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URBANIZATION AND ITS DISCONTENTS

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ABSTRACT

American cities have experienced a remarkable renaissance over the past 40 years, but in recent years, cities have experienced considerable discontent. Anger about high housing prices and gentrification has led to protests. The urban wage premium appears to have disappeared for less skilled workers. The cities of the developing world are growing particularly rapidly, but in those places, the downsides of density are acute. In this essay, I review the causes of urban discontent and present a unified explanation for this unhappiness. Urban resurgence represents private sector success, and the public sector typically only catches up to urban change with a considerable lag. Moreover, as urban machines have been replaced by governments that are more accountable to empowered residents, urban governments do more to protect insiders and less to enable growth. The power of insiders can be seen in the regulatory limits on new construction and new businesses, the slow pace of school reform and the unwillingness to embrace congestion pricing.

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I. Introduction

Discontent roils America's most successful cities: high housing prices, allegedly racist policing, technological innovations like ride-sharing and apparent inequities in public schooling have all sparked fierce protests from New York to San Francisco. Why has urban triumph produced acrimony rather than joy?

Paradoxically, success often generates disputes. Rent-seeking only makes sense where there are rents to fight over. Throughout most of the 1970 to 2000 period, urban fortunes seemed to hang on a knife's edge. Urban mayors emphasized core services that would prevent more urban flight, not redistribution (Peterson, 1981, Ferreiro and Gyourko, 2009). In a world of apparent urban plenty, activists believe that urban governments can focus more on social problems.

Moreover, as Florida (2017) notes, there are many ways in which successful cities are failing their poorer inhabitants. Cities are productive, but they do not appear to enable upward mobility (Chetty et al., 2018, Glaeser and Tan, 2020). The urban wage premium appears to have disappeared for the less skilled (Autor, 2019). As the wealthy bid up the price of urban real estate, the poor must either pay higher prices or move elsewhere (Hsieh and Moretti, 2019). Those prices may explain why poorer people no longer move disproportionately to cities with higher wages (Ganong and Shoag, 2017). Everywhere, but especially in the developing world, urban mobility has been slowed by terrible levels of congestion (Kreindler, 2019), and crime has reappeared as an urban curse in some cities, such as Chicago.

In Section II of this paper, I review backdrop to our current urban discontent: the technological changes that led to urban resurgence. Following previous work (Gaspar and Glaeser, 1998, Glaeser, 2011), I argue that mid-20th century technological changes, such as the interstate highway system and containerization, were largely centrifugal, leading both industry and people to leave urban cores.[2] In more recent decades, technological change has become more centripetal. Globalization and mechanization have increased the returns to skill and innovation, and urban density abets knowledge accumulation and creativity. There is a strong complementarity between cities and skills (Glaeser and Resseger, 2010) so that more skilled places have achieved more success and more skilled urbanites have experienced greater wage

[2] Paul Krugman taught me to understand the dance between centripetal and centrifugal forces that shapes urban concentration.

growth. The economic success and growth of cities in the developing world is even more impressive (Chauvin et al., 2018).

But even as many cities have experienced robust economic growth, they have failed to generate upward mobility. The Opportunity Atlas created by Chetty et al. (2018) provides upward mobility by neighborhood across the U.S. As Glaeser and Tan (2020) document, upward mobility is lower in dense metropolitan areas and lower in denser neighborhoods within metropolitan areas. Many central city school districts appear to be performing poorly, and urban children often live spatially segregated lives. For some teenagers, the urban advantage in making markets may have become a curse because urban drug markets distract from education.

Autor (2019) documents that the urban wage premium has largely disappeared for less skilled workers. In Section IV, I show that this change has occurred in less skilled cities that have experienced less success, but there is still a wage premium for less skilled workers who work in more skilled cities. As a whole, cities appear to perform poorly for less skilled workers partially because less skilled workers live disproportionately in less skilled cities. In developing world cities, weak rule of law means that more vulnerable citizens, particularly women, have difficulty forming reciprocally beneficial partnerships that enable them to benefit from urban collaboration (Ashraf, Delfino and Glaeser, 2019).

Anger about gentrification partially reflects the fact that housing price growth has often outpaced income growth, especially for less skilled workers. That increase in housing prices reflects both demand for consumer amenities by higher skilled workers and limits on housing supply. As I discuss in Section V, cities where housing supply is relatively fixed, such as San Francisco, create the sharpest conflicts as rich and poor battle over a zero-sum stock of homes.

Historically, cities have been an escape route for the underemployed residents of rural areas, such as the African-Americans who fled north during the Great Migration. Since 1980, migration rates have declined (Molloy, 2011) and poor people no longer disproportionately move to higher wage areas (Ganong and Shoag, 2017). Limited housing supply provides one potential explanation for this change, but cities sometimes also fail to provide particularly good jobs for outsiders with the wrong set of skills.

The Highway Revolts of the 1960s and 1970s were the transportation equivalent of community opposition to new housing construction. As more drivers crowd into a fixed supply of city streets, those streets become congested and urbanites waste billions of hours stuck in traffic (Texas Transportation Institute, 2019). Few cities have adopted the congestion pricing that could induce drivers to internalize the social costs of their motoring. Endless traffic jams are even prevalent in developing world cities, although Kreindler (2019) finds that congestion pricing in those areas would have only modest benefits because the quality of roads is so limited. As I discuss in Section VII, urban disamenities, such as traffic, effectively limit urban success.

In Section VIII, I discuss a simple hypothesis to explain these liked phenomena. Our recent urban success primarily reflects private sector productivity which has been enhanced by urban density. But there have been few matching improvements in the efficiency of urban government. Policing is the only area that seems to have generated real success and that success came at the terrible cost of mass incarceration. More generally, the public sector has failed to keep up with private sector led urban growth.

A mismatch between private urban expansion and public capacity is not unusual in either our urban past or in the developing world today. Typically, cities grow and then the public sector needs to catch up by building infrastructure, enacting regulations and supporting the poor. This catchup may also happen today, but there are far more breaks on public sector change than existed in the past. New infrastructure is harder to build. Schools are harder to reform. An empowered and educated citizenry has created more checks on city government.

Those checks have upsides. Communities are less likely to be haphazardly bulldozed to make way for urban renewal than they were in the past. Yet an urban government that protects insiders too stringently will end up having a public sector that lags many decades behind. Lengthy construction delays have further reduced public sector accountability, because the leader who starts a major project is unlikely to be around when it is finished.

This hypothesis echoes the argument made by Sigmund Freud in Civilization and Its Discontents, which motivates the title of this essay. Freud was concerned with the conflict between individual desires and the rules that define civilized behavior. That conflict is minimized when individuals are taught to accommodate social rules and when the rules are limited to restricting the most harmful behavior. The urban discontent of today arguably reflects

failures in both education and regulation that have made cities far less accommodating to the less fortunate.

Section IX concludes with a discussion of the ways in which future research might improve current and future urban policy debates. We need more research on the consequences of gentrification. We need to better understand why urban mobility is low. We especially need to understand the barriers to making developing world cities more livable.

II. Understanding Urban Resurgence[3]

While this paper focuses on urban traumas rather than urban success, the roots of urban resurgence are important preconditions for understanding the current discontent. City populations feel empowered to demand more because cities appear to have more resources. If New York City's government was near bankruptcy, it seems unlikely that New York's citizens would have elected a highly progressive mayor. In 1977, after the Bronx burned and the city lurched towards bankruptcy, New York's voters rejected the progressive Bella Abzug and turned to the more pragmatic Ed Koch.

Urban fortunes are shaped by technological change. During some periods, technological shifts are largely centripetal, meaning that they pull people towards cities. During other eras, technological trends are centrifugal, meaning that they push people away from dense urban cores.

The 19th century was predominantly a centripetal century, marked by a series of innovations, including steam engines, streetcars and skyscrapers, that abetted urban growth. The first sixty years of the 20th century was largely a centrifugal era, largely because technological change reduced the tyranny of distance. Cheaper shipping costs, from highways, cheaper railroads and containerization, allowed far-flung people to participate more fully in the global economy (Glaeser and Kolhase, 2004). Radio and television enabled the rural population to enjoy previously entertainment.

[3] This section largely follows the discussion in Glaeser (2011).

These lower costs reduced the need to locate production near the urban ports and railroads that once anchored all of America's cities. The mass-produced automobile enabled low density mobility and the rise of car-oriented suburbs (Baum-Snow, 2007). These centrifugal technologies first slowed the rise of American cities and then enabled a mass exodus from urban America. The air conditioner made America's warmer places far more appealing than they had been before World War II, and a move to sun accompanied the move to sprawl.

Urban social problems, especially weak schools and crime, were exacerbated by suburbanization and then further encouraged the move to the suburbs and to lower density sunbelt cities. The 1970s were a particularly grim decade for urban America, when many formerly great cities, such as Chicago, New York and Philadelphia, lost ten percent or more of their populations. Midwestern industrial cities, such as Cleveland and Detroit, were particularly badly hit and each of those cities lost more than twenty percent of their populations during the 1970s. That population decline reflects both reductions in the number of households and smaller household sizes.

While transportation costs for goods, people and ideas continued to fall, some cities managed to come back, especially after the Crack Epidemic faded. The populations of New York, Boston, San Francisco and Seattle have all increased steadily since 1980. Other, less visible, urban renaissances have occurred in Minneapolis, Indianapolis, and Columbus, Ohio. Sunbelt cities, such as Atlanta, Dallas, Houston and Phoenix, have experienced far more spectacular population growth.

Economic success lies behind that population growth. The industrial jobs that had once been the backbone of urban economies did not return. Instead, human capital-intensive business services became the new export industries for urban areas. Financial services expanded enormously in urban America from 1980 to 2007. At its height in 2007, finance and insurance generated over forty percent of the total payroll on the island of Manhattan. The urban edge in transferring knowledge is particularly valuable in finance, because a bit of extra information can make millions for a trader in minutes.

Face-to-face contact is often part of the delivery mechanism for urban services. Clients like to meet their accountants, bankers, lawyers and management consultants in person. Face-to-face contact is even more imperative for barbers and manicurists. Urban interactions enable young

workers to become more skilled. Researchers have long noticed that cities offer a steeper age-earnings profile (Glaeser and Mare, 2001, DeLaRoca and Puga, 2017) that has been interpreted as reflecting faster learning in cities.

Why didn't improvements in electronic communication make face-to-face contact obsolete? While email is possible almost everywhere, face-to-face interactions generate a richer information flow that includes body language, intonation and facial expression. As the world became more complex, the value of intense communication also increases. Physical immersion in an informationally intense environment, such as trading floor or an academic seminar, generates a rush of information that is hard to duplicate online. Moreover, dense environments facilitate random personal interactions that can create serendipitous flows of knowledge and collaborative creativity.

The knowledge-intensive nature of the urban resurgence helps to explain why educated cities have done much better than uneducated cities. Glaeser et al. (1995), Glaeser and Saiz (2004) and Shapiro (2006) document the strong link between education and the growth of both urban populations and urban incomes. Rauch (1993) and Moretti (2004) measure human capital externalities, which are defined as the economic benefits associated with working in a more educated place. These benefits appear to have increased over time. In recent years, earnings appear to increase by ten percent as the share of adults in a metropolitan area increases by ten percentage points, holding individual education constant.

While highly educated workers moved into professional and business services, successful cities also generated employment for less skilled workers in other parts of the service economy. Many workers switched from manufacturing to wholesale and retail trade during the 1990s. Hospitality and food services also expanded dramatically after 1980. Employment in these service industries depends on the demand generated by the success of more export-oriented services, like finance. In areas that lack viable export industries, the dominant sector is typically healthcare and social assistance, where demand is maintained by Federal transfers.

Cities also came back as places of consumption as well as places of production (Glaeser, Kolko and Saiz, 2001), which partially reflects the rise in returns to skill. As Americans became better educated and as educated people came to earn more, they spent more on higher-end urban pleasures, such as fine dining, art galleries and expensive retail. Young people increasingly lived

in cities, even as they worked in suburbs. Prices rose dramatically in urban cores and remained flat in the suburbs.

The rise of consumer cities was also enabled by reductions in crime levels, especially when the Crack Epidemic ended. A night on the town is much less fun when the risk of a mugging is omnipresent, although Schwartz et al. (2003) find that only a quarter of the increase in New York City's property values can be associated with reductions in the level of criminal activity.

The causes of the urban crime decline are still hotly debated. Donahue and Levitt (2001) also emphasize the role of rising abortion levels. Reyes (2006) points to a reduction in the level of lead. Police forces themselves emphasize tactical innovations, such as broken-windows or hot spots policing. Levitt (2001) gave more credit to the increasing number of police on New York City streets and to the incarceration of vast numbers of potential criminals. The rise in the number of incarcerations reminds us that declining crime levels have come at a large cost to poorer urban neighborhoods.

Regardless of the cause, falling crime levels must be counted as a public sector success. Somewhat surprisingly, there are few other ways in which urban government saw meaningful improvement. Most big city school districts experienced only modest improvements in test scores, and many parents still suburbanize to get access to more exclusive public schools. Rising commute times suggest little improvement in the area of urban mobility. While some cities, such as New York, managed to get their finances into better shape, the post-1980 urban comeback was overwhelmingly driven by the private sector.

The success of many European cities, such as London and Frankfurt, looks quite similar to the success of New York and San Francisco. Skilled service industries replaced erstwhile manufacturing plants in western cities. Urbanization in East Asia is still oriented towards manufacturing in places like Shenzhen, but in South Asia, Africa and South America, urbanization occurred without industrialization and at far lower income levels than in western history (Jedwab and Vollrath, 2019).

One explanation for the growth of cities in the poor world is that western urbanization occurred in largely closed economies, where agricultural surpluses must exist before cities expand. (Glaeser, 2014). In open economies, cities can be fed through trade and so countries that have a

comparative disadvantage in agriculture will urbanize. The cities of the poor world have also expanded because of urban fertility levels that are vastly higher than those seen in the west either today or in the past (Jedwab and Vollrath, 2019).

The common thread between developing world urbanization and wealthy world urbanization is the limits of the public sector. The world's poorest cities have governments with limited capacity to provide core services or enforce rule of law. Consequently, these places face all of the challenges that density always creates without the public sector capacity needed to address those challenges.

III. The Limits on Urban Opportunity

During the difficult 1970s, much of the urban exodus was led by parents seeking better or at least different, schools for their children. Suburbs disproportionately attracted wealthier parents because the suburban lifestyle, with its reliance on car and home ownership, was more expensive. American local schooling then meant that suburban schools disproportionately educated the children of the rich, and consequently those schools had more resources and faced fewer social problems. Suburban school districts then turned became an added draw for other parents, who happily left urban schools that were often crowded with poorer children.

Racial divisions exacerbated the appeal of suburban schools to many parents. In 1971, the Supreme Court ruled in Swann v. Charlotte-Mecklenburg Board of Education that school districts must eliminate racially segregated schools, even if that meant busing children across neighborhoods. In 1974, the Court ruled in Milliken v. Bradley that busing must occur within districts but could not be forced across districts. Consequently, a child who lived within the city's boundaries would go to a racially integrated school, but if that child lived outside the city limits, he or she could attend an almost completely white school. This ruling meant that parents could escape busing entirely, as long as they left the city.

When cities came back in the 1980s and 1990s, their school districts did not particularly improve. Many of the new urbanites were young and childless and they didn't mind underperforming schools. The modern school reform movement that began around 2000

achieved mixed results in many cities. Graduation rates slowly increased, but there was less visible improvement in test scores in places like New York City.

Until the publication of the Opportunity Atlas by Chetty et al. (2018), the ability to assess urban upward mobility was limited. The Atlas takes the cohort born between 1978 and 1983 and measures their economic performance as adults. The core measure of opportunity is adult economic performance for a child whose parents were in the 25th percentile of the income distribution around 1980. This data is available at the metropolitan area and neighborhood level and its results are deeply troubling for urban America.

Figure 1 shows the robust positive relationship between metropolitan area density and per capita Gross Metropolitan Product, as measured by the Bureau of Economic Analysis. Figure 2 shows the robust negative relationship between metropolitan area density and upward mobility, as measured by the Chetty et al. (2018) Opportunity Atlas.

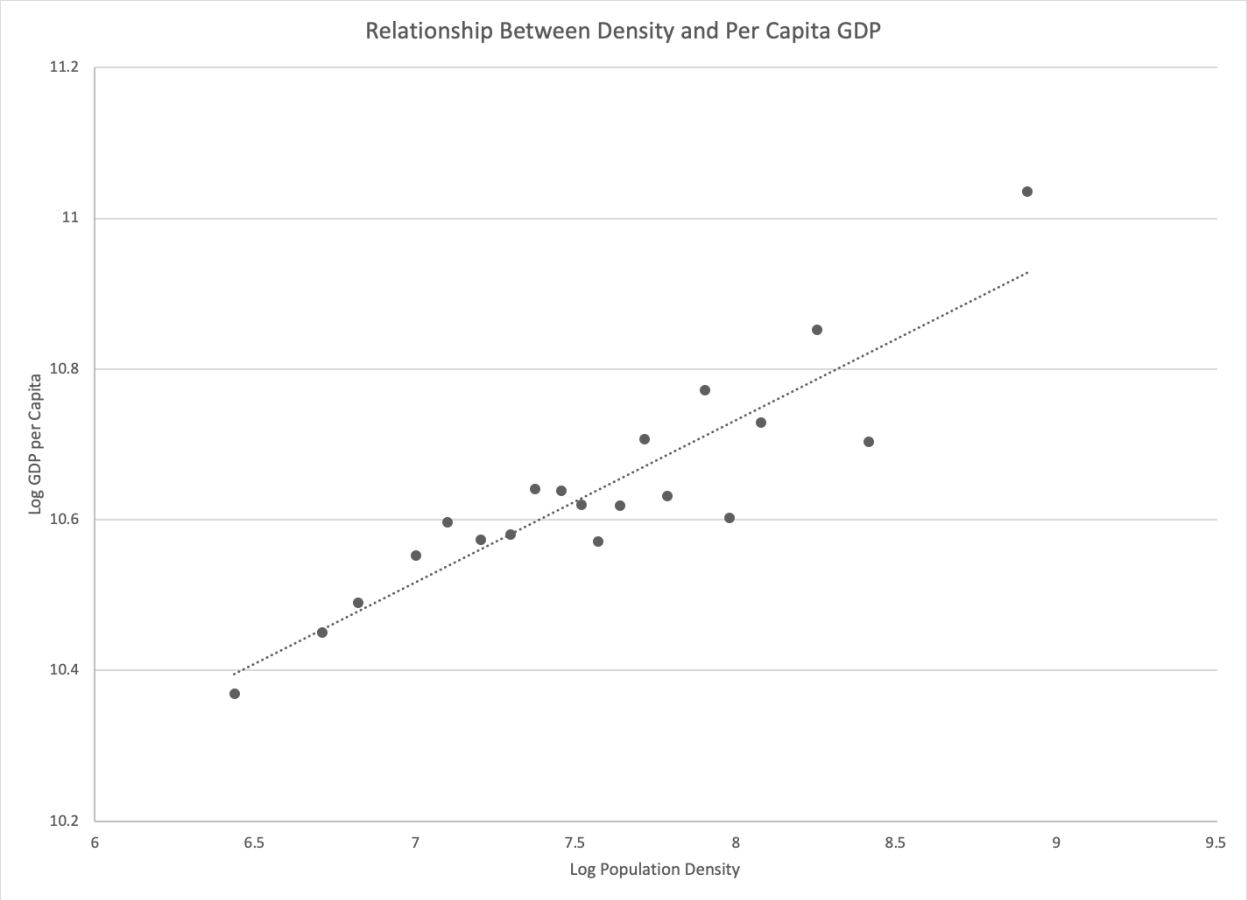

Figure 1: Relationship Between Density and Per Capital GDP

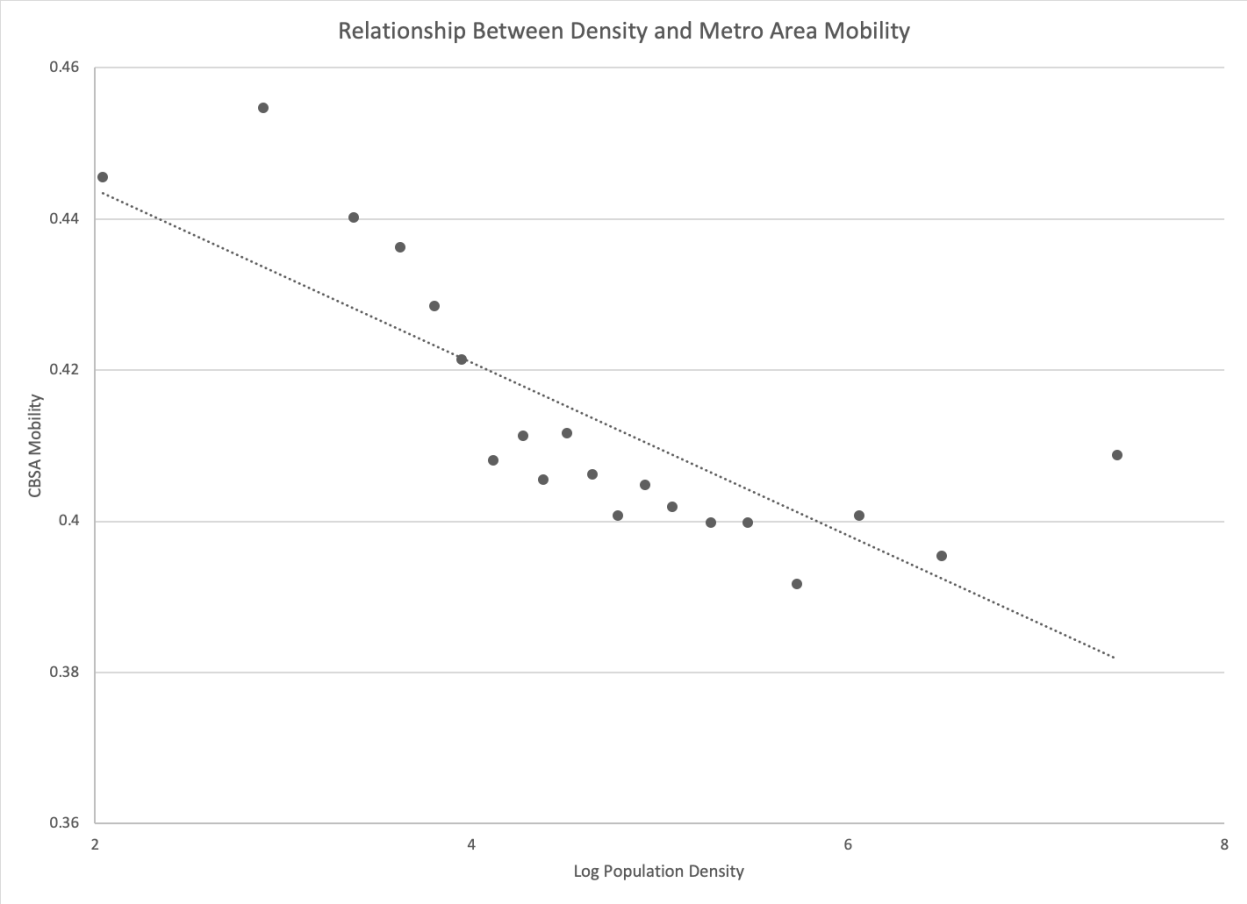

Figure 2: Relationship between Density and Metro Area Mobility

A child born to a 25th percentile parent in one of America's least dense metropolitan areas can expect to end up in the 44th percentile of the national income distribution as an adult. A child born to parents with the same level of income in one of America's most dense areas can expect to end up at the 40th percentile of the income distribution. Cities appear to be almost as bad for upward mobility as they are good for productivity.

Glaeser and Tan (2020) document a series of related facts and attempt to explain those facts. Within cities, productivity is much higher in areas with greater population density, especially in New York (Glaeser et al., 2018). Glaeser and Tan (2020) find that opportunity is lower in more densely populated neighborhoods within cities. Opportunity is also lower in neighborhoods that are closer to the city center.

Across the country as a whole, there is a clear spatial discontinuity at the border of the central city's school district. On average, adult income is at least two percentile points higher just

outside the school district line than within the school district line. The share of children being incarcerated when they are adults falls from 2.75 percent to 2.1 percent. Central city school districts appear to be a significant part of the problem, although it is impossible to control for selection on unobservable attributes at the school district boundary.

Glaeser and Tan (2020) analyze the possible role of unobserved parental attributes and a number of other explanations for why cities appear to be so bad for upward mobility. Controlling for observable parental attributes does little to change the within-city estimates or the spatial discontinuity estimates. Cities also appear to harm upward mobility for the children of richer parents. If income levels were higher for lower human capital parents in 1980, then the Chetty et al. (2018) procedure of controlling for parental income actually induces bias, since parents with the same income in a city will have lower education levels. Yet this argument cannot explain the within city results, since all parents within the city are participating in the same labor market.

One explanation for lower urban mobility is that cities abet racial and income segregation, and consequently poor children in a big city may be less exposed to positive influences than children in a small town. Urban adults who live in poorer areas are still exposed to richer people when they go to work. Urban children who live in the same areas may live far more isolated existences. Controlling for segregation does reduce the negative impact of urban density, especially for African-American children.

A second explanation for low urban mobility is that cities create opportunities that distract from human capital accumulation. Parents have more to do outside the home and so may end up investing less in children. Children can participate in illegal urban activities, such as the drug market, that may reduce their time spent doing homework. The evidence on this hypothesis is limited, but the much higher rates of adult incarceration rates for children who grew up in cities suggests that it may be significant.

A third explanation is that cities have environmental attributes, such as lead and other pollutants, that reduce academic accomplishment. Reyes (2006) documented the connection between lead and crime. Manduca and Sampson (2019) found that environmental pollutants negatively impact opportunity in one large industrial city. Glaeser and Tan (2020) show that opportunity was lower in older industrial cities, and for children growing up in neighborhoods with older buildings. As

pollutants are likely to be more present in older, industrial areas, these facts further support the hypothesis that the physical environment of some cities is detrimental to upward mobility.

I remain unsure why opportunity is lower in central cities, but I am sure that lower urban opportunity remains a major problem for American cities. Perhaps this fact reflects the cohort born between 1978 and 1983 and perhaps recent urban cohorts have experienced more success. Yet as both cities and urban researchers face the future, they must continue to worry about whether cities are failing their children. It is a great paradox that cities appear to be forges of human capital for adults, but places where children seem to learn less productive knowledge.

We know even less about whether cities are engines of opportunity in the developing world. Marx, Stoker and Suri (2013) show that longer term residents of slums are not richer than poorer residents, but this may reflect the selection of those who choose to remain in slums. Perlman and Moser (2010) follows the children and grandchildren of the residents of one of Rio de Janeiro's favelas in 1969. She finds considerable upward mobility, although she cannot compare the slum dwellers with other residents of the city.

We typically lack good inter-generational panel data for the residents of global slums, let alone trials that randomize location. Consequently, we cannot be sure whether slums are good or better for children relative to life in rural poverty. Yet the forces that might explain why American cities are associated with negative outcomes for children could also be operating in developing world slums. Segregation is considerable in these areas, and there are many environmental hazards. Urban children often start begging or street vending, and some get involved in criminal activity.

Economists have long argued that cities should not be judged negatively because of their inequality. Successful cities attract both the rich and the poor, and another name for inequality is diversity. Yet cities should be judged on whether they are turning poor children into rich adults, and many apparently are failing in this fundamental task.

IV. Cities, the Less Skilled and the Vulnerable

An additional explanation reason for low urban mobility is that cities may be providing limited economic opportunity for less skilled adults. Autor (2019) documents that the urban wage

premium appears to have disappeared for Americans without a high school degree. Urban America has experienced increased levels of inequality, partially because the returns to skill have increased sharply within cities (Glaeser, and Resseger, 2010). Will there be a future for less skilled urbanites?

Autor's (2019) fact is quite real, but it is incomplete. The end of the urban wage premium for less skilled Americans partially reflects the fact that less skilled urbanites live disproportionately in less skilled cities, and such places have particularly poor labor markets (Shapiro, 2006). Figure 3 shows the flattened relation between population density and earnings for male workers with less than a high school degree. In 1970, the relationship is robust and positive.

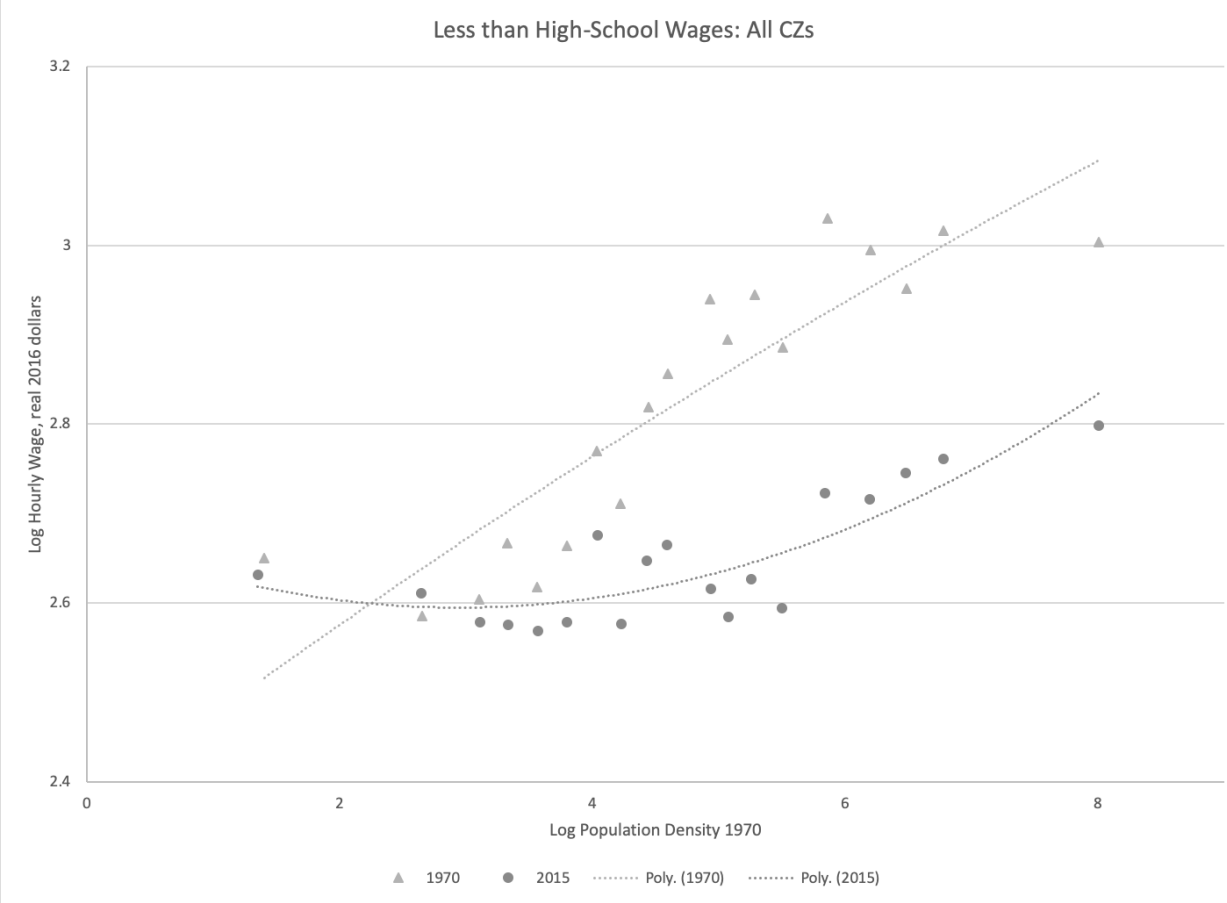

Figure 3: Less than High-School Wages: All CZs

Figure 4 shows the same graph for the one-fourth of metropolitan areas that have the highest share of the adult population with college degrees in 1970. In this case, the lines show a parallel shift down.

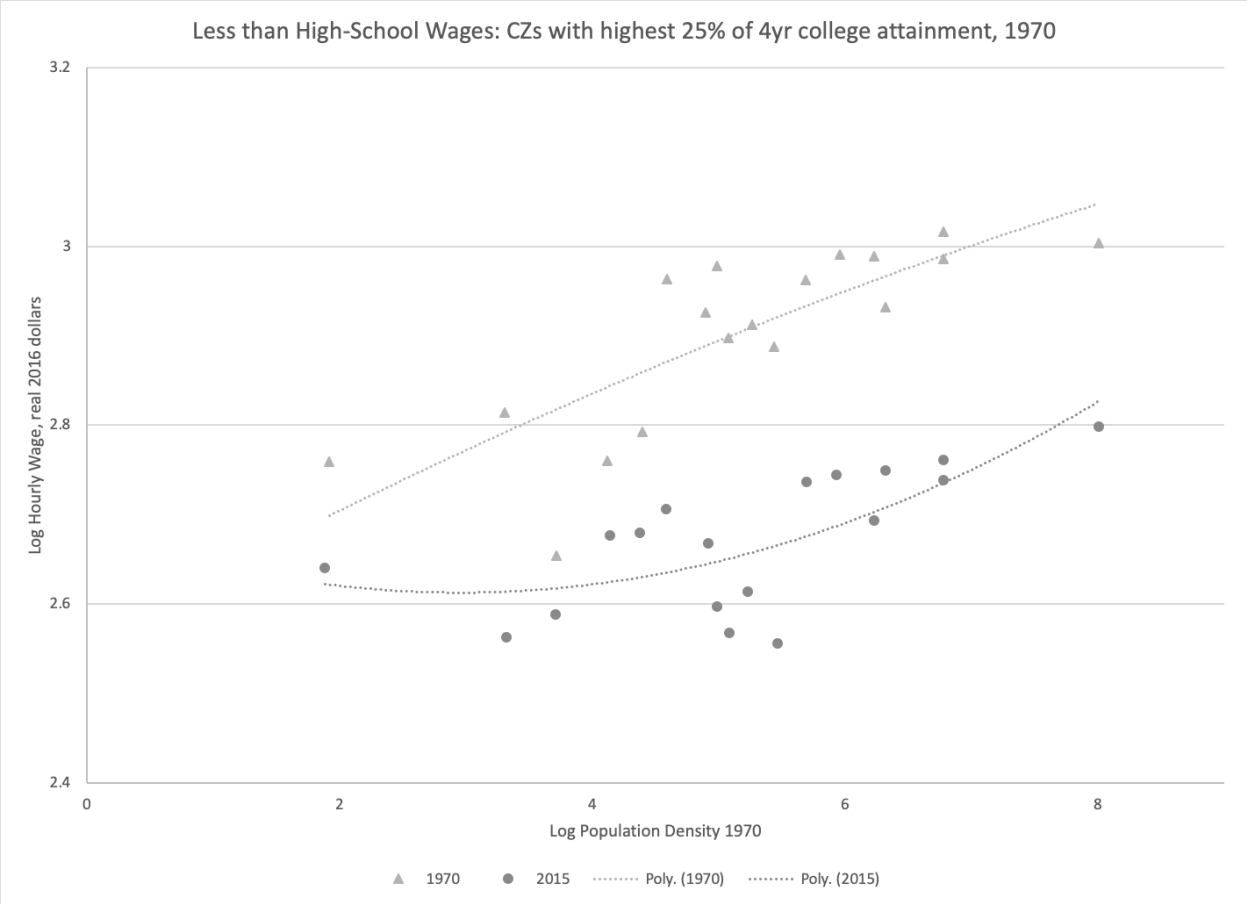

Figure 4: Less than High-School Wages: CZs with highest 25% of 4yr college attainment, 1970

The wage curve has fallen, reflecting the general decline in the returns to unskilled workers, but the slopes of the lines are not statistically different. High school dropouts in the densest, most skilled cities earn approximately .2 log points higher wages than they earn in the least dense, most skilled cities. That gap is approximately the same as the gap that existed in 1970.

The gap between more and less dense, skilled cities is larger for more skilled workers as shown in Figure 5. In this case, both in 1970 and 2015, the workers earn between .3 and .4 log points more in the densest cities. Even the most skilled cities, most dense cities yield higher returns to more skilled workers than to less skilled workers, but that was true in 1970 as well.

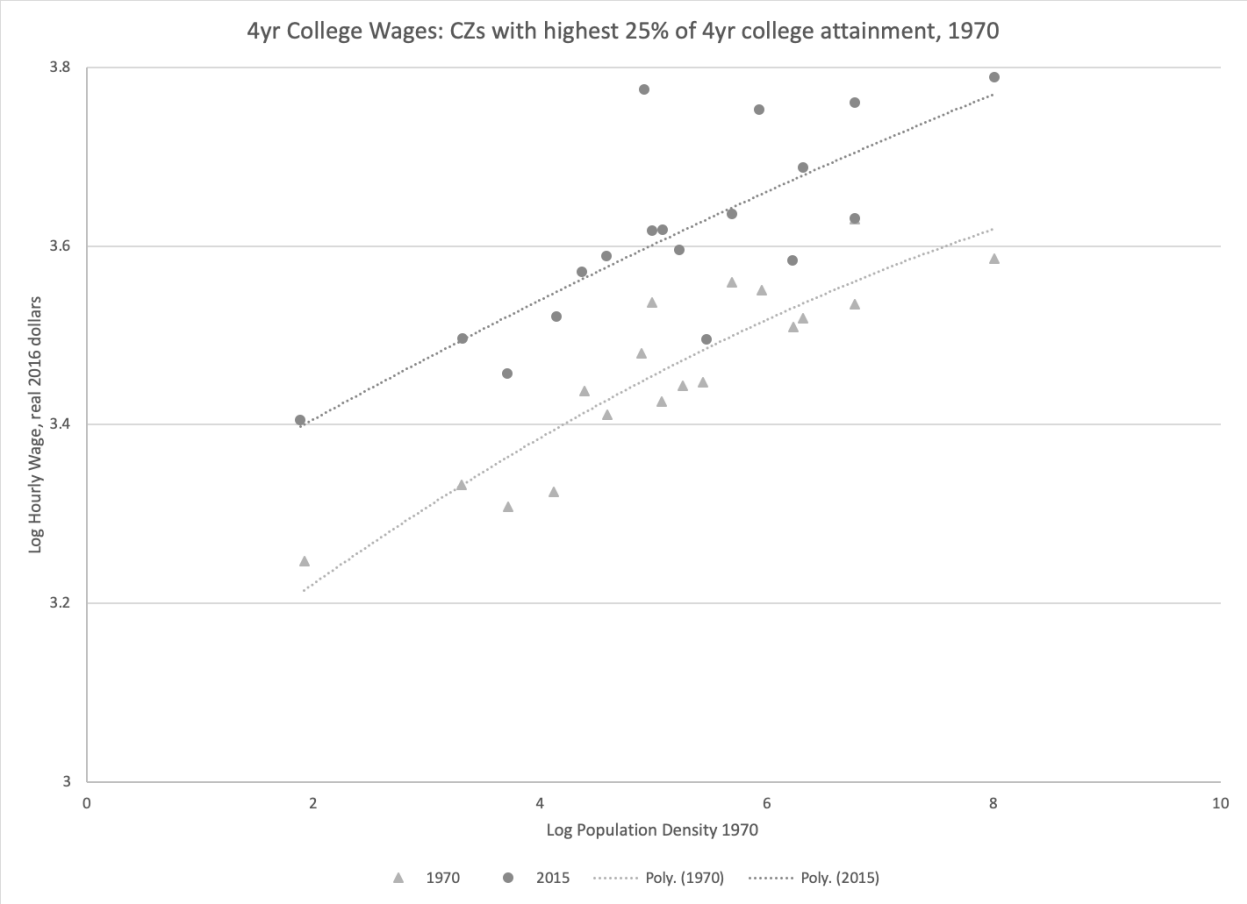

Figure 5: 4yr College Wages: CZs with highest 25% of 4yr college attainment, 1970

One interpretation of these facts is that skilled cities, both in 1970 and 2015, have export industries that particularly rely on skilled workers. Their industrial specialization leads them to deliver a healthy urban wage premium for skilled workers, whose skills become even more valuable when they are able to connect with each other in dense markets. For example, a Computer and Information Systems Manager in San Francisco, a dense and highly skilled area, earns a median hourly wage of 88 dollars. The same occupation earns an hourly wage of 67 dollars in Atlanta, Georgia, which is also skilled but less dense. Both of these wages are still quite high, reflecting the increased demand for information-intensive services in large metropolitan areas.

Unskilled workers in skilled cities specialize in non-traded services. The returns to these activities are higher in dense areas, both because the skilled consumers in those areas have higher incomes and perhaps also because density enables service provision. The median hourly wage

for a bartender in Atlanta, Georgia, is nine dollars. The median hourly wage for a bartender in San Francisco is fourteen dollars and fifty cents. The San Francisco service worker earns a significantly higher hourly wage, at least on a percentage basis, but as I will discuss in the next section, that wage may not be able to cover San Francisco's far more expensive housing costs.

While skilled dense cities pay a sizable premium for service sector workers, unskilled dense cities no longer provide a significant wage premium for either service workers or for workers in tradeable industries. In 1970, unskilled, dense cities often specialized in manufacturing. These cities employed less skilled workers to create industrial products that were exported throughout the country and the world. Over the past 45 years, the demand for less skilled manufacturing work has plummeted and this shift has particularly hit unskilled workers in less skilled, dense cities. Unions that once deliver high wages have grown weaker over time.

In 1979, the U.S. had 19.5 million manufacturing workers. By 2019, the U.S. had only 12.8 million manufacturing workers. Globalization and technological change means that products that were once made by American workers are made by machines and workers elsewhere. Cities that were once manufacturing powerhouses, such as Cleveland, Detroit and Gary, Indiana, have become synonymous with urban decline.

The decline has been particularly painful for less skilled Americans, because the old manufacturing jobs were far more likely to enjoy a union-related wage premium than the new service sector jobs. The union jobs in places like Detroit enabled millions of Americans to increase their wages substantially by moving to cities. That path has narrowed substantially over time, and there are far fewer cities that offer a path to middle income living standards for less skilled Americans.

In a sense, the declining demand for less skilled Americans reflects a failure of entrepreneurial imagination. Nineteenth century entrepreneurs, like Henry Ford and Andrew Carnegie, innovated in ways that provided employed for Americans and immigrants, with low skill levels. Twenty-first century entrepreneurs, like Mark Zuckerberg and Sergey Brin, provide services that are valued by the less-skilled, but their employees are far more likely to be trained computer engineers.

Uber founder Travis Kalanick provides one exception to this claim. Uber and Lyft do provide earning opportunities for the less skilled by enabling them to become transportation service providers. This companies provide one model for 21st century cities. If information technology increases the range of services that less skilled urbanites can provide to more skilled urbanites, then there is at least the possibility that the urban wage premium will again increase for workers with limited levels of education. This chance seems far more likely to appear in densely populated areas, where the ability to access skilled customers is greater, and in skill places, where the income of customers is higher.

Indeed, the future looks even bleaker for the residents of lower density America or of cities with few viable export industries. If a region doesn't export goods or services, then there is far less demand for consumer services that the less skilled could potentially provide. Indeed, the prime aged male joblessness that has become endemic in America's Eastern Heartland (Austin, Glaeser and Summers, 2018), appears so bleak because it is hard to imagine what jobs could even materialize in that region. By contrast, it is easier to envision good service sector jobs for children growing up in the Bronx or East Los Angeles.

Nonetheless, too few of those urban service jobs seem to exist today. One hypothesis is that many service jobs have been crowded out by automation and the internet. This view argues that Amazon Prime is a substitute for local shops and even grocery stores. Certainly, urban logistics jobs, such as the stevedores who once crowded the wharves, have been eliminated by more efficient means of moving goods over space. The techno-dystopian view warns that robots and future automation will eliminate more existing urban service jobs.

The alternative view is that many wealthier urbanites would love to find better service providers, such as cooks, house cleaners and babysitters, but that they currently cannot find reliable, low cost workers. According to this view, technology is more likely to be a solution than a problem, and current government regulations limit the ability of low wage workers to sell their time to high wage workers. In some cases, as with Uber, technology can do an end run around regulation. Uber and Lyft's technology eliminate the limits on taxi supply that had been created by local medallion and other licensing rules.

The role that regulation may play in limiting the supply of low human capital services is a particularly important area for future research. Somewhat oddly, much of America appears to

regulate low human capital entrepreneurship much more tightly than it regulates high human capital entrepreneurs. When Mark Zuckerberg started Facebook in his Harvard College dormitory, he faced few regulatory hurdles. If he had been trying to start a bodega that sold milk products three miles away, he would have needed more than ten permits. One question is whether the inequality that persists in America's system is exacerbated by the legal and regulatory system.

In developing world cities, certain forms of inequality appear to be perpetuated by the absence of a strong legal system. Urban trade requires trust that we take for granted in the wealthy west, where contracts are typically enforced and rule-of-law is strong. In the developing world, courts are virtually inaccessible to the poor and the police are often seen as unreliable and self-interested. Consequently, transactions must be enforced by informal means.

In rural villages, individuals interact with each other for years and even over generations. Bad behavior can be easily punished with ostracization, since villagers typically need the cooperation of the rest of the community. One of the glories of urban markets is that people can interact with strangers, but since those strangers can easily find new partners, ostracization is less of a punishment and norms become much harder to enforce.

The difficulty of enforcing cooperation in the lawless environment of a developing world city disproportionately harms the most vulnerable, which may include women. When law is absent, violence appears and men have shown a greater proclivity towards violence throughout all of human history. Consequently, women may fear to interact with men and may either work in female-dominated industries or avoid market work altogether.

Ashfraf, Delfino and Glaeser (2019) explore this hypothesis both globally and in the context of Lusaka, the capital city of Zambia. They find that female entrepreneurs interact less than their male counterparts and they are less likely to learn their trade from other entrepreneurs. An inability to trust may cause women to lose the benefits from information transfer that can be so richly available in dense, urban areas. Women concentrate primarily in two industries – apparel and food manufacturing – where they can work primarily with other women. Unfortunately, those industries deliver lower earnings and industrial choice can largely explain the income gap between female and male entrepreneurs.

Both in the cross-section and in a trust game, woman cooperate and earn more when they have access to better legal institutions. Well-defined Zambian markets have an institution called the "Market Chief" who adjudicates commercial disputes. Women trust more when they work in markets with chiefs, especially when those markets are predominantly women. When we give women access to market chiefs in a trust game, the trust gap between women and men disappears.

The larger point is that cities have provided riches for their most skilled and luckiest inhabitants. Cities have done less well at providing employment opportunities for the less fortunate. Some part of that inequality may reflect global technological trends, but public policies may also explain some of the difference. A failure to educate, a failure to protect and a tendency to over-regulate the entrepreneurship of the less skilled may help to explain why urban economic inequality has widened over the past three decades.

V. Unaffordable Cities and the Limits of Urban Housing Supply

Urban inequality is particularly painful in the 21st century because of the high cost of housing. A bartender in San Francisco may earn $36,000 annually, but that doesn't go far in the San Francisco housing market. The urban battles over gentrification partially reflect the anger that many older, poorer community members experience when wealthier urbanites move into their neighborhood and drive up prices. That competition over space ultimately reflects the limited supply of space within many successful cities both in the U.S. and in Europe.

Urban land has always been more expensive than rural land. The Alonso-Muth-Mills model, which is the core intellectual framework of urban economics, is built around the increased willingness to pay for proximity to jobs downtown. No one should expect to be able to afford a single-family detached house on a half-acre lot within a mile of a downtown, and demand for such space partially drove the move to the suburbs after World War II.

But urban living space is built by combining land and physical structures. Throughout most of the past 150 years, the ability to build up has reduced the cost of living in cities. If it cost 80 dollars per square foot to build a suburban home, and 200 dollars per square foot to build an urban apartment, then economics would predict that new homes would be 2.5 times more

expensive in urban areas. Today, we experience price gaps that are much larger than the gap in construction costs (Glaeser and Gyourko, 2018), which is probably best understood as a reflection of the difficulty of building new construction in many dense urban cores.

For much of the post-war period, many urbanites could find housing that cost substantially less than construction costs even in successful cities (Glaeser and Gyourko, 2005). Housing depreciates, like cars and clothing, and so poorer urbanites could find older apartments in less fashionable neighborhoods that cost less. Filtering models predict that neighborhoods go through transitions, and that the rich would live in a newer, nicer areas but the poor occupy older, more dilapidated areas. The rich vacate areas as they depreciate and then move to a new area that had been built with higher quality housing.

Apparently, this model appears to have broken down after 1970, probably because of regulation and increased neighborhood opposition to redevelopment. Anger at the teardown of the old Beaux Arts Penn Station in New York City galvanized the historic preservation movement, which then organized and eventually passed legislation that established widespread historic preservation districts. Community activists, such as Jane Jacobs, fought to prevent new construction in areas, such as Greenwich Village. Eventually, a large swath of the most desirable areas of Manhattan became effectively off-limits to new construction (Been et al. 2016).

Economists have tried to quantify the economic impact of land use regulation in many different ways. The most direct method is to compare areas with more regulation and areas with less regulation (Katz and Rosen, 1982). Across metropolitan areas, places with more regulation appear to have less construction and higher prices (Saiz, 2010, Glaeser and Gyourko, 2018). A second approach is simply to look at the relationship between new construction and the gap between construction costs and housing prices. Glaeser and Gyourko (2018) find that places that are expensive don't build a lot and that places that build abundantly are much less expensive, which is most compatible with the view that some areas have more supply restrictions than others.

More evidence on the importance of regulation is provided by comparing the marginal cost of building with the market price of building. If prices are substantially higher than market costs, then there is presumably some barrier to building. In a big city, the marginal cost of an extra unit is the cost of adding an extra story to a new building. Glaeser, Gyourko and Saks (2005a) find

that the market price of housing in parts of Manhattan is more than five times higher than the marginal cost of building. A similar approach asks whether land that sits under a new building is worth more than land that extends the lot of an existing building. In high cost areas, land that sits under a new building can be worth more than ten times the value of land that is attached to an existing building, which suggests that the implicit tax created by zoning rules can be quite high.

The limits on new building appear related not only to higher prices, but to more volatility in housing prices. Glaeser, Gyourko and Saiz (2008) compare the price fluctuations of housing in constrained and unconstrained areas during much housing booms. Both during the 1980s and during the 2000s, constrained areas saw much larger price increases. During the 2000 to 2010, prices in unconstrained Atlanta barely moved, while the amount of new construction first soared and then crashed. By contrast, prices in San Francisco heaved up and down and the level of permitting activity barely changed.

During the early 1920s, New York built as many as 100,000 units during a single year and prices remained affordable despite soaring demand for urban space. Tenements replaced older slums and large apartment buildings replaced tenements. In more recent decades, the stock of housing has remained far more fixed in coastal cities, and consequently older residents keenly experience a conflict over space with newer urbanites. Instead of a filtering process where the wealthy more into new neighborhoods, the wealthy instead gentrify and prices rise in once affordable areas.

Gentrification is associated with other conflicts as well. As the rich move into older neighborhoods, the character of local retail can change as well. The lack of new construction sets up a conflict over neighborhood character that can lead to community mobilization to further block change. Rent control has reappeared as a popular policy partially because the rich are trying to rent space in neighborhoods that were once poor.

VI. The Limits to Entry into Successful Cities

The limitations on new construction mean that existing urbanites must pay more for their space. These limitations also block migration into cities. The large wage difference for bartenders between Atlanta and San Francisco doesn't attract more bartenders to San Francisco because housing prices more than offset higher wages. The housing supply freeze in successful cities may

help explain why there has been an overall decline in American mobility and a decline of movement by poor people into rich places (Ganong and Shoag, 2017).

Throughout most of American history, productive places provided space for the residents of poorer areas. The farmers of rocky New England found it easy to build balloon-frame houses on the frontier before the Civil War. Poorer farmers could find space in urban tenements or mass-produced Sears, Robuck homes in the growing cities of the late 19th century. African-Americans refugees from the Jim Crow South were able to rent apartments in the ghettos of mid-twentieth century northern cities. Dust bowl farmers, like John Steinbeck's Joads, were able to find at least some accommodation in California.

Yet in the late 20th century, land use regulations mean that huge economic success stories, such as Silicon Valley, have been seen only modest amounts of new building. Despite the high wages paid even to less skilled workers in Seattle and Boston, many less skilled workers stay away because they cannot afford the rent. Historically, housing price differences across space were modest (Glaeser, Gyourko and Saks, 2005b) and so higher wages represented almost an arbitrage opportunity. Today, the high housing prices that typically accompany high wages eliminate any economic benefits, which perhaps explains why poor people no longer move to rich places (Ganong and Shoag, 2017).

Limited housing supply is only one potential explanation for why poor people no longer move to rich American cities in the numbers that they once did. As discussed above, the rich places may not provide that much economic opportunity for poorer people. The schools in rich places may not generate opportunity for the children of poor people. Poorer people may have trouble moving their Section 8 Housing Voucher, or other public benefits, to another metropolitan area. Schleicher (2017) argues that a variety of public programs have limited portability and that limits migration across space.

Private social insurance may be even less portable than public social insurance. Austin, Glaeser and Summers (2018) document that more than 30 percent of long-term jobless men sleep in their parent's homes. A large fraction of the jobless live off the earnings of other members of their households. Parents and girlfriends may not be willing to pick up stakes and move somewhere else for the benefit of their jobless dependent.

Immobility means that cities are failing to be a safety valve for economic distress in lower density America. Frederick Jackson Turner famously argued that 19th century American had been defined by its open frontier that offered economic opportunity to anyone with the courage to head towards empty land. For much of America's history, cities have been an urban frontier that offered an escape from economic dislocation. That frontier appears to be closing, just as Jackson's western frontier closed more than a century ago.

The closing of the urban frontier means that America is less productive than it could be if labor was more mobile over space. Hsieh and Moretti (2017) quantify the losses from the spatial misallocation of labor that is associated with limitations on new construction. They find that trillions of dollars of losses that come from the underdevelopment of areas like New York City and Silicon Valley.

The limits on moving into high wage urban areas also means that migration becomes more selective and that imposes costs on the community that is left behind. When less skilled people can find neither jobs nor homes in high wage areas, then only high skilled people leave depressed parts of the U.S. The selective out-migration of the skilled means that these areas suffer "brain drain" and end up with even less human capital. If local economic fortunes depend on local human capital then this leaves these areas with even less of an economic future.

The lack of mobility between depressed parts of America and successful cities may have exacerbated the political tensions that have always existed between American cities and lower density parts of the country. When non-urbanites had many friends and relatives who moved to cities, then they presumably came to believe that urbanites weren't all bad. If they expected that they would move themselves in the future, then this presumably reduced their incentives to support policies that redistributed away from these successful places.

In the 2016 election, there was a stark divide between urban and lower density America. That divide seemed to have lent political support to the subsequent reduction of the Federal income tax deduction for payments to state governments, local governments and mortgage interest. The reduction ended up increasing taxes substantially for many residents of America's more successful cities, while the overall income tax reduction benefitted residents in lower density parts of America. This spatial twist in taxation seems entirely compatible with the geographic divide that marked the election.

In the developing world, cities still play their historic role as an escape route from rural poverty. Places such as Mumbai try to limit new construction, but the limits on public capacity mean that they cannot effectively block new homes being crammed into slums. The great urban failure in these places is not to provide space, but instead not to provide public services that might that space more livable.

VII. Failing to Tame the Demons of Density

The crowding of thousands into a dense city generates negative, as well as positive, externalities. Drivers congest roads. Waste infects the water supply. Cooking and heating fires pollute the air. Criminals find victims more easily on crowded streets and use urban anonymity to escape detection. For millenia, urban governments have tried to tame the downsides of urban life through a combination of infrastructure and regulation. Yet despite this long experience, many poorer cities throughout the world still suffer from the considerable downsides of urban density, and urban externalities have become worse over time in some richer cities.

Negative Urban Externalities in the United States

American cities made enormous investments in sewerage and clear water during the 19th and early 20th centuries (Cutler and Miller, 2005). In some cases, water and sewerage were provided by private companies, but many cities turned to direct public provision or quasi-independent public water authorities, such as the Croton Aqueduct's Water Commission. Institutional design was important because private water companies, such as the Manhattan Company, frequently lacked the financial incentives to provide clear water to poor or minority residents (Troesken, 2003).

Poor residents were often unwilling to pay to connect with clean water, just as African urbanites are sometimes unwilling to pay for water connections today (Ashraf, Glaeser and Ponzetto, 2018). Cities sometimes solved this problem by imposing fines on tenement owners that didn't connect, and these were enforced by boards of health. These fines can be rationalized as Pigouvian taxes that internalized the negative externalities associated with water-borne contagious disease. By the early 20th century, American cities had developed a combination of

infrastructure, institutions and incentives that produced clean water, eliminate sewage and reduced mortality rates dramatically.

Air quality remained a problem through the 1970s, and that was addressed by regulation more than infrastructure. The direct use of coal for home heating was phased out and largely replaced by natural gas. Automobile regulation led to the use of catalytic converters, and car related smog decreased. Euclidean zoning banned industry from core residential parts of the city. The decline of urban manufacturing also had environmental benefits, as polluting industries left from urban cores (Kahn, 1999).

Today, air and water pollution remain modest problems in most American cities, but water problems have again reappeared because of a failure to maintain older infrastructure. At its heart, the Flint water crisis reflected insufficient maintenance investment in century-old lead pipes. America's declining industrial cities face budgetary shortfalls, and Flint tried to save money on its water bill. Unfortunately, reducing the maintenance spending on water can create health risks. The combination of old infrastructure and limited resources exists throughout America's declining industrial cities, and so it is possible that the Flint water crisis will repeat itself elsewhere. Air quality is less likely to deteriorate because cities cannot eliminate regulations to save money.

Crime waves were common in 19th and early 20th century U.S. Cities. The end of prohibition and improvements in law enforcement were followed by reductions in urban crime levels through the 1950s. Crime then soared in the 1960s and 1970s and then plummeted in the 1980s. As discussed above, many observers thought that American cities had essentially solved their crime problem by the 2000s.

Yet over the past five years, some cities, like Chicago, have experienced significant increases in criminal activities. Chicago's homicide rate fell from over 30 murders per 100,000 inhabitants in the early 1990s to about 16 murders per 100,000 in the early 2000s. Murder rates remained much higher than in New York City, but for over a decade, Chicago seemed like a much safer place. That safety disappeared in 2016 when Chicago's homicide rate rose dramatically to over 25 murders per 100,000, and that rate lower than the homicide rates in Baltimore, Detroit, New Orleans and St. Louis.

The rise in Chicago's crime levels is associated with a decline in the clearance rate, which is defined as the share of murders that lead to a criminal charge. Typically, the clearance rate in U.S. cities has been over 60 percent and that was even true in Chicago in the early 1990s. High clearance rates reflected the fact that many murders were the outcomes of quarrels among acquaintances and even spouses. Those acquaintance murders have fallen and been replaced by gang-related homicides, which are much more difficult to solve. Gang related homicide is also prone to significant volatility, since gangs go to war and then make peace.

The low clearance rate also reflects a failure of community members to talk to police, either because of fear of retribution or because the community does not trust law enforcement. The friction between the policy and ordinary citizens has become a fact of life in many American cities. Riots have broken out repeatedly, protesting police violence. Unfortunately, the by-product of community unrest has sometimes been that police pull back from minority neighborhoods, which leads to even higher crime levels (Devi and Fryer, 2020). Eliminating some aggressive police policies, such as "Stop and Frisk" in New York City, seems to have little cost, but when the police pull back dramatically, serious crime can follow.

Good policing typically works together with the community, not in opposition to the community. Yet the incarceration-intensive approach to policing that appeared to work during the 2000s also left behind a bitter rift between law enforcement and minority neighborhoods. That rift made it more difficult for law enforcement to respond to an uptick in gang behavior over the past five years.

If water and air pollution are generally a success story in the U.S., and crime is a roller coaster, then traffic congestion is the one area in which American cities have generally gotten worse. The Texas Transportation Institute's 2019 Urban Mobility Report (Ellis and Glover, 2019) estimates that the total costs of urban traffic delays has risen by $15 billion in 1982 to $179 billion in 2017, correcting for inflation. In 1982, the average commute last 20 hours per year to traffic. In 2017, traffic delays accounted for 54 hours per year.

In the 19th century, urban mobility was greatly improved by a series of mass transit innovations, which were typically provided by private companies. Horse-drawn omnibuses, streetcars and elevated trains all enabled faster commutes over longer distances. During the 20th century, the car transformed urban commutes and indeed all of urban America. Newer cities, like those that

grew after World War II in the Sunbelt, were built entirely around the automobile. Older cities needed expensive new freeways and bridges to retrofit their spaces to the automobile.

The older public transit systems regulated traffic on their rails and they could price in ways that rationed the available space. City streets have typically been open to all drivers, and so there is no mechanism for limiting use. Building more infrastructure in older cities is extremely expensive, and will elicit further driving. The fundamental law of highway traffic (Duranton and Turner, 2011), suggests that it is almost impossible for cities to build their way out of traffic congestion.

Robust demand to live and work in successful cities, like New York and San Francisco, has collided with a limited stock of residential real estate to create high prices. That same demand has collided with a fixed supply of city streets to create traffic congestion. If access to those streets were auctioned off, then presumably, we would see sky high prices just as in the case of gentrifying apartments. Since the price mechanism is not used to deal with congestion on American city streets, robust demand shows up in the lengthy queues that we call traffic jams. While New York City will allegedly have congestion pricing by 2021, it is less clear if the pricing will be effective or whether other cities will follow New York's example.

Urban Disamenities in the Developing World

Developing world cities face the same downsides of density that afflict all cities, but they have far fewer public resources to mitigate those downsides. Typically, these cities lack both the financial resources to invest in major infrastructure and the public capacity to enforce urban regulations, especially when those regulations are targeted towards poorer, informal settlements. Moreover, the lack of clear property ownership in slums makes it particularly hard to impose obligations on landlords, like connecting to the sewer system.

In many cases, there exist two distinct technological paths. One technology borrows technology from the rich world, such as modern sewerage systems, bus rapid transit and tall public housing projects. The other technology uses tools that are common in the poor world, such as pit latrines, jitneys and shanties. One key policy question is whether to switch to the rich world technology or whether to upgrade the existing poor world technology.

In the case of clean water and sewerage, the prevailing wisdom is that developing world cities need to provide rich world infrastructure, like water pipes. But the provision question also includes the institutional choice of whether to use private public partnerships or independent public entities or the executive branch of government. While independent authorities were popular and often effective in 19th century America, they have had less success in many poor nations today, as they can provide the same opportunities for patronage as standard public provision with less accountability. Private-public partnerships can provide cost-reducing efficiency, but they can also lead to the corruption of government. Engel, Fischer and Galetovic (2011) detail the many ways in which Public-Private Partnerships can go wrong in the developing world.

Infrastructure can be funded with user fees or property taxes or general tax revenues. Property taxes are harder to collect when property rights are poorly defined. User fees may also be difficult to collect in poorer communities where households just make illegal connections to the electricity network.

A second challenge is solving the last mile problem. When the social benefits of adoption exceed private costs which exceed private benefits, then the state is faced with the choice of fining households that don't adopt of subsidizing those households that do adopt. Ashraf, Glaeser and Ponzetto (2018) argue that the choice between fines and subsidies depends on the reliability of the executive branch versus the reliability the judicial branch. When police and courts are relatively honest, then fines will be more effective, and they do not have the downside of subsidizing urbanization. When the executive branch is more efficient, then the waste involved in subsidies will be more contained.

A third challenge is maintenance. As the example of Flint illustrates, maintenance can even be a problem in the rich world, but it is a particularly large problem in the developing world. Ashraf, Glaeser, Holland and Steinberg (2018) document the constant disruptions to the water supply in Lusaka, Zambia. When the water supply stops, disease increases and young women must spend more time on household chores. Incentives seem to matter, for the water company seems to fix the water supply more rapidly for households that pay by the liter than for households that pay a fixed monthly fee.

Air pollution remains problematic in many developing world cities. Industry, transportation and home cooking all contribute particulates to the air. Road paving combined with regulations that limited particulates produced by cars, factories and home fires to produce better air in the west. It is less clear if developing world cities have the public capacity to enforce such regulations.

Many developing world cities regulate far more activities on paper than they can control in practice. Consequently, illegal activity is present almost everywhere in developing world cities. In South Asia, such "crime" is typically against the environment. In Latin America, violence against other people is a major problem. The opportunities for drug sales, both domestically and exporting to the U.S., particularly engender violence.

Reducing crime and enforcing regulations requires both spending and management. The police must have incentives to reduce the crime rather than to extort the citizenry. In some cases, it may make sense to set up a parallel inspection service that operates separately from an already corrupted constabulary. The limited ability to enforce can mean that optimal fines are low enough to avoid extortion of the innocent (Ashraf, Glaeser and Ponzetto, 2018).

Traffic is particularly horrendous problem in many developing world cities, where commutes are over one hour. Congestion pricing has been effective in Singapore since 1975, but it is less clear if other cities can enforce such rules. Moreover, poor road quality can limit the benefits of charging congestion fees to smooth out commuting patterns (Kreindler, 2019).

Curitiba, Brazil, pioneered Bus Rapid Transit, which has proven to be a lower cost alternative to rail-based public transit. Other cities, like Bogota, have followed Curitiba's lead. Bus Rapid Transit critically requires that other vehicles are prevented from entering into the dedicated bus lanes, which is again an enforcement problem that requires public capacity.

It can be tempting to look at the travails of developing world cities and think that it would be better if poorer people just stayed on their farms. Yet the agglomeration benefits provided by these cities are real, and few developing countries have the public capacity to enforce limitations on city growth. Public action to limit the downside of density seems like a more appealing option, but this will require both more spending and improvements in the quality of local government.

VIII. An Interpretation

Why has urban success been accompanied by so much discontent? The most natural explanation is that the success of private enterprise in cities has not been accompanied by sufficient development of public capacity. The public sector has often focused on limiting urban change, rather than working to improve the urban experience. In many cases, this focus reflects the political priorities of empowered insiders.

Better urban schools seem like a plausible antidote for the limited upward mobility in cities. Yet school reform has often been limited both by the inherent difficulty of the problem and by the interests of insiders, such as the teachers' unions. The best way to promote affordability is to allow unfettered new construction. Yet building has been limited by neighborhood activists who create rules and lengthy approval processes that limit new construction. New entrepreneurship that might provide jobs for less educated urbanites is limited by regulations that reduce competition to existing businesses. Occupational licensing requirements limit the ability of outsiders to come to cities and compete with existing workers.

At their best, cities promote change. They welcome migrants. They educate the young both at school and on the job. They create a fertile environment for new cultural and intellectual movements. The government can either promote that change by educating the young, or stymie that change by erecting barriers that protect the status quo.

American cities have never been great champions of educational opportunity, but historically, they did not stand in the way of new business formation and new construction. A flurry of local governmental activity over the last three decades has not improved urban schools dramatically, but it has enacted rules that limit urban evolution, by stopping new construction and business formation.

There are many good things about citizen empowerment, but the most empowered citizens tend to be longer term residents with more resources. Those citizens do not internalize the interests of people who live elsewhere and would want to come to the city. Consequently, their political actions are more likely to exclude than to embrace.

The power of insiders can also explain why cities have not embraced congestion pricing. Many drivers in New York are middle income residents, who have figured out ways to get inexpensive

parking, typically in public street space. These residents objected strongly to New York's attempt to enact congestion pricing in 2008 and they found a champion in New York State Assembly Speaker Sheldon Silver. Silver's power essentially doomed congestion pricing in the city for over a decade.

Urban discontent today does not reflect a failure of the economic city, but rather the shortcomings of the political city. Political progress has swept away corrupt urban machines, but those machines often embraced the new immigrants who provide votes and the urban growth that increased tax revenues and graft. Improvements in accountability have created a far more static city that is far less accommodating of urban change, and so inevitably, urban success leads to painful urban friction.

IX. Conclusion

Many American cities are in far better shape in 2019 than they were in 1979. They are richer and cleaner and even their schools are better. Yet opportunity has not kept pace with productivity, and that the public sector has not kept pace with the private sector.

There is no policy conclusion that flows easily from the observations in this essay, but there is certainly a need for further research. That research must both confront the technical aspects of public service delivery, and the political process that limits reforms. We must learn both how to make our schools better and to provide evidence that will illustrate sensible reforms to both voters and Teachers' Unions.

Over the past three millenia, cities enabled remarkable bursts of innovation and creativity. Urban labor markets have turned millions of poor people into middle income people. That urban potential is still there, but the public sector must be more effective if more people are to experience that potential. The upside is large, even if the challenges are severe. I deeply hope that more scholars and ordinary citizens recognize that solving urban problems, both in the U.S. and in the developing world, is one of the great vocations of the 21st century.

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