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INSTITUTE OF URBAN AND REGIONAL DEVELOPMENT

MACARTHUR FOUNDATION RESEARCH NETWORK ON BUILDING RESILIENT REGIONS

Why Regions?

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All Tables and Figures at the End

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I. Introduction

The past decade has seen a resurgence of interest in the idea of *regionalism*, that is, the basic notion that economic trends, social challenges, and environmental problems are not neatly contained by city jurisdictions and that solutions must thus incorporate coalitions and constituencies from across the metropolitan landscape. Such interest is, of course, not entirely novel: discussions about thinking, planning, and acting regionally have waxed and waned since Daniel Burnham's 1909 Plan for Chicago stressed the need for infrastructure improvements and transportation investments at the regional rather than urban scale. But part of what seems to make the "new regionalism" both new and real is that the rising interest is not confined to planners and academics: alongside the scholarly literature has come a body of practice, including the engagement of business and political leadership in metropolitan organizations like the business-oriented Chicago 2020, the evolution of community-oriented metropolitan groups like the Los Angeles Alliance for a New Economy, and the growing presence of new regionally-focused intermediaries like the Alliance for Regional Stewardship, PolicyLink, Smart Growth America, and many others.

Why the surge – or perhaps better put, revitalization – of interest in the regional scale? Is it because the region has actually become a more salient unit – perhaps because the U.S. economy has become more regionalized, and suburbs and central cities have become more interconnected (see, for example, Barnes and Ledebur 1998)? Or is it that the region has simply become a new and perhaps more opportunity-rich venue for policy action – perhaps because polarized national politics prevents meaningful national

consensus and so collective action problems regarding economic strategy or anti-poverty policy can be better resolved in the face-to-face interactions typical of the metropolitan level (Henton et al. 1997)?

This paper tries to tease out the empirical bases for these "objective" and "subjective" rationales for the new regionalism. By objective, we mean a situation in which the region can be demonstrated empirically to be more important to some set of outcomes than in previous eras. For example, some have argued that the networked nature of information economies makes the region the new unit of the international economy (Saxenian 1994, Benner 2002) and others have argued that geographic location in the regional economy is more important than ever to the possibility of escaping low-income status (Jargowsky 1997, Orfield 1997, 2002). In this case, it makes sense that economic and social actors should be more interested in regionalism – their engagement is driven by an objective change in the nature of underlying economic and other relationships.

By subjective, we mean a situation in which actors who may have traditionally pursued their agendas at other levels are now pursuing them at the regional level, independent of whether the region is the proximate cause of the problem such actors seek to address. We understand that the distinction is overdrawn: those actors who pursued a series of living wage laws at the local and regional level over the late 1990s and early 2000s were responding to the *objective* fact that the federal government had not raised the minimum wage since 1997 and was not likely to do so with a Republican President (Pollin and Luce 1998). Thus, subjective here refers to whether one chooses the regional venue because it is the location in which a problem can be "framed" and policy or

political change can happen even if the causes of the problem one seeks to address – say, low wages – may be due more to broad trends like global competition, immigration, and the shifting industry-service mix in the U.S. economy (see Appelbaum, et al. 2003).

We take up the analysis as follows. We began with a brief review of the scholarly arguments for the increased salience of regions and also highlight recent practitioner attempts to promote both economic competitiveness and social equity at the regional scale. We then ask whether economic growth and social inequality are problems that are in fact becoming more *regional* in scope, a task that involves testing for economic convergence, exploring patterns of variation in income and distributional trends across large U.S. metropolitan areas, and examining the changing relationship between economic growth and poverty over time in those metropolitan areas. After concluding that there are indeed "objective" reasons why regions are more important to growth and equity, we then use an innovative logit analysis to explain the patterns of business and social actor interest in regionalism, using as a proxy attendance at meetings of the business-affiliated Alliance for Regional Stewardship or two regional equity summits sponsored by the more community-oriented intermediary, PolicyLink.

A few caveats are in order. First, while there has also been an environmentally-driven rationale for the "new regionalism" (essentially because metropolitan arrangements that promote sprawl are coming up against constraints; see Cieslewicz, 2002 and Wolch, et al. 2004), the focus here is on issues of economic growth and social equity. This is mostly for reasons of analytical convenience and focus; we were also less sure how to develop appropriate time series for examination of the environmental issue or proxies for the degree of interest. Second, while there are a series of statistical tests

shown below, we do not claim to be offering, say, the most complete set of convergence regressions; rather, we develop a serviceable set along with a series of other tests to see whether regions have increasingly divergent performances.

Finally, this exercise is part of a larger effort being organized by the Institute for Urban and Regional Development at UC Berkeley called "Building Resilient Regions;" our thought was that it might be useful to know whether regions were, in fact, more important as either structures or venues before examining efforts to make them resilient. The punch line of this effort is straightforward: they are more important, different actors have different reasons for deeming them so, and we are, we think, likely to see even more regional action in the future.

II. Review of Literature and Practice

There has long been a sort of political rationale for regionalism – Robert Wood's 1961 book, *1400 Governments*, made an important and early case that the fragmentation of metropolitan areas in the U.S. by cities, townships, villages, boroughs, counties, and special districts was irrational and inefficient. What is new about the new regionalism, however, is that the argument has shifted away from the sort of economic efficiencies that might be introduced by consolidating metropolitan services to the sort of economic competitiveness that would be furthered by regional collaboration.

Part of this competitiveness argument stems from traditional notions of agglomeration (Glaeser and Saiz 2003; Krugman 1991) – but the question to ask when considering whether regions are *more* important is whether such agglomeration effects are *more* significant than in the past. Many geographers and urban planners have

answered affirmatively, arguing that the spatial implications of recent industrial restructuring processes (e.g. deindustrialization, globalization of production) leave firms with two choices: either relocate to low-cost locations (often in the developing world) or pursue a flexible business strategy focused on product innovation and specialization (i.e. creating new products and services for a rapidly changing market).¹

Much of the focus of such regionalist thinking has focused on the information economy and such locations as California's Silicon Valley.² In her in-depth comparison of Silicon Valley and Route 128 in Boston, Annalee Saxenian (1994) privileges the role of regional institutions in providing the foundation for innovation in the high-technology sector. Networks of entrepreneurs and innovative small firms locate in large metropolitan regions which tend to have larger numbers of the technology end-users (such as large firms in other sectors). Therefore regions offer the both the building blocks of competitive industry clusters (e.g. agglomerations of entrepreneurs, a large and specialized workforce, knowledge spillovers, institutional foundations) as well as a large immediate market for their products (Cooke and Morgan 1998; Porter 1998). Echoes of this are seen in Richard Florida's argument that "In this new economic environment, regions build economic advantage through their ability to mobilize and to harness knowledge and ideas. In fact, regionally based complexes of innovation and production

¹ There is a related argument that networks of companies and institutions, rather than individual firms, play the key explanatory role in determining the location of economic activity across space (Gereffi and Korzeniewicz 1994; Henderson et al. 2002) and that large global city-regions are the optimal location for the management of increasingly complex global production networks (Sassen 1991; Scott 2001). In this view, the locational advantage of large metropolitan regions – which act as the nodes for information and capital – is is also strengthened. We suspect that this argument is correct but its empirical implication is mostly that some regions are becoming more important than others; our focus here is whether the regional level matters more for most metropolitan economies.

² Scholars from a variety of disciplines have examined the economic transition to the *Information Economy* and its spatial implications. Manuel Castells (1996) provides the most complete explanation.

are increasingly the preferred vehicle used to harness knowledge and intelligence across the globe" (Florida 1995: 532).

The rising importance of regions is not confined to "creative" economies and high-tech centers. Based on rich case studies of regions in advanced industrial economies that added manufacturing jobs against the tide of deindustrialization in the 1970s and 1980s, Piore and Sabel (1984) attribute regional competitiveness to the existence of dense networks of small and medium sized firms who practice *just-in-time* production methods in small runs. Firms within these industrial districts depend on one another and share resources such as a highly-skilled workforce and common infrastructure that help firms choose a *flexible-specialization* model needed to survive (Brusco 1982; Sabel 1989; Storper 1997). In addition to the direct technical benefits of localized industrial districts, Sabel (1989) and Amin (1999) argue that *social institutions* – that is, business and other organizations – at a regional level help foster higher degrees of trust and cooperation, enabling greater risk-taking and leading to higher levels of innovation.

The regional proof may be in the empirical pudding – and by the mid-1990s, a variety of analysts were suggesting that widening variations in metropolitan growth rates suggested that the region had emerged as a significant economic unit (Phillips 1992, Drennan, Tobier, and Lewis 1996, DRI/McGraw-Hill_1998). William Barnes and Larry Ledebur (1998) went so far as to argue that the United States economy should no longer be conceived as a single entity but rather as a "common market" of local economic regions competing with each other as well with other regions in other parts of the world.

While the salience of regions was being debated by academics, practitioners were moving more rapidly. Through the 1990s, journalist Neal Peirce began writing about

"citistates" and proceeded to conduct a series of regional audits helping metropolitan areas both understand their issues and trigger civic consensus (Peirce 1993). In the Silicon Valley, businesses came together to organize Joint Venture: Silicon Valley Network, a group whose loose and ill-defined structure mimicked informal networks but still helped re-start a Valley's economy wounded by defense cutbacks, partly through such mundane efforts as persuading city governments across the Valley to adopt a uniform building code (Joint Venture 1995, Pastor et al. 2000). The consultants who helped birth Joint Venture went from example to theory in much shorter order than would an academic, and the idea of regional business-based collaboratives spread across California and then to other states, often assisted by a new national organization, the Alliance for Regional Stewardship (Henton et al., 1997, 2004).

Even as the competitiveness argument was gaining ground, another rationale for paying attention to regions was emerging: that this was the scale at which a significant share of the nation's income inequality was generated and experienced. This sense was fueled in part by Jargowsky's (1997) finding that poverty had become more spatially concentrated in the 1980s, and that the spatial effects were most significant for African Americans and Latinos. At the same time, a new slew of studies were suggesting that "neighborhood effects" were extensive: if poverty was bad for your economic and social health, concentrated poverty was worse because it tended to signal spatial mismatch in terms of job opportunities, weaker social networks for employment, and difficult conditions for urban education (Ihlanfeldt and Sjoquist 1989, Wilson 1996).

Moreover, some argued that the metropolitan character of this set of phenomena – including the very distinct experiences of city dwellers and suburbanites – was leading to

a fractured politics in which reducing poverty had fallen off the national agenda (Dreier et al. 2001). Reacting to this, a new vision of political change began to emerge, one that stressed organizing at the metropolitan level to tackle issues of spatial and racial inequality. Myron Orfield, for example, developed a whole analytical approach focused on bringing together central cities and older suburbs to change the rules of the game that allowed jobs, economic development, and tax revenues to drift further and further away from the former centers of metropolitan regions (Orfield 1997, 2002). David Rusk, first in *Cities Without Suburbs* (1993) and later in *Inside Game*, *Outside Game* (1999), argued that issues of social inequality would only be addressed by schemes that would share tax revenues and decision-making at a regional level – and urged urban activists to cast their organizing net more widely.³

This is yet another area in which the practitioners quickly outran the theorists. By the mid-1990s, unions were starting to organize new economic sectors at a regional level, something best captured by the Justice for Janitors campaigns that gained ground in California and elsewhere. The aforementioned living wage movements quickly took off as a complement even as housing advocates shifted from creating even cheaper housing in distressed areas to forcing zoning and other changes that would allow for affordable homes in the more opportunity-rich suburbs. Even interfaith social justice efforts seemed to jump on board, with an Industrial Areas Foundation group in San Antonio, Texas launching a model regional job training program called Project Quest and the entire network of the Gamaliel Foundation, groups based in a mix of Black and immigrant

³ There were also a set of authors, including Pastor et al. (2000) who argued for a complementarity of city and suburban incomes and offered supportive empirical evidence; see also Savith, et al. (1993) and Voith (1992, 1998). Hill, et al. (1995) provide an early critique of the complementarity hypothesis, raising important issues of simultaneity that both Pastor, et al. (2000) and Voith (1998) sought to address.

churches, declaring that one of its guideposts for future organizing would be "regional equity" – and then quickly going on to fight for the regional consolidation of transportation systems in and around Gary, Indiana (see Pastor, Benner and Matsuoka, forthcoming).

That regional equity had caught the imagination of these and other urban activists was evidenced in 2002 when a relatively new national intermediary, PolicyLink, organized a "national summit" on the topic and managed to attract over 600 attendees; a subsequent conference in 2005 drew over 1300 participants from around the country. Meanwhile, foundations had come on board with new programs focused on metropolitan realities and a new Funders Network for Smart Growth and Livable Communities making its very first "translation paper" focused on the intersection of Smart Growth planning principles and the need to achieve regional equity (Blackwell and McCullough, 1999).

Of course, as with the competitiveness argument, the key question for our purposes here is not whether regional configurations matter for social equity but rather whether they matter more than they did in an earlier era. To answer this is complicated: for example, Jargowsky's more recent work (2003) suggests that poverty actually deconcentrated in the 1990s, at least in the vast majority of metropolitan regions. On the other hand, it is altogether possible that those left behind are even more stranded than when there were more folks there with them – that is, that jobs are scarcer, networks weaker, and possibilities more limited. What does seem clear is that many equity advocates have jumped on the regionalist bandwagon – and whether this reflects the increasing importance of the region in determining the life chances of the poor or the attractiveness of emerging regional venues is something we attempt to investigate below.

III. Testing the Regions

The basic questions that flow from this discussion are simple: have regions become more important to determining either economic or equity outcomes, and does this either drive or explain the apparent increasing interest of social actors in regional action? These questions can be neatly captured in a convenient two-by-two matrix (Figure 1) in which the vertical axis offers dimensions of concern (economic or equity) while the horizontal axis distinguishes between objective and subjective reasons for the concern. We fill in the resulting boxes with the sort of empirical questions that might be investigated.

Figure 1. Summary of Empirical Questions

	Objective Reasons	Subjective Reasons
The Economy	■ Do we find evidence of divergence or convergence over time?	■ What drives civic action among business and economic leaders?
Social Equity	■ Is there growing variation in inequality and poverty across regions — or a changing link between poverty and regional growth?	■ What explains participation by civil society actors in the regional equity movement?

For example, traditional economic theory suggests that metropolitan incomes converge over time, as poorer regions catch up and wealthier regions slow down; if this

convergence process has changed over time, it might be evidence that regions are a more important *economic* unit. Similarly, if there is more regional variations in income distribution or poverty performance, we think this suggests that the region is a more important unit for considering issues of *equity* – and we also think that a weaker link between any given level of regional growth and shifts in poverty suggest that something has changed at a regional level that makes that level more important for those concerned about social justice. On the subjective side, we seek to see what factors – apart from increasing importance of the region, should that exist – might explain why business or social justice proponents might decide to pursue their goals at a regional level. We are specifically interested in whether either business or equity proponents might be responding to the creation of a new regional venue to pursue interests that are not "objectively" due to the region but simply might be more effectively addressed there.

We tackle each of these research tasks with a quantitative tool specific to the question at hand, including a set of convergence regressions, analyses of coefficients of variation, a time-sensitive analysis of growth and equity, and a set of logistic regressions that seek to predict business and community interest in regionalism as proxied by attendance at national gatherings devoted to this subject. The database that underlies all of analysis was developed by the Building Resilient Regions research network, funded by the John D. and Katherine T. MacArthur Foundation. The BRR database contains a broad spectrum of measures of economic, demographic, and social change across all U.S. metropolitan statistical areas for three decades (1970-2000). The underlying data comes from various sources including the U.S. Census Bureau and the Bureau of Economic

Analysis; an Appendix at the end provides a fuller description of the data sources for each variable.

Is Regional Economic Performance Converging or Diverging?

If the regional scale is more important today than in the past for determining economic outcomes, we might expect that some regions will prosper and grow at a rate well above other regions, leading to divergence in outcomes and potentially new patterns of inequality across space (e.g. Castells, 1996; Storper 1997). However, this conjecture runs counter to one standard tenet in the economic development field: the convergence thesis. This thesis predicts that low-income regions will exhibit faster growth rates as they eventually "catch-up" to more developed areas even as the rate of growth in high-income regions slows in a process of convergence to the mean. While the assumptions for this to occur may seem somewhat strict – capital and other factors of production are assumed to be freely mobile and production must be characterized by diminishing returns to scale⁴ – the theory has spawned a large empirical literature aimed at measuring and testing economic convergence between countries and sub-national regions.

While an exhaustive empirical literature review is not possible here (see Rey and Janikas 2005 for an excellent review), it is worthwhile to note that the initial empirical work was conducted at the country level since economists were interested in the large development gap between rich and poor nations. The typical approach to measuring the rate of "catch-up" or convergence is to run a simple regression of economic growth,

⁴ For a less simplistic approach, see the literature on endogenous growth theory such as Romer (1990). In this framework, increasing returns, technological change, and other factors matter greatly.

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measured as the change in per-capita income from one period to the next, on the initial level of income per-capita. A negative regression coefficient (β or *beta*) on initial income is taken as evidence of convergence, indicating that countries with lower initial income levels have higher growth rates. Early research on counties in Europe and the North America supported the convergence hypothesis, finding *beta* convergence coefficients close to -0.02, indicating that poorer countries catch up to the per-capita income levels of richer countries at a rate of 2% per year (Barro et al. 1991).

As data from more countries became available some researchers found conflicting results. Specifically, convergence could be detected within certain groups of countries (e.g. Europe), but large inequalities persisted between "developed" and "undeveloped" nations. Based on these findings and additional theoretical work, the convergence thesis was revised. Instead of assuming that all counties would ultimately converge to the same level of income, economists argued that a country's overall level of development was heavily influenced by long-term differences in technical capacity, natural resources, human capital, and political institutions. The revised model is referred to as *conditional* convergence as it allows each country or region to converge to its unique level of development – but still holds that that lower income countries will grow faster after the effects of such external variables are taken into account.

The convergence thesis would seem to be even more straightforward in regions within the same country – and because there are no barriers to trade and less variation in political structure, technological capacity, and consumer preferences, analysts expect

convergence to be even faster.⁵ Barro and Sala-I-Martin (1991) use state-level data for the U.S. 1880 and 1988 and find strong evidence in favor of convergence. Higgens, Levy, and Young (2006) use county level data from 1969-2000 and find high rates of *beta* convergence (ranging from 2 to 8 percent) after controlling for up to 41 conditioning variables including age, educational attainment, and industry structure. But despite the growing literature that metropolitan regions are becoming the critical scale for economic transactions, relatively few researchers have examined convergence at the metropolitan scale.

In one such effort, Drennan and Lobo (1999) find small negative convergence rates in their study of 273 MSAs between 1969 and 1995. However, the authors note that it is possible to find negative *beta* coefficients (i.e., evidence of convergence) even while some regions are pulling away from the pack. Specifically they argue that the overall distribution of per-capita income levels between regions has become more diffuse even as most regions "regress to the mean" after short term negative or positive shock. This second dimension of convergence is referred to as *sigma convergence* and measures the overall variation of income levels between economic regions.

Below, we present our own model of *beta* convergence at the metropolitan scale using OLS regression. We then address sigma convergence – or the changing dispersion or regional outcomes – through an analysis of the coefficient of variation of a broad set of variables since 1970.

⁵ There are some complexities as to whether the traditional neo-classical growth model – which assumes a closed economy and investment from local savings – is truly applicable but the heuristic implication is that of faster convergence, something supported by the data. See Higgens, et al. (2006) for a discussion of this issue.

A Simple Beta Convergence Model

Following the typical empirical approach in the literature, we estimate the following regression model of conditional convergence for U.S. metropolitan economies:

(1)
$$g_i = \alpha + \beta \ln(\overline{y}_{it}) + \lambda_j X_{ij} + \mu_i$$

in which the annual average growth rate of per-capita income (g_i) between the time t (start period) and t+1 (end of decade) for each metropolitan area (i) is regressed on the natural log of initial per-capita income (\overline{y}_u) and a vector of j control variables X_{ij} . In contrast to previous studies, we split our panel into two periods in order to assess how the rate of convergence has changed over time. Specifically we compare the *beta* convergence estimate obtained in 1980s to that obtained for the 1990s. Our sample consists of all U.S. metropolitan areas with a population greater than 200,000 in 2000; this amounts to 192 metropolitan regions. To reduce the impact of business cycle fluctuations we use 1979-1989 as the growth period for the 1980s and 1989-2000 for the 1990s; in essence, we are focusing on business cycle peaks.

The key independent variable for making inferences regarding the rate of convergence is the level of per-capita income in the initial period, \overline{y}_{it} . If the economic growth rates of these larger metropolitan regions in the US were determined by a set of exogenous factors that affected all regions in the same manner, such as globalization or national fiscal policy, we would expect the rate of convergence to at least remain stable over the two time periods examined. We instead predict that the *beta* coefficient will decline over time.

We also use a simple set of conditioning variables consisting of the following characteristics measured at the start of each decade: 1) median age of population; 2) the

percent foreign born; 3) the share of the workforce with a Bachelors degree or higher; and 4) proportion of regional employment in manufacturing sectors and finance insurance and real estate (FIRE), respectively. While our regional database includes many other potential conditioning variables, we prefer a parsimonious final model that includes relatively few variables that are stable over time.⁶ This restriction is reasonable since our interest is in the change in the *beta* coefficient on initial per capita income over time. A relatively simple set of conditioning variables reduces the potential for bias stemming from arbitrary interactions between the control variables and per-capita income in a given year.

In Table 1 we present the results of our conditional convergence regressions separately for the 1980s and 1990s. Again, if regions truly "matter more now" than in the past we should expect the rate of convergence to fall between the two decades. As it turns out, our estimate of the *beta* convergence rate is -0.027 for the 1980s, implied that metropolitan areas "converged" at a rate of roughly 2.7% per year over this period. This figure is very close to the consensus estimate of 2% in the cross-national literature and within the range obtained by Higgens, Levy and Young (2005) and Drennan and Lobo (1999). As can also be seen in the table, all conditioning variables are significant at conventional levels.

⁶ Previous conditional convergence studies include variables that measure the relative size of racial and ethnic minority populations. We tested models that included both the percent Latino and percent African-American but found a high level of colinearity with the percent foreign born in the case of percent Latino, and collinearity between percent African-American and the relative size of the central city in the region. Since the inclusion of such variables had less purely economic rationale and had little impact on the central finding regarding the change in the *beta* coefficient on initial per capita income, we instead present the most parsimonious model with consistent variables in each decade.

However, by the 1990s, the rate of convergence fell by nearly half, from 2.7% to 1.4%, a shift that we take as support for hypothesis that the regional scale has become more important. While some might worry that the overall explanatory value of the model also falls from 1980s to the 1990s (with the adjusted r-squared dropping from .364 to .262), this actually also suggests that region-specific factors – such as specific industry clusters, intangible networks, and business and civic institutions not captured by our standard regressors – were more important in the 1990s. Regions matter and they seem to matter more.

Sigma Convergence and Coefficients of Variation

As is standard in the literature, our analysis of convergence was limited to the *beta* coefficient for per-capita income. However, Drennan and Lobo (1999) also point to dispersion or sigma convergence. This requires looking at coefficients of variation over time – and the convenient aspect of this shift to a less formal model is that it allows us to look at a wider array of data, including measures that that incorporate some aspects of income equality and thus might hint at whether regions are also more important for those concerned with social equity.

The coefficient of variation, or CoV (the ratio of the standard deviation of a variable to its mean), has often been used to give a preliminary indication of a convergent/divergent trend and its relative strength, with a falling CoV indicating centralization and a rising CoV indicating dispersion. While it is certainly not as

⁷ In this vein, see Storper's (1997) discussion of "untraded interdependencies" – formal associations and informal networks in which information, business tips, and technological innovations are exchanged. Such factors do not show up easily in multi-region databases, and a declining significance of other more traditional factors can signal a rising significance of these "intangibles."

comprehensive as regression testing in assessing such trends – it does not control for the conditional factors that influence any particular metro area's long run trends in growth or distribution – it is useful in providing a series of "snapshots" of the relative variation of several measures over time across metro areas, allowing one to compare changes in variation over time while taking into account differing mean values for such measures.

Table 2 in the Appendix looks at such coefficients of variation for a defined set of economic variables while Table 3 looks at what might be termed equity variables. After some initial exploration, we discovered interesting differences in the coefficients by metro size and therefore calculated and show separate coefficients of variation for four different size classes by 2000 population (top 25 metro areas, top 26-50 metros, top 51-100 metros, and top 101-192 metros). To look at changes over time, we include calculations for the years 1980, 1990 and 2000; conveniently, these were all peak or near-peak years for the US economy.⁸

Beginning with per capita income, perhaps one of the most common measures of economic performance, the CoV results are more or less consistent with those from the convergence test above: there has been an overall trend of increasing dispersion (or decreasing rate of centralization) across metro areas between 1980 and 2000. For the top 25, the CoV of per capita income increased with each decadal year; however, when all metro areas are considered together or attention is restricted to any of the other groupings by size, the results show a large increase in the CoV of per capita income between 1979 and 1989 (which is consistent with Drennan and Lobo 1999) followed by a decrease

⁸ Note that for all measures derived from the decennial census, the data are for the years 1979, 1989, and 1999 since measures of income are taken in the census from the previous year.

(albeit often very small) between 1989 and 1999. This may initially seem contradictory to the results of our conditional convergence test above, which indicate a decrease in convergence in the 1990s (i.e., an increase in dispersion) as compared to the 1980s.

However, the tests here do not take into account the conditioning variables and it remains striking that the dispersion of per capita income at the regional scale is particularly pronounced in the largest metro areas, which see an increase over each period.

Table 2 also shows that median household income generally behaves like per capita income, albeit with the same level of variation for the top 25 metro areas in 1989 and 1999 rather than an increase. In our view, this suggests that the dispersion of per capita income seen over the 1990s may have been driven more by the higher income bands than the middle of the distribution, a suspicion that squares with subsequently results on the worsening of the income distribution. We also test a measure of economic innovation, patents per capita, and find a pattern of divergence for all metro size bands, with a much more pronounced shift in what might be termed the up-and-coming metros (the second size band).

Employment behaves in a decidedly different fashion, showing a decrease in variation, or a tightening of the distribution of employment levels across metro areas over time. But the results for earnings per worker show increasing variation over time, particularly between 1989 and 1999 and for the larger metro areas (the top 100), which is suggestive of dispersion and is supportive of the conditional convergence test results described above. Indeed, the fact that the increase in the variation of earnings per worker was far more pronounced between 1989 and 1999 than it was between 1979 and 1989 intersects well with the notion that there has been a bifurcation of employment, with

increases in both high- and low-wage jobs in the US over the 1990s. Moreover, the observation of declining dispersion of employment levels alongside a rising dispersion of income and wage levels over the 1990s suggests that perhaps the new jobs created over the decade that allowed regions with lower initial employment levels to "catch-up" did not allow them to "catch-up" in terms of income.

This drives us quickly to questions of social equity and Table 3 considers several variables in this vein, including variations in the distribution of income and the level and geographic concentration of poverty across regions. Here, the findings are a bit more mixed. The top 25 metro areas show steadily increasing variation in the poverty rate, the 80/20 household income ratio (the ratio of the 80th percentile of household income to the 20th percentile of household income to the reaching a new peak.

Interestingly, the one indicator around equity that exhibits a steady pattern of convergence is the degree of poverty concentration as measured by the dissimilarity

⁹ At least one reader of an early draft of this work expressed concern that the particular definition of metropolitan areas used for this investigation – the CBSA – was too geographically specific in the larger metro areas, such that at times it separated out what was formerly considered a single "Consolidated Metropolitan Statistical Area (CMSA)" under the 1999 Census definitions into two or more CBSAs under the 2003 Census definitions, allowing some large regions to be represented as more than a single observation and thus carry more than their share of influence over the CoV calculations. Due to this concern, we made a separate set of all CoV calculations in which we compared the experience of those CBSAs falling inside what was formerly a CMSA (of which there were 17 in 1999) to those falling outside such an area, and found that the dispersion in our measures of economic growth and equity over the period were even more pronounced for those falling inside than for those falling outside a CMSA – a result that held (and even became more pronounced) when attention was restricted to the top 100, top 50, and top 25 CBSAs. The indication, we think, is that there has been dispersion in outcomes *within* the CMSAs themselves. This finding was supported when we inspected the variation in our measures across the CBSAs falling within several particular CMSAs over the two decades, and is supportive of the use of the CBSA to define regions given such observed heterogeneity within CMSAs.

index of poverty calculated using cities or other Census Designated Places (CDPs) as the sub-geography. Such an index ranges from 1 to 100, and in this case indicates the percentage of a region's impoverished population that would have to move to another city or (CDP) within the region in order to achieve an even distribution of people below and above the federal poverty line across the cities (and CDPs) in the region. This would seem to square with hypotheses regarding the suburbanization of poverty, a rationale Orfield (1997, 2002) and others have offered as a reason for building regional anti-poverty coalitions. This is one case where converging experiences might be consistent with making the region more, not less, important.

Poverty, Growth, and Wages at the Regional Level

Both our convergence analysis and an examination of variation in economic and indicators suggest that the region may be a more important unit for analysis and action regarding economic revitalization. On the other hand, the evidence that the region is more important for equity outcomes is a bit mixed. For those concerned with social equity, however, there may be another empirical reason to think regionally: the relationship between aggregate employment growth and poverty levels seems to have shifted over time at the metropolitan level. This suggests that actions to improve the quality and not simply the quantity of jobs is critical – and many have argued that this can be best accomplished by taking a nuanced approach that both understands the clusters

¹⁰ As a comparison, we also calculated coefficients of variation for earnings and employment at the state level – both for all states, and for those containing any CBSA and any CBSA of the particular size categories broken out above – and found similar, but less pronounced results. This suggests that it is the metropolitan areas (in this case measured by CBSAs) rather than states as a whole that are driving the dispersion of outcomes that has been observed over the past two decades – and this is why organizing and intervention at the metropolitan level, albeit supplemented by state policy changes, might be useful.

in each metro economy and seeks to upscale both work and mobility (Benner 2002 and combines this with local organizing to raise basic labor standards (Luria and Rogers 1997).

To investigate this, we used regression techniques to model change in the poverty rate (at the regional level) as a function of the initial poverty rate, employment growth, change in earnings per worker, and several other conditioning variables. The model is akin to a the income convergence model presented earlier, but uses decennial, rather than annual data to assess the underlying trends; it is of similar design to that found in Crandall and Weber (2004), but uses regional rather than census tract-level measures. The key relationship is between the dependent variable – the change in the poverty rate from one decade to the next – and the change in levels of employment and earnings per worker. In particular, we seek to identify how these relationships have changed over time at a regional level, shedding some light on the relative importance of overall employment growth verses increases in standards of pay (earnings per worker) in alleviating poverty over the past few decades.

The regression results are reported in Table 4, in which we report separate coefficients, significance levels, and model fit for each decade examined. We also provide separate results for the top 100 metro areas to identify any nuances in the relationships depicted by the sheer size of the region. In examining the coefficients and significance levels attached to the variables of key interest, we find that in the 1970s, employment growth had a much larger dampening effect on poverty rates than did growth in earnings per worker, particularly for the top 100 CBSAs. By the 1980s, however, earnings growth had superseded employment growth as the more important

anti-poverty factor – and the shift to earnings as the driving factor was more pronounced for the top 100 metro areas. By the 1990s, the two poverty-alleviating forces struck a balance when all metros were considered together – with the standardized coefficients on both the change in earnings and employment growth taking on nearly the same value – but the change in earnings remained the more important factor for the top 100 metros.

As for the conditioning variables, they generally have signs that one would expect and are stable across the three decades: an increase in the percentage foreign born of the total population increases the poverty rate, though the effect is not significant until the 1980s and 1990s when more substantial waves of largely unskilled immigrants arrived in metropolitan areas across the country; an increase in the percentage people of color has a positive and highly significant effect across all decades; an increase in the percentage of families headed by a single parent has a large positive and highly significant effect on shifts in the poverty rate, a trend that squares with the challenges heads of such families have in the labor market; an increase in children as a share of the overall population generally has a positive and significant effect on changes in the poverty rate, except in the 1980s when the effect was largely insignificant; ¹¹ an increase in the shares of persons over 25 years holding a B.A. or higher level of education is associated with a significant negative impact on changes in the poverty rate during the 1980s, but the measure becomes insignificant in the latter two decades, perhaps because the educational structure is being captured the other conditioning variables or perhaps because such high-skill workers also attract low-skill workers to provide basic services; and finally, the base year

¹¹ This is perhaps due to collinearity with the single-parent-family and percentage foreign born measures, whose coefficient rises sharply in the 1980s as compared to the 1970s while other measure that might also be covariates remain relatively stable.

poverty rate, for which the coefficient measures what can be thought of as a "convergence" effect, shows a negative and significant association with changes in poverty rates (as expected), except for during the 1980s where the effect is actually positive (suggesting some degree of path-dependence in that difficult decade).

In any case, the key finding here is that over the past two decades, poverty reduction, particularly for the larger metro areas, has become more about job quality than job quantity. As noted above, there are many who argue that job quality can best be changed at the regional level (for example, Benner 2002), but there is yet another reason why this result suggests that equity proponents need to have their own independent concerns about the region: apparently, a rising tide of employment does not lift all boats, and equity proponents who simply line up to support a business growth agenda may be disappointed in the results. In this sense, regions are both "objectively" and "subjectively" more important for equity advocates: they may be more critical to poverty outcomes and since they are also more important for economic results, it behooves equity proponents to jump into ongoing debates about regionalism lest their constituencies get left behind.

Who's At the Table? Business, Community, and the Regional Interest

Who then is trying to jump into the debates about the future of metropolitan regions? We have stressed above "objective" reasons why either business leaders concerned with growth or social justice advocates concerned with equity might wish to operate at the regional level. But who actually takes up this challenge, and why?

One approach to answering this question might be to construct a history of the various regionalist organizations that have emerged and chart their evolution. Henton et

al. (2004) and FutureWorks (2004) do this for a variety of business and civic organizations and a forthcoming volume by Pastor, Benner and Matusoka does this for an array of "social movement" groups. Such characterizations are important although they do introduce an element of subjective judgment about the subjective choice to take up the regionalist mantle – how can one be sure that the cases authors chose are actually representative as well as illustrative, and how does one account for the structural factors that trigger constituency interest even as one tells the more compelling stories of leadership "epiphanies" and regionalist conversions?

In this section of the paper, we try what we hope is a useful complement to such qualitative analysis: we collect attendance information from a series of conferences put on by the business-oriented Alliance for Regional Stewardship (ARS) over the years 2000 to 2005, and from the two Regional Equity Summits organized by PolicyLink held in 2002 and 2005. We regress such attendance on various structural features of the metro region, and also attempt to test where equity proponents are, for example, responding to business interest in regionalism (or the other way around). The results suggest that business advocates are indeed moved by efficiency concerns and equity proponents moved by sharper levels of inequality; they also suggest that social justice proponents tend to respond to business agenda-setting re the region while business is less reactive.

We anticipate some empirical and methodological objections to our approach. The first has to do with our characterization of the organizations. While few would argue that PolicyLink is not focused on regional equity – they were very early proponents of the concept (Blackwell and McCullough 1999, PolicyLink 2000) and their summits have had "regional equity" in the title – the early leaders of the Alliance for Regional Stewardship

(ARS) saw themselves as a more neutral organization promoting civic leadership. We would argue that appearances there were self-deceiving: the organization drew more from business than community leaders and tended to concentrate their regional member on economic growth and prosperity (although some of its members, such as Chicago 2020, also raised affordable housing and efficient regional transportation for workers as part of a full competitiveness package). For those still unpersuaded of our labeling, we would point out that in 2007, the ARS decided to disincorporate as a separate entity and instead become a program of the American Chamber of Council Executives (ACCE), suggesting at least a strong leaning in one direction of the economy-equity balance.

A second objection may be that the number of attendees at each type of meeting is an imperfect measure of economic or equity interest at the regional scale. We agree, however the convenience of this measurement is that it does not require a brand new sampling process, does not involve any priors on our part, and would certainly seem to be correlated with such economic or equity interest at the regional level. And while there is certain to be substantial statistical "noise" in such a choice of measurement – some regions may have large numbers of attendees because they are seeking institutional or foundational support or because a friend or colleague happened to be going while some regions in which there is genuine interest in working at the regional scale may not have any representation (perhaps due to timing, travel costs, or other factors) – on average we would expect such noise to balance out, in which case any statistically significant findings do indicate some real underlying trends.

A third and more philosophical objection might simply be that such statistical tests cannot reveal the depth of motivations and interests of social actors and thus cannot

tell a full story of how these emerge and evolve. We concur, and for that reason, at least one of the authors has co-written a forthcoming book on the topic (Pastor, Benner, and Matsuoka forthcoming). However, this paper is a starting platform for a much large project that will examine the ways in which business and other actors perceive, "frame," and act on regional challenges like increasing immigration, economic shocks, and the suburbanization of poverty. Given the qualitative work that is soon to follow, we confess to a belief that the data approach taken here may provide a useful platform.

Defining Interests

To generate proxies of "business interest" and "equity interest" in the regional scale, we collected attendance information for the aforementioned ARS and PolicyLink meetings, including name, organizational affiliation and, most importantly, address. We matched up the postal ZIP codes for each of the attendee home addresses to CBSAs, and then aggregated to get the total number of attendees by the year of the particular meeting and the total for all meetings combined by CBSA. We then developed a series of logistical models, entering both dichotomous and polychotomous formations of each measure of interest (business and equity) as the response variable. The dichotomous response variables took on a value of zero if the region had no attendees or one if the region had some positive number of attendees, while the polychotomous formations of the response variable took on a value of zero if the region had no attendees, and values of one, two, or three depending on the regions particular ranking in the distribution of the

number of attendees per capita, when broken into tertiles with natural breaks. As such, the three positive discreet values of the polychotomous response variable could, for example, be broadly interpreted as "low interest," "some interest," and "high interest," respectively, while the zero value – meaning no attendees – could be interpreted as "no interest."

For the dichotomous response variable, we use a straightforward logit model in which the coefficients indicate the effect of the explanatory variables on the probability of a region being represented at each type of meeting (e.g. having any attendees at the meeting). When the polychotomous formations of the response variable are modeled, we are using an ordered logit in which the coefficients indicate the average effect of a right-hand side factor on a region moving from any of the discreet values of the response variable to the next highest value (e.g. from zero ("no interest") to one ("low interest"), or from two ("some interest") to three ("high interest").

To give an idea of the structure of response variables, we have included two cross-tabulations in Tables 5A and 5B – one describing the relationship between the two dichotomous variables (business interest and equity interest) and the other describing the relationship between the two polychotomous variables (which capture the degree of business and equity interest). Beginning with Table 5A, we can see that a very similar number of the 192 CBSAs in our sample of metros were represented at the regional equity summits (90) as were represented at the ARS conferences (87); this makes for two well-behaved response variables for the logit testing since just under half of all metros

¹² We tested out other formations of the polychotomous response variables and results were similar. This specification was chosen because it seemed to best capture regional interest relative to the size of the region (or CBSA), which can vary greatly.

considered are represented at each type of meeting. However, only about two thirds of those metros represented at either meeting are represented at both meetings (61), with the remainder being represented at only one or the other venue. This conveniently means that those factors that predict one sort of attendance do not necessarily predict the other. Moreover, since there is some overlap, we will also be able to see whether the existence of a regional-minded contingent in one arena (economy or equity) has a "pulling" effect on interest in the other arena in action at the regional scale, perhaps because one group is setting a new regional "stage" in which the other can pursue conversations and agendas.

Table 5B could get at that issue of "reactive regionalism" since it relates the degree of interest in each of the two agendas. Unfortunately, the simple comparison does not yield a clear pattern: Metro areas with "high representation" in one arena have degrees of representation in the other arena that range from "high" to "none" and everything in between with a relatively even distribution. Thus, we need to turn to a logistical analysis that can paint a multivariate picture of the factors that are associated with a region being represented at each arena, both to gauge the extent to which what might be thought of as "objective" reasons for interest in the regional scale hold empirically in that they help explain representation in a regional-minded venue, and to examine the significance of any indication of cross-platform effects.

The basic logit regression results for the probability of a region being represented at one of the PolicyLink regional equity summits or one of the Alliance for Regional Stewardship conferences are reported in Tables 6 and 7, respectively.¹³ In each table, we

¹³ For each regression, we also inspected the results obtained when the particular regions hosting the PolicyLink regional equity summits and ARS conferences were omitted, out of concern that they might have representation or stronger representation simply because such meetings would be so much more

first present a base specification that includes, as regressors, a parsimonious set of variables that would seem to have an impact on interest in regional equity or regional economy in theory, followed by the same specification but with the natural log of the number of attendees of the other meeting type (e.g. ARS attendees in the cases of the regional equity logit and regional equity attendees in the case of the ARS logit) to examine any indication of cross-platform effects between the two types of meetings. For each model we report the estimated marginal effect of each of the explanatory variables along with their significance levels, as well as information about model fit, including a pseudo r-square value and the percent predicted correctly. In both regressions, we also include a series of dummies for broad Census region.

Table 6 starts the analysis with a look at what factors predicted attendance at the PolicyLink summits. As can be seen in the first set of columns in Table 6, all variables in the regression are significant at better than the .20 level except for relative per capita

convenient to attend for people living in the hosting region. All such results essentially the same as those reported in Tables 6 and 7, so we stuck with reporting the results for the full sample of regions.

logit regression coefficient for the explanatory variable and P is the mean value of the response variable (or the percentage of cases that take on a value of one). Also, note that the number of observations included in the regression (which is the same for all logits reported), 187, is five short of our overall sample of CBSAs considered (192). This is because a few variables – one from the regional equity logits and one from the ARS logits – are not observed for all CBSAs in our sample. To make the set of CBSAs in the regressions consistent across all specifications, we restricted the sample to the set of CBSAs with observed values for all variables in all specifications. We also tested the separate models without placing such a restriction on the sample and the results were essentially the same.

¹⁴ We tested other specifications of business or equity attendance, including simple dummy and more complex categorical variables. We also conducted a residual analysis to see, for example, whether business interest greater than that predicted by business attendance regression was correlated with attendance by equity proponents at the PolicyLink conference; the idea here was that this was a very good signal of active regional agenda-setting by the business class. All these formulations yield the same result as that obtained with the simpler measure in the text – equity proponents are motivated by business attendance but not the other way around – and so we stick in the text with the more straightforward approach.

¹⁵ The marginal effects were calculated using a standard formula that is perhaps the most common approach to estimating marginal effects: $marginal\ effect = \beta(\overline{P})(1-\overline{P})$. In this formula, β is the estimated

income, which has a negative, but insignificant effect on the probability of a region being represented at the PolicyLink regional equity summits. In addition, the model fit appears to be quite good with a Nagelkerke r-square value of 0.4275 and about 82 percent of outcomes for the response variable predicted correctly. The natural log of population and per capita income growth have positive and highly significant effects, indicating that larger and more rapidly growing regions economically were more likely to be represented at the regional equity summits. In our view, both of these outcomes make sense as we expect larger areas to have deeper organizing histories and have argued elsewhere that many regional equity proponents have actually been motivated by the need to deal with the consequences of growth (such as gentrification; see Pastor, Benner, and Matsuoka, forthcoming).

Income inequality, as measured by the ratio of the 80th percentile of household income to the 20th percentile, has a positive effect that is significant at better than the .20 level (actually carrying a p-value of .103 and thus far closer to significance at the .10 level) indicating that regions with wider income gaps (more inequality) are more likely to have representation at the regional equity summit, which is certainly not surprising given the equity focus the summits. The marginal effects of the dissimilarity index for non-Hispanic whites – a measure of residential segregation – and the percentage recent

While a pseudo r-square value of 0.4275 may not seem good – if it were interpreted as a true r-square value it would indicate that less than half the variation in the response variable is explained by the model – it is actually quite good for a logit model, which, by its nature, tends to achieve very low pseudo r-squared values. Also, we should note that while the percentage predicted correctly is sometime a misleading measure of model fit, since it is possible to predict a large percentage of outcomes correctly using a arbitrary predictor (such as predicting all outcomes to be equal to one), in this regression and in all other logit regression reported here the percentage of cases predicted correctly where the actual value of the response variable was equal to one turned out to be quite similar to the percentage of cases predicted correctly where the actual value was equal to zero (they never differed by more than 13 percent), making the overall percentage predicted correctly reported in the tables a reasonable indicator of model fit.

immigrants (those who arrived in the 1980s and 1990s) are positive and significant, indicating that more racially segregated and more immigrant regions tend to be more interested in regional equity. Finally, the population normalized number of laboraffiliated community based organizations in 2004 – a measure related to the degree of political mobilization for workers in the region – has a large positive effect (as expected) that is significant at better than the 0.05 level.

When the logged number of ARS conference attendees is added to the set of explanatory measures (the second set of columns in Table 6), we see a slight increase in the measures of model fit and little change in the other regression coefficients and significance levels, all signs of a relatively stable model. The added variable itself is significant at better than the .10 level (closer to significance at the .05 level with a p-value of .067) with the estimated marginal effect indicating that a ten percent increase in the number of ARS attendees from any particular region will lead to about a 1.3 percent increase in the probability of representation at the regional equity summits from that region. While the effect is clearly small, the fact that it is quite significant – even in the midst of several other measures with high degrees of explanatory power – is interesting, and suggests that there may be some degree (albeit small) of "venue shopping" among regional equity proponents, who may have become aware of the utility of acting regionally by observing the opportunities for regional conversation created by the actors with very different interests.¹⁷

¹⁷ This, for example, was the case with the Social Equity Caucus SEC) in the Bay Area which was originally created by an environmental justice intermediary, Urban Habitat, as a way of responding to a series of "sustainability" conversations sponsored by a business organization, the Bay Area Council. The SEC subsequently evolved into a fuller coalition with its own agenda, including advocacy for mass transit throughout the San Francisco region and organizing for better urban planning in distressed areas like

Results for the ARS logit model appear in Table 7. Once again, a set of parsimonious measures seem to yield a reasonably good explanation of the probability of a region being represented at the ARS conferences. As with the equity equation, the log of population is highly significant – indicating that it tends to be the larger regions that have representation at the ARS conferences – but the insignificance of per capita income growth indicates that it is not necessarily regions that have had strong economic growth that are represented at the ARS meeting. This suggests that the regional discussion tends to attract both business leaders hoping to stir growth as well as those dealing with the consequences of growth – a pattern that squares with the mix we ourselves have seen at these meetings.

What is significant is the change in jurisdictional complexity between 1990 and 2000 – a measure of the number of census designated "places" (made up of cities and unincorporated areas) normalized by population. This suggests that perhaps business actors are looking to the region as an efficient geographic scale to organize an array of municipalities that has become more complex over the past decade. It also helps to explain to us the seemingly odd fact (highlighted earlier) that one of the premier business regionalist alliances, Joint Venture: Silicon Valley Network, boasted the most often about a seemingly mundane achievement: persuading so many cities to adopt the same building code in an effort to speed up time to production.

Two related measures – the percentage of workers working outside of their county of residence and the change in the suburban percentage of regional employment – turn

Richmond, California. "Reactive regionalism" is not confined to simply reacting but can develop an independent program; we are simply trying to see which sector tends to lead the other.

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out to be significant and positive, which might be related to interest in cohesive transportation strategies at the regional level. The ratio of total jobs in a CBSA to total population – a measure of labor market "tightness" which is better than unemployment as it better captures whether discouraged workers have also been drawn out into the labor market – shows a positive and highly significant effect on the probability of a CBSA being represented at the ARS conferences, with the estimated marginal effect indicating that an increase in this ratio of 1 percent (or 0.01) in a region will lead to about a 3 percent increase in the probability of that region being represented at the ARS conferences. In our view, this suggests that regions where labor shortages might be developing would be more likely to search for a business voice on workforce development and other matters.

Two variables that are related to housing, the home ownership rate and median gross rent as a percentage of household income (a measure of (un)affordability), have positive and significant effects on the probability of a CBSA being represented at the ARS conferences. The positive effect on the level of home ownership may be a result of greater interest in a strong regional economy in areas where people have more at stake in the region (perhaps to keep home values high). The positive effect on unaffordability in the rental market may reflect business interest in keeping the region attractive to workers who ultimately fuel the regional economy through their labor and consumption; certainly,

¹⁸ Out of concern that the measure capturing the percentage of workers working outside their county of residence was related to the geographic size of counties – which tend to be much larger in the western states of the nation that the remainder (particularly the South and East) – we inspected its mean value across the four major regions of the U.S. delineated by the Census. We found the mean value for CBSAs in the West of 15.65 percent was not too different from those in the other four regions, which it ranged from 20.82 to 22.46 percent, so we kept this measure in the final model. We are also reassured by the fact that the reported specifications include broad regional dummy variables for three of the four regions, which should capture the differences in county size since they are quite strongly related to the broad census regions.

there is no shortage of business voices calling now for "workforce housing" and this has been a central issues for groups like the Silicon Valley Leadership Group and Chicago 2020.

Finally, because some have suggested that business regionalism is mostly the province of the information industry, we include the change in percentage of workers in what are considered "high-tech" occupations. This has a positive effect on the probability of a region having representation at the ARS conferences that is significant at better than the .20 level (p-value = .136) – having more of these sorts of knowledge workers does seem to introduce a broader concern in quality of life and regional collaboration (Florida 2002, Henton, et al. 2004).¹⁹ The important fact, however, is that other variables are significant: business interest in regionalism is not confined to high-tech areas of the nation.

Interestingly, when we enter the logged number of PolicyLink regional equity summit attendees to the model, there is essentially no improvement in the fit of the model, nor is the variable significant. In fact, it is highly insignificant, making it appear that while there was some evidence of "reactive regionalism" among regional equity proponents, the same is not true for those focused on the regional economy. Thus, it appears that while taking conversations to the regional level may induced by several "objective" rationales for business interests, such as the health of the regional economy, regional transportation efficiency, housing affordability, and cultivation of the high-tech sector, for equity interests it is a combination of both "objective" reasons (such as income

¹⁹ The definition of "high-tech" occupations was borrowed from the 6-digit NAICS-based definition specified by the American Electronics Association (AEA). See http://www.aeanet.org/Publications/idmk naics pdf.asp

inequality, the degree of political mobilization among labor proponents, immigration and residential segregation) and the existence of some regional platform in the first place – even if the motivations behind the conversation on that platform are not exactly consistent with the conversation they want to initiate.

When we tested the four logit models above under the ordered logit specification (for which the response variables were described above and in Table 5B), we found largely the same results. The indication is that the set of explanatory variables included in the models not only explain the probability of a region having any representation at the two types of regionally-focused gatherings, but also the degrees of representation at those meetings, or the probability of moving from one category of representation to the next highest category. While we do not report the results here, as they are largely redundant, we briefly describe the differences between the two model specifications (logit versus ordered logit) below.

In the ordered logit model for the degree of representation at the PolicyLink regional equity summits, we find very few differences including a slight decrease in the significance of the dissimilarity index for non-Hispanic whites, and an increase in the significance of the number of labor CBOs per 10,000 people. For the ARS ordered logit model, the significance of the percentage owner-occupied housing units drops (from significance at the .05 level to significance at only the .20 level), and a few variables become insignificant. These include the change in jurisdictional complexity, median gross rent as a percentage of household income, and the change in the percentage of workers employed in high-tech occupations (recall that these measures were significant at the .20, .10, and .20 levels, respectively, in the basic logit specification). This suggests

that while these measures are important in explaining representation verses non-representation at the ARS conferences, they are not important in the explaining the *degree* of representation at these conferences in terms of the number of attendees.

Finally, in this series of tests which try to account for the degree of interest, we found an *increase* in the significance of the logged number of ARS conference attendees on the probability of regional attendance at a PolicyLink summit. However, the logged number of PolicyLink regional equity summit attendees becomes *even less* significant in the ordered logit specification, and the sign of the coefficient actually becomes negative. Thus, while equity proponents do seem to react to business interest in setting regional tables, business leaders seem to care less about what the equity proponents are up to.

IV. Adding Up the Pieces

A key goal of this paper is to investigate the empirical bases that underlie contemporary calls for regionalism among scholars and practitioners. Through four distinct exercises, we explored whether the regional scale is *objectively* more important today than in the past two decades and what seems to drive *subjective* interest in regionalism. While the results of any one analysis do not make a conclusive case, the overall pattern suggests that regions do matter more today for both economic competitiveness and social equity, but that the interest of regional equity proponents may, as in the case of the living wage, reflect some degree of venue shopping in favor of more favorable political and policy outcomes.

The results of OLS models of metropolitan convergence for the 1980s and 1990s, for example, indicate that the rate of convergence for per-capita income was cut in half in

the 1990s, a trend that suggests a rising differentiation in regional performance. This pattern is consistent with an analysis that made use of coefficients of variation for per capita and median household income growth; we found mixed evidence of rising dispersion in many distributional measures, suggesting some rationale for the regional scale as a way to address issues relevant to social equity. The rationale is made stronger when we look at a set of regression models examining the relationship between poverty and the rates of employment and wage growth; we find that while job growth was critical to reducing poverty in the 1970s, by the 1980s and 1990s wage growth was a more important factor than just jobs alone. If simply adding more jobs is no longer sufficient, equity proponents must have a regional agenda distinct from simply supporting growth per se – and this drives an objective interest in getting engaged in regional conversations and planning.

When we test for the factors that in fact drive such interest in regionalism, we find that efficiency concerns – such as high levels of government fragmentation, concerns about coordinating transportation systems, higher levels of suburban employment – tend to drive business engagement. Such interest seems to be less sensitive to past income growth – business leaders will get engaged if growth is slow or fast – although there is more interest where labor markets are tighter and housing is less affordable, both clear collective action problems for business. On the equity side, more unequal regions, as measured by income distribution or residential segregation, tend to produce more equity proponents, and interest seems to be higher when past income growth is faster and hence there is something to redistribute. Perhaps what is most striking is that equity proponents

do seem to react to business interest in setting regional tables but business leaders have little reaction to the regionalist activities of social justice proponents.

Ultimately, this empirical work may open up more questions than it answers. We have established that regions are more important on the economic side, but we do not clearly know whether this is due to social network effects, new forms of clustering, or the reconfiguration of political space. There is some evidence that regions are more important for equity, particularly for those efforts that seek to change the quality and not simply the quantity of employment, but we have offered no assessment of which proequity strategies are most successful. We have noted the roots of business and social interest in participating in regionalist conversations, but we have offered only brief hints of how this plays out in particular regions and advanced no strong analysis of why equity proponents are reacting to the business regional agenda but not the other way around.

We are blessed, however, by being part of a larger project that intends to address these and other questions in a multi-year and multi-region study of which metropolitan areas are most resilient and what are the economic, institutional, and cultural factors that make them so. We offer this then as a starting point and wish our colleagues and other researchers well as we all continue to explore why the new regionalism has gained adherents in both the academic and practitioner world, whether such regionalist thinking and organizing can actually improve the future for metropolitan America, and how we might promote the best and most inclusive of these efforts in the years ahead.

Tables and Figures

Table 1. Conditional *Beta* Convergence by Decade for U.S. Metropolitan Areas

onational Dela Convergence by	y Decade for v	o.b. Metropolitan Areas
	1980s	1990s
Variable	All	All
Constant	0.225***	0.132**
	6.844	3.680
Ln Per Capita income	-0.027***	-0.014**
	-7.474	-3.466
Median age	0.001***	0.0001
	6.177	0.543
% foreign born	-0.012**	-0.020
	-1.120	-2.553
% w/ BA or higher, 1980	0.093***	0.072***
-	7.670	6.658
% manufacturing employment	0.032***	0.020**
	4.851	2.842
% FIRE employment	0.069**	0.077**
1 3	2.149	2.643
Adj R-square	0.364	0.262
N	192	192

Notes: Each variable is for the base year in the decade (e.g 1980 or 1990), while the dependent variable is the annual average growth rate between 1979 and 1989, and 1989 and 2000 respectively. T-stats appear below estimates in italics. Significance levels: *** = 1%, ** = 5%, * = 10%

Table 2

Coefficients of Variation for Selected Economic Measures for Core Based Statistical Areas (CBSAs)

	Per Capita Income		Median Household Income		Employment (Place of Work)		Earnings Per Worker (Place of Work)		Patents Per Capita		er				
	1979	1989	1999	1979	1989	1999	1979	1989	2000	1979	1989	2000	1979	1989	1998
Top 25 Metro Areas	0.089	0.115	0.126	0.099	0.132	0.130	0.906	0.854	0.738	0.100	0.106	0.147	0.330	0.351	0.434
Top 26 to 50 Metro Areas	0.113	0.136	0.126	0.129	0.165	0.164	0.281	0.240	0.215	0.086	0.103	0.221	0.874	1.047	1.545
Top 51 to 100 Metro Areas	0.133	0.191	0.186	0.131	0.189	0.163	0.347	0.300	0.254	0.099	0.112	0.155	0.787	0.689	1.000
Top 101 to 192 Metro Areas	0.150	0.175	0.162	0.171	0.178	0.162	0.344	0.286	0.266	0.148	0.126	0.132	1.204	1.007	1.101
All Metro Areas	0.143	0.178	0.170	0.152	0.183	0.168	1.928	1.870	1.712	0.130	0.131	0.186	0.939	0.846	1.120

Table 3

Coefficients of Variation for Selected Equity Measures for Core Based Statistical Areas (CBSAs)

	Household Income Inequality											
	P	Ratio of 80th to 20th Ratio of 90th to 10th Poverty Concentratio Poverty Rate percentile percentile (Dissimilarity Index)										
	1979	1989	1999	1979	1989	1999	1979	1989	1999	1979	1989	1999
Top 25 Metro Areas	0.153	0.179	0.220	0.071	0.091	0.101	0.101	0.148	0.156	0.158	0.165	0.138
Top 26 to 50 Metro Areas	0.297	0.297	0.231	0.109	0.127	0.100	0.151	0.171	0.138	0.158	0.165	0.138
Top 51 to 100 Metro Areas	0.381	0.474	0.425	0.086	0.124	0.098	0.131	0.173	0.166	0.181	0.172	0.158
Top 101 to 192 Metro Areas	0.342	0.382	0.355	0.098	0.154	0.128	0.148	0.191	0.196	0.228	0.225	0.227
All Metro Areas	0.338	0.390	0.356	0.094	0.136	0.113	0.139	0.178	0.176	0.216	0.210	0.200

Table 4

Modeling Change in Regional Poverty Rates

(Dependent Variable = Change in Poverty Rate from 1969-1979, 1979-1989, and 1989-1999)

	1970s		19	80s	1990s			
	<u>All</u>	<u>Top 100</u>	<u>All</u>	<u>Top 100</u>	<u>All</u>	<u>Top 100</u>		
Model Variables	coeff. t-stat.	coeff. t-stat.	coeff. t-stat.	coeff. t-stat.	coeff. t-stat.	coeff. t-stat.		
earnings per worker growth	-0.094 -2.225 **	-0.056 -1.219	-0.362 -5.413 ***	-0.392 -4.941 ***	-0.313 -5.691 ***	-0.468 -6.852 ***		
employment growth (place of work basis)	-0.161 -3.738 ***	-0.244 -5.458 ***	-0.231 -4.696 ***	-0.172 -3.343 ***	-0.298 -6.193 ***	-0.367 -7.230 ***		
change in the % foreign born population	0.000 -0.002	0.012 0.248	0.235 2.625 ***	0.291 2.553 **	0.244 2.755 ***	0.431 3.808 ***		
change in the % persons of color	0.203 3.794 ***	0.322 5.864 ***	0.215 2.424 **	0.287 2.572 **	0.226 2.767 ***	0.168 1.675 *		
change in the % families headed by a single parent	0.270 7.243 ***	0.199 5.276 ***	0.410 7.251 ***	0.510 8.211 ***	0.156 2.735 ***	0.129 1.904 *		
change in the % persons under age 18	0.130 3.602 ***	0.085 2.338 **	0.077 1.570 #	-0.046 -0.794	0.204 3.982 ***	0.213 4.215 ***		
change in the % with a B.A. or higher education	-0.024 -0.647	-0.069 -2.024 **	-0.018 -0.321	-0.020 -0.277	0.095 1.540 #	-0.021 -0.307		
base year % persons below poverty	-0.813 -13.436 ***	-0.887 -15.526 ***	0.130 2.676 ***	0.126 2.277 **	-0.389 -7.398 ***	-0.410 -7.219 ***		
Number of observations: Adjusted R Square:	178 0.8278	100 0.9093	178 0.7728	100 0.8365	178 0.8012	100 0.8748		

[#] indicates significance at the .20 level; * indicates significance at the .10 level;

Notes: 1.) Observations with no data on race/ethnicity for 1970 (due to not being tracted) were ommitted from models for the 1980s and 1990s in order to keep the set of CBSAs consistent over time - one such observation was among the top 100 CBSAs which is why there were only 99 observations included; 2.) Coefficients reported are standardized coefficients; 3.) Though not reported, three dummy variables for the broad census geographic regions of the "south", the "midwest", and the "west" were included, as well as an intercept term.

^{**} indicates significance at the .05 level; *** indicates significance at the .01 level

Table $5\mathbf{A}$ Relationship Between the Two Dichotomous Response Variables

Alliance for Regional Stewardship Conferences No Some Attendees Attendees Total **PolicyLink** 102 No Attendees 76 26 Regional **Equity** Some Attendees 29 61 90 **Summits** Total 105 87 192

 $\label{eq:continuous} \textbf{Relationship Between the Two Polychotomous Response Variables}$

		Allian				
		High interest	Some interest	Low interest	No interest	Total
	High interest	7	6	8	9	30
Regional	Some interest	7	6	5	12	30
	Low interest	7	7	8	8	30
	No interest	8	10	8	76	102
·	Total	29	29	29	105	192

Modeling the Probability of a Region being Represented at the PolicyLink Regional Equity Summits, 2002 and 2005

(Logit Model)

Model Variables	Marginal Effect	Wald <u>Stat.</u>	Marginal <u>Effect</u>	Wald <u>Stat.</u>
In(population), 2000	2.55%	12.379 ***	1.80%	4.947 **
relative per capita income, 1999	-0.52%	1.191	-0.47%	0.959
per capita income growth, 1979-1999	2.07%	9.864 ***	1.93%	8.327 ***
ratio of 80th to 20th percentile of household income, 1999	0.20%	2.658 #	0.21%	2.846 *
dissimilarity Index for non-Hispanic whites, 2000	1.17%	4.092 **	1.03%	3.196 *
% recent immigrants, 2000	2.71%	3.848 **	2.82%	4.020 **
number of labor CBOs per 100,000 people, 2004	1.14%	5.334 **	1.01%	4.041 **
In(number of Alliance for Regional Stewardship Attendees)			1.28%	3.365 *
Number of observations: Nagelkerke R Square: Percentage predicted correctly:	0	187 .428 .733	0.	187 .445 .759

[#] indicates significance at the .20 level;

Notes: 1.) Though not reported, three dummy variables for the broad census geographic regions of the "south", the "midwest", and the "west" were included, as well as an intercept term. 2.) Relative per capita income is figured as the ratio of each CBSA's level of per capita income to the average across all 192 CBSAs.

^{*} indicates significance at the .10 level;

^{**} indicates significance at the .05 level;

^{***} indicates significance at the .01 level

Table 7

Modeling the Probability of a Region being Represented at the Alliance for Regional Stewardship Conferences, 2000-2002 (Logit Model)

Model Variables	Marginal Effect	Wald <u>Stat.</u>	Marginal Effect	Wald <u>Stat.</u>
In(population), 2000	4.59%	22.244 ***	4.47%	19.279 ***
relative per capita income, 1999	-0.64%	1.412	-0.62%	1.307
per capita income growth, 1979-1999	0.73%	1.194	0.71%	1.111
change in jurisdictional complexity, 1990-2000	1.73%	2.073 #	1.67%	1.945 #
% working outside county of residence, 2000	1.43%	6.453 **	1.37%	5.683 **
change in suburban % of regional employment, 1990-2000	1.83%	2.231 #	1.89%	2.302 #
ratio of total jobs to total population, 2000	3.40%	8.914 ***	3.27%	7.827 ***
% owner occupied housing units, 2000	3.66%	5.405 **	3.63%	5.304 **
median gross rent as a % of household income, 1999	5.51%	3.074 *	5.26%	2.709 *
change in % high-tech employment, 1990-2000	7.41%	2.341 #	7.10%	2.085 #
In(number of Regional Equity Summit Attendees)			2.93%	0.177
Number of observations: Nagelkerke R Square: Percentage predicted correctly:	0	187 .568 .824	187 0.569 0.824	

[#] indicates significance at the .20 level;

^{*} indicates significance at the .10 level;

^{**} indicates significance at the .05 level;

^{***} indicates significance at the .01 level

Notes: 1.) Though not reported, three dummy variables for the broad census geographic regions of the "south", the "midwest", and the "west" were included, as well as an intercept term. 2.) Relative per capita income is figured as the ratio of each CBSA's level of per capita income to the average across all 192 CBSAs.

References

- Amin, Ash. 1999. "An institutionalist perspective on regional economic development." *International Journal of Urban and Regional Research* 23:365-378.
- Appelbaum, Eileen, Annette D. Bernhardt, and Richard J. Murnane. 2003. Low-wage America: how employers are reshaping opportunity in the workplace. New York: Russell Sage.
- Barnes, William and Larry C. Ledebur. 1998. *The New Regional Economies: The U.S. Common Market and the Global Economy*, Thousand Oaks, CA: Sage Publications.
- Barro, Robert J., Xavier Sala-I-Martin, Olivier Blanchard, and Robert E. Hall. 1991. "Convergence Across States and Regions." *Brookings Papers on Economic Activity* 1991:107-182.
- Benner, Chris. 2002. Work in the new economy: Flexible labor markets in Silicon Valley. Oxford: Blackwell Press.
- Blackwell, Angela Glover and Heather McCullough. 1999. *Opportunities for smarter growth: Social equity and the smart growth movement*, Prepared for the Funders Network on Smart Growth and Livable Communities. Oakland, CA: PolicyLink.
- Brusco, Sebastian. 1982. "The Emilian Model: Productive Decentralization and Social Integration." *Cambridge Journal of Economics* 6.
- Castells, Manuel. 1996. *The rise of the network society*. Cambridge, MA: Blackwell Publishers.
- Cooke, Philip, and Kevin Morgan. 1998. *The associational economy: firms, regions, and innovation*. Oxford England; New York: Oxford University Press.
- Cieslewicz, David J. 2002. "The environmental impacts of sprawl." In Gregory D. Squires, Editor, *Urban Sprawl: Causes, Consequences, and Policy Responses*. Washington, DC: Brookings Institution.
- Crandall, Mindy S. and Bruce A. Weber. 2004. "Local Social and Economic Conditions, Spatial Concentrations of Poverty, and Poverty Dynamics." *American Journal of Agricultural Economics* 86 (5), 1276–1281.
- Dreier, Peter, John Mollenkopf, and Todd Swanstrom. 2001. *Place Matters: Metropolitics for the Twenty-first Century*. University of Kansas Press.
- Drennan, M. P., and J. Lobo. 1999. "A Simple Test for Convergence of Metropolitan Income in the United States." *Journal of Urban Economics* 46:350.

- Drennen, Matthew, Emanuel Tobier, and Jonathan Lewis. 1996. "The Interruption of Income Convergence and Income Growth in Large Cities in the 1980s." *Urban Studies*, vol. 33, no. 1, pp.63-82.
- DRI/McGraw-Hill. 1998. *The Role of Metropolitan Areas in the National Economy*. Report prepared for the Joint Center for Sustainable Communities of The United States Conference of Mayors and the National Association of Cities, March 19.
- Florida, Richard L. 1995. "Toward the Learning Region." *Futures* 27:527-536.
- Florida, Richard L. 2002. The Rise of the Creative Class: And How It's Transforming Work, Leisure, Community and Everyday Life. New York: Basic Books.
- FutureWorks. 2004. Minding Their Civic Business: A Look at the New Ways Regional Business-Civic Organizations are Making a Difference in Metropolitan North America. Arlington, MA: FutureWorks.
- Gereffi, Gary, and Miguel Korzeniewicz. 1994. *Commodity chains and global capitalism*. Westport, Conn.: Greenwood Press.
- Glaeser, Edward, and Albert Saiz. 2003. "The rise of the skilled city." *Harvard Institute of Economic Research* Discussion paper No. 2025.
- Henderson, Jerffrey, Peter Dicken, Martin Hess, Neil Coe, and Henry Wai-Chung Yeung. 2002. "Global production networks and the analysis of economic development." *Review of International Political Economy* 9:436-464.
- Henton, Douglas, John Melville, and Kimberly Walesh. 1997. *Grassroots leaders for a new economy: How civic entrepreneurs are building prosperous communities.*San Francisco, CA: Jossey-Bass Publishers.
- Henton, Douglas, John Melville, and Kim Walesh. 2004. *Civic Revolutionaries: Igniting the Passion for Change in America's Communities*. San Francisco, CA: Jossey-Bass.
- Higgins, Matthew J., Daniel Levy, and Andrew T. Young. 2006. "Growth and convergence across the U.S.: evidence from county-level data." *Review of Economics and Statistics* 88(4), 671-681.
- Hill, Edward, Harold Wolman, and C. Ford. 1995. "Can suburbs survive without their central cities? Examining the suburban dependence hypothesis." *Urban Affairs Review* 31.
- Ihlanfeldt, K, and D. Sjoquist. 1989. "The impact of job decentralization on the economic welfare of central-city blacks." *Journal of Urban Economics* 26:110-130.
- Jargowsky, Paul A. 1997. *Poverty and place: ghettos, barrios, and the American city*. New York: Russell Sage Foundation.

- Jargowsky, Paul A. 2003. Stunning Progress, Hidden Problems: The Dramatic Decline in Concentrated Poverty in the 1990s. Living Cities Census Series, 6. Washington DC: Brookings Institution. http://www.brookings.edu/es/urban/publications/jargowskypoverty.pdf.
- Joint Venture: Silicon Valley Network (JV:SVN). 1995. *The Joint Venture Way: Lessons for Regional Rejuvenation*. San Jose, CA: Joint Venture: Silicon Valley Network.
- Krugman, Paul R. 1991. Geography and trade. Cambridge, Mass.: MIT Press.
- Luria, Daniel D. and Joel Rogers. 1997. "New Urban Agenda." *Boston Review*, February/March.
- Orfield, Myron. 1997. *Metropolitics: a regional agenda for community and stability*. Lincoln Institute of Land Policy, Washington, D.C., Cambridge, Mass.: Brookings Institution Press
- Orfield, Myron. 2002. *American metropolitics: The new suburban reality*. Washington, DC: Brookings Institution Press.
- Pastor, Manuel, Christopher Benner, and Martha Matsuoka, forthcoming. *This Could Be the Start of Something Big: Regional Equity Organizing and the Future of Metropolitan America*. Ithaca, NY: Cornell University Press.
- Pastor, Manuel, Peter Drier, and et. al. 2000. *Regions that Work: How Cities and Suburbs Can Grow Together*. Minneapolis: University of Minnesota.
- Peirce, Neal R. with Curtis W. Johnson and John Stuart Hall. 1993. *Citistates: How Urban America Can Prosper in a Competitive World*. Washington, D.C.: Seven Locks Press.
- Piore, Michael J., and Charles F. Sabel. 1984. *The second industrial divide: possibilities for prosperity*. New York: Basic Books.
- Phillips, Heith R. 1992. "Regional Wage Divergence and National Wage Inequality." *Economic Review*. Federal Reserve Board of Dallas, Fourth Quarter, pp. 31-44.
- PolicyLink. 2000. Community-based initiatives promoting regional equity: Profiles of innovative programs from across the country. Oakland, CA: PolicyLink.
- Pollin, Robert and Luce, Stephanie. 1998. *The living wage: Building a fair economy*. New York: New Press.
- Porter, Michael. 1998. "Clusters and the New Economics of Competition." *Harvard Business Review* 76:77-90.
- Rey, Sergio J. and Mark V. Janikas. 2005. "Regional convergence, inequality, and space." *Journal of Economic Geography* 5(2):155-176.

- Romer, Paul M. 1990. "Endogenous Technological Change," *Journal of Political Economy*, 98, S71-102.
- Rusk, David. 1993. *Cities without suburbs*. Washington DC, Woodrow Wilson Center Press.
- Rusk, David. 1999. *Inside game outside game: Winning strategies for saving urban America*. Washington DC: Brookings Institution Press.
- Sabel, Charles F. 1989. "Flexible Specialization and the Re-emergence of Regional Economies" in *Reversing Industrial Decline*, edited by J. Zeitlin P. Hirst. New York: Berg.
- Sassen, Saskia. 1991. *The global city: New York, London, Tokyo*. Princeton, N.J.: Princeton University Press.
- Saxenian, AnnaLee. 1994. Regional advantage: culture and competition in Silicon Valley and Route 128. Cambridge, Mass.: Harvard University Press.
- Scott, Allen J. 2000. The cultural economy of cities: essays on the geography of image-producing industries. Thousand Oaks, CA: Sage.
- Scott, Allen J. (Ed.). 2001. *Global City-Regions: Trends, Theory, Policy*. Oxford: Oxford University Press.
- Storper, Michael. 1997. The Regional World: Territorial Development in a Global Economy. New York: Guilford.
- Voith, Richard. 1992. "City and Suburban Growth: Substitutes or Compliments." Business Review- Federal Reserve Bank of Philadelphia September-October:21-33.
- Voith, Richard. 1998. "Do suburbs need cities?" *Journal of Regional Science* 38 (3):445-65.
- Wilson, William Julius. 1996. When Work Disappears: The World of the New Urban Poor. New York, NY: Alfred A. Knopf, Inc.
- Wolch, Jennifer, Manuel Pastor, and Peter Dreier. 2004. *Up against the sprawl: Public policy and the making of Southern California*. Minneapolis, MN: University of Minnesota Press.

Appendix

The data in this paper comes for a comparative metros database that is being constructed as part of the Building Resilient Regions project. The basic unit of analysis is the Core Based Statistical Area (CBSA), a set of metropolitan definitions officially adopted in June 2003. In some cases, variables were obtained from sources which have already aggregated the information to the 2003 CBSA level. For example, in the convergence regressions, median age, percent foreign-born, percent with a BA or higher, were taken from HUD's State of the Cities Data System (SOCDS) and percent manufacturing and FIRE employment were taken from the BEA's Regional Employment Information System (REIS). However, we also sometimes "reshape" data to the CBSA level using underlying tract data. For example, our measures of household inequality were obtained from data from the U.S. Census Summary Tape Files; here we take tract level data for these measures, reallocate the data to 2000 tract shapes, and add up to calculate CBSA levels

Thus, in the analysis of coefficients of variance, per capita and median household income are taken from the census tract level data, and reallocated and aggregated to CBSA level as indicated above. However, employment and earnings per worker are taken from Regional Economic Information System (REIS), 1969-2004, with the income and earnings variables adjusted for inflation using the Consumer Price Index – Urban. Patents per capita is figured as the number of use patents granted by the U.S. Patent Office in 1979, 1989, and 1999 per capita for a metro region, with individual patent records geocoded according to the city of residence (data from the NBER; see Hall, B. H., A. B. Jaffe, and M. Tratjenberg, 2001. "The NBER Patent Citation Data File: Lessons, Insights and Methodological Tools." NBER Working Paper 8498 (http://www.nber.org/patents)). The poverty rate is from the reshaped Census data as are the poverty concentration and the income ratios; the dissimilarity index for poverty is figured using the standard formula and the income distribution ratios are determined by adding up the households (by tract) in each metro area in a series of income categories and using a Pareto interpolation procedure to estimate the income of those at the 10th. 20th, 80th, and 90th percentiles.

For the determinants of poverty regression, we use the employment and earning variables indicated above. The other variables in that regression include the change in foreign-born, the change in the percent with a B.A. or higher, the percent of families headed by a single parent, and the percent poverty from the State of the Cities Data Systems (SOCDS at http://socds.huduser.org/); the percent of the population under the age of 18 and people of color from various Geolytics and Census datasets (with original 1970, 1980, and 2000 data reshaped into 2000 tracts and aggregated as described above, and the 2000 data taken directly from the Summary Files).

For the logit tests on equity interest, nearly all the independent variables come from the Census with tract-level data aggregated up to obtain CBSA-level variables; the derivation of the ratio of 80th to 20th percentile of household income is described above

in the discussion of coefficients of variation. The number of labor CBOs per 1 million persons is from the National Center of Charitable Statistics for 2004.

For the logits on business interest, the change in jurisdictional complexity comes from the State of the Cities Data Systems, the percent working outside the county of residence comes from tract level Census data aggregated up to the CBSA as does the percent of owner-occupied housing comes from the Census and median gross rent as a percent of household income. For the change in high-tech employment, we rely on the U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (ES-202) and aggregate employment in NAICS industry codes based on the American Electronics Association's (AEA) published definition for high-tech. In both equations, the log of population and log of attendees from the other conference (the only logged variables in these regressions) are multiplied by ten so that the resulting coefficients line up better with the rest of the variable coefficients.



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