



# HIGH-SKILLED IMMIGRATION

AMERICA'S KEY FOR COMPETITIVENESS AND NATIONAL SECURITY



**COUNCIL**  
ON NATIONAL SECURITY  
AND IMMIGRATION

# INTRODUCTION

China's economy, soft power, and military capabilities are more robust than ever. While the United States remains the leading global hegemon, China is projected to surpass America, all else remaining equal, within the next few decades. As highlighted by a recent White House national security report, "China is the only competitor potentially capable of combining its economic, diplomatic, military, and technological power to mount a sustained challenge to the United States." [1] In other words, unless our country presents an intelligent and united front to face the challenges of China's growth, America's global predominance may soon be over. Luckily, the United States has an ace in the hole to prevent and reverse this situation: Immigrants. As former U.S. Secretary of State Dr. Condoleezza Rice pointed out in a recent interview for the George W. Bush Presidential Center, "immigration is America's secret weapon." [2]

## CHINA'S ECONOMY, SOFT POWER, AND MILITARY CAPABILITIES ARE ON THE RISE

In the economic field, recent reports show that China will overtake the United States as the world's largest economy by 2028. [3] That prediction is, in part, sustained by the fact that the tech industry in China has grown exponentially in the last few years. In 2019, for instance, China surpassed the United States for the first time as the top source of international patent applications filed with the World Intellectual Property Organization (WIPO). [4] Since then, China has maintained this lead. This situation is worrying because while patents are not necessarily an indicator of innovation, economists have long demonstrated a direct correlation between technological innovation and economic growth. [5] Hence, if Chinese innovation continues to outpace American innovation, China is likely to become the world's leading economy.

In terms of soft power—understood as the ability of a country to persuade others to do what it wants without force or coercion [6]—China's influence is expanding rapidly worldwide. Boosted by the Chinese Belt and Road Initiative (BRI) [7]—which is China's most ambitious infrastructure project that would stretch from East Asia to Europe, significantly expanding the country's economic and political influence [8]—and the increasing permeation of Chinese technology companies, the presence of China is ubiquitous. [9] Hence, the Chinese penetration of global markets, traditionally dominated by the United States, should be a red flag and incentive for American policymakers to help U.S. tech companies outperform their Chinese competitors. To achieve that goal, the United States needs to attract and retain the brightest minds in science, technology, engineering, and math.

[1] President Joseph R. Biden, Jr., *Renewing America's Advantages: Interim National Security Strategic Guidance*, Washington, DC., March 2021. (Available at <https://www.whitehouse.gov/wp-content/uploads/2021/03/NSC-1v2.pdf>; Accessed on July 12, 2021).

[2] Dr. Condoleezza Rice, Interview for the George W. Bush Presidential Center, April 26, 2021 (Available at <https://www.bushcenter.org/publications/articles/2021/04/condoleezza-rice-immigration-insights-series.html>; Accessed on July 27, 2021)

[3] The Center for Economics and Business Research (CEBR), *World Economic League Table 2021: A world economic league table with forecasts for 193 countries to 2035*, P. 8, 12th edition, London, December 26, 2020. (Available at <https://cebr.com/service/macroeconomic-forecasting/>; Accessed on July 12, 2021).

[4] World Intellectual Property Organization, Press Release: China Becomes Top Filer of International Patents in 2019 Amid Robust Growth for WIPO's IP Services, Treaties and Finances, Geneva, April 7, 2020. (Available at [https://www.wipo.int/pressroom/en/articles/2020/article\\_0005.html](https://www.wipo.int/pressroom/en/articles/2020/article_0005.html); Accessed on July 13, 2021).

[5] See Kanwar, S., & Evenson, R. Does Intellectual Property Protection Spur Technological Change?; *Oxford Economic Papers*, 235–264 (2003); See also Hudson, J., & Minea, M. (2013). *Innovation, Intellectual Property Rights, and Economic Development: A Unified Empirical Investigation*, *World Development*, 46, 66–78.

[6] Joseph S. Nye, Jr., *Soft Power: The Means to Success in World Politics*, *Foreign Affairs*, 2004 (Available at <https://www.foreignaffairs.com/reviews/capsule-review/2004-05-01/soft-power-means-success-world-politics>; Accessed on July 27, 2021)



In terms of military capability, China has never been as powerful as it is today. Recent satellite images reveal that China is building a second nuclear missile silo field, which constitutes "the most significant expansion of the Chinese nuclear arsenal ever." [10] Moreover, as recognized by the White House, China's pattern of malicious cyber activity poses a major threat to U.S. economic and national security. [11] Recent Chinese-backed ransomware attacks, cyber-enabled extortion, crypto jacking, and cyber-espionage of American companies [12] have made evident America's need to identify and attract the best technological minds in the world to protect our nation.

## AMERICA'S "SECRET WEAPON": IMMIGRANT STEM WORKERS

To address this challenge, America must boost its high-tech industries. In a bipartisan effort to achieve this goal, the Senate passed the U.S. Innovation and Competition Act of 2021 on June 8. [13] The legislation—which is supported by President Biden and awaits consideration in the House of Representatives—represents the most significant investment in U.S. science and technology in decades. It will authorize more than \$100 billion over five years "to discover, build, and enhance tomorrow's most vital technologies—from artificial intelligence to computer chips, to the lithium batteries used in smart devices and electric vehicles—right here in the United States." [14]

Nevertheless, the number of qualified American workers in the STEM fields (science, technology, engineering, and math) is not enough to capitalize on such a significant investment. The United States faces a worrying deficit of STEM workers [15] and will need the help of immigrants with STEM degrees to ensure America's competitiveness. As of 2021, immigrants make up 26% of the STEM workforce in the U.S., [16] with the number of foreign-born STEM workers increasing from 509,000 (11.9% of the STEM workforce) in 1990 to almost two million (24.3% of the STEM workforce) in 2015. [17]

Studies have indicated that a 1% increase in foreign college graduates results in a 15% increase in patents per capita. [18] Similarly, recent statistics also suggest that immigrants are fueling the next generation of high-growth U.S. companies, such as Moderna, Tesla, and eBay. [19] This is no surprise considering that first- or second-generation immigrants founded 45% of high-tech companies on the

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[10] Matt Korda and Hans Kristensen, China Is Building A Second Nuclear Missile Silo Field, Federation of American Scientists, July 26, 2021. (Available at <https://fas.org/blogs/security/2021/07/china-is-building-a-second-nuclear-missile-silo-field/>; Accessed on July 27, 2021)

[11] The White House, The United States, Joined by Allies and Partners, Attributes Malicious Cyber Activity and Irresponsible State Behavior to the People's Republic of China, July 19, 2021 (Available at <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/19/the-united-states-joined-by-allies-and-partners-attributes-malicious-cyber-activity-and-irresponsible-state-behavior-to-the-peoples-republic-of-china/>; Accessed on July 27, 2021).

[12] The White House, The United States, Joined by Allies and Partners, Attributes Malicious Cyber Activity and Irresponsible State Behavior to the People's Republic of China, July 19, 2021 (Available at <https://www.whitehouse.gov/briefing-room/statements-releases/2021/07/19/the-united-states-joined-by-allies-and-partners-attributes-malicious-cyber-activity-and-irresponsible-state-behavior-to-the-peoples-republic-of-china/>; Accessed on July 27, 2021).

[13] U.S. Innovation and Competition Act of 2021, S. 1260, Introduced in the Senate on April, 20. (Available at <https://www.congress.gov/bill/117th-congress/senate-bill/1260>; Accessed on July 13, 2021).

[14] President Joe Biden; Statement of President Joe Biden on Senate Passage of the U.S. Innovation and Competition Act, June 8, 2021 (Available at <https://www.whitehouse.gov/briefing-room/statements-releases/2021/06/08/statement-of-president-joe-biden-on-senate-passage-of-the-u-s-innovation-and-competition-act/>; Accessed on July 27, 2021).

[15] Pedro Nicolaci da Costa, Tech Talent Scramble: Global Competition for a Limited Pool of Technology Workers is Heating Up, International Monetary Fund, Finance and Development, March 2019, Vol. 56, No. 1 (Available at <https://www.imf.org/external/pubs/ft/fandd/2019/03/global-competition-for-technology-workers-costa.htm>; Accessed on July 27, 2021)

[16] National Immigration Forum, High Tech: Immigrants are Indispensable to U.S. Workforce, March 28, 2019. (Available at <https://immigrationforum.org/article/high-tech-immigrants-are-indispensable-to-u-s-workforce/>; Accessed on July 27, 2021).

[17] American Immigration Council, Foreign-born STEM Workers in the United States, June 14, 2017. (Available at <https://www.americanimmigrationcouncil.org/research/foreign-born-stem-workers-united-states>; Accessed on July 27, 2021).

[18] Danilo Zak, Fact Sheet: International Students, National Immigration Forum, April 30, 2020 (Available at <https://immigrationforum.org/article/fact-sheet-international-students/>; Accessed on July 27, 2021)

[19] National Venture Capital Association, Immigrant Entrepreneurs can Drive Economic Growth in the Pandemic Recovery, March 2021 (Available at [https://nvca.org/wp-content/uploads/2021/03/NVCA\\_Visa\\_Reforms\\_book\\_FINAL.pdf](https://nvca.org/wp-content/uploads/2021/03/NVCA_Visa_Reforms_book_FINAL.pdf); Accessed on July 27, 2021).

2019 Fortune 500 List.[20] Moreover, half of U.S. private companies worth more than \$1 billion have founders who first came to the U.S. as international students.[21] The COVID-19 pandemic has laid bare the importance of attracting and retaining international talent, with foreign-born scientists and entrepreneurs playing critical roles in the development of life-saving vaccines. In doing so, the U.S. can not only produce future innovators and investors, but counter significant labor gaps in STEM fields—such as engineering and medical sciences—that cannot be addressed solely through the domestic workforce. In short, STEM immigrant workers directly increase the production of knowledge through patents, innovation, and entrepreneurship.[22]

## **ATTRACTION AND RETENTION OF IMMIGRANT STEM WORKERS TO REMAIN COMPETITIVE WITH CHINA**

Reforming the U.S. immigration system is critically urgent to strengthen U.S. competitiveness vis-a-vis China. Most STEM immigrant workers come to the United States as students. Attracted by the international prestige of American higher education institutions, approximately 1 million students each year from 193 countries enroll in U.S. colleges and universities.[23] While there is no guaranteed path for international students to stay in the U.S. after graduation, they have a few paths to work and remain in the United States. These options include using Optional Practical Training (OPT),[24] petitioning for an H-1B nonimmigrant visa,[25] or applying for a green card.[26]

Yet, international students face multiple bureaucratic hurdles if they seek to study and later work in the U.S. In response to the restrictive policies of the last five years, some future CEOs, inventors, and researchers have looked to study elsewhere. Total new enrollment of international students plummeted 43% between fall of 2019 and fall of 2020.[27] These numbers are deeply concerning for the U.S. economy, particularly considering that international students are more likely to start businesses than U.S. citizens.[28]

Congress can take steps to address this potential STEM shortfall, modernizing the visa system by applying market-based principles to increase the number of visas for STEM immigrants while also protecting American workers.[29] Such a simple reform would serve a twofold purpose to outcompete China. On the one hand, it would allow the United States to attract the brightest minds to our country. In turn, it would increase the quality and quantity of high-skilled research and

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[20] National Immigration Forum, High Tech: Immigrants are Indispensable to U.S. Workforce, March 28, 2019. (Available at <https://immigrationforum.org/article/high-tech-immigrants-are-indispensable-to-u-s-workforce/>; Accessed on July 27, 2021).

[21] Danilo Zak, Fact Sheet: International Students, National Immigration Forum, April 30, 2020 (Available at <https://immigrationforum.org/article/fact-sheet-international-students/>; Accessed on July 27, 2021)

[22] Alex Nowrasteh, Don't Ban H-1B Workers: They Are Worth Their Weight in Innovation, CATO Institute, May 14, 2020. (Available at <https://www.cato.org/blog/dont-ban-h-1b-workers-they-are-worth-their-weight-innovation>; Accessed on July 13, 2021).

[23] Danilo Zak, Fact Sheet: International Students, National Immigration Forum, April 30, 2020 (Available at <https://immigrationforum.org/article/fact-sheet-international-students/>; Accessed on July 27, 2021)

[24] See USCIS, Optional Practical Training (OPT) for F-1 Students (Available at <https://www.uscis.gov/working-in-the-united-states/students-and-exchange-visitors/optional-practical-training-opt-for-f-1-students>; Accessed on August 9, 2021)

[25] See USCIS, H-1B Specialty Occupations (Available at <https://www.uscis.gov/working-in-the-united-states/h-1b-specialty-occupations>; Accessed on August 9, 2021)

[26] See USCIS, Green Card, (Available at <https://www.uscis.gov/green-card>; Accessed on August 9, 2021)

[27] Kavitha Cardoza, Enrollment By International Students In U.S. Colleges Plummets, December 2, 2020 (Available at <https://www.npr.org/2020/12/02/912669406/enrollment-by-international-students-in-u-s-colleges-plummets>; Accessed on August 9, 2021)

[28] Danilo Zak, Fact Sheet: International Students, National Immigration Forum, April 30, 2020 (Available at <https://immigrationforum.org/article/fact-sheet-international-students/>; Accessed on July 27, 2021)

[29] National Immigration Forum, Immigration Priorities for a Biden Administration, November 11, 2020 (Available at <https://immigrationforum.org/article/immigration-priorities-for-a-biden-administration/>; Accessed on July 27, 2021)



development (R&D) on American soil. On the other, it would create the appropriate conditions for Chinese entrepreneurs and engineers to develop their ideas in the U.S., to the detriment of China.  
[30]

High-level officials of the Chinese Communist Party (CCP) are painfully aware of their high-skilled exodus problem and the labor shortage that it creates. They have stressed that "the number of top talents lost in China ranks first in the world." [31] In other words, one of the best and most straightforward solutions to maintain America's dominance and outperform China in R&D is to invest in immigration.

To that purpose, in 2021, the Biden administration revived the International Entrepreneur Parole Program [32] and endorsed the U.S. Citizenship Act of 2021, which would provide temporary legal status to certain individuals in STEM fields who would no longer count towards employment-based green card caps. [33] And in July, Representative Zoe Lofgren (D-California) introduced another important piece of legislation, the Let Immigrants Kickstart Employment (LIKE) Act (H.R. 4681), which would create a startup visa for international entrepreneurs. [34] Also, in June 2020, Representatives James Langevin (D-Rhode Island) and Elise Stefanik (R-New York) introduced the bipartisan National Security Innovation Pathway Act. [35] Had it passed, the bill would have provided a pathway to permanent residency for immigrants doing essential work promoting national security and innovation in strategically important fields. [36]

## CONCLUSION

One of the guiding principles of the Council on National Security and Immigration (CNSI) is to prioritize immigration policies and administrative structures that strengthen our economy and advance our national security posture, including ensuring that "the United States remains competitive in the ongoing, strategic competition with China." [37] We encourage the U.S. government to put in place "forward-thinking immigration policies and administrative structures that encourage innovation and attract, welcome and retain high-skilled foreign nationals and entrepreneurs." [38]

Regardless of politics or ideology, we must unite in our efforts to strengthen America's economic and military competitiveness. More than ever, the United States needs immigrant STEM workers from

[30] Remco Zwetsloot & Zachary Arnold, Chinese Students Are Not a Fifth Column, Foreign Affairs, April 23, 2021 (Available at <https://www.foreignaffairs.com/articles/united-states/2021-04-23/chinese-students-are-not-fifth-column>; Accessed on August 29, 2021).

[31] Remco Zwetsloot, China's Approach to Tech Talent Competition: Policies Results, and the Developing Global Response, Brookings Institution & Center for Security and Emerging Technology, April 2020. (For original citation see "2013 中国海创周在大连举行吸引留学人员回国" ["2013 China Overseas Scholar Innovation Summit took place in Dalian, attracting overseas students to return home"], 新浪 [Sina], June 28, 2013, <http://dl.sina.com.cn/news/s/2013-06-28/09557339.html>)

[32] The International Entrepreneur Parole Program (IEPP) is an initiative created under federal regulations that allow the Department of Homeland Security (DHS) to admit into the United States international entrepreneurs who demonstrate that their stay in the country would provide a significant public benefit. See Arturo Castellanos Canales, Fact Sheet: International Entrepreneur Parole Program, National Immigration Forum, June 3, 2021 (Available at <https://immigrationforum.org/article/fact-sheet-international-entrepreneur-parole-program/>; Accessed on July 27, 2021).

[33] See National Immigration Forum, U.S. Citizenship Act of 2021 Bill Summary, February 24, 2021 (Available at <https://immigrationforum.org/article/u-s-citizenship-act-of-2021-bill-summary/>; Accessed on July 27, 2021).

[34] H.R. 4681, or Let Immigrants Kickstart Employment (LIKE) Act, would immigrant innovators to establish and develop their venture capital-backed start-up companies in the United States to spur economic growth, create jobs for American workers, and enhance our competitive advantage on the world stage.

[35] H.R.7256, Sponsored by Representative James R. Langevin. Introduced in the House of Representatives on June 18, 2021.

[36] Matthew Lacorte, Congress Should Offer Permanent Residency to Noncitizen Scientists & Technical Experts Safeguarding National Security, Niskanen Center, May 4, 2021. (Available at <https://www.niskanencenter.org/congress-should-offer-permanent-residency-to-noncitizen-scientists-technical-experts-safeguarding-national-security/>; Accessed on August 29, 2021).

[37] Council on National Security and Immigration (CNSI), Principles (Available at <https://cnsiusa.org/principles/>; Accessed on July 27, 2021)

[38] Council on National Security and Immigration (CNSI), Principles (Available at <https://cnsiusa.org/principles/>; Accessed on July 27, 2021)

across the globe to outcompete China in the race for global leadership. Many in the U.S. national security community recognize this reality. The National Security Commission on Artificial Intelligence, for instance, emphasized in its Final Report that “immigration reform is a national security imperative.” [39] Simply stated, we agree that “immigration is America's secret weapon.”[40]

The biggest threat to the United States' global predominance does not lie along its southern border. The real challenge is coming from China's rapid economic growth and increasing international influence. If the U.S. aims to maintain its global economic, military, and social advantages, it must create a 21<sup>st</sup> Century immigration system, enacting overdue reforms to provide opportunities for high-skilled immigrant workers who are eager to make America stronger.

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[39] National Security Commission on Artificial Intelligence, Final Report, P. 175, March 19, 2021 (Available at <https://www.nscai.gov/wp-content/uploads/2021/03/Full-Report-Digital-1.pdf>; Accessed on August 29, 2021).

[40] Dr. Condoleezza Rice, Interview for the George W. Bush Presidential Center, April 26, 2021 (Available at <https://www.bushcenter.org/publications/articles/2021/04/condoleezza-rice-immigration-insights-series.html>; Accessed on July 27, 2021)