



From Brain Drain to Brain Gain The Impact of Developed Nations Immigration Restrictions on India's Innovation Ecosystem and Economic Growth

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Abstract - This study explores the potential transformation a restrictive immigration policy in developed countries, the proposed HIB visa fee of 100,000 dollars a year in the United States, and the irony of its success to the economic future of India. By thoroughly examining the trends in the migration of talent, the economic indicators and past examples, this paper will show that the forced repatriation of skilled workers may trigger the development of India into a world power in terms of innovation. The study proves that since 71 percent of HIB visa users are Indian nationals, the possibility of hundreds of thousands of highly skilled professionals coming back is an ultimate chance of an economic revolution. We have found that India would accrue about 50–75 billion in yearly economic benefit of returned talent, augmented foreign direct investment, and quicker development of startup ecosystems in the coming decade. The research also uses comparative study relying on successful talent repatriation model that has been implemented in China, and studies particular areas such as technology, pharmaceuticals, and financial services that India can develop as a global leader. This study adds to the data on how the new economies can use the changes in global policies to speed up the development process, which implies that the way India will react to this flow of talents will shape whether India will become the next innovation hub in the world or the generation will be missing this chance.

Keywords: Reverse brain drain, HIB visa policy, Talent repatriation, Innovation ecosystem, Knowledge economy transformation, Skilled migration, Emerging market development, Human capital mobility.

1. INTRODUCTION

The world economy is in critical condition. Old trends in talent movement are ripping apart. Throughout decades, skilled workers have been migrating between the developing and developed countries due to economic disparities. The biggest proportion of skilled migrants to the United States is supplied by India. It has long been struggling with brain drain. The most talented professionals born in India continue working in America and the country cannot retain them. The recent US change in policy like the proposed fee of 100,000 dollars on HIB visa holders are restructuring the global talent flows. They were able to make India an exporter of talent into an innovation powerhouse.

In the US, 71 percent of the total HIB holders are Indians. That adds to approximately 500,000 skilled individuals. They are technologists, health, financial and engineering. They were trained in the best schools and leading international companies. Their joint competence is worth trillions in the market. When they returned to India it would be over reversing brain drain. It would bring global talent that would transform the economic trend of India. To understand this, we are forced to look in various directions. Returnees are estimated to cost the direct value of between 50–75 billion a year. Such figure includes productivity and innovation returns. But there are indirect benefits, as well, there are. New start-ups and foreign investment may increase the effects several folds due to knowledge spillovers. The timing is



perfect. The growing digital infrastructure and the expanding domestic market, the demographic dividend of India all work in tandem. They would be able to work together to produce unparalleled growth.

History gives us key clues. The journey of India since colonial times to emerging as a major market has involved both spurts of talent loss and talent gain. Free-market reforms in 1991 opened the way to global integration, but accelerated brain drain. The first wave of returnee was the late-1990s IT boom. They assisted India in being a global services center. A third wave may now be a possibility of a mass return. It might transform India into not only a service provider, but the actual creator of innovation. This study discusses the way India can manage the influx of talent. It investigates aspects such as areas to focus on and policies to embrace and how to execute them. It draws comparison between successful models in China, Israel and Ireland. It also examines India-specific factors. The idea is a workable road map that will transform a displacement crisis into a national growth opportunity.

2. THE ECONOMIC DIMENSIONS OF TALENT REPATRIATION

Mass talent repatriation has more than just an economic effect of raising the number of workforce. The professionals returning to their home country after spending time in the advanced economies are not only bringing in valuable human capital, foreign contacts and practical skills that cannot be measured using the traditional economic indicators. A proposed fee of \$100,000 per year on each HIB employee alters the cost-benefit analysis of the U.S. employer, and Indian talent appears to be prohibitively expensive in most cases except the most necessary jobs.

Take the figures, an average technology professional in Silicon Valley who earns an annual salary of 150,000 dollars would cost an employer about 200,000 dollars when benefits and overheads are factored. A \$100,000 visa fee will add up to 300,000 dollars. Such an increase in price makes a lot of jobs unfeasible. The companies can react by either shifting business to India or by getting rid of the Indian talent within their organization. As much as Indian professionals are already an integrated part of the U.S. tech companies, the shift to India is becoming an increasingly likely one.

The value that is generated by returning talent in India is threefold. First, the direct productivity boost employees who have been trained in companies such as Google, Microsoft, and Amazon can enhance the productivity of Indian corporations by 2030 percent as compared to the studies carried out. Second, entrepreneurship according to Chinese returnee statistics, 15 to 20 percent of Chinese returning to their homeland initiate their businesses within five years and those businesses thrive three times as frequently as local startups. Third, attraction of investors skilled workers are concentrated in the Indian cities and the influx of foreign direct investment of 100–150 billion dollars in the coming 10 years is expected.

Another strong economic force is salary arbitrage. A software engineer in San Francisco with a salary of 150,000 can buy the same things in Bangalore at a salary of 40,000 and allow the companies to save 60–70 percent in the overall compensation expenses. This would save in the hundreds of thousands of jobs between 30 to 40 billion dollars annually— money that could be used to invest in research and development and expansion.

Homecoming families also increase domestic consumption. It is estimated that each family, courtesy of the savings made in foreign countries and the continued high income, can create some 200–300 k of economic activity annually in the form of housing, education, healthcare, and expenditure. If 200,000 families come back in five years, that is an extra 40–60 billion domestic consumption that will boost growth in sectors.



Lastly, there will be an acceleration in the knowledge economy. As of today, the knowledge economy in India contributes to about 15.000 percent of GDP which is significantly lower than 30.35 percent in developed countries. The annual growth of the GDP by 2–3 percent by the international-trained professionals would translate to 100–150 billion dollars' worth of new economic products by 2035– moving India to higher-value activity.

3. HISTORICAL CONTEXT AND EVOLUTION

The relationship that India has had with the migration of talent has gone through distinct phases, which have been influenced by the global economic trends and the native country regulations. Following the independence, very few Indians moved out of the country due to lack of mobility in the world, as well as lack of opportunities abroad. The first wave of the brain drain started in the 1960s and 1970s. The Western countries were the ones that were getting the engineers and doctors to work in their countries and this led to the economic debate that was referred to as the brain drain tax by Jagdish Bhagwati.

The 1991 economic liberalization changed things. It drew more Indians to foreign countries and prepared the way to their ultimate coming back. Indian diaspora in the United States increased to over 4 to 9 million in 2020 compared to 500,000 in 1990. Members of this category of professionals were the most paid ethnic group in America, and they not only brought with them wealth, but also experience in establishment and growth of international companies. The last big channel of reverse brain drain was created in the late 1990s with the dot-com boom. Vinod Khosla (Sun Microsystems) and Sabeer Bhatia (Hotmail) are examples of the entrepreneurs who invested in Indian start-ups. Experts of large companies such as Intel and Texas Instruments came back to establish R&D centres. The multiplier effect of repatriated talent was demonstrated as 5–10 new jobs were created by each returning professional, both directly and indirectly.

The financial crisis of 2008 altered the situation once more. The western labor markets shrank, and India continued to expand with an average of 7.8 percent per annum. Approximately 100,000 professionals returned in 2008–12. They assisted in the start-up of more than 3,000 start-ups and attracted 5 billion dollars of venture capital. This was the period that established that shocks in the developed markets can be advantageous in the emerging economies in case talent is diverted appropriately. The case of China is helpful. Between 2000 and 2020, China has received over 2 million returnees under such programmes as the Thousand Talents Program. These ocean turtles assisted in the construction of giants like Baidu, Alibaba, and ByteDance. The market value of China increased more than 500 billion, which is a demonstration of the strength of strategic talent repatriation. The existing H1B crisis is not like the previous disruptions. It is more permanent and more in scale. Policy-induced restrictions, unlike cyclical troughs, bring about structural barriers that may permanently change the flow of talent. This places India in a historical place to attract not only returning Indians but also overseas talent who are finding other ways to immigrate than the old fashioned methods.

4. CURRENT INDUSTRY DYNAMICS AND SECTORAL IMPACTS

The biggest beneficiary of talent repatriation is the technology industry. 68 percent of H1-B visa employees are employed in the computer-related field, and Indian IT services companies like TCS, Infosys and Wipro are now able to get access to senior talent that was earlier unreachable. Such a shift will help these companies to ascend the value chain and shift to product development and innovations as opposed to service delivery. Experienced professionals working in FAANG companies (Facebook, Amazon,



Apple, Netflix, Google) might boost the process of changing India into product development instead of services.

Returned talent is also a source of strength to the startup ecosystem of India. Nowadays, India has a ratio of 1 unicorn per 10,000 startups, as compared to 1 per 5,000 in the United States. Those professionals who have previously experienced the work in Silicon Valley are able to increase this success rate by having more effective business models, execution, and international networks. Returned talent can become the catalyst to the Indian startup ecosystem, which is estimated to reach 350 billion dollars today but is projected to reach 1 trillion dollars by 2030.

Another significant opportunity of transformation is provided by financial services. The number of Indian professionals in the quantitative analysts and risk managers of Wall Street is 35 percent. Their coming back would make India a financial hub in the world and particularly in the field of algorithmic trading, risk analytics, and fintech innovation. Mumbai and GIFT City have the potential to be the alternatives to Singapore and Hong Kong and gain 50–100 bn assets under management in five years.

There is also potential in the pharmaceutical and healthcare industries. Research teams in large pharmaceutical companies and highest academic medical centers across the globe are headed by Indian professionals. Their coming back might accelerate the process of India making a shift in terms of producing generic drugs to innovative drugs. As the global pharmaceutical market is estimated to hit 2 trillion dollars by 2030, India can get 10–15 percent of that market, or an increase of the present 3.5 percent by considerable margins which is mainly through generics.

New opportunities can be seen in manufacturing and hardware. The China Plus One approach aims at finding alternatives to the Chinese production. The experienced professionals in the supply-chain and manufacturing can make India the choice of alternative, which has the potential to draw in 200–300 billion investments in manufacturing within the next 10 years.

Returning to academics will also change the education sector. By eliminating visa uncertainties, Indian professors in the top world universities can set up world-renowned research centers in India. This would turn around the spending habits of Indian students who spend \$15 billion a year on foreign education. Good quality domestic institutions would keep that spending and attract foreign students, generating a \$305 billion education-export business.

5. CHALLENGES AND SYSTEMIC BARRIERS

India has enormous potentials in terms of the possibility of repatriating talents, but the problem lies in the fact that there are huge challenges in achieving the same. Poor infrastructure is one of the main concerns. Even in tier-one cities, the problem of unreliable power supply, poor urban planning, and lack of public transport haunts the city. It might be challenging to professionals who are used to Silicon Valley or New York infrastructure. Therefore, there is a possibility of some of them emigrating once again, this time to Singapore or Dubai.

Entrepreneurship and innovation is also heavily impeded by bureaucratic inefficiencies. India is ranked 63rd in the Ease of Doing Business index in the world. The major weaknesses are in the initiation of businesses, the enforcement of contracts and the insolvency resolution. There are frustration reports of regulatory requirements which require a period of 3–6 months to start a company and days in the United States. The entrepreneurial potential of returned talent cannot be achieved without substantial administrative changes.



The cultural adaptation challenge does not just end at the lifestyle level to professional settings. The Indian culture of corporates tends to be hierarchical and relationship oriented. This is the opposite of the meritocratic, flat organizations that the returnees had in foreign countries. The cultural difference results in frustration and turnover. Research indicates that one out of every three returnees quits their jobs in India in two years.

The issue of quality of life influences retention, particularly air pollution, healthcare, and education. The quality index of air in Delhi is often beyond dangerous levels. Even the best healthcare institutions are below the global standards. In international schools, the fee is between 20,000 and 30,000 per year and this is very expensive for the family. The level of public education is still low. These aspects impact professionals who have families and can restrict the sustainability of the retention of talent.

The compensation difference is still high in absolute terms. An engineer based in Silicon Valley and earning \$300,000 may earn 80,000 in India. Purchasing-power parity offsets it to some extent, but the disparity has an impact on lifetime wealth accumulation and retirement planning. This economic fact can drive back migration into early or late career professionals, and it will leave out the so-called golden mid-career bracket with the most productive potential.

Weaknesses in the legal framework and protection of intellectual property deter innovation-intensive business. In India, the average time taken to give a patent is 7–8 years as compared to 2–3 years in developed nations. Ineffective IP protection allows copying and decreases motivation towards innovations. Courts are costly and uncertain in enforcing contracts, which can be used to resolve business disputes that may take 4–5 years. These systemic problems should be solved to establish the environment that would promote innovation-driven growth.

6. STRATEGIC SOLUTIONS AND IMPLEMENTATION FRAMEWORK

Returning talent requires an enabling ecosystem that would require a concerted effort by the government, industry, and civil society. The government ought to establish the Returning Talent Welcome Program based on the best practices in other countries but adapted to India. The program would provide one-window start up business clearance, tax incentives in the initial five years and special assistance regarding regulatory issues.

Quality infrastructure should be created in several core areas of innovation instead of being implemented nationwide. They should develop 10–15 world-class districts in India with a stable infrastructure, schools, and healthcare. Some of the proposed locations are Bangalore, Pune, Hyderabad, and Gurgaon. These areas would offer the world-level living conditions and retain Indian cost benefits. It would pay off in greater economic activity and tax revenue as it would cost about 50 billion dollars in five years.

Regulatory sandboxes should be put in place in regulatory reforms that allow returning entrepreneurs to operate under simplified rules and yet safeguard the critical interests. The e-governance system in Estonia demonstrates that developing nations can bypass the bureaucratic system by going digital. The Aadhaar and UPI digital infrastructure of India provides a good foundation to a fully integrated e-government architecture that has the potential to reduce the regulatory compliance duration by approximately 80%.

The culture of private companies should be redefined to embrace talent that has been brought back. They are supposed to establish similar career lines that can recognize technical mastery besides management trajectory so that the gifted repatriates who are frustrated by being sent into management



are not forced into that field. Flexible working arrangements like remote working and performance-based assessment rather than rigid attendance time are in line with the best practice that the global returnees demand.

Institutions of higher learning should be redesigned to enable innovation eco systems. The New Education Policy 2020 provides a guideline, but its execution needs to accelerate. Universities ought to be free to recruit foreign faculty, create courses and establish links with industries. This research-excellence model of the Indian Institute of science ought to be emulated in approximately 50 institutions and this would provide sufficient capacity in world-class education and research.

The development of the financial ecosystem should be given priority. Even though the venture capital has increased to 35 billion in 2021, it remains in the consumer internet sectors. Deep-tech companies - which returned talent tends to perform well in - find it difficult to raise funds. The government ought to establish a Deep Tech Fund of \$10 billion which they provide as patient capital to invest in artificial intelligence, quantum computing, biotechnology, and advanced materials. It must also be professionally handled with the best global practices to prevent bureaucratic capture as was evident in earlier government investment projects.

7. FUTURE PROJECTIONS AND LONG-TERM IMPLICATIONS

It is up to the next decade to determine whether India will take this historical opportunity or remain entangled as a middle-income country. With good policy reforms in place, there is a possibility of India raising its GDP by a whopping \$1 trillion by 2035, owing to talent-based innovation and productivity increase. That would move India to the position of the third-largest economy in the world and entrench it as a global innovator, alongside the United States and China.

The effect of talent returns is increased by the demographic dividend. Having a median age of 28, which is lower than that of the U.S. (38) and Japan (42), the returning professionals in India will be able to mentor and train a massive number of young employees. Formal or informal knowledge sharing by one of the returnees can affect 50 to 100 younger colleagues. In the following ten years, this multiplier may transform the skills of millions of Indian professionals.

India is becoming a trusted technology partner due to the changes in geopolitics. With the U.S and China drifting apart in terms of technology, the democratic nature of India and its English speaking talent makes it a potential ally to the Western companies seeking to find an alternative to China. Those professionals who have been working in the West may help overcome cultural and operational differences and result in more profound cooperation.

The innovation ecosystem will be built in a cyclic trend observed across the globe. During the initial stage, 2025- 2027, there will be an increase in infrastructure and early returnees will establish businesses or become part of Indian firms. The second stage is 2027-2030, when the ecosystem will become mature the exits will occur, venture capital will be established, and tested business models will attract more talent. At stage three, 2030-2035, India may become a global leader in terms of innovation, and its businesses will be able to compete on the international level and attract foreign talent.

In sectors where India matches talent with market strength, sectoral leadership will emerge. Digital payments, which are already led by UPI, can be further extended to broader fintech dominance. One of the potential solutions that can be developed by using the large number of patients and returning medical professionals of India is healthcare technology. Another opportunity to take a leadership role is



climate technology that addresses the urgent environmental challenges in India and provides the country with exportable products.

India will be transformed at the city level. Even Bangalore, that is already its Silicon Valley, can rival the large world tech centres in ten years. Pune can be a center of production and automotive development. Pharmaceuticals and biotechnology could be a leadership of Hyderabad. Chennai can become a healthcare innovation hub. This agglomeration benefits will result in such focused clusters forming effective ecosystems.

The effects of the culture extend beyond economics. Repatriates have international perspectives that can accelerate gender equality, environmental and governmental standards. Their children, who study in international schools and receive global exposure may become a generation of people, who can change the Indian society. This is a cultural change, which is difficult to quantify, but it may have comparable economic impacts.

8. COMPARATIVE GLOBAL ANALYSIS

The talent repatriation experience in China provides the most appropriate lessons to India. China has drawn 3.65 million returnees in the period between 2008 and 2018 who contributed to the establishment of over 50,000 technology firms. The achievement was based on liberal government grants and subsidies, ease of registering a business and special economic zones that were comparable to international living standards. Nevertheless, authoritarian rule in China and blocked internet curtailed its attractiveness to certain talent. India has the opportunity to use its democratic society and open version of the internet to entice the same professionals.

The case of Israel turning into a technology powerhouse through the involvement of the diaspora can be used to illustrate how the involvement of the diaspora can lead to development of an economy that was previously an agricultural economy. Israel has more NASDAQ-listed companies than any country but the United States and China with a population of only nine million. Mandatory military service as a source of technical skills and networks, government investment in R&D of more than 4.5% GDP and a culture that accepts failure as an element of entrepreneurship are key drivers. India can implement these factors by increasing skill-building initiatives like the National Cadet Corps and increasing its investment on research and development to more than 0.7 percent of GDP.

The development of Ireland, the poorest country in Europe, to the technological hub can be seen as the strength of strategic positioning. Technology companies were attracted to Ireland by low corporate taxes, English speaking employees, and access to the EU market. The straightforward marketing plan by the Industrial Development Authority created employment that retained domestic talent onshore and new talent. India can also establish itself as the entry point to South Asian and African markets and provide the cost benefits that Ireland enjoyed.

The Singapore development model is an example of how strategic talent management can enable a small nation to punch above its weight. Global Investor Program provides permanent residency to entrepreneurs and investors, whereas Tech. Pass is aimed at high-skill technological talent. Singapore is as efficient, has the rule of law and good life as the major cities in the West. India can never be as homogenous as Singapore, but it can establish Singapore-style innovation centers in bigger cities.

The example of the United States itself demonstrates how innovation is the result of openness to immigration. Fortune 500 companies have 40 percent of immigrants or children of immigrants. The same



opportunity is presented in India by current restrictive policies, which is also reminiscent of the benefit that America had given to Europe in the brain drain during the World War II. Historical irony of the situation is evident: by inviting talent, it changes economic leadership, and India can put itself in a favorable position by establishing open conditions.

9. POLICY RECOMMENDATIONS AND IMPLEMENTATION ROADMAP

The first 100 days should involve establishing a definite talent return structure. The government must initiate a Welcome Back India program that will capture five-year tax exemption to professionals who come back to establish businesses, provide immediate permanent residency to people with five-years of overseas experience, and establish a one-stop shop of all regulatory approvals. Such actions are a good signal of intent and establish a push towards returning migration.

Infrastructure and ecosystem obstacles should be addressed within medium-term projects of 6-18 months. It is necessary to start planning and resource distribution of 15 Global Innovation Districts that can be compared to international standards in terms of infrastructure, healthcare, and education. Regulatory adjustments can create autonomous Innovation Zones with more relaxed labor legislation, reduced land acquisition, and expedited environmental clearances, ordinances may be introduced if legislation process decelerates. Agreement of autonomy grants should be given to the first 50 education institutions in the country so that they can employ international faculty and establish industry partnerships.

Prolonged structural changes between 2 and 5 years should deal with core competitiveness challenges. The judicial system should be augmented and updated to reduce the waiting time in contract enforcement by a difference of years to months. The rights of intellectual property ought to be enhanced by having special IP courts and more enforcement mechanisms. Financial system has to further diversify its capital markets, particularly in venture debt and growth equity, to enable businesses to grow beyond the initial venture capital.

It should be implemented through public-private partnership and not entirely on the government initiative. The industry organizations can initiate mentorship schemes where returning professionals are matched with local businessmen. Innovation districts can be developed by private developers, and the government can support these by land and infrastructure. Education institutions have a chance to work with the industry in designing curriculum and conducting research.

A competition at the state level should be promoted with the help of the Talent Attraction Index that will rank the states according to such factors as ease of doing business, quality of life, infrastructure, and the successful integration of returned individuals. This would encourage states to be better since they will be competing over talent and investment. The state of Karnataka may have a threat of being surpassed by Maharashtra in terms of financial capability or by Tamil Nadu in terms of manufacturing capacity, which will result in healthy competition that will be beneficial to the entire nation.

Foreign relations should be supplementary to home activities. This would be facilitated by the bilateral agreements with the United States that will enable the returnees to retain social-security benefits and transfer pensions to make the decision of coming home easier. Dual-degree programs with international universities would keep international relationships alive and enable the development of greater domestic capacities. The ability to have technology-transfer agreements with international companies would enhance faster building of local capabilities.



10. CONCLUSION

The suggested HIB visa limits can be viewed as a turning point in the economic development history of India, as it is the first such initiative that creates a chance to alter the model of being an export-oriented country to an innovation-driven one. The possibility of re-absorbing 500,000 highly skilled workers, in addition to the demographic divide in India, digital infrastructure, and increasing domestic market, will result in a scenario where economic change accelerates to add \$1 trillion to the GDP by 2035. This study indicates that talent repatriation will not be successful unless it is actively supported by government, the private, and civil society in creating an environment that enables the talents sent back to thrive and ensure their optimum potential is realized. These challenges are enormous, such as infrastructure shortages, bureaucracy, and the quality of life issues, yet these obstacles can be overcome with specific solutions by means of innovation districts, regulatory changes, and cultural adjustment. The Chinese, Israeli, and Irish histories can serve as roadmaps whereas the Indian opportunities are unique because of its advantages in the democracy, English proficiency, and market size. It will be up to the next five years to ascertain whether India seizes this generational opportunity, or it will turn into vapor through inaction. The success would not only make India a beneficiary of the restrictive policies of others but an active planner of its economic future and may become the third-largest economy of the world and leader in global innovation by 2035. Whether India can bring this transformation or not is not the question but whether it will be able to launch the political will, resources, and coordination to turn crisis into an opportunity creating a new paradigm in the development of countries in the knowledge economy.

REFERENCES

- [1] Admin, S. (n.d.). Implications of US HIB visa restrictions being studied: MEA. <https://www.newsonair.gov.in/implications-of-us-hib-visa-restrictions-being-studied-mea/>
- [2] Bortolazzi, O., & Khan, N. (2023). From 'Brain drain' to 'Capital gain': Indian skilled migration to the UAE. In *Gulf Studies* (pp. 223–248). https://doi.org/10.1007/978-981-19-7796-1_14
- [3] Client challenge. (n.d.). <https://www.ft.com/content/46e44b6c-c203-11e2-ab66-00144feab7de>
- [4] CrossMigration. (n.d.). Taxonomy. CrossMigration. <https://migrationresearch.com/taxonomies/topics-migration-consequences-for-migrants-sending-and-receiving-countries-socio-economic-consequences-brain-drain-and-brain-gain>
- [5] El, S. (2023, December 29). Reversing the Tide: Understanding the Rise of Reverse Brain Drain. Medium. https://medium.com/@sayele_39399/reversing-the-tide-understanding-the-rise-of-reverse-brain-drain-b6ddb5e44feb
- [6] George, A. S., & Siranchuk, N. (2025). From Teacher-Centered to Learner-Driven: A review of the progression towards Student-Centric Education models and Practices. [www.pumrj.com. https://doi.org/10.5281/zenodo.15041868](https://doi.org/10.5281/zenodo.15041868)
- [7] George, D. (2025a). Advancements in Artificial Intelligence for industrial robotics and Intelligent Drones: A Comprehensive review. Zenodo. <https://doi.org/10.5281/zenodo.14911559>
- [8] Enkhtaivan, B., Brusa, J., & Davaadorj, Z. (2020). A gap in brain gain for Emerging Countries: Evidence of International Immigration on Non-Resident Patents. *Journal of Risk and Financial Management*, 14(1), 7. <https://doi.org/10.3390/jrfm14010007>
- [9] George, A. (2024). Brain drain or brain gain: Assessing the costs and benefits of India's manpower exports. Zenodo. <https://doi.org/10.5281/zenodo.10257669>
- [10] Foreign Direct Investment (FDI). (n.d.). India Brand Equity Foundation. <https://ibef.org/economy/foreign-direct-investment>
- [11] George, D. (2025b). India's multidimensional pathway to artificial intelligence supremacy. Zenodo. <https://doi.org/10.5281/zenodo.14944290>
- [12] Inamdard, S. B. a. N. (2025, September 22). H-1B: What Trump's "00,000 visa means for India and US industries. <https://www.bbc.com/news/articles/ce3yy58lj79o>
- [13] George, D., George, A., & Dr.T.Baskar. (2024). Artificial intelligence and the future of healthcare: Emerging jobs and skills in 2035. Zenodo. <https://doi.org/10.5281/zenodo.11176554>



- [14] Journal of the Indian Institute of Science. (2025, September 8). SpringerLink. <https://link.springer.com/journal/41745>
- [15] George, D., & George, A. (2025b). How artificial intelligence systems function as digital migrants creating more profound societal disruption than human immigration. Zenodo. <https://doi.org/10.5281/zenodo.16112307>
- [16] Pharmaceutical Market Size & Share | Industry Report, 2030. (n.d.). <https://www.grandviewresearch.com/industry-analysis/pharmaceutical-market-report>
- [17] George, D., & George, A. (2025a). The role of artificial intelligence in advancing sustainability across business, medical, and agricultural domains. Zenodo. <https://doi.org/10.5281/zenodo.14907960>
- [18] Smith, J. K. A. (n.d.). Reading The Irony of American History 70 years later. The Christian Century. <https://www.christiancentury.org/article/books/reading-irony-american-history-70-years-later>
- [19] SPM IAS ACADEMY. (2025, June 23). Q.13. Examine the impact of developed countries' immigration policies on India's skilled workforce and diaspora communities. Analyze how visa regulations and skilled immigration programs in countries like the United States and Canada affect India's brain drain and diaspora engagement. - Welcome To SPM IAS Academy. Welcome to SPM IAS Academy. https://spmiasacademy.com/mains_exam/q-13-examine-the-impact-of-developed-countries-immigration-policies-on-indias-skilled-workforce-and-diaspora-communities-analyze-how-visa-regulations-and-skilled-immigration-progra/#:~:text=Return%20Migration:%20Many%20Indian%20professionals,brain%20gain%20through%20return%20migration.
- [20] Tech, N. P. (2025, February 1). Budget 2025: FM Nirmala Sitharaman announces Deep Tech Fund of Fund. NDTV Profit. <https://www.ndtvprofit.com/technology/budget-2025-fm-nirmala-sitharaman-announces-deep-tech-fund-of-fund>
- [21] The Global Indian. (2023, April 15). With a median age of 28 years, significantly lower than 38 in the United States and 39 in China, India can boast of the largest workforce in the world for at least the next 25 years. - The Global Indian. <https://www.globalindian.com/didyouknow/with-a-median-age-of-28-years-significantly-lower-than-38-in-the-united-states-and-39-in-china-india-can-boast-of-the-largest-workforce-in-the-world-for-at-least-the-next-25-years/>
- [22] Trade agreements. (n.d.). United States Trade Representative. <https://ustr.gov/trade-agreements>
- [23] Wikipedia contributors. (2025a, September 15). Reverse brain drain. Wikipedia. https://en.wikipedia.org/wiki/Reverse_brain_drain
- [24] Wikipedia contributors. (2025b, September 17). List of Israeli companies listed on the Nasdaq. Wikipedia. https://en.wikipedia.org/wiki/List_of_Israeli_companies_listed_on_the_Nasdaq