The Megacity, Untethered

What Happens When the Richest U.S. Cities Turn to the World?

As the economy has changed, so have the relationships between places, to the disadvantage of smaller cities and rural areas.

By Emily Badger, Dec. 22, 2017

SAN FRANCISCO — Well before anyone thought of this place as the center of the tech economy, the Bay Area built ships. And it did so with the help of many parts of the country.

Douglas fir trees logged in the Pacific Northwest were turned into lumber schooners here. Steel from the East, brought in by railroad, became merchant vessels. During World War II, workers assembled military ships with parts from across the country: steam turbines from Schenectady, N.Y., and Lester, Pa.; gear winches from Tacoma, Wash.; radio equipment from Newark; compasses from Detroit; generators from Milwaukee.

Most of these links that tied the Bay Area’s prosperity to a web of places far from here have faded. Westinghouse closed the Pennsylvania plant. General Electric downsized in Schenectady. The Milwaukee manufacturer dissolved. The old Bethlehem Shipbuilding yard in San Francisco will soon be redeveloped. And its former parent company, the Bethlehem Steel Corporation in Bethlehem, Pa., went bankrupt in 2001.

The companies that now drive the Bay Area’s soaring wealth — and that represent part of the American economy that’s booming — don’t need these communities in the same way. Google’s digital products don’t have a physical supply chain. Facebook doesn’t have dispersed manufacturers. Apple, which does make tangible things, now primarily makes them overseas.
A changing economy has been good to the region, and to a number of other predominantly coastal metros like New York, Boston and Seattle. But economists and geographers are now questioning what the nature of their success means for the rest of the country. What happens to America’s manufacturing heartland when Silicon Valley turns to China? Where do former mill and mining towns fit in when big cities shift to digital work? How does upstate New York benefit when New York City increases business with Tokyo? The answers have social and political implications at a time when broad swaths of the country feel alienated from and resentful of “elite” cities that appear from a distance to have gone unscathed by the forces hollowing out smaller communities. To the extent that many Americans believe they’re disconnected from the prosperity in these major metros — even as they use the apps and services created there — perhaps they’re right.

“These types of urban economies need other major urban economies more than they need the standardized production economies of other cities in their country,” said Saskia Sassen, a sociologist at Columbia who has long studied the global cities that occupy interdependent nodes in the world economy. New York, in other words, needs London. But what about Bethlehem, Pa.? Such a picture, Ms. Sassen said, “breaks a past pattern where a range of smaller, more provincial cities actually fed the rise of the major cities.” Now major cities are feeding one another, and doing so across the globe.
Ram Mudambi, a professor in the Fox School of Business at Temple University, offers an even more unnerving hypothesis, in two parts: The more globally connected a city, the more prosperous it is. And as such cities gain global ties, they may be shedding local ones to the “hinterland” communities that have lost their roles in the modern economy or lost their jobs to other countries.

Richard Longworth, a distinguished fellow with the Chicago Council on Global Affairs, fears that exactly this is happening in Chicago. The metropolitan area long sat at the center of a network of economic links crisscrossing the Midwest. They connected Chicago to Wisconsin mill towns that sent their lumber there, Iowa farmers who supplied the city’s meatpackers, Michigan ice houses that emerged along the railroads transporting that meat to New York.

“These links have been broken,” Mr. Longworth said. Of course, some remain. And antipathy toward prosperous big cities is not a new theme in history. “But this is different: This is deeper,” Mr. Longworth said. “It is also, as far as we can see, permanent, simply because the economy that supported the earlier relationships has gone away and shows no sign of coming back.”

The Rise of Global Cities

For much of the 20th century, wages in poorer parts of the country were rising faster than wages in richer places. Their differences were narrowing, a product of migration between the two and gains from manufacturing that helped lift up regions that were once deeply poor. Then around 1980, according to work by the Princeton researcher Elisa Giannone, that convergence began to stall.
Cities full of highly educated workers like Boston, San Francisco and New York began to pull away. And that pattern, Ms. Giannone finds, has been driven entirely by what’s happening with high-skilled workers: When they cluster together in these places, their wages rise even more. That widens inequality both within wealthy cities and between wealthy regions and poorer ones.

“Big changes have been happening over the last 30 years,” Ms. Giannone said. “Now we’re actually seeing the impact of them.”

Those changes have come from multiple directions — from globalization, from computerization, from the shift in the United States away from manufacturing toward a knowledge and service economy. These trends have buffeted many smaller cities and nonurban areas. The uncomfortable political truth is that they’ve also benefited places like San Francisco and New York.

“The economic base has shifted in a way that highly favors cities — and big cities — because it’s now based on knowledge, on idea exchange, on agglomeration,” said Mark Muro, the policy director of the Metropolitan Policy Program at the Brookings Institution.

Programmers benefit from having more programmers nearby, in ways different than when assembly line workers gather together. The forces of agglomeration, which big cities enable, are strongest in the kind of knowledge work that has become central to the economy.

Outside the Federal Reserve in Manhattan. As global cities like New York grow ever richer, much of the nation falls further behind. Credit, Todd Heisler/The New York Times

For all of the talk of how globalization has cost America manufacturing jobs, it has created American jobs, too — but the high-paying ones have tended to go to such cities.
Ms. Sassen argues that a global economy has created new kinds of needs for companies: accountants specializing in Asian tax law, lawyers expert in European Union regulation, marketers who understand Latin America. Global cities must connect to other global cities to tap these resources, which have become more valuable to them than lumber and steel.

Inventors in these global cities are also increasingly connecting to one another. Using the addresses of patent co-inventors, Mr. Mudambi has traced a steep rise starting in the early 1990s of global connections from a few American metro areas, which are today among the most prosperous in the country.

Many American companies still create physical things, in addition to inventing digital products and ideas. But globalization has changed who benefits from their business, too, enabling firms to separate intellectual work from routine work and scatter those roles across the globe. The knowledge work has tended to stay in the United States. The routine work is what was historically performed in the hinterland. And that in large part is the work that has gone overseas.

“The hinterland for Silicon Valley is Shenzhen,” said Timothy Sturgeon, a senior researcher at the M.I.T. Industrial Performance Center.

**Inventing ‘New Stuff’ Before Anyone Can Catch Up**

People in Rust Belt towns where Google has no office still use the search giant. Facebook and Twitter still require physical assets in server farms. Uber, a quintessential Bay Area company that is both global and digital, operates in about 250 American cities.

But these kinds of ties aren’t truly spreading the Bay Area’s prosperity. Server farms don’t create mass middle-class employment. Using Google isn’t the same as having a hand in engineering it.

Yes, Uber’s innovation eventually reaches smaller cities in Texas and Ohio. “But the economic benefits of it are at Uber headquarters,” said Michael Storper, an economic geographer at U.C.L.A. “The people who got rich off of it are not going to be in the small area. They’re going to be where it’s invented.” To put it more harshly, when global cities need other communities today, Ms. Sassen said, it’s often to extract value out of them. New York bankers need Middle America’s mortgages to construct securities. San Francisco start-ups need idle cars everywhere to amass billion-dollar valuations. Online retail giants need cheap land for their warehouses.

The rest of the country may receive the innovations that flow out of global cities, and the benefits to consumers are real. “But by the time that’s done, the cities have already invented something new and made themselves richer again,” Mr. Storper said. “Before anywhere else can catch up, San Francisco has already leapt ahead again with new stuff they’ve invented.”

The advantages bestowed by the global economy keep compounding from there. Research by Filipe Campante at Harvard and David Yanagizawa-Drott at the University of Zurich finds that when two cities are linked by direct flights across the globe, business links between them increase as well, such that places with more connections grow more economically. Those economic benefits, though, don’t appear to touch places more than 100 miles beyond the airport.

Harald Bathelt at the University of Toronto has found that firms in leading tech clusters in Canada tend to invest in leading tech clusters in China, and vice versa. They’re pouring resources into and linking up to places that are already similarly successful.
“The Torontos, Ottawas and Waterloos in countries like Canada and the U.S., they will link with Shenzhen in China, they will link with Munich and Stockholm in Europe,” Mr. Bathelt said. “And other places will be kind of left out.”

Greg Spencer, another researcher at the University of Toronto, has analyzed the global footprints of the world’s 500 largest firms in advanced industries like machinery, digital services and life sciences — mapping their headquarters, regional offices, manufacturing plants, warehouses, retail stores.

In the international network that emerges, global cities stand out. Other places connect to the global economy by going through them.

“I keep coming back to the idea that a lot of this is about power,” Mr. Spencer said. He means relative power — which places are gaining or losing it as the geography of the economy shifts, too. “Not only are they losing their power,” he said of the places left out, “but they’re losing their connection to the power centers as well.”

That dynamic also leaves smaller places at the mercy of global cities, where decisions are made about which plants to close or where to create new jobs. And so Tulsa, Buffalo and Tucson turn to Seattle as supplicants for a windfall of Amazon jobs. None of them have what Amazon really wants, though: an international airport with daily direct flights to Seattle, the Bay Area, New York and Washington.

**Correction: December 27, 2017**

An earlier version of this article misstated a type of ship that was assembled in the Bay Area during World War II. Military ships were built there during that period, but battleships were not among them.

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A version of this article appears in print on December 24, 2017, on Page BU1 of the New York edition with the headline: The Megacity, Untethered. Order Reprints | Today’s Paper | Subscribe