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TRUMP, TECHNOLOGY AND TALENT

Will America's Anti-Immigration Posture Hurt U.S. Tech Hubs and Help Canada's

Cities

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The Cities Project at the Martin Prosperity Institute focuses on the role of cities as the key economic and social organizing unit of global capitalism. It explores both the opportunities and challenges facing cities as they take on this heightened new role.

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America has long had a lock on leading-edge technologies, dating back to semiconductors, personal computers, biotechnology, mobile devices, and social media. A big part of this stems from the fact that America has been able to attract the global talent that was critical to those industries, from Scottish born Andrew Carnegie in steel to the Hungarian born Andrew Grove in semiconductors and many in between and after.

But now, for the first time, that edge may be waning. Donald Trump's unexpected and unsettling rise to the Presidency of the United States has fueled speculation that America may squander its long-held advantage in attracting the world's top tech talent.[1] Trump's troubling moves to restrict immigration, the early travel ban targeted at Muslim countries, and his administration's proposals to limit the entry of high-tech talent send a clear signal that America is no longer open to foreign talent.

Canada is the country that is most often mentioned as benefitting from America's inward turn away from global talent. Indeed, Canada seems to be having its moment with the rise of musicians like Drake and The Weeknd to the heights of popular culture and Prime Minster Justin Trudeau's increasing global celebrity status.[2]

Beyond this, Canada and its major cities and metropolitan areas have a series of deeply ingrained assets that may well improve its position in the competition for global talent. It is an open society where immigrants already make up a larger share of the population than in the United States. Its big cities, particularly Toronto, Vancouver and Montreal, offer amenities on par with almost every large American city with the possible exception of New York, topping the lists of the world's best cities and best places to live year after year.

Canada's top research universities now number among the world's best, especially in technologically important fields like computer science, electrical and computer engineering, and especially artificial intelligence. Leading Canadian universities are also stepping up their efforts to aggressively recruit both U.S.-based and global talent who face immigration restrictions or are increasingly put off by Trump's effect on American politics and society.

And Canada's business community is putting its weight behind these efforts to attract global talent. In January, 2017, 250 of Canada's leading tech CEOs and leaders signed a letter encouraging their federal government to offer immediate entry visas for those displaced by President Trump's executive order.[3] Canada—and in particular its major cities—seem poised to dramatically improve their ability to compete for and secure the world's leading tech talent.

Artificial intelligence and machine learning are two of the most commercially important technologies of the early 21st century, promising to transform not just a host of industries, but the very ways we live and work from medicine. And, they may be the first in this long

line of world-shaping technologies to take route outside the United States. Not a single one of the six leading scientists and technologists in these fields was born in the United States; and only two are currently based there. Three are from the UK, two from France, and one from China. Two are based in Canada, including the University of Toronto's Geoffrey Hinton who is perhaps the leading figure in the entire field.

Will Trump's ascendance hasten the rise of Canada and its major cities as the next big talent and tech hubs?

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For the better part of a century, the U.S. dominated the global competition for innovative and entrepreneurial talent. This can be most readily seen by how immigrants, who by definition changed locations, have accounted for a large proportion of people employed at the highest levels of science, technology, and innovation. U.S. foreign-born workers in so-called STEM, short for science, technology engineering and math, fields account for nearly a fifth of workers with bachelor's degrees, 40 percent of those with master's degrees, and more than half of Ph.Ds.[4] Immigrants also serve as founders of a quarter of all U.S. tech startups and more than 40 percent of tech startups in Silicon Valley.[5]

America's dependence on global sources of talent can be seen even more clearly when we look at the immigrant share of top talent across its leading metros. In the San Jose metro, which for all intents and purposes is synonymous with the Silicon Valley, immigrants comprise more than 55 percent of adults who hold advanced degrees. In Los Angeles and San Francisco, immigrants make up roughly a third of all advanced degree holders; in Seattle and Washington, D.C., it is about a quarter; and in Boston, immigrants make up 20 percent of all those with graduate degrees.[6]

Metro	Immigrant Share of Advanced Graduate Degrees
San Jose	57.1%
Miami	39.4%
Los Angeles	34.0%
San Francisco	33.3%
New York	30.4%
Houston	30.2%
San Diego	26.1%
Seattle	25.0%
Washington, D.C.	24.9%
Riverside	24.1%
Dallas-Fort Worth	22.5%
Boston	21.9%

Exhibit 1: Immigrant Share of Advanced Graduate Degrees in U.S. Metros
Source: U.S. Census American Community Survey 2015.

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Simply put, America's leading tech hubs are both disproportionately dependent on foreign talent and disproportionately at risk from any significant clamp down on foreign immigration. assisted by the re-location of talent from outside of the U.S. Thus, every talented foreign individual the U.S. deters from entry represents a net loss of talent for America and its leading tech hubs.

When all is said and done, the global competition for talent conforms to winner-take-all logic. It is a competitive game with a few big winners. At any given time, the global pool of top talent for the most advanced technologies and industries is relatively fixed. While there are things nations, cities, industries, and firms can do to expand that talent pool in the long run, in the short-term, there are relatively few superstars who dominate key technology fields and act as magnets for other talent. Where they

choose to locate defines the places that win or lose in these key technology fields. That top talent may come from lots of different places around the world—the world is a very big place after all—but history shows that it tends to end up in a relatively small number of places that offer the scientific and commercial activities, amenities, and broad environment required to attract it.

The entire process tends to lock itself in. The places that attract leading global tech talent tend to reinforce their advantages over time. They have the opportunities, the research centers, the leading companies, the venture capital, and perhaps more than anything else, the lion's share of the existing talent required to attract new up and coming talent and produce more of it.

The location of global superstars can and does have a powerful effect on the global distribution of talent. Superstars function as magnetics that signal and attract other talent.[7] Once a location gains a superstar, or several of them, it begins to gain real competitive advantage. For most of recent history, the big winners with the very biggest concentrations of superstars and of global talent generally were the Bay Area and small number of tech hubs in the United States.

But, the places the attract leading talent can and do change over time. History is in fact littered with leading scientific and technological centers that have lost their once formidable advantages to other places. These include Boston's Route 128 in information technology and wireless communication in Denmark and Canada. While the advantages that favor incumbent talent and tech hubs are considerable, there are factors that can reduce their attractiveness and cause new locations to emerge.

One of the biggest disruptors is policies that restrict talent from gaining entry. We live in a world where talent is marked by a country of origin. If nations decide to place restrictions on the origin of talent individuals, they essentially make it impossible for their firms and tech hubs to attract that talent. If talented people are prohibited from entering existing hubs, they have no other choice but to seek out other locations, even if they are not quite at the same level of the leading centers.

Talented people can also decide a place—even a well-established tech hub with many opportunities and advantages—is not for them. Indeed, talent is a rather unique factor of production in that it is embodied in actual people. That's why economists call it "human capital."[8] Talented people cannot be shipped around at will. They can and do have their own personal or idiosyncratic preferences for locations.

These preferences are typically thought of revolving around quality of life, culture, amenities, or even weather. But they can also involve politics and ideology. Hinton in fact moved from the United States to the University of Toronto in the early 1980s when he became disillusioned with the rightward drift of American politics during the Reagan years and by the prevalence of the military in research funding in his field. Hinton was, and perhaps still is, an outlier; the majority of talent in his fields have been pulled into the large Bay Area tech complex. But, a larger talent shift can occur if restrictions become sufficiently strict or if a country or place is seen as unfriendly or politically out of sync with the beliefs of top global talent, which is exactly what appears to be happening with Trump in American today.

For the first time in a long time, America finds itself facing real competition for global talent. The U.S. is no longer the only player in the global talent game. The game itself began to change around turn of the millennium, or maybe a little bit before, when a series of other countries began to raise their own stakes.

From 1990 to 2010, the U.S. saw a substantial decline in its share of educated immigrants, while nations like Great Britain, Canada, Australia, Norway, and even Mexico saw significant increases. Even before the rise of Trumpism, the United States had fallen behind other nations in terms of its overall share of foreign-born residents with immigrants making up roughly 14 percent of its population compared to 22 percent for Canada and almost 30 percent for Switzerland, New Zealand, and Australia.[9]

Other countries have also gotten more effective at attracting more highly skilled and educated talent. Canada's widely praised points-based immigration system has resulted in it attracting a large share of highly skilled immigrants. For this reason, it has recently been highlighted as a model that the U.S. might follow. While immigrants make up a 20 percent of Canada's total population, they make up an even greater share of more highly educated and skilled talent, comprising about a third of adults with a university degree. Canada's foreign-born residents are particularly versed in science, technology, engineering, and math, making up around half of the nation's STEM degrees. Immigrants comprise around 60 percent of Canada's engineering degrees, 56 percent of its math and computer science degrees, and 40 percent of its science and technology degrees.[10]

Universities have longed played a central role in the global competition for talent. In the U.S., universities have functioned as the Ellis Islands of the knowledge age, attracting talented faculty and students, underpinning high-tech ecosystems. Stanford has long played the role of talent magnet for Silicon Valley, while MIT has done the same in Boston. The venture capitalist John Doerr once famously said, "I would staple a Green Card to the diploma of anyone that graduates with a degree in the physical sciences or engineering in the United States."[11] Just the opposite is happening with Trump.

Canada's universities play a key role in attracting foreign talent. Roughly 10 percent of Canadian students are foreign-born, a percentage that rises to around 25 percent in major metros like Vancouver and Toronto.[12] In fact, Canada's leading research universities are well above the threshold needed to attract and retain global talent, especially in the key fields of computer science and engineering. The University of Toronto ranks in the top 25 global research universities, around the same as the University of Michigan; its computer science program ranks in the top 20. The University of Waterloo is a top engineering university and has long been a leading recruitment site for companies like Google and Microsoft. It ranks in the top 25 in computer science on par with New York University and its mechatronics program that combines computer science and mechanical engineering is currently harder to enter than MIT or Stanford. Both the University of British Columbia and McGill rank among the top 50 research universities in the world.[13]

A number of key figures and research groups at Canadian universities are among the global leaders in the increasingly important field of artificial intelligence. Critical advances in this field have come by using neural networks for machine learning. Neural networks were conceived of in the 1950s, but later fell out of favor. During the 1980s and 1990s, however, researchers like the University of Toronto's Hinton and several others at other Canadian universities, persisted and ultimately generated the key breakthroughs for contemporary ar-

tificial intelligence technologies used today by leading tech companies like Google, Facebook, Apple, Amazon, and Microsoft. Instead of moving to established American tech hubs like Silicon Valley, these superstars were able to attract these firms to their locations. Google, for instance, went to great lengths to recruit Hinton to Silicon Valley, but he would not move. Instead they set up a research center for him in the heart of Toronto. Microsoft set up a new research facility in Montreal to be close to University of Montreal's Yoshua Bengio, a French immigrant to Canada, who had up until that then had resisted commercial affiliations.[14]

More surprising perhaps is the Google's decision to open a major AI research facility in Edmonton. In January, 2014, Google acquired the UK based DeepMind for its pioneering advances in reinforcement learning. Although it was developed for computer games, Google has used its reinforcement learning technology to reduce power consumption in its data centers. Why Edmonton? Because of the University of Alberta's AI research lab led by Rich Sutton, the superstar researcher of reinforcement learning.[15] Google is bringing its researchers from the U.S., Europe, and around the world to be part of this new research center.

Other tech companies have opened Canadian operations to be close to younger, up-and-coming academic stars. In May, 2017, Uber announced that it was setting up its Advanced Technologies Group in Toronto just a year or so after setting up research facilities in Pittsburgh, a six-hour drive to the south. The reason was the University of Toronto's Rachel Urtasun, one of the world leaders in getting machines to see and understand the environment around them, a key technology used in driverless vehicles.[16]

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Canada's cities and metro areas stack up well against their American peers in the global competition for talent. In fact, Canada's largest cities and metro regions boast even larger shares of immigrants than their U.S. counterparts. Immigrants make up slightly more than 35 percent of the residents of the San Jose metro. But, immigrants make up more than 45 percent of the population of Toronto and 40 percent of the population of Vancouver. That compares to about a third of the population of Los Angeles and 30 percent of the population of San Francisco. Calgary's share of immigrants is about the same as New York's, and Montreal's is about the same as Washington, D.C.

Metro	Share of Foreign-Born Residents
Toronto	46.0%
Vancouver	40.0%
Miami	38.9%
San Jose	37.2%
Los Angeles	33.7%
San Francisco	30.0%
New York	28.6%
Calgary	26.2%
San Diego	23.5%
Houston	22.7%
Montreal	22.5%
Washington, D.C.	22.1%
Las Vegas	21.9%
Riverside	21.7%
Ottawa	19.4%

Exhibit 2: U.S. and Canadian Metros with Highest Shares of Foreign-Born Residents
Source: U.S. data is from the U.S. Census American Community Survey 2015; Canadian data is from Statistics Canada, 2011 National Household Survey.

Canada's leading cities and metro areas consistently rank among the world's best places to live, with Vancouver ranking third and Toronto fourth on *The Economist's* list of the world's most livable cities.[17] Canada's leading cities have also climbed the list of the world's most significant global economic and financial centers. Toronto ranks seventh on the Global Financial Centre's Index, a leading ranking of world financial centers. Montreal is 12th and Vancouver 17th.[18]

Rank	Metro	Creative Class Share
1	San Jose	46.9%
2	Washington, D.C.	46.8%
3	Ottawa	44.6%
4	Boston-Cambridge	41.6%
5	Hartford, CT	39.7%
6	San Francisco	39.4%
7	Calgary	38.7%
8	Toronto	38.5%
9	Baltimore	37.7%
10	Seattle	37.7%
11	Minneapolis-St. Paul	37.7%
12	Raleigh-Cary, NC	37.6%
13	Denver	37.6%
14	Sacramento	36.6%
15	Vancouver	36.5%
16	Montreal	36.3%
17	Atlanta	36.3%
18	New York	35.9%
19	San Diego	35.6%
20	Rochester, NY	35.2%

Exhibit 3: Leading Large Metros for the Creative Class
Source: Data for the U.S. is from the 2010 U.S. Bureau of Labor Statistics; data for Canada is from Statistics Canada 2011 National Household Survey.
Note: Large metros are those with over one million residents.

Moreover, Canada's cities and metro areas have large concentrations of the knowledge workers, techies and artists that make up the creative class. Toronto's creative class share of the workforce is similar to San Francisco's and greater than Seattle. The creative class makes up a greater share of the workforce in Vancouver and Montreal than it does in New York and San Diego. In addition, Ottawa ranks with San Jose, the heart of Silicon Valley, with nearly 45 percent of its workforce in the creative class.[19]

The tech and entrepreneurial ecosystems of Canada's leading cities have also grown and matured. While they are not nearly at the level of the leading U.S. tech ecosystems in the Bay Area, New York, and Boston, they are now significantly above the threshold required to attract and hold onto aspiring entrepreneurs and tech companies.

America still has the lion's share of startups and attracts the disproportionate share of global venture capital. In 2016, U.S.-based startups attracted nearly $70 billion in venture capital investment, roughly half of global venture capital.[20] Just two broad regions in the U.S.—the San Francisco Bay Area and the Boston-New York-Washington Corridor—account for over 40 percent of the world's venture capital investment. By contrast, Canada attracted just $2.4 billion U.S. dollars or just 2 percent of global venture capital investment in 2016.[21]

But, Canada's major cities and metro areas have now reached a point where they compare favorably with second-tier U.S. tech hubs. In 2016, Toronto and nearby Waterloo attracted to $992 million together, which puts in the

same league with Washington, D.C., Austin, and Philadelphia and not far behind Seattle and San Diego. The city has been ranked as one of the world's top tech hubs and the sixth leading center for tech job growth.[22] Montreal attracted more than $600 million in venture capital, putting it on par with Dallas and Salt Lake City, while Vancouver attracted more than $300 million, similar to Nashville and Portland and was ranked the world's fifteenth leading tech hub. All of these places attracted more venture capital investment than Pittsburgh a prominently mentioned up-and-coming U.S. tech hub.[23]

Canadian universities are also working to strengthen their surrounding entrepreneurial and tech-based ecosystems. A key missing element to build an entrepreneurial cluster is access to entrepreneurial judgment. When entrepreneurs wake up in the morning, they are confronted with limited resources and many choices. Having access to mentors who have built ventures to scale gives them important judgment as to what to prioritize. In places such as Silicon Valley, judgment is so thick it is in the air for the price of a latte at a local café. For other places, it needs to be organized so that entrepreneurs can find and access it.

Founded at the University of Toronto, the Creative Destruction Lab puts successful entrepreneurs and venture capitalists in the same room as start-up firms based in core scientific expertise (especially in the area of machine learning).[24] It is designed to give Toronto that missing market in judgment. In its first five years of operation it has generated over $1 billion in equity value for start-ups running through its program as well as core experiential learning for MBA students at the Rotman School of Management. When it started, the experienced mentors and capital providers were all local. But, as the success of the model came to be known, successful entrepreneurs from around the world started to jet in to its bimonthly meetings to voluntarily lend their knowledge to these start-ups. They were joined by top Silicon Valley venture capitalists including Bloomberg Beta, Bessemer, and Google Ventures. Now,

Rank	Metro	Millions of U.S. dollars
1	San Francisco	$23,401
2	New York	$7,565
3	San Jose	$6,718
4	Boston-Cambridge	$6,028
5	Los Angeles	$5,446
6	San Diego	$1,549
7	Seattle	$1,503
8	Miami	$1,296
9	Chicago	$1,245
10	Washington, D.C.	$1,090
11	Greater Toronto	$992
12	Austin	$977
13	Philadelphia	$897
14	Atlanta	$754
15	Dallas	$678
16	Salt Lake City	$633
17	Montreal	$630
18	Provo-Orem	$549
19	Denver	$502
20	Minneapolis-St. Paul	$491

Exhibit 4: Leading Metros for Venture Capital-Backed Startups
Source: U.S. Data is from Pitchbook; Canadian Data is from the Canadian Venture Capital Association, *VC & PE Canadian Market Overview*. Both are for 2016.
Note: Greater Toronto includes Guelph and Waterloo. Canadian dollars are converted to U.S. dollars at 1.32 exchange rate from the Bank of Canada for 2016.

start-ups themselves are coming to the program from Silicon Valley, New York, Paris, and Tel Aviv. They are doing this because in one day they can get access to the resources in need that would otherwise take them weeks to assemble. The Creative Destruction Lab has moved to expand its unique model for start-up acceleration to several other Canadian cities. In 2017, CDL West was opened at the Sauder School of Business at the University of British Columbia in Vancouver, and in 2018 it will add programs in Montreal, Halifax and Calgary, which will help to bolster their entrepreneurial ecosystems.[25]

Canada's leading cities and metros also benefit from the proximity and strategic closeness to the U.S. If they were in Asia, Africa, or even Europe, it would be another matter. But for the most part, Canada's population is massed in a few cities and metro areas located close to the U.S. border. Toronto is closer to New York and Boston than Chicago is. Vancouver is closer to San Francisco and Seattle than Denver is. This makes real time collaboration easier and reduces the barriers to U.S. firms locating integrated research facilities in Canada. One can think of Toronto and Montreal as northern extensions to the Boston-New York-Washington Corridor, while Vancouver already functions as a key node in the Cascadia mega-region, which encompasses Portland and Seattle, and can be seen as an extension of the entire West Coast high-tech complex which encompasses Los Angeles and Southern California and the San Francisco Bay Area.[26]

Toronto and Vancouver also offer state-of-the-art global airports, which connect both metros to the United States and tech hubs around the world. Toronto's Pearson International Airport handles more international passengers than any other airport in North America, with the exception of New York's JFK. The metro's downtown Billy Bishop airport also provides direct flights to New York, Boston, and Washington, D.C. Similarly, Vancouver International Airport offers daily, non-stop flights to Asia, Europe, Mexico, and the U.S. In major Canadian cities, U.S. customs is located just after security eliminating the hassle of clearing customs at more congested U.S. airports. For U.S. tech companies, Canada's major cities offer a close-by alternative to their U.S. locations for amassing global talent.

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When all is said and done, might we have reached an inflection point for America's long-held dominance in high tech industry and talent? Can Canada and its major cities benefit from Trumpism and attract a growing share of global high-tech talent and industry?

On this, only time will tell.

Canada has many assets, but the competition for global talent is a long, hard game. Even if Canada and its cities increase their draw on global talent in the short run, America, and its leading tech hubs, have many advantages. Trump and Trumpism may ultimately not last very long.

This is not the first time Canada has been seen as potentially benefiting from a restrictionist bent in U.S. policy. It happened with the immigration restrictions and bellicose foreign policy of the Bush Administration in the early to mid-2000s. At the time, a number of American high-tech companies set up branches in Canada: Microsoft opened a lab outside Vancouver to attract foreign techies. But, ultimately, the period saw little in the way of a permanent shift of talent and technology to Canada. Indeed, the San Francisco Bay Area and other U.S. tech hubs improved and consolidated their advantages in tech and talent during the subsequent Obama years.

Yet, there are reasons that suggest this time may be different. For one, Trumpism poses a far more serious threat, not just to open immigration in America, but to public investments in basic science and technology as well as a general posture that signals a much stronger and troubling disdain for scientists, intellectuals, immigrants, and so-called urban elites. It also reflects a persistent strain in American society, coming after the Bush years, one that is deeply ingrained in the growing divide between more open and liberal Blue America of the nation's leading superstar cities and tech hubs and the backlash politics of Red America. This is not just a product of Trump. In fact, Trump is a product of it. Around the world, America is beginning to be seen as something of a rogue nation—out of touch and out of step with the core practices and cultural beliefs of other advanced nations.

This time around, the effects of Trump and Trumpism may have a more lasting impact on America's "national brand" across the world. A national brand is the way people around the world perceive a country. Migration is a significant move requiring trust; in particular, trust that the new life will be safe and stable. There was a reason the U.S. was a magnate for migration historically—it literally had a statue with its brand visible from Ellis Island. Migrants want to know that visa policies will not be reversed one day or migrants will not be treated as second class citizens, at least in terms of basic human rights. Thus, trust is critical in much the same way that we trust pharmaceutical companies to keep our pain medication safe or our food companies to be free of contaminants. And branding is a first step in that trust.

For decades, America for all its faults was seen as a land of opportunity, a place where immigrants could make a better life. From moves to curb legal immigration by half, increasing security along the border, and continued threats to build a wall along the Mexican border to the travel ban on people from several Muslim-dominant countries and the notion that refugees are, by definition, "bad people" who should be denied entry to increasing border security, Trump has shown the world that America is now increasingly a place that shuns immigrants.

The damage Trump has done to America's brand is not permanent, yet. Foreigners are not leaving America in droves and immigrants have not yet sought out other destinations en masse. But, what will happen if Trump really does build the border with Mexico, initiates mass deportations of immigrants, starts a nuclear conflagration with North Korea, if white nationalists and neo-nazis, emboldened by his reign, take to the streets of city after American city, or if Trump wins reelection in 2020?

On balance, Canada has reason for cautious optimism. Its big cities—especially Toronto, Vancouver, and Montreal—have much more to offer and are much more capable of competing for global talent and global tech firms than they were a decade or two ago. They are now large, diverse cities than offer amenities on par with most every large American city with the possible exception of New York, topping the lists of the world's best cities and best places to live year after year. They are open to immigrants with even larger concentrations of immigrants and foreign talent than most U.S. cities. And their universities and research capability have matured and grown substantially. Trump signals that immigrants are not welcome, while Canada builds centers for refugees streaming across the U.S. border and Trudeau is pictured greeting Syrian refugees and openly participating in citizenship events, the clear message or brand being "immigrants are welcome here." As America's brand wanes, Canada's grows in stature on the global stage.

All of this is occurring against the backdrop of a growing backlash against America's leading tech companies and tech hubs from the left as well as the right. Once championed as sources of innovation and economic progress, high tech companies and high-tech entrepreneurs are increasingly being pilloried as modern-day robber barons. Uber has come on the carpet for its unfair competitive practices and for underpaying its drivers. Airbnb has been charged with helping to raise housing prices and make expensive cities like New York and San Francisco less affordable. Protests have emerged in the Bay Area over the private shuttle buses that high-tech companies use to move their employees between their homes in San Francisco and corporate campuses in Silicon Valley. A ballot measure to prohibit high-tech companies from locating in certain neighborhoods in downtown San Francisco was narrowly defeated last year. And America's leading tech hubs—not just San Francisco and New York, but Boston, Seattle, and Los Angeles—have become harrowingly unequal and increasingly unaffordable for the middle class as well as service workers and the less advantaged.[27] This has led a growing number of commentators to speculate that established tech hubs may have reached a tipping point of their own and they we may be starting to see the so-called "rise of the rest" as tech talent and tech startups begin to shift to other locations across America.

What is more likely is that the rise of the rest will occur outside of the United States. Instead of talent and tech shifting from established U.S. tech hubs like the Bay Area, New York, and Boston to new U.S. tech hubs like Denver, Portland, Nashville, or Pittsburgh, the more likely shift may be to tech hubs outside America. That could be London or other European cities. It could be emerging tech hubs in Asia. But it is more likely to be the aspiring tech hubs of Canada—Toronto, Vancouver, Montreal, and others.

While only time will tell whether these places and Canada as a whole are able to compete effectively and persistently for global talent, one thing is clear: The tide appears to be turning in its favor.

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