It’s no secret that the United States has long dominated cutting-edge technologies, from personal computers and biotech to smartphones and social media. One big reason: America’s track record of attracting global talent, like the Scottish-born steel magnate Andrew Carnegie or the Hungarian-born Andrew Grove, a pioneer in the semiconductor industry, or, more recently, Google’s Sergey Brin—and many other entrepreneurs in between and afterward.

But that edge may be disappearing thanks to the new president. Just eight months into office, President Donald Trump has moved to cut legal immigration by half over the next decade, increase security along the border, build a wall with Mexico, ban travel indefinitely from several countries and overturn DACA, the Obama-era policy that grants work permits to undocumented immigrants who arrived in the country as minors. The Trump administration has also suggested limiting “startup visas” for high-tech entrepreneurs entering the United States, and massively
cutting America’s funding for scientific research. Trump’s aggressive “America first” posture on trade and international diplomacy has transformed the United States into something of a pariah nation, out of touch with the basic norms and values of advanced democracies.

Trump might see these proposals as part of his core political agenda to prioritize Americans and their jobs, and make the United States “great again.” But, while America turns inward, another country stands to benefit: Canada.

Why? It’s not just that Canada has opened centers for refugees streaming over the border from the United States, with Prime Minister Justin Trudeau personally welcoming some of them to the country. Canada is specifically recruiting the skilled, ambitious talent that drives innovation and economic growth, including top thinkers and workers in technology and industry. Canadian universities—which rank among the world’s best in fields like computer science, electrical and computer engineering, and artificial intelligence—are aggressively recruiting foreign students, who in turn are matriculating in Canada at higher levels than before Trump’s election. And Canadian cities—particularly Toronto, Vancouver and Montreal, which rate among the best places in the world to live—are attracting more venture capital to fund the tech industry, on par with American tech hubs like Seattle and Austin.

**U.S. and Canadian Metros with Highest Shares of Foreign-Born Residents**

![Bar chart showing the shares of foreign-born residents in various cities.](chart-image)

Source: U.S. Census American Community Survey 2015; Statistics Canada, 2011 National Household Survey
As America closes its borders, Canada is playing the longer, smarter game.

It’s not alone in this regard, but Canada, more than any other place, is uniquely positioned to benefit from Trump’s anti-immigrant posture. The United Kingdom also hosts a large number of immigrants; yet it has seen a populist backlash of its own, and London has been plagued by terrorism, growing inequality and unaffordable housing, which make it a more difficult place for immigrants to settle. Australia and New Zealand also attract their fair share of immigrants, but they are geographically more remote, and they do not provide proximity to the large U.S. market, as Canada’s major cities do.

The truth is that if Trump really wants to put America first, he’s doing it all wrong. If he keeps up his anti-immigration push, the United States’ polite neighbor to the north could soon be eating Americans’ lunch.

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It’s hard to overstate the role that foreign-born talent plays, and has long played, in America’s leadership and economic competitiveness in the fields of science and tech. For much of its history, the United States was the most open and welcoming country in the world, with the best universities and the most vibrant industries and opportunities—the place global talent wanted, and needed, to be. As of 2013, foreign-born workers in STEM fields—science, technology engineering and math—accounted for nearly a fifth of workers with bachelor’s degrees in the United States, 40 percent of those with master’s degrees and more than half of those with Ph.D.s. In the San Jose metro area, consisting largely of 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’s about a quarter. And in Boston, immigrants make up 20 percent of all those with graduate degrees. As of 2012, immigrants also served as founders of a quarter of all U.S. companies and more than 40 percent of tech startups in Silicon Valley.

While Trump’s “America first” posture and moves to restrict immigration are damaging America’s ability to attract talent, the United States has been facing increased competition for such talent in recent years. America has fallen behind other nations in terms of its overall share of foreign-born residents, with immigrants making up roughly 13 percent of the U.S. population as of 2013, compared with 20 percent for Canada and almost 30 percent for Switzerland and Australia. This is largely a matter of other countries becoming more open to immigrants and, in particular, getting better at attracting more highly skilled and educated foreigners.

In that, Canada has excelled. Its immigration system is a points-based system that rates immigrants on their education, skills and work experience, as well as family relationships and community ties. (A bill Trump is backing to cut legal immigration to the United States would use a similar points system to prioritize immigrants.) Over the summer, Canada launched an additional fast-track visa program for high-skilled workers. In Canada, immigrants today comprise about a third of all adults with a university degree. Canada’s foreign-born residents are particularly versed in science, technology, engineering and math, making up about half of the nation’s STEM degrees. Immigrants also comprise about 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—higher percentages than the United States.

Just as American universities like Stanford and MIT have functioned as the Ellis Islands of the knowledge age for the United States, Canada’s universities now play a key role in attracting foreign talent to the country. Between 2008 and 2015, the number of international students in Canada nearly doubled—from roughly 185,000 to more than 350,000. Today, foreign-students already make up a substantially larger percentage of students at Canadian versus U.S. universities—20 percent of all students at Canadian universities compared with less than 5 percent in the United States. Canadian immigration law also makes it much easier for foreign students to remain in Canada after they graduate, so they are able to make a more direct and lasting contribution to the Canadian economy.

Perhaps not surprisingly, the number of foreign students applying to Canadian universities has spiked substantially since Trump was elected. At the University of Toronto, where we both teach, international student applications jumped by 70 percent in fall 2017, compared with the previous year. In the weeks following the 2016 election, foreign student applications to McGill University in Montreal jumped by 30 percent, while those to the University of British Columbia in Vancouver increased by more than 25 percent, compared with the same time a year earlier.

Meanwhile, Canada’s tech industry is beginning to challenge America’s for talent, especially in the fields of artificial intelligence and machine learning, which promise to revolutionize the way we live and work in coming decades. 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 are from France, one is from China and another two are based in Canada. One of these Canadian scientists, the University of Toronto’s Geoffrey Hinton, is perhaps the leading figure in the entire field. Hinton left the United States for Canada during the 1980s for political reasons—he did not want his research funded by the American military. In the years since, Google has followed Hinton and built a lab for him in Toronto. Another leading deep-learning researcher, Yoshua Bengio, is a French immigrant to Canada and a professor at the University of Montreal. Microsoft recently established a new research facility in that city to be close to him. Google also established a major AI research facility in Edmonton to be close to the University of Alberta’s Rich Sutton, another Canadian superstar. And in May, Uber announced it was setting up its Advanced Technologies Group in Toronto to be close to the University of Toronto’s Raquel Urtasun, a Spanish immigrant who is one of the world leaders in getting machines to see and understand the environment around them—a key technology used in driverless vehicles.
Canada’s large cities and metropolitan areas are diverse, cosmopolitan places that stack up well against their American peers in the global competition for talent. Immigrants make up 45 percent of Greater Toronto’s population and 40 percent of Greater Vancouver’s, compared with more than 35 percent in Silicon Valley and about a third in Los Angeles and San Francisco. Calgary’s share of immigrants is about the same as New York’s, while Montreal’s is about the same as Washington, D.C.’s. Vancouver and Toronto also routinely outdistance American cities on livability, ranking third and fourth respectively on the *Economist*’s 2017 list of the world’s most livable cities. With excellent public schools and lower urban crime, Canada’s urban centers have a real advantage attracting families that want to live in cities.

And Canada’s large cities are no economic slouches. Toronto ranks seventh among global financial centers—second only to New York in North America—and both Montreal and Vancouver number among the top 20. While they are no match for the leading U.S. tech ecosystems in the Bay Area, New York and Boston yet, several of Canada’s biggest cities are now significantly above the threshold required to attract and hold onto aspiring entrepreneurs and tech companies. Montreal attracted more than $600 million in venture capital in 2016, putting it on par with Dallas and Salt Lake City, while Vancouver attracted more than $300 million—on par with Nashville and Portland. In 2016, Toronto and Waterloo combined to attract nearly a billion dollars in venture capital to their startup companies, putting them the same league as Seattle, Washington, D.C., Austin and San Diego. Toronto is now routinely ranked as one of the world’s top tech hubs and a dominant site for tech job growth. In fact, in a July survey conducted by MaRS—an incubator based near the University of Toronto that hosts some 150
startups, along with other tech companies—62 percent of Canadian companies polled said they had noticed an increase in American job applications, particularly after the election. Before undertaking its current, much-ballyhooed search for a second headquarters, Amazon reportedly discussed expanding to Toronto a few years ago; that idea was tabled at the time, but Toronto is now bidding for the spot alongside many American cities.

Other countries have booming tech industries too, but Canada’s leading metros have the benefit of proximity to the United States. Toronto is closer to New York and Boston than Chicago is, and Vancouver is closer to San Francisco and Seattle than Denver. This makes real-time collaboration easier and reduces the barriers to American firms locating facilities in Canada. One can think of Toronto and Montreal as northern extensions of the Boston-New York-Washington corridor, while Vancouver already functions as a key node in the Cascadia mega-region, which encompasses Portland and Seattle. Canada’s large cities, especially Toronto and Vancouver, provide a nearby solution for U.S. tech companies that want to avoid America’s growing immigration restrictions and anti-immigrant sentiment.

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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 succeed in attracting a growing share of global high-tech talent and industry?

The competition for global talent is a long, hard game. Even if Canadian cities increase their draw of global talent in the short run, America and its leading tech hubs still have many advantages—particularly if Trump and Trumpism are not long-lasting.
History Dept.

**When Presidents Get Angry**

By Mark Perry

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On The Bench

**Do Trump’s NFL Attacks Violate the First Amendment?**

By Robert Post
Law And Order

Trump Sent Judges to the Border. Many Had Nothing to Do.

By Meredith Hoffman
This is not the first time Canada has potentially benefited from a restrictionist bent in U.S. policy. In the early to mid-2000s, around the same time that the George W. Bush administration imposed immigration restrictions, a number of American high-tech companies set up branches in Canada. Microsoft, for instance, opened a lab outside Vancouver to attract foreign tech talent that it feared would be denied entry in the U.S. But, ultimately, the period saw little in the way of a permanent shift.

Yet, this time could be different. Trumpism poses a serious threat not just to open immigration in America, but also to public investments in basic science and technology, while signaling a troubling disdain for scientists, intellectuals, immigrants and so-called “urban elites.” Around the world, America is beginning to be seen as something of a rogue nation—out of step with the core practices and cultural beliefs of other advanced countries. Migration requires trust that a new life will be safe and stable. Migrants want to know that visa policies will not be reversed in a day,
and that they won’t be treated as second-class citizens. Trump hasn’t helped to build that sense of trust. Instead, he has shown the world that America is now increasingly a place that shuns immigrants.

Still, the damage Trump has done to America’s brand is not yet permanent. Foreigners are not leaving America in droves, and immigrants have not sought out other destinations en masse. The question moving forward is what will happen if Trump really does build the border wall with Mexico, or initiates mass deportations of immigrants, or if emboldened white nationalists and neo-Nazis take to the streets again?

All of this is occurring against the backdrop of a growing backlash against America’s leading tech companies from the left and right. Once championed as sources of innovation and economic progress, tech companies and entrepreneurs, from Uber to Airbnb, lately are being pilloried as modern-day robber barons. America’s leading tech hubs—not just San Francisco and New York, but also Boston, Seattle and Los Angeles—have become increasingly unequal and unaffordable for the middle class, service workers and the less advantaged. This has led a growing speculation that tech talent and startups will begin to shift to other locations across America.

More likely, those companies increasingly will look outside the United States—to Canada’s aspiring tech hubs, but also to London, other European cities and emerging tech centers in Asia. Canada’s big cities have much more to offer and are much more capable of competing for global talent and tech firms than they were a decade or two ago. As America’s global brand wanes, Canada’s grows in stature—and that means more immigrants, more talent, more tech and more prosperity.

Karen King of the Martin Prosperity Institute contributed research and data to this report.

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