Earnings Inequality and Central-City Development

Edwin S. Mills

Introduction

Many papers have shown that U.S. earnings inequality increased substantially from about 1980 to around 1996.[1] Recent and careful studies agree that a basic explanation for increased earnings inequality is the rising returns to human capital resulting from new technology. These rising returns have meant that the relative earnings of some of the best educated, and thus best paid, workers have increased. Inequality has risen while the economy has grown with unusual stability (at least after the 1980-82 cycle) and while substantial growth has occurred in the fraction of adults who are employed. Government data indicate that the earnings of low-income and historically disadvantaged workers rose faster in 1997 and 1998 than those of other workers. The *Economic Report of the President* (U.S. Council of Economic Advisers 1999) attributes the recent trend reversal to extreme tightness in the labor markets. Whether this reversal will continue if labor markets slacken seems doubtful if indeed the underlying cause of growing earnings inequality has been the rising returns to human capital.

It is worth mentioning that income inequality certainly has increased more than earnings inequality. Returns to corporate equities have averaged nearly 20 percent per year during the 1990s. Although more than a third of adult Americans now own corporate equities (including those owned through pension plans), most are still owned by people in the upper quarter of the income distribution. The distribution of physical capital ownership has been more unequal than that of human capital ownership since estimates have been available, and Heckman et al. (1998) provide evidence that rising returns to human capital have induced students to stay in school longer. However, the ratio of stock capitalization to GDP has nearly tripled since the 1980s. The result must have been a rising share of property income in total income (see Hale [1999]). (Of course, capital gains must be included in income.) Although earnings inequality has increased in a few other countries more than in the United States, it is almost certain that when income inequality has increased more here than elsewhere it is because of the astounding performance of U.S. equities during the 1990s.

Thus, the facts are clear: earnings inequality has increased for close to twenty years—until, perhaps, a temporary reversal occurred starting in 1997—and

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income inequality has almost certainly increased more than earnings inequality. Earnings inequality has increased for a sound economic reason: rising returns to human capital at least in part have been related to technical change. It is patent that governments should encourage, not discourage, technology and the resulting high returns to human capital. How taxes should be levied on high earnings (relative to low earnings) and on earned income (relative to property income) is beyond the scope of this paper. But research during the last decade or two should have convinced everyone that all taxes affect economic behavior.

Inequality and Metropolitan Structure

Everyone knows that U.S. metropolitan areas have suburbanized massively since World War II. In fact, during most of the last century and in every metropolitan area, suburbanization has increased in every part of the world that has been studied (see Cheshire [forthcoming] and White [forthcoming]). Although residences are more suburbanized than businesses, both sectors have suburbanized rapidly and substantially.

The causes of suburbanization have been studied extensively. Agreement is widespread on the major causes, but not on their relative importance (see Mieszkowski and Mills [1993]). First, there is metropolitan growth: large metropolitan areas are more suburbanized than small ones. Second, there are high and rising incomes: high-income metropolitan areas are more suburbanized than low-income metropolitan areas, and high-income residents are more suburbanized than low-income residents, at least in the United States and in the few metropolitan areas elsewhere for which requisite data are available. Third, residential suburbanization leads to business suburbanization and vice versa, with the former sequence being stronger than the latter (see Carlino and Mills [1987]). Manufacturing is the leading example of an important business sector that has suburbanized (and exurbanized) in advance of residents. Retailing and consumer services follow consumers to the suburbs. Business services have suburbanized less than most business sectors, and mostly to suburban subcenters that are smaller versions of central business districts, or CBDs (see White [forthcoming]).

Finally, and most controversially, there is the predominance of poverty, minorities, crime, poor schools, and alienation in central cities. The fact that such characteristics are anathema to the upper middle class should not be news to anyone. But that does not make the case for such characteristics as causes of suburbanization.

First, large numbers of poor and alienated minorities in central cities are predominantly a U.S. phenomenon, and suburbanization has taken place in virtually all other countries. Second, numbers matter. Suppose that the alienated minority is a small fraction of the metropolitan population—then presumably little suburbanization would result from their presence in central cities. Alternatively, suppose that alienated minorities are half the population in a metropolitan area in which two-thirds of the metropolitan population would live in the suburbs even if there were no minorities. Then it seems likely that about the same two-thirds would live in the suburbs even if half the population were alienated minorities.

In any case, retreat of nonpoor whites to the suburbs cannot achieve its putative goals if alienated minorities are as large a fraction of suburban residents as they are of central-city residents. Some circumstances must keep the alienated minorities in the central city. Poverty, suburban land use controls, and racial discrimination in suburban housing and employment are viewed as reasons that minorities have remained in central cities in postwar U.S. metropolitan areas. The latter two acts have been illegal for more than thirty years, but certainly still exist in attenuated degree (see Yinger [1995]). There is indeed evidence that suburbanization has been greater in U.S. metropolitan areas where the fraction of central-city residents that are minorities has grown (see Mills [1992]), but I believe that the numbers of the poor and minorities have had stronger effects on who has suburbanized than on how many residents have suburbanized.

During the last half century, high-income whites have led the march to the suburbs, followed by whites of decreasing places in the income distribution. There is some evidence (see Mills and Lubuele [1997]) that minorities have followed whites to the suburbs in substantial numbers since about 1980, also led by their highest income members. My judgment is that the remaining racial discrimination in suburban housing—and probably in employment—is more a matter of class than of race, as minorities are disproportionately low income.

I conclude this section with brief comments on income levels of suburban relative to central-city residents. Many writers bemoan evidence that central-city residents have become poorer relative to suburban residents. The observation is correct, but not very relevant. Suppose, as is approximately true, that the highest income residents suburbanize first, followed by residents in decreasing order of income. Then the ratio of suburban to central-city incomes will be greatest when the smallest and largest fractions of residents live in the suburbs. When only a small fraction of the metropolitan population has suburbanized, the average income in the central city approximates that in the entire metropolitan area, whereas the average income in the suburbs is that of the metropolitan area's highest income residents. When nearly all of the metropolitan area's residents live in the suburbs, the average income in the suburbs approximates that for the metropolitan area, whereas the average income in the central city is that of the metropolitan area's poorest residents. At both extremes, the ratio of suburban to central-city incomes is high.

Depending on the income distribution across a metropolitan area, the ratio will be smallest when about half of the residents live in each place. Since about two-thirds of metropolitan area residents now live in the suburbs, the suburban-to-central-city income ratio inevitably increases as more people suburbanize. That is true even if all of the metropolitan area residents' incomes are unchanged as suburbanization proceeds. That the average earnings of the worst paid 20 percent of workers have fallen relative to those of the best paid 20 percent is an important social fact. But it is not implied by the rise in suburban to central-city earnings as suburbanization proceeds, because the population bases in the two places are shifting.

Effects on Central-City Development

It has been indicated that employment has suburbanized along with population during the last half century. About half of metropolitan employment, along with two-thirds of residents, is now located in the suburbs.

At least qualitatively, the reasons for business concentration in metropolitan areas, and especially in CBDs and suburban subcenters, are now well understood. The only advantage that metropolitan areas and their business centers have over other locations is the proximity that they afford for diverse economic activities.[2] Large size, crowding of activities, substitution of structural capital for land in real estate development, and a high-quality transportation and communication system imply that the costs of moving people, goods, and messages among businesses and between businesses and residences are lower in large metropolitan areas than elsewhere.[3] The most dramatic example is CBDs, where the advantages of face-to-face communication justify production on land that may be 100 times as expensive as land fifteen to forty miles away. Urban economists use the term "agglomeration economies" to describe this phenomenon, but it suggests a mystique that may disguise a prosaic notion. Agglomeration economies have been measured repeatedly in U.S. metropolitan areas and in a few metropolitan areas elsewhere. Evidence suggests that a doubling of a metropolitan area's size increases the area's total factor productivity by 5 to 15 percent (see White [forthcoming] and Eberts and McMillen [forthcoming]).[4]

An important reason for business suburbanization is that modern transportation and communication technologies have reduced the costs of moving people, goods, and messages over considerable distances. A second reason is that CBDs have become large enough to exhaust the advantages of location there. For example, nearly half of the one million jobs located in the city of Chicago are in its CBD, and 200,000 are located within about a mile of the periphery of O'Hare Airport, by far the metropolitan area's largest subcenter, but not entirely in the city.

As noted, retailing and consumer services locate in the suburbs mostly because their customers and, to some extent, their employees, live there. Furthermore, manufacturing has suburbanized and exurbanized largely because most of its inputs and outputs are shipped by road, and the suburbs and rural areas now have easy access to other places by modern expressways—in most cases easier access than central-city locations. In addition, modern manufacturing technology requires relatively few employees, freeing manufacturing from locations near a metropolitan area's large labor pool. The notion that manufacturing can be induced to return to central cities is a fantasy of large-city mayors.

The foregoing paragraphs explain most of the pervasive reasons for business suburbanization, and have nothing to do with central-city poverty, minorities, or alienation. Nevertheless, most observers, myself included, believe that employment in most central cities has decreased more than can be accounted for by the aforementioned causes. During the quarter century that ended in 1996, jobs located in the city of Chicago fell 15 percent, while total metropolitan area jobs increased 29 percent. If the city's employment had remained constant, 200,000 more jobs would now be there. During the same quarter century, the city's population declined 18 percent, while the metropolitan area population increased 10 percent. (As is true for the country as a whole, employment per capita increased both in the city and, especially, in the entire metropolitan area.) Fragmentary evidence indicates that since 1996, jobs located in Chicago and some other central cities have increased.[5]

Conditions that have changed recently may provide insight into the dynamics of central-city employment change during the last thirty to forty years. What has happened recently? First, the entire economy now has tighter labor markets than it has had for about thirty-five years. Businesses may be locating in central cities for the same reasons that U.S. businesses have been locating in Mexico and East Asia, such as the availability of many kinds of workers at wages that cannot be matched in most of the U.S. economy. Employing central-city minorities, however, presents problems: many are poorly educated, many cannot speak or read English well, and many have little or no work experience. These problems are also faced in Mexico and other developing countries, and perhaps U.S. firms are learning to cope with them better than previously.

Second, and important in Chicago and other old centers of heavy industry, is the reform of brownfields liability. For a quarter century, the Environmental Protection Agency administered a law that imposed unlimited liability on anyone who owned, developed, produced, or even financed production on sites that had been polluted in earlier years, in some cases even before there were environmental laws. Needless to say, significant parts of central cities have remained unused for many years as a result. At last, cities have been permitted by federal legislation to remove or limit the liability of developers or producers for environmental damages that occurred before their involvement with a site. Of course, many conditions surround this provision. Nevertheless, the removal or limitation of liability for damages that developers were not responsible for and could not estimate has resulted in a large influx of firms that want to redevelop brownfields (see Arthur Andersen LLP [1998]). I do not know how important better brownfields remedies are likely to be, but the Chicago effects are certainly helped by the fact that other available sites may be thirty to fifty miles from the CBD. In addition, as indicated above, potential workers are available near brownfields that may not be available elsewhere in tight labor markets. Brownfields redevelopment in Chicago is being carried out mostly for business projects, but by no means mostly by manufacturing firms.

Third, everybody knows that crime rates have fallen in the 1990s, especially in central cities, more than can be accounted for by demographic changes. (Most serious crimes are committed by males between sixteen and thirty years of age, and their numbers fell during the 1990s.) Nobody who has ever tried to help businesses locate in central cities can doubt that among the deterrents are fear of arson, theft, vandalism, and attacks on female employees on the way to and from work. It is merely facing the facts to observe that about half of the black males in the high-crime-age range are under the supervision of the criminal justice system (see Freeman [1996]). It is also merely facing the facts to observe that blacks have often been discriminated against by the criminal justice system just as they have been discriminated against by housing and employment markets (see Thernstrom and Thernstrom [1997]). These issues are much too complex to analyze here, but decreases in employment discrimination and crime rates have presumably made businesses more willing to locate in central cities. Presumably, the steadily improving educations of minority groups, to some extent motivated by rising returns to human capital, have also increased businesses' willingness to locate in central cities.

Central-City Economic Development Programs

What about central-city economic development programs? Here I can report only pessimism. During the last two or three years and for the first time in a decade or so, developers have wanted to build office buildings, hotels, and a substantial number of dwellings in many central cities. I first illustrate responses in Chicago, since this is the only evidence yet available. I then suggest what I believe to be rather obvious directions for local government policies to promote central-city economic development.

The Chicago city government generally recognizes that prosperity requires it to improve the human capital of its residents, especially by upgrading its public schools from their dire straits of a few years ago. Yet it has consistently gone against this principle by downzoning residential densities in its highest income neighborhoods. About 4 percent of the city's population lives in the city's highest income census tracts. These are within a mile or so of Lake Michigan and stretch from the CBD about five miles north. Residential zoning in that area now permits densities of only about half of those permitted in 1950. The city fears that additional high-rises in that area would create "intolerable congestion." This claim is dubious, given that off-street parking has long been required of developers, that the area is well served by public transit to the CBD, and that those zoned out of the near north area are the ones most likely to live in the north shore or western suburbs, from which most CBD workers commute ten to twenty-five miles on congested expressways. Presumably, some of the city's job loss has occurred because business services have increasingly decided that having locations in suburban subcenters is better than requiring their employees to make the trip to the CBD.

Chicago's low-income residents presumably have no direct interest in low-cost housing for high-income residents on the near north side. But the city government has an interest in the taxes that high-income residents pay—in the form of making the city a desirable place for high-income people to live and in the jobs that high-income residents create.[6]

Turning to direct local government effects on businesses, city (and all of Cook County) taxes on business real estate are about three times as high per dollar of market value as those on single-family dwellings. City business (including many nuisance) taxes are higher than those in suburbs outside Cook County, but I suspect that high taxes are no more harmful than the business development strategies to which they lead. Most communities, including most especially the city of Chicago, seek nonresidential ratables precisely because they generate more tax revenues relative to costs of the government services that they receive than do dwellings. This leads communities to "bid" for businesses by offering them "incentives" of an enormous variety: tax increment financing, temporary relief from taxes, relaxation of land use controls, subsidized financing, and so on. If a developer wants to build a high-rise commercial structure in Chicago, he or she will need a couple of years and much high-priced legal, environmental, political, public relations, financial, and accounting talent to obtain the needed permissions, and will end up with permission to build at no more than half or two-thirds the density first proposed.[7]

Some studies conclude that economic incentive programs result in net job creation and some conclude that they do not. However, almost no studies take account of the fact that state and local governments must balance their budgets, so that subsidies to some businesses require higher taxes on other groups, with offsetting effects (see Bartik [1991] and Mills [1997]).

None of the above antidevelopment strategisms is peculiar to Chicago. Undoubtedly, some other central cities are worse and some are better. And many suburbs are no better. A few small, high-income suburbs do not permit businesses to locate in their jurisdictions on any terms. A few low-income inner suburbs, mostly in Cook County in the Chicago area, are desperate for businesses and nearly give away the farm to seduce them to locate there. But in most metropolitan areas, central cities have lost jobs in competition with their suburbs while the suburbs have gained them.

How many jobs and how much tax revenue have central-city antidevelopment actions cost the central cities? No one can possibly know. The qualitative and disparate nature of many actions makes quantitative estimates nearly impossible. I suspect that Chicago, although larger than most, is typical of many central cities in the country. Press accounts persuade me that at least Trenton, Newark, New Orleans, Detroit, Philadelphia, and Washington, D.C., have had worse antibusiness policies during most recent decades—to use a few striking examples.

What are appropriate economic development strategies for central cities? I believe the answer is obvious. Start with the axiom that central cities are in permanent and intense competition, not only with their suburbs, but with every other metropolitan area in the country and with numbers of metropolitan areas in other countries that increase every year or so. A second axiom is that generous earnings will continue to accrue mostly to workers with substantial human capital. The conclusion is that central cities should do everything they can to increase the supply of and demand for human capital within their borders. The only alternative is to place the emphasis on handouts, which are politically attractive in important respects but result in neither substantial incomes nor self-sufficient residents.

Recent emphasis on human capital makes it nearly inevitable that local governments will try to entice businesses that they think will attract, improve, or retain human capital in the labor force. Local governments have a long history of attempts to attract "winners" among businesses. They have established various kinds of technology parks, preferably near colleges and universities, believing that they could outguess the market as to what businesses would thrive in their communities. Many were mostly vacant for many years until local governments sold or leased them to any businesses that would occupy them. State and local governments wasted taxpayers' money to subsidize the attraction of businesses to the community. Fads have come and gone for high-tech, software, biotech, venture capital, and other ill-defined business groups. In the most successful development programs, governments identified a trend and called it a policy, but mostly governments identified the previous decade's winners and wasted taxpayers' money to attract them after their employment growth spurt had abated.

Local governments cannot outguess markets as to what businesses will thrive in their communities. Business location decisions are among the riskiest and, when successful, best rewarded business decisions. Local governments have neither the expertise nor the incentive to make location decisions wisely. These strictures apply as much to attempts to promote businesses dependent on human capital as to attempts to promote any other kinds of business developments.

The best economic development policy would be to adopt a neutral pro-business policy. That sounds innocent, but it contrasts vividly with many central-city government attitudes toward businesses in which they are regarded as public enemies, as geese to be plucked, as servants of government officials from whom campaign contributions can be obtained, or as places where government officials' relatives can get jobs. A pro-business policy should entail removal of all unneeded regulations. Local governments should have a few transparent and important requirements that all businesses must follow, modest taxes, and nothing else for business policies. They should relax or remove zoning restrictions on businesses and housing.

Regarding human capital development, local government policies must start with improvements in elementary and secondary education. Everybody should know that children in poverty reach ages four or five a couple of steps behind other children. This has to do with family structure and neighborhood conditions in poverty areas. There really is not much that local governments can do about these things other than to enable poor children to improve their prospects through better education. Many children in low-income neighborhoods are difficult to educate. Nevertheless, public schools in the poor areas of many large central cities are of poor quality. Improvements require higher quality and more dedicated teachers and administrators. Many school programs have shown that expecting children to succeed and providing good learning opportunities produce good results.

The fact that the children in poor neighborhoods are difficult to educate does not mean that nothing can be done. Opposition to reform by teachers' unions is only part of the problem. In big cities, the education bureaucracy is politically powerful, mostly because it is a strong lobby that influences many voters. Charter schools are a big help, but the best reform would be a comprehensive voucher program in which public schools (as with private schools) have to attract enough students to pay their costs, including rental costs of facilities, or they would have to sell or rent the facilities to private schools. It would then be possible to promote competitive schooling with almost no construction of new facilities. Private schools would have to comply with nondiscrimination rules, as they do now, and with elementary state requirements on educational quality. They should also be eligible for whatever special assistance for handicapped children that public schools can receive.

There would be little danger that private schools would skim off the best students, leaving public schools with those who are most difficult to educate. In some large cities, private schools already skim off many of the best students. At a minimum, a good voucher program would enable them to dip down further into the student quality distribution. Many private schools would make special efforts to attract students with poor backgrounds. Public and private schools anywhere in a metropolitan area should be eligible and encouraged to enroll students with vouchers from anywhere in the area. Vouchers would have to be sufficient to pay for a decent education, but schools should be allowed to set tuition at levels exceeding the vouchers' value and to grant needs-based scholarships. A voucher program would have to be state-authorized.

A high-quality educational system does not entail focusing just on students who can become scientists, doctors, and lawyers. There are many kinds of human capital, and students should be able to experiment with several kinds. High-quality instruction can teach most students to read, write, and do arithmetic by the time they are in the third grade, although some now spend twelve years in public school without learning those skills. All students should be enabled to become comfortable with elementary computer operations. Students must be held to reasonable standards and must be able to perceive that educational and business opportunities await them if they succeed.

Of course, the streets should be safe. Most Americans do not appreciate the close connection between illegal drugs and street crimes. Not only have we imprisoned 1 percent of the adult population, but also many prisons are predominantly inhabited by drug offenders. In my view, illegal drugs have filled and corrupted the prisons (in some, these drugs can be bought almost as easily as on the public streets) and have infiltrated the police and courts as well as many local governments. Illegal drugs are also a major reason for street gangs, just as prohibition was a major cause of criminal activity in the 1920s, with similar consequences.

The war on drugs is not showing signs of success. Because of this, it is my belief that illegal drugs should be available at about cost, and in modest quantities, upon convincing an appropriate medical authority of need. By taking the profit out of drugs, we would reduce crime and corruption and probably addiction, since it would undercut the profitability of sales promotion by providers of illegal drugs, and would place users under the supervision of medical professionals. It would also reduce perceived racial discrimination in the criminal justice system. Illegal drugs are almost as easily available in many suburbs as they are on central-city streets. But middle-class offenders rarely go to jail; they are placed in rehabilitation programs, put on probation, or kept out of prison through legal maneuverings.

Finally, if central cities increase the supply of human capital through better education and a better criminal justice system, and increase the demand for human capital through better pro-business policies, they should also take steps to retain their best educated and best paid residents. Reduced business regulations would enable businesses to serve the needs of residents better throughout the income distribution. Reduced controls on residential development would enable relatively high-income residents to live where and how they wish.

Many central cities could also dramatically improve their transportation systems at little or no cost (under present arrangements, the federal government would pay for much of the cost) to enable both city and suburban residents to move around cities more easily. Bus systems should be opened to private companies. (It is done successfully and with considerable savings in many places.) Operation of fixed-rail transit systems should be contracted to private businesses. Construction of highways in central cities is unjustified on both economic and political grounds. But the capacity of city streets and roads could be increased through: carefully designed systems of reverse-direction streets and lanes, sequenced traffic lights, much higher charges for on-street parking (coupled with decontrol of private off-street parking facilities), better traffic law enforcement and, by federal action, much higher and more reasonable motor vehicle fuel taxes (the substantial revenues from which should revert to local governments in exchange for agreements to reduce distorting property taxes).

Local governments must, as must all governments in our imperfect democracy, respond to the wishes of their constituents. In recent years, partly because of pervasive regulation, central-city governments have spent too much of their energies arguing over minor concessions to this group or that group. Probably more important, they dissipate too much of their resources on stadiums, convention centers, hospitals, and other business investments that would be better left to the private sector. I believe that they should at least undertake serious taxpayer education, debates, and election campaigns on long-run issues related to economic development. Nothing that federal, state, or local governments can or at least should do will reverse the trend of suburbanization. Recent national debate about "controlling urban sprawl" will further divert resources to unproductive uses and will spawn more unproductive regulations.

Endnotes

The author is indebted to the conference participants for valuable comments on an earlier draft of this paper.

1. See Heckman et al. (1998) and U.S. Council of Economic Advisers (1999). Different authors employ different measures of earnings inequality, but virtually all careful studies show that the worst paid 20 to 35 percent of workers have experienced smaller earnings increases than other workers. Earnings inequality has increased not only for workers as a whole, but also within racial, gender, and sectoral groups.

2. This is not quite true. Metropolitan areas are located on relatively flat land with better access to water for their needs than other places. Location on navigable waterways is still of some importance, but most intermetropolitan movement now takes place by motor vehicles, trains, and airplanes, and is not very dependent on geographical conditions.

3. The statement is true even if travel in CBDs and in some sub-centers is slow, as it is. The relevant measure is the cost of movement between origin and destination. That cost is low even if travel is slow, provided that origin and destination are near each other. Even if communication is by modern electronic means, facilities are best in large metropolitan areas.

4. Intrametropolitan transportation and communication inputs are of course among the relevant inputs. Increasing total factor productivity is reported partly because the most costly transportation input, time spent traveling, is unmeasured.

5. Population and employment data in these paragraphs are from Gaquin and Littman (1998), Woods and Poole (1997), and the Illinois Department of Employment Security (1997).

6. There is direct evidence on the jobs issue. The northern end of Michigan Avenue contains one of the world's finest walkable shopping areas (including seven fine vertical department stores and dozens of boutiques), about ten of the city's finest hotels, and a booming office development sector. Nobody knows how much the prosperity of the area depends on the high-income residents of the near north, but it must be considerable. Zoning densities can easily be verified from city zoning maps.

7. A couple of years ago, a developer proposed a mixed-use project for one of the prime undeveloped sites in the city, just north of the Loop and near the mouth of the Chicago River; the city, with the mayor's approval, finally authorized the project, which was downsized by about a third because of the "congestion" that it would have created. When asked if the city did not think that the extra jobs and taxes would be missed, a city official said he "hadn't heard any complaints from the developer."

REFERENCES

Arthur Andersen LLP. 1998. "City of Chicago Industrial Market and Strategic Analysis." Paper submitted to the City of Chicago's Department of Planning and Development. Chicago: Arthur Andersen LLP.

Bartik, Timothy. 1991. "Who Benefits from State and Local Economic Development Policies?" Kalamazoo, Mich.: W. E. Upjohn Institute for Employment Research.

Carlino, Gerald, and Edwin S. Mills. 1987. "The Determinants of County Growth." JOURNAL OF REGIONAL SCIENCE 27, no. 1: 39-54.

Cheshire, Paul. Forthcoming. "Trends in Sizes and Structures of Urban Areas." In Paul Cheshire and Edwin S. Mills, eds., HANDBOOK OF URBAN AND REGIONAL ECONOMICS 3. Amsterdam: Elsevier/North-Holland.

Eberts, Randall, and Daniel McMillen. Forthcoming. "Agglomeration Economies and Urban Public Infrastructure." In Paul Cheshire and Edwin S. Mills, eds., HANDBOOK OF URBAN AND REGIONAL ECONOMICS 3. Amsterdam: Elsevier/North-Holland.

Freeman, Richard. 1996. "The Labor Market." In J. Wilson and J. Petersilia, eds., CRIME. San Francisco: Institute for Contemporary Studies.

Gaquin, Deidre, and Mark Littman, eds. 1998. 1998 COUNTY AND CITY EXTRA. Washington, D.C.: Bernan Press.

Hale, David. 1999. "U.S. Cycle Theory." FINANCIAL TIMES, February 17.

Heckman, James, Lance Lochner, and Christopher Taber. 1998. "Explaining Rising Wage Inequality: Explorations with a Dynamic General Equilibrium Model of Labor Earnings with Heterogeneous Markets." NBER Working Paper no. 6384, January.

Illinois Department of Employment Security. 1997. "Where Workers Work in the Chicago Metro Area, 1972-1996." Mimeo.

Mieszkowski, Peter, and Edwin S. Mills. 1993. "The Causes of Metropolitan Suburbanization." JOURNAL OF ECONOMIC PERSPECTIVES 7, no. 3: 135-47.

Mills, Edwin. S. 1992. "The Measurement and Determinants of Suburbanization." JOURNAL OF URBAN ECONOMICS 32, no. 3: 377-87.

———. 1997. "Toward the Next Massachusetts Miracle: The Limits of Economic Development Programs." Boston: Pioneer Institute for Public Policy Research.

Mills, Edwin S., and Luan´ Sendé Lubuele. 1997. "Inner Cities." JOURNAL OF ECONOMIC LITERATURE 35, no. 2: 727-56.

Thernstrom, Stephen, and Abigail Thernstrom. 1997. AMERICA IN BLACK AND WHITE. New York: Simon & Schuster.

U.S. Council of Economic Advisers. 1999. ECONOMIC REPORT OF THE PRESIDENT. CHAPTER 3. Washington, D.C.: U.S. Government Printing Office.

White, Michelle. Forthcoming. "Urban Areas with Decentralized Employment: Theory and Empirical Work." In Paul Cheshire and Edwin S. Mills, eds., HANDBOOK OF URBAN AND REGIONAL ECONOMICS 3. Amsterdam: Elsevier/North-Holland.

Woods and Poole. 1997. 1997 MSA PROFILE. Washington, D.C.: Woods and Poole.

Yinger, John. 1995. CLOSED DOORS, OPPORTUNITIES LOST. New York: Russell Sage Foundation.