role in contributing to local economic performance.¹⁹ Increasing concentration also means that workers in many smaller labor markets have fewer employers competing for their labor. The rise of this "monopsony" power is especially problematic outside cities where the level of economic concentration tends to be higher and the effect on workers' wages greater.²⁰

In addition to these sins of omission, sins of commission have also exacerbated spatial divergence. As the deregulatory push hurt America's smaller and mid-size communities, the introduction of new regulations triggered the breakdown of key processes, like migration and land-use management, which help enable economic convergence.

In this regard, skill-biased technical change and the geographic concentration of highly skilled workers would not be so problematic if more people could access the opportunities available in agglomeration hubs. But most cannot, given today's interplay of mobility and land values. Skill-biased technical change and the geographic concentration of highly skilled workers would not be so problematic if more people could access the opportunities available in agglomeration hubs. But most cannot, given today's interplay of mobility and land values.

Traditional labor market models presume that high- and low-income workers will move to the places where economic opportunity is more abundant.²¹ In this model, migration to higher-income places creates an oversupply of workers that drives down wages in the destination while lifting up wages in the places workers leave behind, supporting regional wage convergence. In this connection, Ganong and Shoag show that for much of the 20th century, affordable housing enabled highly educated, highly skilled workers and less-educated, lower-skilled workers to live in the same places.

The introduction of stringent land use and zoning regulations in the 1960s and 1970s, howeverincluding laws limiting the height or density of new construction-stunted the growth of housing supply and increased the cost of living in prosperous cities. While this has posed few barriers to high-skill workers' migration, the high cost of housing, especially in dynamic cities, has often prohibited low-skill worker migration. Low-skill workers can't afford to move to thriving places and high-skill earners stay at home in their thriving cities. Rather than reducing the differences between regions, migration patterns today are exacerbating the tendency of skillbiased technical change and agglomeration economies to sort workers geographically by their skill level, pulling places further apart.²²

Concentration dynamics are a fundamental aspect of economic activity, of course, and are, to a degree, a good thing for the economy. Agglomeration, and the regional divergence it creates, has been associated with efficiency gains and aggregate welfare at the national level.²³ And yet, while enabling more people to live and work in gargantuan agglomeration hubs might well increase national and individual productivity, the combination of laissez-faire policy fashions with what Ron Martin calls an "agglomeration bias" has ensured that current conventional wisdom deems any intervention to reduce inequalities between regions as nationally inefficient.²⁴ This is what urbanist Richard Florida calls "winner-takeall urbanism," and it remains the default view of this decade.25

But this view is likely wrong. There is little evidence to support the idea that achieving a more spatially balanced economy would seriously detract from the goal of maximizing national growth.²⁶ In fact, policies that seek to lift up lagging regions may prove nationally efficient. The Organization for Economic Co-operation and Development has argued that because lagging regions are not operating at their "production possibility frontier," they constitute "unrealised growth potential."27 Meanwhile, recent research from the Economic Innovation Group finds that "had distressed communities merely stagnated, the U.S. economy would have added one-third more jobs over the past 15 years than it actually did."28 Such conclusions suggest that if anything, the under-performance of lagging regions is working to depress national growth.

IV. THE POLITICS OF DIVERGENCE

The economics of divergence are, meanwhile, contributing to a politics of divergence. At the same time that our economy has shifted to favor density, density has increasingly predicted voting behavior.²⁹ During the postwar period, there was no correlation between regions' population density and their voting patterns. Today, electoral preferences map almost perfectly onto a region's density. While presidential candidates' electoral strategies historically included forming cross-regional coalitions, today's national Democratic candidates seldom make appeals to rural voters, and Republican candidates seldom reach out to urban voters.

The failure of the two major political parties to capture a geographically diverse set of voters in recent years has not only exacerbated political polarization but has begun to challenge confidence in democratic politics itself. For example, a Brookings analysis of county-level election data finds that while Hillary Clinton won only 472 counties compared to the 2,584 captured by Donald Trump in the 2016 presidential election, the counties Clinton won accounted for 64 percent of aggregate GDP in 2015.30 Clinton herself remarked, "I won the places that represent two-thirds of America's gross domestic product. So I won the places that are optimistic, diverse, dynamic, moving forward."31

While Clinton was not wrong to say she won the economy, the comment reflects the disturbing political ramifications of regional divergence: the places that are left behind by economic change feel left behind by the political system too. The implication that inclusion in the new and changing economy is a prerequisite for democratic representation only works to embolden discontent. Throughout his campaign, Donald Trump leveraged these feelings of

exclusion. Heightened regional inequalities help explain why a populist message has resonated in recent years. As *Financial Times* columnist Martin Sandbu notes, "a group which finds itself at the sharp end of a series of economic changes arrives at a political self-identification that is particularly strong and antagonistic." Those who had lost the lottery of economic geography embraced Trump's populist message, a message they believed spoke to them and their communities.

This political coalition of the "left behind" has shaken the liberal democratic system. London School of Economics professor Andrés Rodríguez-Pose writes that the areas that have "witnessed long periods of decline, migration and brain drain, those that have seen better times and remember them with nostalgia, those that have been repeatedly told that the future lays elsewhere, have used the ballot box as their weapon."³³

By failing to adequately respond to the concerns voiced by the victims of economic change, our political system has helped spawn a "geography of discontent."34 A paper by Massachusetts Institute of Technology economist Jason Spicer contends that in democratic political systems that take the majoritarian electoral form, party elites failed to incorporate region-specific, globalizationrelated concerns into the national party agenda, disregarding them as the special interests of particular regions. For example, concerns around deindustrialization became the purview of members of Congress from Rust Belt states rather than issues the national party felt pressured to prioritize. Rising regional inequality thus precipitated declining "ideological congruence" between voters and their parties, and the failure of both major political parties to respond to the voters most affected by economic change paved the way for a populist insurgency.³⁵

While our majoritarian political system may have empowered one such insurgent on November 8, 2016, liberal democracies everywhere are contending with rising regional inequalities and the populist backlash it emboldens. Comparing the average income of a country's poorest and richest regions, The Economist finds that disparities between rich and poor places within Eurozone countries has increased since the financial crisis. Support for populism in Europe maps onto the geography of this divergence.³⁶

The Leave vote on the Brexit referendum negatively correlated with population density, and over 50 percent of rural voters in England and Wales favored exit from the European Union.³⁷ In the most recent French presidential election, Marine Le Pen enjoyed the greatest support in the countryside, while Emmanuel Macron's base was largely urban.³⁸ Urban voters in Hungary and Poland, home to today's most entrenched populist governments, have largely rejected the bid of right-wing parties, but voters outside the major cities have propelled populists in Central Europe to victory.³⁹

Across these examples, one finds that the rural voters who have ridden the populist wave share some key attributes, including low levels of educational attainment, anti-immigrant attitudes, and a fear of cultural and economic change. These cultural similarities in many ways reflect the patterns of economic growth and disconnection. As Spicer asserts, "the powerful forces of regional agglomeration" unevenly distribute populist voters geographically.⁴⁰ British journalist David Goodhart similarly identifies a connection between populist support and geography, arguing that populism represents a political battle between "anywheres"-the mobile, well-educated beneficiaries of the global economy-and the "somewheres"-the older, lesseducated individuals whose identities are rooted in particular places.41

Implicit in this formulation is the fact that non-economic, cultural factors such as racial resentment and xenophobia have also played an undeniable role in enabling recent populist victories. In truth, a combination of both economic and cultural anxieties help explain the populist challenge liberal democracy confronts today.⁴² But many have failed to realize that the economic divide fueling political discontent may not be between the poorest and richest members of society, but between prosperous and lagging regions. Place matters. As Rodríguez-Pose argues, "Populism took hold not among the poorest of the poor, but in a combination of poor regions and areas that had suffered long periods of decline. ... The challenge to the [political] system has come from a neglected source of inequality: territorial and not interpersonal."43

In order to respond to the populist threat, then, those interested in safeguarding the liberal democratic order must take steps to alleviate the pain felt in the places left behind by economic transformation. By achieving regional buy-in across rural and urban areas, liberal democracy can stave off a legitimacy crisis posed by the geographic unevenness of the modern economy.

The challenge may be existential. The electoral success enjoyed by populists who have won support from the victims of economic geography reveals that representative democracy depends on a minimum level of regional cohesion. Responding to populist demagoguery will require policies and political leadership that can ameliorate the effects of the density economy that has left too many behind. Failing to do so could put democracy itself at risk.

V. THE POLICY IMPERATIVE

There is, then, a clear political responsibility to recognize that divergent outcomes are a feature of today's economy and that the problem is likely to intensify. Accepting this responsibility, however, will require some serious revisions of the ideas that for years have guided our understanding of regional development.

Historically, as we have seen, the overall trend of wage convergence has fed a belief that regions, just like individuals, are upwardly mobile—that the places lagging today may outperform prosperous regions tomorrow. Consequently, economists' and policymakers' optimistic faith in a level playing field across regional economies has limited the demand for place-based policies. At the same time, economists have long argued that interventions to promote a more even distribution of economic activity might reduce the nation's efficiency by reducing the capacity of the nation's most successful local agglomerations to drive national productivity.⁴⁴ This has had the additional effect of pitting equity concerns against efficiency. Lastly, skepticism about the mixed record of place-based policies has combined with a view that it is better to help poor people rather than poor places, further stunting thought about place-sensitive responses to sharpening divergence.45

Today, a greater awareness of the disturbing spread of territorial inequality appears to be motivating some economists and policymakers to reconsider the traditional disdain for place-oriented problem-solving in the U.S. Most notably, a recent paper by the Harvard economists Benjamin Austin, Edward Glaeser, and Lawrence Summers entitled "Saving the Heartland: Place-Based Policies in 21st Century America" marks a significant revision of the more skeptical orthodoxy.⁴⁶ The three observe that "in recent

decades, regional income convergence has slowed or even reversed" and argue "for reconsidering place-based policies" in light of these trends. 47 The publication of a new book by The Hamilton Project entitled *Place-Based Policies for Shared Economic Growth* is similarly encouraging. 48 Such reconsiderations add heft to the cause and undercut the mostly false opposition between equity concerns and efficiency goals. They also bode well for more creative and unorthodox problem-solving.

Indeed, a meaningful practical response to the nation's deep and structural geographical challenges will require new thinking on the part of both of the major political parties. The Republican attachment to a politics of personal responsibility and laissez-faire economics, and to a belief that social supports should only target individuals who are "deserving," falls far short of addressing the causes of declining cross-regional prosperity. Similarly, Democrats will need to acknowledge that fiscal transfers to lagging regions won't by themselves generate the sustained opportunity necessary to lift up the places that have fallen behind. Democrats have largely campaigned on stemming rising inequality between individuals and economic classes without much consideration of the spatial dimensions of economic inequality. By contrast, Republicans have successfully tapped into the discontent fueled by increasing spatial divergence but have showed little interest in reckoning with the disruptive market forces that heighten such discontent. Even populists who at present benefit politically by harvesting rural anger should be aware that it will turn against them, too, if their performance does not measure up to their promises. An updated focus on boosting economic opportunity for Americans in left-behind communities should become rich territory for bipartisan action.

VI. A FRAMEWORK FOR ACTION

Enacting an effective bipartisan approach will not be easy, though.

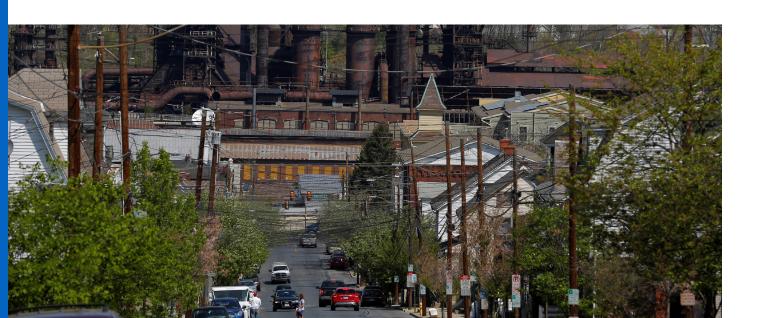
For one thing, it requires setting aside specific regional development strategies that are frequently pursued but rarely effective. If efficiency-oriented nonchalance about the pulling-away of "superstar" cities and the decline of "left-behind" places is no longer tenable, neither are two of the most dramatic "equity" oriented stratagems.

REVIEWING WHAT HASN'T WORKED

In Europe, massive, top-down investments in physical infrastructure have failed to curtail regional inequality. Most notably, the European Union's policy of "territorial cohesion," which aims to reduce economic gaps between European regions with cash infusions, constitutes the second-largest spending category in the EU budget and constitutes over one-third of the total budget. And yet, while the EU merits credit for its awareness of the perils of regional inequality, its system of fiscal transfers has neither succeeded in fending off the political challenges posed by spatial divergence nor placed distressed regions on a more sustainable path toward economic growth. In fact, many of the greatest

beneficiaries of European cohesion spending are the same places that have embraced a resurgent nationalism that poses the greatest threat to the bloc's future.⁵¹ Massive transfers focused on physical infrastructure upgrades will not likely bring either self-sustaining growth to lagging places or political unity.⁵²

The aggressive use of business incentives and firm-attraction subsidies by U.S. states and localities hoping to sway the location decisions of firms represents another dead end.⁵³ For example, Timothy J. Bartik's research at the W.E. Upjohn Institute for Employment Research demonstrates that even if incentives tend to lead to higher employment rates among the local unemployed in the short-term, in the long-term, a larger share of the jobs created through incentives is taken by workers who migrate to the area.⁵⁴ And there are other problems with this policy approach. Young businesses drive job creation, but business incentives disproportionately go toward large, incumbent firms. 55 Generous incentive packages dry up funding for education, workforce development, and programs that could support local start-ups and generate new employment opportunities.⁵⁶ By gambling on catching the "big fish," localities tend to divert attention and funds needed to spur new business entry and growth.⁵⁷



Nevertheless, business incentive and subsidy programs remain a core development strategy pursued as part of local and state economic development policies.⁵⁸ Governors and mayors face tremendous political pressure to attract employers to their communities and demonstrate to their constituents that they are doing all they can to create jobs. They cannot easily extricate themselves from what is usually a race to the bottom, so these wasteful and ineffective efforts to "catch up" continue. This is why we like an idea recently put forward by Jack Markell, the former governor of Delaware, which proposes a 100-percent federal tax on every dollar in state or local incentives specifically directed toward a single company.⁵⁹ We endorse this proposal and additionally suggest that the money collected through a tax on incentives go toward a smallcommunity development fund to support smart initiatives to foster the start-up and growth of new and young businesses in small cities and nearby rural areas. In this way, federal policy could both rescue states and localities from a race to the bottom and help level the playing field between regions.

In short, the evidence is clear: Two of the most ambitious and expensive stratagems that leaders at home and abroad use to push back against divergence are not working and should be set aside.

SUGGESTING WHAT MIGHT WORK: THE NEED FOR PLACE-SENSITIVE DISTRIBUTED DEVELOPMENT

What might work? What kinds of efforts might begin to push back against divergence, if neither "place-agnostic" programs that leave economic geography to itself nor clumsy "place-based" interventions that throw cash at regional inequality seem to be producing good outcomes? Here, we lay out one possible approach and some examples of appropriate initiatives.

What is needed, we believe, are strategies that respect the dynamism and efficiency of the agglomeration economy but seek to extend it to more regions by helping to foster wider access to the assets, conditions, and growth drivers needed to propel convergence.

Our place-oriented approach to reducing the country's spatial divides seeks to pursue both efficiency and equity at once by jumpstarting a process of economic growth in a wider swath of American communities. Instead of spatiallyblind, people-based policies, and instead of proposing only place-based policies aimed at equity, we follow the economic geographers Simona lammarino, Andrés Rodríguez-Pose, and Michael Storper in suggesting a different course.⁶⁰ Their "distributed development" approach is neither spatially-blind nor narrowly place-based. Instead, the three scholars' approach is "placesensitive:" assumes that equity won't happen without development and that development can be jeopardized by excessive unevenness. lammarino, Rodríguez-Pose, and Storper maintain that, "economic development policy should be both sensitive to the need for agglomeration and the need for it to occur in as many places as possible."61 As such, economic development strategies should "enable as many actors and regions as possible to participate productively in the economy in a way that their capacities can expand."62

It is this approach that we adopt. In this way, unevenness can be at least partially mitigated even as the support of more agglomeration in more places can maximize the total future innovation and output of the economy.

Below, we lay out two sets of initiatives, one that focuses on providing more regions with the assets and conditions they need to flourish, and another that identifies specific strategies regions could adopt for achieving growth.

VII. ASSETS AND CONDITIONS FOR GROWTH

In order to renew local vitality and, with it, convergence, it is essential to strengthen local communities' access to the assets and conditions needed to cultivate the kind of economic activity that can lift up left-behind areas. This includes ensuring that places possess a skilled workforce prepared for the kinds of employment opportunities the digital economy has created, that they have access to capital to start and grow businesses, and that they have access to reliable communication technologies.

SKILLS

One factor is skills—specifically digital skills. The digital economy has helped create today's divergent new map of American economic life. Now, tech must be harnessed to help restore convergence. To do this, the nation needs to make an urgent push to boost the tech skills of leftbehind places.

The key fact here is that digital skills have now become a crucial factor for basic economic

inclusion in advanced economies—for individuals and for places. Recent research from the Metropolitan Policy Program at Brookings shows what is at stake.⁶³

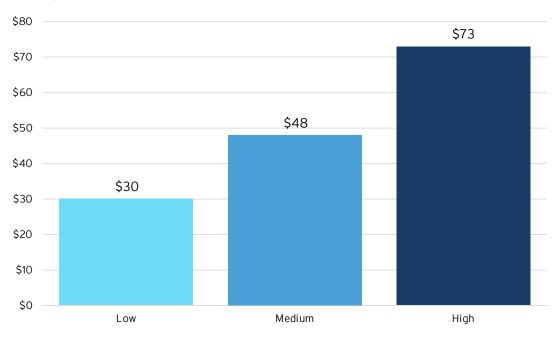
On the upside, the increasingly digital nature of the economy ensures that the workers, industries, and places that possess strong digital skills are enjoying important rewards, including higher productivity and better pay. On the downside, the nation's uneven distribution of digital skillscombined with the tendency of digital economies to amplify that variation-ensures divergence. While the uneven distribution of tech skills can empower some individuals and communities. it has also been polarizing, contributing to the divergence of local economies. For example, our work shows that while smaller cities and rural areas have caught up some with leading "superstar" cities on basic digital skills, they are actually falling farther behind bigger, higher-tech cities when it comes to higher-level skills, with direct impacts for their local productivity and income levels.



FIGURE 4

Average annual wage by digitalization level

In thousands, 2016



Source: Muro and others, "Digitalization and the American Workforce."

This is why any attempt to push back against the winner-take-all dynamics of today's advanced economy must include preparing every region's workforce to participate strongly in the digital economy with a special focus on left-behind places. Helping workers everywhere transition to higher-order tech-based employment will ensure that more regions—and not just today's tech hubs—end up on the right side of technological change.

What might this look like? Some aspects of the needed work will require state and local leadership. North Carolina shows how a state can provide for basic tech exposure at scale with its partnership to provide Microsoft's online Imagine Academy in every high school in the state. Arkansas has led the way in embracing the introduction of computer science throughout the state's school system. Ultimately, states should require K-12 school curricula in all communities to

include computer science coursework to prepare students today for the working world.

The national government can help, and it has an interest in doing so. One cost-effective but meaningful move would be to invest in the ongoing TechHire network of communities working to create more opportunities for overlooked and underrepresented Americans to gain skills and access to technical jobs across the country. A modest infusion of resources could efficiently strengthen and expand an existing network already catalyzing 237 training partners and 1,300 employers in 72 cities, states, and rural areas. At the same time, Bartik of the Upjohn Institute has suggested a valuable role for the federal government in providing grants to states to expand their current customized training programs for small and medium-sized firms in economically distressed areas as well as in expanding the current Manufacturing Extension

Partnership program.⁶⁴ In each case, the reach and impact of well-evaluated, effective programs could be increased by targeting each program on distressed areas and increasing their emphasis on digital challenges and skills.

Beyond these public policy efforts, firms can actively help disperse employment opportunities in the digital economy across a broader swath of regions where the requisite skills exist. Big tech firms can distribute moveable business units to places outside today's tech hubs. Venture capitalist Patrick McKenna suggests tech companies, heartland cities, and governments should create an information network that relies on public and private data to match companies looking to expand their workforce to regions that can host them.⁶⁵

The acquisition of digital skills has already helped many workers outside the dominant tech hubs improve their success in the labor market. For example, "mid-tech" or "new collar" jobs, such as computer and mathematical-based employment that does not require a bachelor's degree, are prevalent outside the coastal tech hubs in especially the Midwest. These jobs offer an example of how employment requiring digital skills can create growth and opportunity across a greater number of regions.

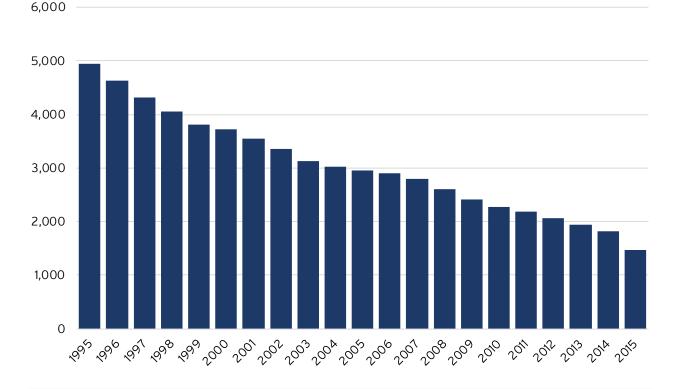
CAPITAL

Improving access to capital constitutes a second need. The pullback in small business lending following the financial crisis has hit less densely populated parts of the country particularly hard.⁶⁷

FIGURE 5

Small banks have been declining for the last twenty years

Number of banks with under \$100M in assets, 1995-2015



Note: Assets are in 2005 dollars.

Source: Powell, "Trends in Community Bank Performance over the Past 20 Years."

Small loans to businesses in rural communities today are half the value they were in 2004 (compare this to small loans to businesses in big cities, which have only fallen a quarter) and rural lending levels today are below what they were in 1996.⁶⁸ Facing a financing shortfall, many businesses struggle to grow, generate jobs, and build wealth in their communities.

Since the recession, big banks have significantly reduced the number of loans they make to small businesses.⁶⁹ Even as the economy has recovered, many larger banks have stopped issuing loans below a \$100,000 threshold.⁷⁰ This is bad news for small businesses, since the majority of applications for small business loans are for amounts under \$100,000.⁷¹ At the same time, the number of small community banks, which have historically served as an important source of credit for small businesses in smaller communities, has declined.⁷²

The twin trends of the slow recovery of small business lending at large banks and the steady decline in the number of small community banks means that there is insufficient supply to meet the financing needs of small businesses today.⁷³

In addition to the cyclical obstacles confronting small business lending, there are notable structural challenges that make extending small business loans a particularly costly and risky proposition. Small business loans are associated with high transaction costs, making them less profitable compared to larger loans.⁷⁴ Additionally, small business loans lack a secondary market that can reduce exposure to lenders.⁷⁵

Banks are often unwilling to lend to small businesses because they lack sufficient information to assess risk. Better data on small business performance could provide potential lenders with the information they need to determine the creditworthiness of borrowers and help reduce transaction costs.⁷⁶

The twin trends of the slow recovery of small business lending at large banks and the steady decline in the number of small community banks means that there is insufficient supply to meet the financing needs of small businesses today.

The emergence of new non-bank sources of credit can also support small businesses.⁷⁷ The growth of financial technology has the potential to create a robust secondary market for small business loans, for example.⁷⁸

We are skeptical, however, that "fintech" can fill the large gaps in small business lending on its own. We encourage financial engineers to generate proposals that could help address the structural impediments to small business lending.

Lastly, we encourage identifying and bolstering other alternative sources of capital to support businesses in lagging communities. For example, a provision passed as part of the most recent tax law establishes new incentives to invest unrealized capital gains that will flow to distressed areas designated as "Opportunity Zones." While opinion is mixed on the utility of these zones, the associated "Opportunity Funds" do provide a potentially useful instrument that can invest in everything from business operations to infrastructure. We encourage active experimentation with this new source of regional development funding.

We also support efforts to expand the reach of venture capital outside prosperous cities on the coasts. More than half of today's venture capital investments flow to urban zip codes.81 Seventy-five percent of venture capital funding goes to three states alone-California, New York, and Massachusetts.82 Outside investors should look to fund promising start-ups in overlooked communities. For example, Steve Case's Rise of the Rest Seed Fund has established a network of investors to fund start-ups located outside the major tech hubs. In addition to encouraging outside investment, a regional "fund of funds" could support a homegrown venture capital community. Private stakeholders would provide early stage funding to regional venture capitalists operating in the targeted region.83 Such a program would empower local investors knowledgeable about the regional business landscape to identify promising opportunities for investment that can support economic growth in the region.

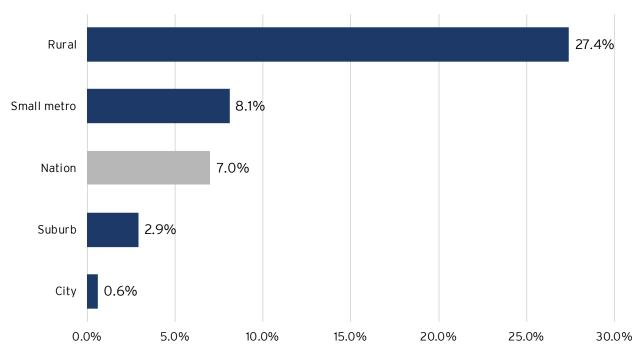
COMMUNICATION

Improved broadband connection is also a prerequisite for convergence. However, research by Brookings' Adie Tomer, Elizabeth Kneebone, and Ranjitha Shivaram reveals that large gaps in broadband service plague rural America, putting less densely populated communities at a huge disadvantage in today's tech-driven economy.84 Rural communities contain a disproportionate share of the neighborhoods in the U.S. without access to broadband. In 2015, these communities accounted for 15 percent of the nation's total population but made up 57 percent of the nation's residents living in neighborhoods without broadband.85 Over 25 percent of residents in rural communities lacked broadband service with 25 Mbps download speed (the Federal Communications Commission's classification of

FIGURE 6

The largest gaps in broadband service are found in rural America

Share of residents without 25 Mbps service in their neighborhood



Source: Tomer and others, "Signs of digital distress."

advanced telecommunications capacity).⁸⁶ In addition to these "no access" communities, rural areas make up a disproportionate share of "low access" communities. Sixty-five percent of rural residents live in low subscription neighborhoods (defined as those where in-home broadband subscription rates fall below 40 percent).⁸⁷

The high cost of infrastructure and operation works against rural areas and helps explain the urban-rural broadband divide. While many metropolitan and suburban areas can rely on existing lines for internet connection, many rural areas require the construction of new ones. There are often not enough customers per square mile, however, to persuade telecommunications companies to take on the costly project of expanding service to more sparsely populated communities. In this way, many rural Americans are the victims of broadband market dynamics.

There is a lively debate taking place on how best to promote broadband deployment across rural communities that have failed to attract sufficient private investment. From reverse auction grant programs like the Federal Communications
Commission's Connect America Fund that
provides funding to internet service providers
offering low-cost plans for broadband deployment
to municipal and cooperative networks owned
and operated by localities, there are a variety
of private and public actors trying to bridge the
digital divide. Proposals put forward as part of
this debate should focus on connecting more
individuals and their homes to the internet and
encouraging greater subscription rates in the
places already endowed with broadband.

Without high-speed internet access, businesses in sparsely populated regions will operate at a disadvantage compared to their well-connected competitors. Similarly, workers looking to build the kind of skills the digital economy requires will struggle to do so if they are constantly slowed down by spotty internet connections. Even manufacturing, a sector employing a larger share of rural Americans, is increasingly going digital. Manufacturing in rural communities can maintain a competitive edge if manufacturers have up-to-date broadband.

VIII. STRATEGIES FOR GROWTH

Beyond helping places secure the basic platform assets and conditions needed to enable convergence, it will be essential to develop strategies for more directly instigating new growth in the places left behind and creating opportunities for the people living there. As we've noted, the debate between place-based or peoplebased policies sets up a false choice. We need both.

A PLACE-BASED APPROACH: CONNECT OPPORTUNITY TO WORKERS

In the first instance, more needs to be done to counter divergence by actively spurring growth in places closer to left-behind workers. This will promote both regional convergence and aggregate growth: the current centralizing dynamics of the economy are likely depressing America's total output and will not likely ease on their own.

The nation's uneven development is producing not just rancor but a considerable productivity problem that is almost certainly reducing the nation's overall efficiency. Growing gaps between regions leave both the workers and firms who remain in lagging regions and those residing in successful localities worse off. Those left behind lose the opportunity to work in high-productivity growth firms and may struggle with unemployment and underutilization, even as those who reside in vibrant big cities may see their productivity sapped by traffic congestion and housing costs.

Nor will the problem naturally equilibrate. No longer, in an era of agglomeration, will the cheaper costs of lagging regions automatically attract firms and workers from the successful hubs. Instead, a kind of agglomeration lockin ensures that top workers and firms want to be where the other top workers and firms are. Workers' migration decisions may only exacerbate the problem, as Rob Atkinson of the



Information Technology & Innovation Foundation observes. Atkinson writes: "When workers leave communities because of a lack of employment opportunities, it further devalues the investments in the communities that have been left behind, reducing house values, local tax revenues, and infrastructure utilization." Conversely, he adds, if these workers move to crowded and moreexpensive metropolitan areas, "they push up housing costs and traffic congestion, making life worse, not better, for existing residents."91 All of which means that addressing regional divergence must place a significant focus on high-value regional development outside the major tech hubs and closer to the places and people being left behind.

What might such a federal development push look like? For one thing, it will need to be robust, as Atkinson suggests. Current community and regional development initiatives in the country remain scattershot, with small grants being made to too many places, many of which have very little prospects of an economic turnaround.92 Greater focus is needed. In addition, the requisite development initiatives should be targeted and scaled with a goal of truly changing the trajectory of a few places. It may be inefficient to "save" every left-behind small city or rural community in the U.S., but by targeting a few promising midsize communities adjacent to other lagging towns and rural areas, federal investment can put many more places and whole regions, ones remote from existing successful tech hubs like Boston and Silicon Valley, on a path toward self-sustaining economic growth.

Hence the proposal we are now developing in partnership with Atkinson to have the federal government establish a competition though which 10 or so medium-sized metropolitan areas would compete for major federal investment and designation as a Rising Tech Hub or federal "tech pole." To us, a "growth pole" or regional tech hub is a regional center that "has enough 'critical mass,' including transportation links, educational institutions, a diversified labor market, and

suppliers and other businesses, to grow and attract even more economic activity."93 Through the competition, a set of promising heartland metros with genuine advanced-sector industries, a university, and adequate airline connectivity would vie to obtain a suite of research, tax, infrastructure, and economic development benefits from the government aimed at achieving critical mass and growing beyond it. In exchange, regions will offer proposals to build out the kinds of public-private partnerships and investment and infrastructure commitments to support an advanced industry hub. Ultimately, the hope would be not only to foster the emergence of 10 or 12 newly consequential advanced industry hubs in the U.S., but also to promote more growth and hope across whole swaths of the country as ancillary business opportunities proliferate and small-town and rural residents begin to commute to the adjacent new growth centers.

A PEOPLE-BASED APPROACH: CONNECT WORKERS TO OPPORTUNITY

At the same time, restoring more geographical mobility to the labor market would help more people catch up to growth. The share of Americans packing up and moving to settle down in a new community has steadily declined over the years. This share, which reached a historic high in 1951 when 21.2 percent of Americans moved, was at a historic low of 11 percent in 2017.94 As recently as 1985, 20.2 percent of Americans moved, almost double the share today.95 Not only are fewer Americans moving, there are many Americans who want to move but do not end up doing so. A 2015 Census report found that in 2010, fewer than 20 percent of American households that wanted to move did so.96

Some have fiercely advocated for increased geographic mobility as the only response to concentrated, regional distress.⁹⁷ We believe it is possible—and necessary—to help *both* people and places. While we advocate policies that can promote opportunity in lagging places for

individuals who prefer to remain, we also believe that the nation should support individuals who wish to leave their communities.98 The government should provide financial support for individuals who want to make long-distance moves to places that promise greater economic opportunity. The cost of moving is often a severalthousand-dollar proposition.⁹⁹ The government could help offset this expense by establishing a relocation reimbursement scheme for displaced workers modeled on the program already in place for trade-displaced workers receiving Trade Adjustment Assistance.¹⁰⁰

Efforts to encourage greater mobility, however, should work simultaneously to make today's prosperous regions more affordable for newcomers. While many Americans today are "stuck" in place, others are making moves, just not to the "right" places. Research from Harvard's Equality of Opportunity Project finds that when Americans do move, they are heading for the places where housing is cheaper-not to the places with greater opportunity for economic mobility. The states that are home to the most upwardly mobile cities have experienced net out-migration while the states that are home to cities where lower-income individuals struggle to climb the income ladder have experienced net in-migration.¹⁰¹

Unaffordable housing in today's most prosperous places locks prospective residents out of the economic opportunities that exist there.¹⁰² One analysis finds that among the 20 richest metros, less than half of homes are affordable (less than 31 percent of the metro's median household income).103 As such, the households most likely to move to urban areas where economic opportunity is abundant are among the wealthiest, while others move to places where housing is affordable but economic opportunity is scarce. 104 As The Atlantic's Derek Thompson explains, the mismatch between affordable housing and economic opportunity means that "the allure of cheaper housing ... often leads families to cities with the worst social mobility."105 Efforts to promote geographic mobility should ensure that mobility

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patterns better align with patterns of regional economic growth.

In today's prosperous cities, demand for housing vastly outpaces supply, explaining why the exorbitant cost of housing puts desirable destinations out of reach for so many. Policies that relax zoning restrictions will enable the construction of new housing units and bring down housing costs. To this end, federal policy can encourage states and localities to relax zoning restrictions through tax incentives that reward places that construct new housing units while penalizing places that fail to provide housing at an affordable rate. 106

Additionally, public policy should promote means of wealth-building outside homeownership, removing the incentives that lead many homeowners to obstruct development projects. To protect the value of their homes, many homeowners lobby for restrictive development policies that prevent the construction of luxury high-rise apartments or mixed-use housing, a phenomenon known as "exclusionary zoning." 107 For many families, their home is their main asset, meaning they have strong incentives to protect against anything that would decrease the value of that home. As Brookings's Cecile Murray and Jenny Schuetz note, we should re-evaluate the many federal tax policies that favor owneroccupied homes over other asset types as the primary vehicle for families to build wealth.¹⁰⁸

It is not enough for public policy to encourage long-distance moves, however, because Americans' locational decisions are not guided by economic considerations alone. A recent Pew survey finds that a desire to live near one's family often keeps individuals rooted in place. Of the individuals who say they have always lived in or near the community where they grew up, 35 percent cite living near their family as the main reason for staying put.¹⁰⁹ There are many advantages to living near family, such as access to affordable and reliable childcare or proximity to elderly parents. In addition, strong social networks and access to acquaintances knowledgeable about local labor market opportunities lead many to stay in their communities.

Given these non-trivial factors that compel many Americans to stay where they are, we further encourage alternatives to long-distance moves that can nevertheless boost the economic wellbeing of both individuals and the places where they live. For instance, states and localities could encourage commuting to adjacent areas by offering a commuting subsidy that would support individuals who want to stay in their communities to live but not necessarily to work. Such a scheme would support all the towns that make up a regional hub by enabling workers to commute to adjacent communities. 110 These hubs could sustain and develop the human capital they need to succeed while allowing individuals to continue living and spending in their place of residence, boosting the social capital and wealth of their own communities.

IX. THE CASE FOR EXPERIMENTATION

After decades of skepticism, policymakers across the political spectrum are beginning to take seriously the need for place-sensitive policies to support convergence. They are gradually recognizing that development policies for lagging and declining areas offer a realistic option. But, given years of at least semi-neglect, no clear and tested playbook exists for policymakers who are interested in pursuing this strategy.¹¹¹

This gap bolsters the case for experimentation. We need a new period of concerted policymaking focused on promoting regional catch up and improving the vitality of more regions. Such policymaking should be grounded in theory and

evidence; it should combine efficiency with equity objectives as well as a regard for both local people and their places; and its results should be carefully evaluated.

A number of recent proposals show promise to the point that piloting them would generate useful evidence as the debate over what kinds of policies are needed to meet the challenges of regional inequality continues. These proposals include a geographically-targeted wage subsidy, a hiring tax credit, a much larger Economic Development Administration (EDA), and a new technology "extension" effort by the nation.



In their recent paper, Austin, Glaeser, and Summers suggest that a geographically-targeted wage subsidy will appropriately tailor employment policies at a time when patterns of regional economic growth and stagnation have become more durable. They justify geographically targeting the Earned Income Tax Credit by noting that "stronger employment subsidies are likely to have more benefit in Eastern Tennessee than in San Francisco." Their analysis finds that a wage subsidy that targets lagging regions is more likely to result in increased employment as opposed to a wage subsidy introduced in prosperous regions. Such a proposal should be tested.

Similarly, a hiring tax credit could lead to new hiring in regions of high unemployment.

Brookings's Robert Litan proposes such a credit, arguing that rather than providing benefits for jobs that already exist, it would give employers incentives to expand employment opportunities.¹¹³

Such a tax credit enjoys the additional "advantage of inducing investment along with it," Litan notes. This too warrants piloting.

Turning to regional development, Robert Atkinson calls for a significant expansion and refocusing of the Economic Development Administration (which is charged with regional economic development), with most of the new resources refocused on midsized communities.¹¹⁴ This would reach an echelon of regions beyond the handful of national growth poles.

Lastly, a recent proposal from economists Jason Baron, Shawn Kantor, and Alexander Whalley envisions a scheme for boosting productivity in left-behind places by broadening the scope of the Department of Commerce's Manufacturing Extension Partnership (MEP) program to include a broader range of sectors and a focus of disseminating the most practical insights of research universities.¹¹⁵ The authors suggest that the modified MEP would channel leading-edge practices and technologies from potentially remote university campuses to targeted communities though a mix of discounted consultation services and new branch offices in those communities. This, too, seems promising and dovetails well with the "growth poles" idea.

Some of these ideas, and others that may be proposed, will not pan out. Still, they are promising enough to warrant serious testing as policymakers begin crafting place-sensitive policies in the coming years.

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X. CONCLUSION

The 2016 election forced the country to confront the cultural and economic cleavages separating urban and rural America. By revealing the huge rift between coastal, metropolitan America and the country's hinterland, the election led many to discover the longer-term economic trends that had divided the country into pockets of prosperity and distress.

Economic divergence, we're learning, creates demand for the very political leadership and policies likely to intensify the plight of left-behind communities. This dangerous feedback loop plagues liberal democracies across the West today and intervening to disrupt this cycle is the challenge of our time. As one *Economist* article on the dangers of regionally imbalanced economic growth warns, "if economists cannot provide answers, populist insurgents will."116

Carving out a role for federal policy for mitigating place-based disparities through building a more robust place-sensitive policy regime will require revisiting many of the assumptions that have traditionally guided economic theory. Reality once confirmed economists' belief that growth and regional economic convergence go hand in hand. This is no longer the case. As the high-tech economy gained steam, it concentrated highlyskilled workers, and their wealth, into fewer places. At the same time, a deregulatory push ended a policy regime that had tacitly spread transportation, communication, and financial resources across a wider swath of regions while new regulations, like restrictive zoning laws, made it more difficult for workers to move to regions more abundant with economic opportunity.

Fortunately, a greater understanding of the forces stacked against today's lagging communities is beginning to set in. We do not pretend to have all of the answers, but we have laid out a few ways to meet the challenges holding back America's left-behind communities. Rather than endorsing a system of fiscal transfers or relocation subsidies, the strategies we offer are designed to foster selfsustaining economic growth in the places in most urgent need of revitalization.

In brief, we need both people-based and placebased policies, and a "place-sensitive" vision for distributed development, to tamp down the nation's deepening territorial divide.

As one group of economic geographers has pointed out, those who dismiss place-oriented policies "fail to appreciate that what are peoplebased characteristics are often inextricably linked to place."117 It is becoming clear, moreover, that ignoring this link will lead to more divergence, more small-city and rural decline, and more challenges to the current economic and political system. This is why we have drawn on both people- and place-based approaches. Our aim is to suggest ways to unleash the economic potential of a greater number of regions, boosting both aggregate output and interregional equity, so that more individuals and places will be able to access economic opportunity no matter where they are.

Again, many of our proposals may fail, as policy experiments often do. But as we have learned from the experience of recent decades, doing nothing is not an option.

ENDNOTES

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- **4** Enrico Moretti, "America's great divergence," *Salon*, May 20, 2012, https://www.salon.com/2012/05/20/america_resegregated/.
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- 8 While the divergence pattern sharpened significantly in the wake of the financial crisis it was not as distinct in the decade prior. Looking over the longer time period medium-sized and small metros have managed to grow somewhat since 2001 and not fall too far behind the large metros. With that said, a severe urban-rural growth gap has taken shape.
- 9 Mark Muro and Jacob Whiton, "In 2017, rural places won a little more, but will it last?" *The Avenue*, March 20, 2018, https://www.brookings.edu/blog/the-avenue/2018/03/19/in-2017-rural-places-won-a-little-more-but-will-it-last/. See also, Mark Muro and Jacob Whiton, "As midterm elections near, smaller, redder places show more economic growth," *The Avenue*, September 7, 2018, https://www.brookings.edu/blog/the-avenue/2018/09/06/as-midterm-elections-near-smaller-redder-places-show-more-economic-growth/.
- 10 David Autor, David Dorn, and Gordon Hanson, "The China Shock: Learning from Labor Market Adjustment to Large Changes in Trade," National Bureau of Economic Research, Working Paper No. 21906, January 2016, http://www.nber.org/papers/w21906.
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