

America Is Closing the Door to Talent

Paola Sapienza

The border dominates the immigration debate. The rules governing how America recruits scientists and engineers are being rewritten with far less attention.

Border Patrol encounters at the U.S.-Mexico border fell by more than 80 percent between fiscal year 2024 and fiscal year 2025 to the lowest total since 1970. It is a remarkable outcome, and it has made the country more secure. But it is not the only immigration number worth watching. A second set of rules has been moving quietly through the regulatory process. These rules govern the channel through which the United States has historically recruited the world's top technical talent.

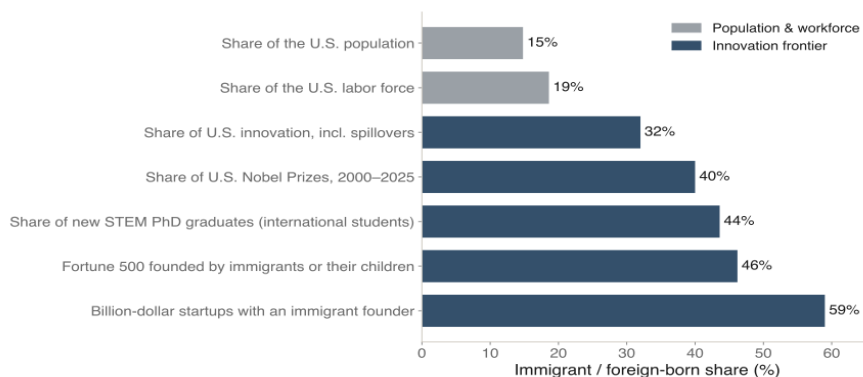
Immigration and Innovation

A small number of people produce most innovation, and in the United States, those people are disproportionately foreign-born. The pattern holds across advanced degrees, prizes, patents, and start-ups. Immigrants make up about 15 percent of the U.S. population but account for 23 percent of patents. Once their effect on the colleagues they work alongside is counted, their share rises to roughly a third of American innovation. Students on temporary visas earn 44 percent of new American STEM doctorates. Immigrants have won 40 percent of the Nobel Prizes awarded to Americans in chemistry, medicine, and physics since 2000, and 59 percent of the country's privately held billion-dollar start-ups have at least one immigrant founder.

This talent reaches the United States through a patchwork of rules that are often antiquated, cumbersome, and hard to navigate. And yet the country has continued to attract it. Losing these people would cost more than the foreign talent itself: because they raise the output of the Americans who work alongside them, their departure would also subtract from American productivity.

Immigrants are ~1 in 6 workers — but a rising share at the innovation frontier

Foreign-born / immigrant share, latest available year. The climb from population to patents, Nobels and top companies is the case for high-skill immigration.



Sources: ACS 2024; BLS 2024; new STEM-PhD share from Clemens, Neufeld & Nice, "Brain Freeze" (National Academies, 2025); IPEDS; Bernstein et al. NBER WP 30797 (2025); U.S. Nobel-Prize share from NFAP, Immigrants and Nobel Prizes (Oct 2025), counting chemistry, medicine and physics; American Immigration Council 2025; NFAP Billion-Dollar Companies 2026. Concepts differ slightly by row.

Figure 1. Immigrant share, from the general population up to the innovation frontier.

What Creates the Pipeline

Talent like this arrives disproportionately through graduate programs, which function as a de facto talent-acquisition system for the country. Of the 775 privately held U.S. companies valued at a billion dollars or more as of April 2026, nearly a quarter have at least one founder who first came as an international student. That pipeline is already narrowing. About 293,000 international students were enrolled in graduate science and engineering programs in fall 2025, down from 340,000 a year earlier—a drop of roughly 14 percent.

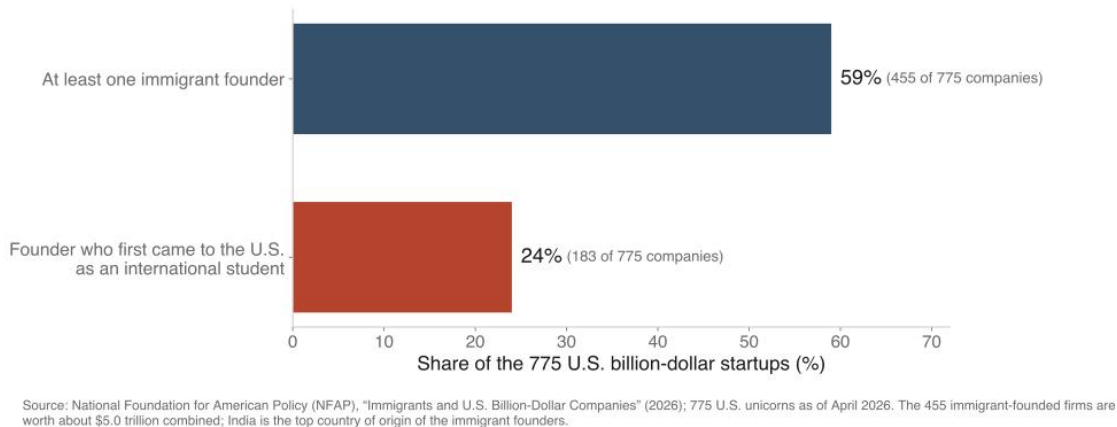


Figure 2. *The founder pipeline: from student visa to billion-dollar company.*

The path runs in three stages. Students arrive on an F-1 visa. After a STEM degree, Optional Practical Training (OPT) allows them to work for up to three years. From there, employers enter the H-1B lottery, where about 85,000 places were available in the spring 2026 registration against roughly 212,000 entries. That cap has not changed in two decades, and relative to the size of the American labor force, it is now smaller than the 65,000 cap Congress set in 1990. The shortage of visas is not new. What is new is a set of rules that affects every stage of the path at once.

Three Rules, One Pipeline

The Student Visa

Since 1983, F-1 students have been admitted for “duration of status,” which lets them stay as long as they pursue a full course of study and make normal progress. A [final rule](#) published on July 17, 2026, replaces that with a fixed admission period of no more than four years. Yet the median science or engineering doctorate that a U.S. university awards to an international student takes seven years from the start of graduate study. A federal judge in Massachusetts postponed the rule on September 14, one day before it took effect, and duration of status remains in force while the case proceeds.

The proposal may already have done damage. In a 2025 Institute for Progress and NAFSA survey of 1,039 international graduate students and postdocs in the United States, 49 percent said they would not have enrolled had a fixed admission period been in place. Only about one in five science and engineering

doctorates is finished within four years. An applicant choosing between Stanford, Imperial College London, and ETH Zurich now faces a risk that did not exist before: an extension filing in year four at Stanford, with fees and an uncertain outcome, and nothing comparable at Imperial or ETH.

The Bridge

Optional Practical Training connects graduation to an employer-sponsored visa, and it faces three separate threats. A rule to rewrite the program has been on the regulatory agenda since 2025. A second rule, imposing a fee the government has not yet disclosed, cleared White House review this month and could appear any day. And a House bill with 39 cosponsors would abolish the program outright.

The Work Visa

The H-1B has been hit hardest. A presidential proclamation in September 2025 barred entry on an H-1B unless the petition carried a \$100,000 payment. After a federal court vacated that policy, a new proposal would add a \$103,265 fee on cap-subject petitions. The reasoning is that firms will pay such a fee only for their most valuable hires, so the fee should select for top talent. In practice, talent rarely arrives fully formed. It usually enters as a promising junior employee: a new biotechnology PhD, say, whose future discoveries will benefit the United States—not an established 50-year-old executive. The likely result is that fewer young researchers will come to work at innovative start-ups, and venture capital, which is mobile, can fund companies in more welcoming places. The H-1B has real flaws. Closing the loopholes that let consulting firms bring in routine IT workers from abroad is a worthy goal, but it can be done without stifling innovation.

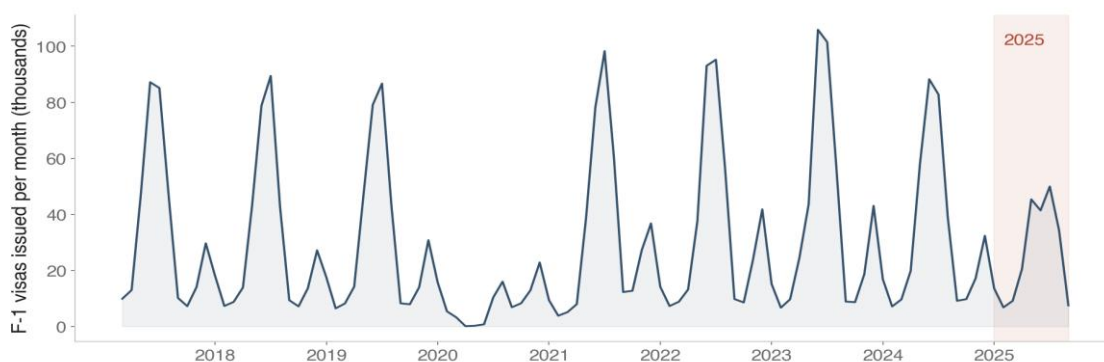
Research on past H-1B restrictions suggests what to expect. Britta Glennon found that for every visa rejection, the average U.S. multinational firm hired 0.4 employees at its foreign affiliates, and the most global firms hired nearly one. Microsoft opened a development center near Vancouver in 2007 and cited U.S. immigration difficulties among its reasons. There are signs that firms are again quietly expanding hiring abroad in anticipation of further restrictions.

The Consequences

Between June and September 2025, the United States issued 39 percent fewer F-1 student visas than in the same months of 2024. Compared with 2023, the post-pandemic peak, issuance fell by roughly half.

U.S. student-visa issuances, month by month, 2017–2025

Each summer brings the pre-semester surge. The 2025 peak is the weakest since the pandemic.



Source: U.S. Dept. of State, Monthly NIV Issuances by Nationality and Visa Class (F-1). Author's tabulation.

Figure 3. *F-1 issuances month by month, 2017–2025.*

When talented researchers choose universities abroad, they build their networks, research programs, and careers there. Their breakthroughs are likely to happen there too. So are the patents, the start-ups, and the economic value that follows.

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