2018

ECOLLOQUIAL

ANNUAL JOURNAL

DEPARTMENT OF ECONOMICS

LADY SHRI RAM COLLEGE FOR WOMEN

ANNUAL JOURNAL OF THE DEPARTMENT OF ECONOMICS
LADY SHRI RAM COLLEGE FOR WOMEN
NEW DELHI

Note from Faculty-in-Charge

The Annual Journal of Department of Economics aims to inculcate among students the qualities of in-depth understanding of pertinent issues and the ability to analyse them theoretically and quantitatively with a critical lens. This year too, the students have contributed well-researched articles on a wide range of contemporary topics, like collaborative consumption, gender and climate change, impact of Brexit, capitalism and war, education, India-China relations etc. Quantitative tools have also been used extensively. The innovative feature of this issue is The Big Read section where students have expressed their opinions on a vast array of topics. We congratulate the editorial team for their hard work and dedication in the maintain the academic standard of the journal and its timely publication. We hope the journal provides an enriching experience for the reader.

Faculty-in-Charge
Ms. Anjani Kochak
Mr. Rajeev Parashar
Ms. Surabhi Gupta

Note from the Editorial Team

It is with great honour, humility and pleasure that the Editorial Board presents to you the Annual Journal of the Department of Economics 2018. The Ecolloquial 2018 aims to expand horizons and kindle interest in the varied and dynamic fields of economics. From economics impacting our daily lives such as hailing a cab to deconstructing the idea of "ceterus paribus" and analysing the extremely interconnected Doklam crisis and Indo-China relations, we have attempted to compile a wide array of thought provoking research papers and articles in the Journal.

This year we are proud to announce the introduction of a new section in the Journal called The Big Read which aims to incorporate opinion pieces that shed light on brimming, disruptive "Big Ideas" of today, in a succinct manner. From big data and artificial intelligence to farmer suicides, this section gives voice to the students' perspective on intricacies of the world we live in and aims to present a holistic viewpoint of the areas explored. Behavioural economics has piqued the curiosity of many and we hope to cater to this with a book review on "Predictably Irrational" by Dan Ariely.

The Editorial Board is delighted to share that it received an overwhelming response of submissions from the student body. We hope that this journal serves as an inspiration for future research and ignites discussions of contemporary and pertinent issues.

The Annual Journal of the Department of Economics, 2018 is a culmination of months of hard work on the part of the authors and the editorial team. The Editorial Board is excited to present this year's journal and hopes that the reader enjoys and gains from it as much as we did.

The Editorial Board 2017-18

Table of Contents

India-Japan Economic Partnership: Bullet Trains and Beyond

Chetna Hareesh Kumar chetnahkumar.online@gmail.com

Abstract

Since Narendra Modi came to power in 2014, India-Japan bilateral relations have been exceptionally flourishing. There has been a growth in trade and investment under the Modi-Abe partnership, the most recent development on this front being Japan's investment in a high-speed bullet train from Ahmedabad to Mumbai. This is an ambitious project, with India aiming to establish the bullet train route by 2022 which doubtlessly has multiple implications for our economy. The present research aims to analyze the nature of the bullet train project, with emphasis on the motivation behind its initiation, its positive and negative aspects and the implications for both countries' economies. This research is expected to uncover the implications of the HSR project on Indian foreign policy towards Japan and South Asia.

Keywords: India-Japan, bullet train, high-speed rail, foreign direct investment

JEL Classification: E600, H400, H870

1. Introduction

India is the largest recipient of Official Development Assistance (ODA) from Japan and Japan is the fourth largest investor in the Indian economy. With the change in Indian leadership in 2014, India-Japan bilateral relations have been flourishing at an exponential rate. The inauguration of the bullet train project in India with special aid by Japan is the most recent addition to a series of economic collaborations between the two nations. The present research consolidates the various aspects of the bullet train project in India and presents a cost-benefit analysis of undertaking this. The first section outlines the salient features of the agreement on points of logistics, costs and investment followed by an analysis of the major aspects of the project and the challenges associated with it. The final section provides a synopsis of the mutual benefits of the agreement to India and Japan, attempting to validate the commencement of this project which has garnered equal parts criticism and optimism since its launch.

2. Features of the HSR project

The High-Speed Rail (HSR) project in India was proposed in 2014 and inaugurated in September 2017. The total project cost is estimated to be ₹97,636 crores. 81% of the project cost will be funded by a loan from the Japan International Cooperation Agency (JICA) for 50 years at 0.1% per annual interest with a 15 years moratorium period. The first route in the proposed High Speed Rail Network (HSRN) in India is set to be charted between Mumbai and Ahmedabad on a course of 508 kilometers. The MAHSR is expected to cut down the travel time between the two industrial cities from seven hours to under three hours. The MAHSR is expected to cater to 13 million passengers per annum, and the ticket fare is speculated to be between the range of Rs.3000 to 5000, which is almost double the ticket price of the first-class AC trains currently running on this route.

3. Three main aspects of HSR in India and associated challenges

The Indian government is undertaking infrastructural development on an enormous and ambitious scale with the proposed HSR project, with particular emphasis being laid on three main aspects of it – on-time completion and technological transfers, land acquisition and public debt.

3.1. On-time delivery and technological transfers

India is expecting to complete the laying of the tracks and to commence services by 25th August 2022 to mark its 75th day of Independence. This date of completion is more than a year in advance of the original date specified by the contract signed in 2015. With the training of workforce and increased manufacturing within India, Japan is set to transfer its cutting-edge Shinkansen technology to India to ensure the success and scale of the project. However, officials from the International High-speed Rail Association (IHRA) have expressed their concern over the fast-tracking of the project, stressing that the most important aspect of the HSR project should be crash prevention.

In order to successfully replicate Japan's spotless record of zero fatalities in over 53 years of operation of the Shinkansen network, India must focus equally on hardware and software Operations & Maintenance, personnel training and proper management, alongside technical innovation. On-time production cannot justify the neglect of any of the aforementioned vitals of what the Japanese call 'a total system approach' to safety and reliability, especially in a scenario where there is growing mistrust among the masses as well as the investors in the safety of Indian railways

3.2. Land acquisition

Although the quantum of land required for this project given its scale is not very high, it has put the propriety of land acquisition for public purpose up for debate. Farmers have staged protests against the acquisition of their land. When Japan started constructing its own high-speed rail network, it resorted to a very aggressive privatization program leading to massive job losses. Although a similar privatization of Indian Railways has been rejected by former Minister of Railways Suresh Prabhu, the scale of the HSR project guarantees corresponding job creation organically. The quantum of job creation must outweigh the costs of land and job losses by a large margin for the project to be deemed an economic success.

3.3. Debt repayment and future profitability

One of the most widely-censured aspects of the HSR project still remains the quantum of public debt it is expected to create. The low-interest long-duration loan from JICA is mistrusted because of the same reasons and the Interest Rate Differential (IRD) between India and Japan is often cited to blow up the figures associated with the debt. However, two points must be noted here. Firstly, the financial non-viability of a project does not discredit its economic viability. Economic viability quantifies all the externalities that arise from the project such as savings in time and fuel, reduction in accidents, savings in vehicle operating costs, reduction in emissions and air pollution, benefits in the form of economic development and employment generation, etc. Secondly, even by considering the conservative parameter of financial viability as the yardstick for this project, the estimated revenues from all sources (farebox and non-farebox revenues) outweigh the estimated expenditures (including IDC, depreciation of the rupee, Operations & Maintenance expenses) by a comfortable margin of approximately INR 1,810 crore (Sharma, 2017).

4. Mutual benefits

4.1. Benefits to India

The import and use of advanced Japanese technology provides an exceptional opportunity for India to propel itself into an age of growth and progress. With the creation of over 20,000 jobs just with MAHSR, the HSRN on the whole is set to provide a welcome boost to the economy and a heartening swell in the GDP growth numbers, with spillovers in the from of creation of satellite cities nad additional routes.

4.2. Benefits to Japan

Japan granting a low-interest loan for a long period is far from an act of altruism; they stand to gain equally from this investment. Strengthening economic and strategic ties with India is beneficial for Japan as it is struggling with an ageing population and thus is naturally attracted by the enormous market and plentiful human resources offered by India. Moreover, the collaboration with India positions Japan to become a dominant player in the high-speed rail market, where it has recently been facing competition from China and Germany.

4.3. Strategic relevance

In addition to being attractive to both nations from an economic point of view, this partnership between India and Japan is also important from a geostrategic perspective. As per the ‘Special, Strategic and Global Partnership’ between the two countries, as well as PM Abe’s ‘Free and Open Indo-Pacific Strategy’ and PM Modi’s ‘Act East’ policy, the two nations have increasingly promoted bilateral and trilateral security cooperation (by involving their common ally USA) in order to counter China’s oppressive influence on the South Asian economy and geopolitics. Economic partnerships, such as the Asia Africa Growth Corridor (AAGC), mooted by the two nations in 2016, are seen as a counter to the dominance of China’s Belt and Road Initiative. Hence a synergy between India and Japan on the dual fronts of economy and national security embolden their united stand against China.

5. Conclusion

HSR in India cannot just be looked at through the lens of domestic policy; the foreign policy and strategic motives behind it run deep and have far-reaching implications. India may be faced with some short-run challenges with respect to capital and labor accumulation along with skepticism regarding the viability and necessity of such a large-scale ‘elitist’ project. However, in the long-run, the high-speed rail network will achieve economies of scale and the profits will pay for the loan from JICA. Moreover, the project has the potential to become an important pillar in strengthening India-Japan bilateral ties, which will ultimately strengthen its position in South Asia and globally against growing economic and geopolitical oppression from China. For this to materialize, the government must ensure proper FDI allocation and execution of the project in a way that does not compromise railway safety or the interests of the Indian population.

References:

Sharma, D. (2017, September 21). *Is PM Modi’s bullet train project economically viable?* Retrieved from The Hindustan Times : https://www.hindustantimes.com/editorials/is-modi-s-bullet-train-project-economically-viable/story-V7SR4dhGTiYkBezpVaKb0O.html

Tommy Wilkes, K. T. (2017, September 12). *Japan PM Abe to launch $17-billion Indian bullet train project as ties deepen*. Retrieved from Reuters: https://in.reuters.com/article/india-japan-bullettrain-modi-abe/japan-pm-abe-to-launch-17-billion-indian-bullet-train-project-as-ties-deepen-idINKCN1BN15T

Chandran, R. (2017, September 25). *India's bullet train project reignites debate on land for 'public purpose'*. Retrieved from Reuters: https://uk.reuters.com/article/india-landrightsinfrastructure/indias-bullet-train-project-reignites-debate-on-land-for-public-purpose-idUKL8N1M60LC

Jain, S. (2017, September 12). *Why is the bullet train OK for China, but not for Narendra Modi's India?* Retrieved from Financial Express: http://www.financialexpress.com/india-news/why-is-the-bullet-train-ok-for-china-but-not-for-narendra-modis-india/852001/

Prabhu, J. (2014, November 26). *Upside of bullet trains: The costs may be high, but benefits are understated.* Retrieved from First Post: http://www.firstpost.com/business/economy/upside-of-bullet-trains-the-costs-may-be-high-but-benefits-are-understated-1997787.html

Shepard, W. (2017, September 14). *As Japan Propels India Into The Age Of High-Speed Rail, China Is Left Behind.* Retrieved from Forbes: https://www.forbes.com/sites/wadeshepard/2017/09/14/japan-propels-india-into-the-age-of-high-speed-rail-china-stands-by-watching/#22a3314a1a9e

All you need to know about India's first bullet train. (2017, September 14). Retrieved from The Hindu BusinessLine: https://www.thehindubusinessline.com/economy/logistics/all-you-need-to-know-about-indias-first-bullet-train/article9858678.ece

Dhar, K. (2017, September 15). *Is Mumbai-Ahmedabad bullet train really worth the cost?* Retrieved from BusinessToday: http://www.businesstoday.in/current/economy-politics/mumbai-ahmedabad-bullet-train-cost-japan-india/story/260280.html

Contributors, E. (2017, September 19). *All aboard, it's much more than a Mumbai-Ahmedabad train ride.* Retrieved from The Economic Times: https://economictimes.indiatimes.com/industry/transportation/railways/all-aboard-its-much-more-than-a-mumbai-ahmedabad-train-ride/articleshow/60739354.cms

Bhardwaj, D. (2017, September 13). *Fares, Timings & Speeds: All You Need to Know About the Mumbai-Ahmedabad Bullet Trains.* Retrieved from The Better India: https://www.thebetterindia.com/115313/railways-bullet-train-mumbai-ahmedabad-modi-ticket-prices/

Railways, M. o. (2016, March 1). *Bullet Train Project* . Retrieved from Press Information Bureau (Government Of India): http://pib.nic.in/newsite/mbErel.aspx?relid=137111

Desk, E. W. (2017, September 11). *Bullet train deadline 2023, but will try to complete project a year before: Railway Minister Piyush Goyal.* Retrieved from The Indian Express: http://indianexpress.com/article/india/piyush-goyal-bullet-train-indian-railways-mumbai-ahmedabad-bullet-train-2022-india-japan-modi-4838865/

PTI. (2017, April 27). Suresh Prabhu: *No privatisation of railways*. Retrieved from The Times of India Business: https://timesofindia.indiatimes.com/business/india-business/suresh-prabhu-no-privatisation-of-railways/articleshow/58394424.cm

Uberisation of the Indian Markets

Vidhi Maheshwari mvidhi97@gmail.com
Prema Narasimhan n.prema999@gmail.com

Abstract

The paper aims to provide an insight into the rapidly evolving sharing economy and the underlying social glue which renders this model successful – "trust". The paper explores the adoption of collaborative consumption in India and its growth trajectory. We highlight the benefits to various stakeholders and the roadblocks that this new system of addressing double coincidence of wants is hitting as it grows. The paper concludes that while regulatory and legal frameworks are integral to address risk and accountability concerns, the underlying "trust revolution" holds a far greater sway than can be presently perceived.

Key Words: Sharing Economy, Collaborative Consumption, Trust, Regulation, Accountabiltiy

JEL Classification: L11, L14, L22, M13

1. Introduction

Sharing economy or collaborative consumption has emerged as a new and effective solution to matching people's "wants" with "haves". It addresses problems associated with both non-ownership as well as under-utilisation of owned goods. Unlike traditional markets where owners rent out their assets, in a sharing economy model, owners use as well as rent out their assets giving rise to a peer-to-peer (P2P) sharing network. These platforms facilitate in expanding access to goods and increasing utilisation of assets while providing income to "consumer-owners". In the following sections we have explored several facets of the sharing economy and how it connects trust worthy strangers to create people powered marketplaces. In the first section we dwell on the key element of P2P sharing – "trust" and how advancements in technology are increasing the efficacy of "trust", transforming it into a currency for the sharing economy. In the subsequent sections, the paper hopes to paint a canvas for collaborative consumption in India, examining the drivers of its growth in the domestic economy, the benefits and spill overs from the sharing economy, the challenges that need to be met with and a few policy recommendations for the same.

2. Foundation of a Sharing Economy – "Trust"

Collaborative consumption trends are transforming the conduits via which "trust" operates. During the era of barter economies, people trusted one another and this trust formed the key ingredient for the recipe of arms-length transactions in goods and services. With the evolution of money, people have come to place their trust, first, in the central bank and/or government which enforces the general acceptance of money as a currency and subsequently people have placed their trust in organisations and corporations which provide the good or service one pays for. Thus in traditional markets, trust is embedded in a people-organisation framework and is popularly referred to as "institutional trust". This trust stems from confidence in the authority, legitimacy and mandate of the organisation – for instance we have long held trust in financial institutions, corporations, regulatory authorities and in their ability to create and enforce rules to ensure safety and systematic execution of transactions. The strength of society is contingent on the ability to count on others to do the right thing. Broadly the characteristics of this institutional trust have been identified as hierarchical, centralized and standardized. However, despite these consistent themes playing in the backdrop of institutional trust, this framework has often failed us. The Global Financial Crisis of 2007-08 has been touted as an example of this breach of trust with responsibility of this falling across the main protagonists: bankers, regulators and the government. Rachel Botsman noted a slump in institutional trust in an article in Harvard Business Review dated October, 2015. Since 1973, Gallup Poll has asked people, annually, about their confidence in American institutions, recording their response as one of the following - a great deal, quite a lot, some, or very little. The results observed by noting peoples' response to the above question exhibit a trend of declining public confidence across most major institutions except military and small business. Researchers have attributed this decline in trust to several factors like globalisation, innovation, eroding social values, lesser transparency in the structure and functioning of institutions and rapidly deteriorating reputation of those leading many such institutions. But the most important cause for distrust is not the absence of trust in pre-existing institutions but the emergence of a new-found trust in information produced by technology platforms such as search engines. This phenomenon is referred to as the "echo chamber" effect and is driving the belief that institutional trust cannot cope with the digital age. In a world of social networking, services networking and other collaborative marketplaces trust is adopting a webbed and distributed dimension peer-to-peer relationships. The success and growth of the sharing economy is driven by the fact that people have started trusting strangers instead of institutions – be it renting one's house to a stranger on AirBnB or sharing a car ride with a stranger. "Peer trust" is personal, distributed, flowing and bottom-up, unlike institutional trust, thus re-designing the convention of how trust is fostered, lost and repaired. Trust is no longer linear and on a tight leash extended by organisations but instead deftly placed in a web of people. This paradigm shift in how and whom people trust has disrupted traditional markets, creating business out of ideas like social lending platforms, crowdfunding, crowd-sourced delivery services etc. While the distribution of trust has provided a seed to the nurturing of several new business ideas in the sharing economy space, it ought to be cultivated with caution to ensure accountability and transparency. This necessitates new regulatory and legal frameworks.

3. Collaborative Consumption in India:

3.1. Growth

Sharing economy services in India are in its nascent stages. The concept of sharing economy gained popularity in India with on-demand transportation platforms that have made it convenient for any individual to commute from one point to another, without owning the means of transport. The concept has also become popular among other sectors like accommodation, food and grocery, healthcare and household goods. The other emerging markets are unorganized service sector expansion. Demographics and smartphone penetration seem to be the key drivers accelerating the usage of sharing economy in India.

The highest adoption rates of this concept in India are currently seen in the Transportation, Hospitality and Food and Beverages sectors. While the transportation sector has seen the rise of companies like Uber and Ola, there are other emerging options for carpooling as an alternative to car ownership and rentals. OYO rooms, Airbnb and Stayzilla, are some of the platforms that are changing the landscape of the hospitality sector. Platforms like Swiggy, Zomato, and Foodpanda are increasingly making food delivery and payment efficient through their user-friendly interface, comprehensive and verified listings and updated information and analytics that are matching supply and demand.

3.2 Benefits

The striking feature of these sharing platforms is the low transaction costs of exchange of goods and services. It has been possible to achieve these low costs because knowledge has been made inexpensive and ubiquitous. Low transaction costs significantly increase the incidence of mutually beneficial trade. If we breakdown transaction costs into three parts- search and information costs, bargaining and decision costs, and government and enforcement costs, is it observable that a reduction in these would make it possible to leverage market mechanisms and match dynamic supply and demand more accurately.

One example of this mechanism is Dynamic Pricing that is used in the transportation sector. It is applied on a location-specific basis depending on the supply-demand and ratio at a particular point in time. As soon as the supply and demand equalize, dynamic pricing ends and the base model of pricing resumes. A similar mechanism has been adopted in the hospitality sector as well. These models are a success because of the feature of ubiquitous knowledge. They successfully create a win-win situation for the stakeholders.

The sharing economy has multiple positive benefits for all stakeholders. It has bolstered an entrepreneurial spirit and has achieved better resource mobilization, social mobility, digital literacy and skill development among others. As an illustration, let us take the case of a social sector such as the education sector. On-demand education technology platforms like the Massively open online courses(MOOCs) have efficiently connected potential users to academic institutes/companies/teachers. This revolutionary concept of sharing economy has also proven to be an increasingly useful source of job creation. In India, around 1500 drivers onboard daily by a taxi aggregator. On-demand technology platforms are creating massive employment for delivery associates, data collectors and sales agents across the country. To give a global perspective, there are over 7500 sharing platforms globally, $28 million being invested in sharing economy startups and 37% of these, funded by Venture Capital funds. Alongside this, the sharing economy is empowering a new class of micro-entrepreneurs who are financially rewarded for their expertise, resources, and services. The sharing economy has also increased transparency and accountability in the system. For instance, leading restaurant platforms have an open and broad database of restaurants that are assigned ratings based on user feedback. Such systems instill a sense of trust among the users of these services. Apart from all the benefits mentioned above of the sharing economy, there are also environmental benefits such as reduction of the number of cars in the economy through increasingly efficient transportation platforms. One car-sharing vehicle, for instance, can replace 9-13 vehicles. This has significant environmental benefits by creating an efficient and sustainable means of using services.

3.3 Challenges

Just like any emerging model/platform, the sharing economy also has challenges to face, from both the consumer and business sides. In the *consumer side*, one of the most critical hurdles is the issue of trust and safety. It is essential for a consumer to trust the service provider because the services like transport or accommodation are used majorly on the basis of trust. It could be challenging to garner the trust of users, especially if there is a lack of accountability of consumer grievances. First off, authenticating the identity of the service provider is important but is rather tough in a peer-to-peer model as compared to a business-consumer model. A second issue that could arise is asymmetric information, which could be mitigated by introducing ratings, thereby increasing transparency. It is also crucial to ensure consistency in service quality. On the *business side*, the major impediment is the regulatory considerations. While the conventional industries are under the influence of regulations by the Government of India, there is a need to reexamine these regulations for the sharing economy models and their sub-segments of the ecosystem. The second reason for concern is the management of an unconventional set of workers. The sharing economy heavily relies on short-term, elastic employment as opposed to the traditional stable employment. Individual rendering services enter as independent contractors, self-employed or freelancers. Background verification, training, and skilling are imperative for the smooth functioning of the platform.

4. Policy Recommendations

On a global scale, India has not achieved internet penetration as much as the other developed countries have. Nevertheless, the quantum of the number of users of the internet in India, and the potential shift of market demand owing to demographics is certainly reassuring. The internet penetration coupled with the growing mobile penetration will enhance the reach and growth of sharing economy in India.

For an emerging market like the sharing economy, it is imperative for regulation to be defined. Regulators in India are inherently reactive and very slow to respond to the changes in the sharing economy and play a catch-up role. The accelerating growth of sharing economy in India may lead to significant regulatory changes, and as a consequence, there will be more clarity on the regulatory environment. As the business models adapt to the changes, they will become more secure and trust-worthy models.

Following are some *policy recommendations* for India:

- The role of regulations in the sharing economy should be to lower barriers to entry for startup companies, which raises competition for incumbents.
- Sharing data and algorithm with government is one way that sharing economy companies can build trust with the regulators.
- The consumers should be able to control how businesses use their data.

Until recently, the sharing economy has been more impactful in consumer markets such as retail and transportation. However, there is a massive potential for it to be replicated across industries that comprise the social sector, as the education and healthcare industries. By revolutionizing trust through technological advancements, the sharing economy sector is here to stay. The only roadblocks that seem to be at the horizon are regulatory and legal concerns which when addressed could mean increased efficiency and reduced environmental impacts of the marketplace.

References:

The Rise Of The Sharing Economy - Ernst & Young - EY. (2015, October)

Yaraghi, N., & Ravi, S. (2017, March). *The Current and Future State of the ...* - large.stanford.edu.

All eyes on the sharing economy. (2013, March 09). Retrieved February 02, 2018, from https://www.economist.com/news/technology-quarterly/21572914-collaborative-consumption-technology-makes-it-easier-people-rent-items

Botsman, R. (2015, October 20). *The Changing Rules of Trust in the Digital Age*. Retrieved February 02, 2018, from https://hbr.org/2015/10/the-changing-rules-of-trust-in-the-digital-age

Trust in institutions is eroding. (n.d.). Retrieved February 02, 2018, from http://sfmagazine.com/post-entry/may-2017-trust-in-institutions-is-eroding/

Does Capitalism Mean War?

Uurja Bothra uurjabothra@gmail.com
Vaidehi Parameswaran vaidehiparameswaran@gmail.com

Abstract

Our paper explores the striking rise in the number of wars in the past two centuries and whether this increase is related to the emergence of capitalism. Our endeavor has been to draw upon the works of various social scientists that have studied the relationship between capitalism and war and compare the feasibility and relevance of their arguments with available empirical evidence as well as our intuitive observations. We also delve upon the factors that are likely to affect the price of war and the characteristics of a capitalist society that incentivize or disincentivise an increase in the number of wars.

Key Words: War, Capitalism, Diversionary, Globalisation, Imperialism, World War I

JEL Classification: P11, P12, P16

1. Introduction

Capitalism refers to a social formation. Borrowing from Bukharin (Bukharin & Preobrazhensky, The ABC of Communism , 1919), the capitalist system has four essential features which are indispensable to the society a) commodity production-:all articles are produced for the market, with exchange value attributed greater importance than use value, b) emergence of wage-labour: where workers are compelled to supply labour in order to escape starvation, c) private ownership of resources and property: the monopoly of all things necessary for production (factory building, machinery, raw materials) by a small capitalist class, and d) exploitation of workers: workers are paid for less than the actual number of hours worked, thus granting capitalists to extract what is called surplus-value.

The establishment of Nazi Germany, World War I, World War II, and the Cold War has been experienced in the capitalist era of the global political economy. There has been a rise in the number of wars in the last few centuries.

Wars are not attributed solely to capitalism. In protest against any authority or imposition of superiority, societies wage wars. A war is defined as a state of armed conflict between states, nations or societies. Warfare is said to engender some positive externalities as well. Studies of time frame during European-state making have contended that the armed forces were being built and resources being appropriated from the subject population. (Tilly, 1975) Walter Laqueur says, "War appears to have been the decisive factor in the emergence of revolutionary situations in modern times…" (Laqueur, 1968)

2. Literature Review

Various theories have been given by social scientists exploring whether capitalism provides nations with a greater incentive to wage war in comparison to other social formations.

Lenin, through his works, tried to assess the causes of war and which classes benefit from it from Marx's point to view. He differentiated the revolutionary wars waged in Europe to overthrow feudal ruling classes from the wars waged later under the capitalist regime. He believed that wars were a result of each capitalist regime trying to change the division of power and wealth in the world to increase their own share in it. This led to a constant allocation and reallocation the world's resources between the warring nations.

Nikolai Bukharin, expressed similar views on the the unprecendented rise in number of wars since the emergence of capitalism in *Imperialism and World Economy*. He argued that military competition for markets was unavoidable. According to them, as the system evolved, the small units of capital characteristic of early capitalism merge into larger and fewer units. The new scale of production in the industrialising nations could no longer be contained within the geographical boundaries of the state and had to be expanded beyond those limits. Capitalism is a system characterized by incessant production, and this does not develop uniformly — some capitalist states will grow faster than others, and demand a re-division of the world in their favour. (Bukharin, Imperialism and World Economy)

As Lenin pointed out, the capitalists are trapped by the system as much as workers are. Each capitalist is stuck in a competition of capital accumulation with other capitalists. This unending race leads to crises, benefitting some capitalists while others go bankrupt, while in the long run, the whole economy steers towards a greater social crisis. (Lenin, 1917)

Their German contemporary, Karl Kautsky challenged this idea. He had a more optimistic belief that wars weren't a necessary outcome of capitalism. He believed that a very small fraction of capitalists- whose profits depended on export of capital and thus required expanding empires, along with arms manufacturers, who relied on war and the threat of war for their profits- benefitted from wars. Kautsky believed that there could be capitalist peace- that imperialism was just one among several options for the system. (Kautsky, 1914)

However, according to Lenin and Bukharin, no individual capitalist has any influence over the system and neither are they able to come together with all the other capitalists to form what Kautsky called a "super-imperialism" to peacefully govern the world. Such a capitalist would be driven out of business by their competitors. To benefit from it in terms of wealth and power, capitalists must run in the rat race. (Lenin, 1917) (Bukharin, Imperialism and World Economy)

John Atkinson Hobson, was an English economist and social scientist who argued in his work *Imperialism* that the European powers' pursuit of colonies, and the wars over these colonies, was the result of the pursuit of new markets for the consumption of the surplus goods produced in the home market, since workers did not have the purchasing power to consume all that was produced in the economy. (Hobson, 1902) The theory of underconsumption as an economic impetus for war was further developed by the historian Charles A. Beard. In his work *The Devil Theory of War*, Beard argued that capitalist states seek to overcome the problem of underconsumption by diverting civilian production to the production of arms, and by using war to provide a constant demand for those weapons. (Beard, 1932)

The problem with both the ways of explaining the relationship between capitalism and war based on the theory of underconsumption is that underconsumption is not a persistent feature of capitalism. Building on underconsumption theory, in his *The General Theory of Employment, Interest and Money*, the economist John Maynard Keynes explained that the other components of his concept of aggregate demand, namely investment, government spending, and exports, can be held to account for the consumption of products not accounted for by private consumption. He agreed that a lack of private consumption could cause economic downturn, but he decisively showed that this was not a necessary feature of capitalism, and thus could not be a sufficient explanation of war among capitalist states. (Keynes)

In fact, Karl Marx, the most distinguished critic of capitalism, believed that that capitalism and peace between states were strongly related. He believed that growing trade would result in peace between capitalist states. Marx linked the war-like behavior of the states of his time to their underdeveloped capitalist regimes. (Marx)

Yet another concurrent theory was presented in the book *Triangulating Peace* by political scientists Bruce Russett and John R. Oneal in 2001. They provide empirical evidence that the presence of the thick economic ties between nations fostered by global capitalism greatly reduces the possibility of war between those nations. Worldwide, the incidence of war and the number of war casualties has declined over the past few decades, precisely during the time of U.S. political and economic hegemony. This decline can partially be explained by the commercial peace described by Russett and Oneal. (Russett & Oneal, 2001)

However, we note that what Russett and Oneal have found is relative peace between states already deeply embedded in the capitalist economy; this says very little about how prone a capitalist nation is to go to war with a non-capitalist one. It can be postulated that while capitalist economies tend to live in peace with one another, they can in fact go to war with their non-capitalist neighbors, and wage war more ruthlessly, than non-capitalists. For example, history shows that the United States has not hesitated to use force to create and maintain its hegemony. Thus we see that this theory was not very effective in explaining a positive relation between capitalism and peace.

The Disaster Capitalism doctrine given by Nobel laureate Milton Friedman is another influential theory that links war to capitalism. It refers to a deliberate strategy of “shock therapy” under capitalism which uses crises to push policy reforms and liberalization that would otherwise have not been accepted by the public under normal circumstances as this is the time when citizens are too emotionally and physically distracted by disasters or upheavals to mount an effective resistance.

3. Potential and Capacity for War in Capitalism

There has been an ongoing heated debate about the cost of wars incurred by economies. While several scientists have asserted that capitalism has driven the price of wars up, there have been studies and theses to disprove the same. An obvious influence of capitalism on wars is in the area of armaments and weaponry. Capitalism fosters mechanisation and automation. This brings about innovation in military technology. The land armed forces grew in size, due to easier transportation. There has been evidence that military productivity was rising in early modern Europe, in both naval warfare and land military. In this time period, the price of weaponry was also on the decline. (Hoffman, 2012) This allows us to conclude that even when capitalism was established, the prices of weaponry continued to fall.

Private competitors in the market for defense equipment led to greater innovation and invention. In several economies, where the government withdrew from its role as the sole player in this market, military technical progress is subsidised. (Harrison M. , 2012) This, unequivocally, led to improvement in the qualitative aspects of the department.

Military Keynesianism refers to a set of beliefs contending that addition to military spending boosts growth. This extra spending allows the Keynesian multiplier to act. When an economy retracts from recession, government spending offsets the effects in the short run. (Feldstein, 2008). However, this theory has been contested on several platforms; the argument opined is about how opportunity costs of such spending to maintain military apparatus are large- lives and freedoms of the people, and economic costs.

4. Does Capitalism Show Preference for Wars?

4.1 Trade

Trade has shown to have an important relationship with war. Previously, economies that maintained trade relations with several other nations were more secure. Economies with no trade relations seemed to suffer from famines and general starvation during wartimes. However, after globalisation, the results have transitioned. An empirical study by (Martin, Mayer, & Thoenig, 2008) has proved that the probability of escalation of war in countries that engage in bilateral trade is low. But for economies with multilateral trade relations, possibility of war is more. Thus countries open to more global trade have the tendency to be caught in wars. An inexorable aspect of capitalism has been globalisation making this observation noteworthy.

4.2 Diversionary Policy

Diversionary policy is based on a concept of engaging in adventurous foreign policies, in order to divert attention from internal strife or unrest. Emanating from Marxian philosophy, a capitalist society is likely to see diversionary wars primarily to distract the proletariat (working class) from embarking on a revolution to establish socialism. Quantitative research has brought about little evidence to support the hypothesis. There are striking differences between quantitative research models and historical case studies. (Levy, 1988)

However, an opposition to this view that has been contended is the difficulty of a society with a stringent class-divide to wage a war; the exploited class may be hesitant to unite with the dominant class to fight.

5. Do capitalists benefit from war?

At first sight, the trigger for World War I was the competition to establish colonies. Germany wished to create some; Britain and France wished to maintain theirs. While imperialism may have ignited the sparks for the war, it was fostered by the formation of Britain-France alliance against Germany. The Allied powers emerged victorious owing to many reasons-the size, territory, GDP etc. Capital abundant economies engaged in capital-intensive warfare. The richer countries saw more efficient mobilization of resources- physical and human. France, Germany, Russia witnessed heavy losses. (Harrison & Broadberry, 2005)

An article by the National Bureau of Economic Research of the United States makes the claim that,

> *"The total cost of World War I to the United States (was) approximately $32 billion, or 52 percent of gross national product at the time."*

In the initial periods of the war, United States was in recession. Following that, it witnessed a boom for around 4 years- first, by selling arms and equipment to Europe and later when they joined the war. The guns-and-butter trade off was made here; emphasis laid on war goods. While more than half of war spending was financed by public debt, the War Revenue Act was instituted. It taxed excess profits of businesses. Further, the stock exchange crashed and remained closed for days, in fear and anticipation of the worst.

The US transitioned from a net debtor in the pre-war period, to a large investor in the post-war period. Britain fell weak after the war, and New York took over as the superior player in the world finances, overthrowing London. The most important long-run effect of wars was the creation of a pool of new and innovative ideas and thoughts. Perhaps, in the short-run, capitalists were faced with difficulties, but the situation is different in the long-run.

6. Conclusion

Munkler, a political scientist and commentator, has suggested that the rise in number of wars in capitalism is most likely because of dynamic quality of wars. Wars are fought with more arms, improved technology and better arms. From (Harrison M. , 2012), we quote:

> "New wars lose the distinction between combatants and civilians; they substitute massacre for battle; they erode rather than build state-capacity. By implication, modern states are losing control of violence."

(Harrison & Wolf, The Frequency of Wars, 2012) present an alternate view. While the factors- globalisation and relative costs of waging wars- are common to both views, they believe that these affect the number of wars and not the quality. "If the frequency of conflict has been increasing," they conclude, "it may be not because we want it; more likely, it is 'Because we can'."

The theoretical contribution made to this research by various social scientists gives us multiples explanations of the links between capitalism and war. Yet, we do not get a definitive 'Yes' or 'No' answer to whether capitalism regimes are more prone to waging wars in comparison to other social such as slavery, feudalism, communism or fascism

References

Bukharin, N., &Preobrazhensky, E. (1919). *The ABC of Communism* .

Harrison, M., &Broadberry, S. (2005). *The Economics of World War I*. Cambridge University Press .

Harrison, M., & Wolf, N. (2012). *The Frequency of Wars*. Economic History Review

Martin, P., Mayer, T., &Thoenig, M. (2008). *Make Trade Not War?* The Review of Economic Studies .

Beard, C. A. (1932). *The Devil Theory of War*, Praeger

Hobson, J. A. (1902). *Imperialism,* Cosimo

Environment and Climate Change: The Gendered Impact

Anannya Singhal anannyasinghal23@gmail.com
Brinda Sudan bsudan@gmail.com

Abstract

Gender is a social construct, which arises from the differing perceptions associated with different sexes. Environment is everything that surrounds us. In this paper, environment signifies primarily natural environment. Each of us affects this environment through our actions individually and socially. Given the social nature of both these concepts, this paper studies the relationship between gender inequality and state of environment. Then keeping in mind the upcoming challenge of climate change that is looming over the world, we also try to see the "gendered impact" of climate change, if it exists. Through our paper, we arrived at the finding that gender inequality does negatively affect state of environment. And also that climate change, impacts women more harshly due to their limited access to alternatives.

Keywords: Gender, Environment, Climate Change

JEL classification code: Q59

1. Introduction

Environment- is the biggest yet most neglected gift given to mankind. In an attempt to make our life more comfortable in the short run, we engage in activities that cause long run harm to the environment. All of this is leading to problems like global warming or heating up of Earth. These are the problems occurring at the physical level of human existence. However, there are lots of problems being faced at the social level also. A primary one being, gender discrimination. Atrocities against women and biased attitudes have risen in recent times, especially in our country. Amongst all this the question arises whether the physical aspect of human life be connected to its social to better understand the inter linkages that exist. Using regressions and case studies we try to gain perspective on this subject.

2. Gender and Environment:

Women have always played an important role in relation to environment. History has been witness to their role as "gatherers" of fruits, sticks and other forest produce and also nurturers. These actions of their in turn impacted the environment. Even in today's world when this relation and roles seem to have taken the backseat, the reality is that it continues to exist, however, in less explicit ways. The responsibility of maintaining the household and tending to domestic duties largely tends to be an "unpaid" domain associated with women. (Sida, 2013) Along with these, what remains unrecognized is women's' continuous interaction with the environment through these activities. Whether this is in form of provisioning, management and safeguarding water or energy sources, the interaction is present. Since women's work is taken for granted, seen as "immeasurable" and unaccounted, so is the possibility that their interactions with the environment and the impact that their actions have on environment and their knowledge is undermined. This can have disastrous implications for environment. Furthermore, institutions that allow gender inequality to thrive can also have implications on environment sustainability.

3. Literature Review

In a paper by OSCE it has been argued that, Owing to the social construct, women and men have different personal attitudes, priorities and power over resources. Society gives men and women different responsibilities and experiences which influences their knowledge and interaction with environment differently. In an article on Gender equality for the environment: An unfinished agenda, by Lakshmi puri, he mentions that "a*chieving environmental sustainability, gender equality and women's empowerment are closely intertwined."* and thus, their efforts in environmental conservation should be recognized. In a paper by UNDP, authored by it is discussed that climate change is not gender neutral. A variety of factors like access to resources, institutional difference, opportunities, account for the differences between men's and women's exposure and vulnerability to climate change risks.

In light of the above mentioned studies, we apriori expect that gender inequality negatively impacts the environmental performance due to the difference of access to resources by different genders. Difference in career roles and responsibilities of men and women also attribute to the same. Surveys conducted in varied regions hint that areas with higher gender inequality rank low on environmental sustainability and climate change also impacts different genders differently.

4. Methodology

The paper regresses the environmental performance index (EPI) of a country on gender inequality index (Gender Ineq) and Population (Popln) as the control variable using Ordinary Least Squares. The analysis presented here is based on cross sectional data of 149 countries on environmental performance index, gender inequality index and population as the control variable for the year 2014. The countries and this year have been chosen to study the relation as per the recent estimates.

- Environmental performance index: The index quantifies and marks the environmental performance of states policies and evaluates environmental sustainability of a country. Components of the index are: Environmental health (air quality, water and sanitation, health impacts) and Ecosystem validity (water resources agriculture, forests, fisheries, biodiversity and habitat, climate and energy).
- Gender Inequality Index: The index measures gender disparity in a nation, using three dimensions to measure opportunity cost: reproductive health, empowerment and labor market participation.
- Population: The number of people inhabiting a country.

5. Regression Results:

Model 1: OLS, using observations 1-150 (n = 149)

Missing or incomplete observations dropped: 1

Dependent variable: EPI

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
Const	78.6072	1.68866	46.5501	<0.0001	***
GenderIneq	−70.5824	4.03196	−17.5057	<0.0001	***
Popln	−0.0097968	0.00488477	−2.0056	0.0467	**

Mean dependent var	52.05826	S.D. dependent var	16.48748
Sum squared resid	12831.94	S.E. of regression	9.374966
R-squared	0.681050	Adjusted R-squared	0.676681
F(2, 146)	155.8763	P-value(F)	5.91e-37
Log-likelihood	−543.3749	Akaike criterion	1092.750
Schwarz criterion	1101.762	Hannan-Quinn	1096.411

Resultant Model: EPI = 78.6072 -70.5824*Genderineq −0.00979685 Popln +e_i

The residuals are normally distributed. The results of the tests, done for the same have been attached in the appendix. The regression coefficient for gender inequality is negative and is highly significant, indicating that higher gender inequality led to lower environmental performance index. The result is in line with the apriori expectations. Gender inequality undermines the knowledge and the role women play in the environment. This leads to an unbalanced approach when dealing with the environment. This explains the negative coefficient that comes up in the results.

Food and water insecurity is heightened by increasing world population. Increased population puts pressure on limited resources leading them to be used to an extent that is unsustainable and adverse for them in the long run. This explains the negative impact found.

6. Climate Change and Gender

Climate change impacts physical and economic aspects of life as well as social and cultural. Climate change although seems gender neutral at first glance, has highly different impacts on men and women. It is seen to affect women more owing to:

- High dependence on natural resources for livelihood
- Unequal access to resources like finance and decision making powers
- Limited mobility in rural areas
- Limited access to information, technology and skills necessary to adapt to climate change

Recognizing these vulnerabilities and potential of women in dealing with the climate change challenge is imperative for a sustainable future of us as a society. Examples of women's potential when it comes to climate change are available closer home. Be it Chipko Movement or the Narmada Bachao Andolan- the history of these popular movements for environment conservation is incomplete without remembering their women contributors and leaders.

7. Case Studies

An intra household analysis From Rural Kenya involved surveying husbands and wives from regions with different climatic conditions and captured gender differentiated data on access to resources, perceptions, adaption strategies and differentiated approaches to changes in climate. Similarly different approaches were observed in crop and rain adaption by different genders as analyzed using significance of p values and kappa values. The study emphasizes the point that men and women adapt differently to climate change due to risk associated with adoption. For e.g., women are more concerned about food insecurity arising from climate change since they look after nutritional security of family members. There are a lot of factors which contribute to differential attitude to adaption to climate change like trust of information, being a part of community level programs, etc. (Ngigia, Mueller and Birner 2017, pp. 99-108). A UN study argues that women are more vulnerable to change in climate due to the nature of responsibilities they hold like fetching water from wells, rivers, procure cooking oil etc. coupled with unequal access to resources, decision making, etc. It increases their exposure to unsafe conditions, poor sanitation causing health hazards as well. (UNWomenWatch, 2011). A study in Rural Australia (Alston& Kent, 2008) argues that men also suffer from prolonged mental pressure and depression due to repeated drought lands, over the loss of livelihood and farm lands owing to their career roles. Other studies in Murray-Darling Basin area of Australia (Alston & Whittenbury, 2010), in the Pacific (Alston & Vize, 2010) and Bangladesh (Alston et al., 2011) argue that women's morbidity and insecurity also increases in natural disasters.

8. Conclusion

Through this paper we aimed to investigate the relation between: Gender inequality & state of environment and Gender inequality & climate change. The results convey that higher gender inequality is associated with poorer state of environment. Furthermore, climate change impacts women more adversely owing to their impoverished state in presence of gender inequality. Empirical analysis and case studies also hint at the disparity in adaptive behavior in environment change by men and women. Thus there is a need to alter the formulation and delivery of policies such that there is equitable access to resources, information, community based projects, which results in equal decision making and participation rights at all levels for both the gender.

References

Alston, M. &. (2008). *The Big Dry: The link between rural masculinities and and poor health outcomes for farming men* . Journal Of Sociology , 133-147.

Alston, M. & Vize, S. (2010). *Gender and climate change in the Pacific*. Gender, Leadership and Social Sustainability (GLASS) research unit, Monash University, Melbourne

Alston, M. & Whittenbury, K. (2010). *Impacts of declining water availability in the Murray–Darling basin: Short report*. Gender, Leadership and Social Sustainability (GLASS) research unit, Monash University, Melbourne.

Alston, Margaret, Whittenbury, Kerri, & Haynes, Alex (2011). *Gender and climate change in Bangladesh* paper presented to the International Rural Sociology Conference, Chania, Greece. August.

Gender, Leadership and Social Sustainability (GLASS) research unit, Monash University, Melbourne.

Habtezion, S. (2013). *Overview of linkages between gender and climate change*.

Margaret Alston, J. K. (2009). *The Gender Justice and Global Climate Change.*

Marther W.Ngigia, U. R. (2017). *Gender Differences in Climate Change Adaptation Strategies and Participation in Group-based Approaches: An Intra-household Analysis From Rural Kenya.*

OSCE. (2009). *Gender and Environment: A guide to the integration of gender aspects*. OSCE.

UN Women Watch. (2011). *Women, Gender Equality and Climate Change The Need for Gender Sensitive Responses to the Effects of Climate Change.*

A comparison of Indian and Chinese investment in Africa- with special reference to AAGC and MSR

Retika. V retikavijay@gmail.com

Abstract

India and China are seen as key players in International politics and are subjects of comparison when it comes to discussing the rise of Asia. Though the economies of the two nations started out with considerable similarities, in contrast to India, Chinese growth has been exponential since the turn of the 21st century. The competitive spirit between the two countries has been compounded by rivalries resulting from border disputes, particularly in recent times. This competition has manifested itself in a new arena- Africa. A comparison of the investment undertaken by the two Asian giants in the African continent, with special reference to the Asia- Africa Growth Corridor (AAGC) and Maritime Silk Road (MSR), is the primary focus of this paper.

Keywords: International Political Economy, International relations, National Security.

JEL Classification: F5

1. Introduction

India and China have shared a strained relation since the second half of the 20th century due to border disputes and the race to secure international standing and prestige. Territorial and political rivalry has only intensified in the recent years with heavy Chinese investment in countries neighbouring India, providing a potentially more lucrative partner to countries that have traditionally looked to India. Coupled with this, is increasing Chinese activity in the Indian Ocean Region, which includes live fire drills in the Indian Ocean, Chinese submarines being deployed in the Indian Ocean and patrolling activities by the Chinese navy in the IOR.

It is this strained relation that provides the context of evaluating and comparing Indian and Chinese investments in Africa in the recent years. Both countries have undertaken several investment projects in Africa, from the side of the public as well as the private sector.

2. Indian Investments in Africa

Economically, the relations between India and Africa have grown substantially. Total trade between India and Africa in the last decade from 2005-06 to 2015- 16, has increased almost five-fold to US$ 52 billion. The growth in Indian FDI stock in Africa has, however, not been much. It stood at US $15 billion in 2014, up from US $12 billion in 2009. The growing importance accorded to Africa by India was manifested in the India- Africa Forum Summit in 2015, when all African states were invited to participate in the summit, as opposed to the traditional format where the African Union decided which 14 countries would get to participate in the summit[3]. At this summit Prime Minister Modi, admitting that India's involvement in Africa has become sluggish over the years, promised concessional credit of $10 billion over the next five years. He also offered a grant assistance of $600 million[4]. As of 2015, India has provided Africa with $7.4 billion in soft loans and $1.2 billion in aid, since the first India- Africa Forum Summit (IAFS) in 2008.

This paper draws from an original research paper written as part of an Internship with Chennai Centre for China Studies, entitled 'AAGC: An initiative strong enough to balance out MSR?'. The paper can be found here- https://www.c3sindia.org/geopolitics-strategy/asia-africa-growth-corridor-aagc-an-initiative-strong-enough-to-balance-out-the-maritime-silk-road-msr-by-retika-v/

Indian involvement in Africa has always been based on a consultative process. For instance, in 2015 before the IAFS, the AU adopted two key policies. The first was, Agenda 2063, a vision to rejuvenate the continent by eradicating poverty, skill and literacy enhancement, and ending conflicts. Africa Integrated Maritime Strategy (AIMS), was the second policy, aimed at developing a thriving maritime economy and using oceanic resources in a more sustainable fashion. Recognizing this, the IAFS 2015, too, centred its bilateral commitments along these concerns, viz, energy access, Blue economy, sustainable development, peace and security and agricultural growth.

Thus, African perception of Indian investment has been largely positive, even though the magnitude of investment has been much below that of China and the United States. Another factor responsible for this has been the image of India as a genuine functioning democracy that has emerged from the same colonial experiences of Africa.

3. Chinese Investment in Africa

Juxtaposed to this is the Chinese story of investment in Africa, which while beginning in the 1970s, has witnessed a meteoric rise in the past decade. This rise is a consequence of China's 'Going Out' policy. This economic involvement takes three main forms- trade, development cooperation and FDI that is primarily focused on infrastructure projects. On all three counts, China's presence is looming and poised to replace the traditional Western monopoly. China as of 2015, emerged as Africa's largest trading partner displacing USA and UK, the traditional powers. The growth rate of Chinese FDI in Africa has been consistently high since 2000. In the decade between 2004 and 2014, Chinese FDI grew from $ US 1 billion to $ US 49 billion[6]. At this rate, China will be Africa's primary source of FDI. In addition to this, Chinese economic presence in Africa also includes loans and aid, which in 2015 stood at $ US 12 billion and $ US 6 billion, respectively.

4. AAGC vs MSR- Which way do the scales tip?

In the 52nd annual meeting of the African Development Bank (AfDB) in May 2017, the vision document of the Asia-Africa Growth Corridor, was released. Announced in 2016, in a joint statement by Prime Ministers Narendra Modi and Shinzo Abe, of India and Japan respectively, the Asia-Africa Growth Corridor (AAGC) is a collaboration between India and Japan, to bring about a convergence of their respective country's rising interests and work towards sustainable development in Africa. This initiative, as picked up by other governments and foreign policy experts poses a challenge to China's 21st century Maritime Silk Road (MSR). The Maritime Silk Road project has been a major touchstone in regional politics in the last few years.

Comparisons between the AAGC and the MSR have only been natural and anticipated as both initiatives have a focus on Africa and are concentrated on developing a maritime corridor. But, it has to be noted that the business models of India and China in Africa have significant differences. However, there are some evident overlaps in their stated goals and objectives, that become apparent through a cursory glance at their respective Vision Documents.

MSR appears to be more viable and consequential as compared to the AAGC because of its grandiosity and larger pattern of investments. This assessment may be too premature as the AAGC has only just been announced. Also, the incredulity that this scheme evokes, abates to a considerable extent when the general pattern of Chinese economic investments in South, South-East Asia and Africa comes into view

It has also been argued by many that the MSR lacks a coherent plan and structure, which could be implemented. The white paper on MSR makes an assured reference to the infrastructure projects that have already been completed so far, or are works in progress, which serve to satisfy the infrastructure requirement of MSR. In addition to this are a host of infrastructure projects that have been completed in Africa, which despite being in the interiors of the continent, play an important role in the transportation of goods and commodities to the port cities.

The AAGC is yet to formulate a plan of action and implementation and the number of investment projects undertaken by India and Japan falls dishearteningly short of the Chinese figures. The Chinese have 66 FDI projects in Africa as of 2016, worth US $ 36.1 billion. In contrast, India has 18 FDI projects worth US $ 1.2 billion and Japan has 27 projects worth US $ 3.1 billion, as of 2016[8]. Besides this, there exists a considerable gap in the trade and aid figures of China to Africa and that of India and Japan to Africa. China definitely seems better and more comfortably positioned and has the lead in terms of numbers. However, as the AAGC has not yet been firmly enrooted, there is scope for India and Japan to catch up with the level of Chinese investment.

In terms of financial viability too, the Chinese initiative seems better prepared. The MSR is largely a state- funded initiative, with the role of private sector being limited to operations once the requisite infrastructure is set up. In 2014, China established the $40 billion ‘Silk Road Fund’, a corpus meant to finance the infrastructure construction of MSR[9]. In addition, China led the foundation of the Asian Infrastructure Investment Bank in 2015, which has the largest stake, to invest in the MSR projects though its activities are not limited to that. In 2015, there was an infusion of funds to the tune of $93 billion into the China Development Bank and the Chinese Exim Bank by China’s State Administration of Foreign Exchange (SAFE)[10]. The China daily reports that such an infusion of foreign reserves will help support the Belt and Road Initiative financially, among other development projects[11]. According to official Chinese media, the China Exim Bank alone funded more than 1,000 MSRI and SREB-related projects in 2015 in sectors such as electricity, resources, and transportation[12]. This is in spite of the repeated assertion and emphasis on the initiative being based on market forces, in the 2015 vision document of the BRI. From this, it is evident that China has taken a considerable number of measures to finance its initiative.

On the contrary, the AAGC has been stated to be an enterprise that is to be led and financed by private companies to a significant extent. This is in line with the current status quo, where much of the Indian investment in Africa is by a few private enterprises. Japan and India are initiating investments worth $30 billion and $10 billion each respectively[13]. The actual investment figures are expected to go higher with other institutions contributing. Hence, at this point, the MSR seems to have a financial plan up its sleeve, while the AAGC is yet to formulate one.

The one area where India surpasses China’s strengths is that of people- to- people ties and public perception. The Indian presence is mostly considered to be benign and in consonance with this, the first response to the AAGC is also positive. Akinwumi Adesina, President of the African Development Bank, noted, at the annual meeting of the AfDB in 2017, that, “This cooperation is both a mutual privilege and priority” and that it is a “pleasure to partner with such an inveterate and committed investor in Africa.”[14] This is a culmination of India’s historical relations with Africa, their common struggle against colonialism and India’s rise and sustenance as a credible democracy.

Africans have also accepted Chinese investment in infrastructure as a welcome change from the rather ineffective Western ‘aid and donation system’. There are also arguments that the Chinese investment in Africa is a form of neo-colonialism, which adversely impacts the environment and does not improve the life of its African employees beyond that of a minimum wage labourer.

5. Conclusion

When both initiatives are weighed against each other, the Chinese pattern of investment and economic diplomacy seems to be at present paramount. Irrespective of the pitfalls in the MSR identified in this article, the fact remains that China is currently better positioned to undertake the implementation of its grand scheme, both politically and financially. China is also currently enjoying a momentum in terms of co-operation from other developing countries in Asia and Africa. It is receiving due deference as the regional super power that it has turned out to be. Perception among the beneficiaries of Chinese economic diplomacy is also rather favourable.

For AAGC to compete and coexist with a mammoth initiative like the MSR, there is a need for India to capitalize on its traditional edge and for Japan to provide quality infrastructure to counter Chinese influence. The two countries enjoy considerable social momentum among the African nations and this must be put to optimal use to bear results. But a proper assessment can only be made in the years to come. Until then, Chinese growth seems unrestricted. The practicality of AAGC is yet to be manifested.

But this is true not only with regard to AAGC but also with regard to the larger pattern of Indian investment in Africa. For India to pose an effective counter to China, it will have to optimize its traditional advantages and develop a more proactive approach towards trade and investment.

References

Confederation of Indian Industry, (2018, January 1) *“India- Africa trade and investment relations”* Retrieved from https://ciiblog.in/india-africa-trade-and-investment-relations/

Chakrabarthy M. (2017, December 28) *India and China in Africa: Difference lies in scale,* Observer Research Foundation, retrieved from http://www.orfonline.org/research/india-china-africa-difference-lies-scale/.

Roy S. (2015) Indian Express, *“Engaging Africa: India’s 54 +1 initiative”*. Retrieved January 12 2018, from http://indianexpress.com/article/explained/engaging-africa-indias-541-initiative/.

Roy S. (2015) Indian Express, *“PM Modi offers Africa $10- bn loan, says projects to be monitored”*. Retrieved from http://indianexpress.com/article/india/india-news-india/india-offers-africa-10-bn-soft-loan-seeks-stronger-ties/

Jayaram K, Kassiri O, and Sun I. (2017) McKinsey, “*The closest look yet at the Chinese engagement in Africa”*. Retrieved from https://www.mckinsey.com/global-themes/middle-east-and-africa/the-closest-look-yet-at-chinese-economic-engagement-in-africa.

Hopkins J, China Africa Research Initiative, School of advanced international studies, *“Our Data”*. from http://www.sais-cari.org/data/

“Connectivity redefined, Africa attractiveness program 2017” EY (2017). Retrieved from http://www.ey.com/Publication/vwLUAssets/ey-africa-attractiveness-report/$FILE/ey-africa-attractiveness-report.pdf.

Silk Road Fund, *"About Us- Fund History*". Retrieved from http://www.silkroadfund.com.cn/enweb/23775/23767/index.html

Reuters Staff, (2015) Reuters, *"China's Central Bank put $93 billion into development banks in July"*. Retrieved from https://uk.reuters.com/article/uk-china-economy-cenbank/chinas-central-bank-put-93-billion-into-development-banks-in-july-idUKKCN0QN1M920150818.

Jia C. (2015) China Daily, *"Policy Banks get $ 90 cash infusion"*. Retrieved from http://www.chinadaily.com.cn/business/2015-08/19/content_21643373.htm.

Xinhua (2016). *"China Exim bank boosts lending to Belt and Road projects".* Retrieved from http://news.xinhuanet.com/english/2016-01/14/c_135010252.htm.

Pathak M and Roche E, (2017) Livemint, *"Shinzo Abe's India visit may see launch of Asia- Africa Growth Corridor".* Retrieved from http://www.livemint.com/Politics/AxVUcVEsggqkfZpGVsY2SL/Shinzo-Abes-India-visit-may-see-launch-of-Asia-Africa-Growt.html.

Beri R. (2017), Institute for Defence Studies and Analysis. *"India's new initiative in Africa: the Asia- Africa Growth Corridor"*. Retrieved from https://idsa.in/idsacomments/indias-new-initiative-in-africa-asia-africa-growth-corridor_rberi_130617#footnote1_egursmp.

London Bridge is Falling Down? - London as a Financial Hub Post Brexit

Vidhi Maheshwari mvidhi97@gmail.com
Vaidehi Parameswaran vaidehiparameswaran@gmail.com
Stuti Murarka stutimurarka2204@gmail.com
Raashi Parakh rashiparakh1996@gmail.com

Abstract

This research paper aims to explore the possible standing of London as the financial centre of Europe, post its exit from the European Union. The paper attempts to look at alternate possibilities in Europe, where the financial power may be repositioned – Frankfurt, Luxembourg, Paris. From the analysis, it is discerned that while London is likely to remain Europe's financial centre, owing to factors like language and infrastructure in the short run, fragmentation of financial power across EU remains on the horizon in the long run.

Key Words: Brexit, European Union, United Kingdom, Financial Services, Banking, Asset Management, Insurance, Passporting, Equivalence

JEL Classification: D21, F13, F15, F23, F38, F55, O52

1. Introduction

London has been a leading international financial centre since the 19th century boasting of the largest trade surplus in financial services. London's fortuitous location, the predictability of its legal system, its language and lifestyle, enactment of the Big Bang reforms, economic clustering and access to a vast pool of talent have propelled it to its present status. The decision of the United Kingdom (UK) to leave the European Union (EU) has raised several questions regarding the ability of London to retain its leading position as a financial centre for EU and the world. In this paper we have considered four posible Brexit strategies that may emerge from the negotiations and have analysed the implication of each scenario on the future of London as a global financial hub. We have also compared and contrasted the potential of three EU states (Frankfurt, Luxembourg and Paris) to attract London's thriving banking and non-banking industry.

2. BREXIT: Decisions and Implications

There is an air of uncertainty regarding the path that Britain chooses once it disintegrates from the EU. In the wake of this uncertainty, people have predicted that Britain could choose two possible paths to exit - a "hard" Brexit and a "soft" Brexit. These terms are not definitional. They are indicative of the degree of association with the EU. Under the "soft" approach, Britain may continue to be a member of the single, unified market. This would involve Britain also agreeing to maintain free movement of people. The alternative approach is that of a "hard" one. This could lead to a no-deal agreement, where the UK completely cuts ties with the EU.

3. Passporting – The Regime Thus Far

'Passporting' allows for provision of financial services by firms headquartered in UK to the remaining EU member nations. In this section we explore the significance of passporting to UK's financial services sector by examining how it currently operates in the single market. Placing a value on passports is relevant in understanding the implication of various Brexit strategies on the continuation of London's current status as Europe's leading financial centre. A study by Oliver Wyman conducted in 2015 estimates that a quarter of the revenue earned by UK based financial service sector comes from international and wholesale business related to the EU. The report also estimates that in the event that UK adopts WTO terms with EU, nearly £20bn of EU-linked revenue would be subject to risk. In banking, passporting ensures efficiency in terms of time and cost, with little additional capital requirement. This has facilitated UK in establishing itself as an entry point to gain access to EU's common market. However, passporting is of little significance in the non-banking sector because different countries have independent definitions of 'marketing'. Supervisory and legal fees making it costly for small and medium sized asset managers to expand uniformly across EU while a majority of the large funds already operate European subsidiaries. Lastly, insurance services are provided by subsidiaries instead of being routed through passports. Thus, from an insurance perspective, passporting is of little to no value.

4. Charting Possible Outcomes for UK

Against the backdrop of UK's reliance on passporting, we analyse possible post Brexit scenarios that may play out along with the implication that each scenario will have on London continuing as a global hub for financial services.

4.1 European Economic Area

If UK opts for and is granted an opportunity to join the European Economic Area (EEA), it would retain its passporting rights and consequently there would be little change in its present unfettered access to the market with regard to financial services. However, political reasons impede the manifestation of this strategy, for the UK government is opposed to certain requisites that come with joining the EEA – making contributions to the EU budget, accepting free movement of EU citizens and absolving control. Consequently, the alternative that presents itself to Britain is negotiating a comprehensive FTA with special emphasis on financial services.

4.2 Equivalence

Certain EU financial regulations permit third countries to enjoy some of the advantages of the single market, provided their regulatory and/or supervisory regime is deemed equivalent to the corresponding EU system. However, grant of equivalence varies by regulation, thus making it a partial solution for UK. The banking sector is likely to be most in jeopardy in the absence of passporting as there is no scope for a grant of equivalence under CRD IV, one of the most important regulation governing the banking sector with regards to deposit taking, lending, broking, payment services, securities issuance and portfolio management. Furthermore, equivalence is granted on specific aspects of a particular regulation.

In March 2018, in an annex (to Brexit negotiations) on financial services, EU has indicated that greater caution would be pursued prior to the grant of an equivalence lest it dampen the financial stability of the EU. This could mean greater time taken in decisions pertaining to grant of equivalence.

A priori, we would expect UK to find it easier to seek equivalence as presently there is no divergence in its regulatory regime from EU's. Some analysts also allude to possible benefits that UK may enjoy from securing equivalence in only those areas where it has a competitive advantage. On the opposite end of the wheel, analysts also take cognizance that an "equivalence – regime" would be unilateral, relegating UK to the status of a rule taker, despite it's immensely large and well-functioning financial market. UK could seek 'pre-emptive' equivalence on financial services regulation in its negotiations. This would ensure that UK's regulatory and supervisory regime is considered equivalent from the moment the withdrawal comes into force and thus help reduce uncertainty.

4.3 Bespoke Agreements

Bespoke agreements giving passport-like access appears to be the only solution to prevent disruption of banking in the City of London. The prospect of such agreements appears slim but not non-existent as several EU banks make significant revenues in UK.

4.4 Local Arrangements

In the absence of an accord between the two extremes – equivalence and bespoke agreements – UK and London based US financial firms may have to either a) set up branches in every state they wish to operate in or b) set up subsidiaries in an EU member state, where from they can provide services to the entire bloc. Both the alternatives require incurring redundant costs in terms of capital, infrastructure and staff.

5. Factors in favour of London

Despite Brexit, London has several attributes to its credit which contribute zealously in its race against other EU nations as a global financial hub - English as a common language, presence of many multinational financial organisations and finance universities, present trading stats, tax incentive schemes for financial services firms. The UK has been recording a Global Foreign Exchange Turnover of more than 30% since 2004. If it loses membership of the EU the figures may push down, however what lies behind these numbers is a significant amount of infrastructure and expertise which can't be relocated so easily.

The Global Financial Centres Index (GFCI) provides a strategic understanding of the competitiveness and growth of financial centres over time. 108 centres were researched for the 22nd edition of GFCI. The report shows that there has been relatively no change in the top 5 positions from 2016 to 2017 (with London in the lead) although there are hints of convergence by Frankfurt to the current position of London

Centre	GFCI 22		GFCI 21		Change in	Change in
	Rank	Rating	Rank	Rating	Rank	Rating
London	1	780	1	782	0	▼2
Zurich	9	704	11	718	▲2	▼14
Frankfurt	11	701	23	698	▲12	▲3
Luxembourg	14	695	18	708	▲4	▼13
Geneva	15	694	20	704	▲5	▼10
Paris	26	680	29	679	▲3	▲1
Dublin	30	672	33	663	▲3	▲9
Amsterdam	33	667	40	647	▲7	▲20
Stockholm	39	660	46	630	▲7	▲30
Jersey	40	658	43	633	▲3	▲25
Guernsey	41	657	47	629	▲6	▲28
Vienna	42	656	64	611	▲22	▲45
Copenhagen	43	655	52	623	▲9	▲32
Oslo	46	650	44	632	▼2	▲18
Glasgow	49	647	53	622	▲4	▲25

Table 1: Western European Top 15 Centres in GFCI 22

6. Possible Financial Hubs post Brexit

We consider the viability of 3 possible financial hubs in the EU post Brexit – Frankfurt, Luxembourg and Paris. *Frankfurt* enjoys political and economic stability. It is home to some major banks and global commercial law firms and auditing companies. With the European Central Bank (ECB) located in Frankfurt, it is also the financial capital of EU. Frankfurt also boasts a good infrastructure but faces challenges in terms of housing and education. The vacancy rate on the housing market is almost negligible. Demand for education in Frankfurt is high and would expand further with Brexit requiring steep infrastructural development. *Luxembourg* is one of the leading financial centres in Europe. It enjoys economic, social and fiscal stability. It has a AAA credit rating. However one problem that the country faces is that it doesn't replicate the cosmopolitan life people in London enjoy. *Paris* too hosts many top EU banks, it is home to the pan-European Euronext stock exchange, ESMA (the European securities mad markets authority) and top ranked financial universities. Paris also has the second largest asset management industry in the world. France is the 3rd largest contributor to the EU GDP (in 2016 its contribution was 15% of the GDP as per Eurostat) and has a public debt of less that 3% of its GDP. The Macron government has initiated reforms like reduction in corporate tax rate and labour market reforms to make France more business friendly. However, language is a major impediment.

7. Conclusion

In commercial lending, absence of equivalence (or other means of retaining the present passporting rights) would mean that London based institutions would have to set up independently capitalised and staffed subsidiaries in EU member states to conduct business. This would accentuate costs and create redundancies. The insurance and asset management sector in UK is less likely to be rattled by the revoking of passport rights. To observe the possibility of a change in economic order of nations with regards to financial services, we analysed Frankfurt, Luxembourg and Paris. Our analysis suggests that the balance of scale, in the financial services sector, tips more in the favour of London owing its independent market size, predominance of English (relative to the popularity of the language in other EU states) and infrastructural supremacy. But we also takes cognizance of the fact that if negotiations turn sour for UK, then EU's financial services industry in the long run is more likely to be fragmented across Frankfurt, Luxembourg and Paris. The emergence of any one player as the dominant financial center does not appear at the horizon.

References

Brexit: The United- Kingdom and EU financial sevrices(Rep.). (2016). London: European Parliament.

Philippon, T. (2016). *Brexit and the End of the Great Policy Moderation*. Brookings Papers on Economic Activity,385-393. Retrieved March 24, 2018.

Reenen, J. V. (2016). *Brexit's Long Run Effects on the UK Economy.* Brookings Papers on Economic Activity,367-383. Retrieved March 25, 2018.

The impact of 'Brexit' on the financial services sector(Rep.). (2016). London.

Scarpetta, V., & Booth, S. (2016). *How the UK's financial services sector can continue thriving after Brexit.* Open Europe, 1-70.

Financial Times *Equivalence does not meet either side's requirements*. (n.d.). Retrieved March 21, 2018, from https://www.ft.com/content/53246cda-2393-11e8-add1-0e8958b189ea

Yeandle, M. (2017). *Global Financial Centres Index 22*. doi:10.18411/a-2017-023

Banking in Luxembourg: Trends & Figures 2016. (n.d.). Retrieved March 21, 2018, from https://www.pwc.lu/en/banking/banking-luxembourg-trends-figures-2016.html

Frankfurt, Paris and Dublin: Post-Brexit Rivals to the City of London? (2018). Politics Trove. doi:10.1093/hepl/9780198737469.001.0001

Frank, K. (2018). *The wealth Report 2018*. Review of Income and Wealth. doi:10.1111/roiw.12276

The Political Economy of a Global Financial Centre. (2017). *3-in-1: Governing a Global Financial Centre*,2-12. doi:10.1142/9789813221178_0001

Wyman, O. (n.d.). *The impact of the uk's exit from the eu on the uk-based financial services sector*. doi:10.1787/888933600771

A., & J. (2017, March 10). *Brexit and financial services* | Oxford Review of Economic Policy | Oxford Academic. Retrieved March 23, 2018 from https://academic.oup.com/oxrep/article/33/suppl_1/S54/3066163

An Analysis of Doklam's Influence on India and China's Economic Relations

Tanya Singh tanyasingh090199@gmail.com
Suramya Srivastava suramya1076@yahoo.com
Aashima Dhingra shaina1004@gmail.com
Rajni Dahiya rajnidahiya4703@gmail.com
Charul Verma charulverma1998@gmail.com

Abstract

Since the 1978 Chinese economic reforms were implemented, trade between India and China has soared. However, parallel to the increasing economic interdependence between the economies, there exists a political and diplomatic relationship marked by tensions and conflicts, the latest being the Doklam crisis of 2017. This paper analyses how the trade relationship between these two Asian giants has been affected by the Doklam crisis. The aim of this paper is to show that the India-China trade relationship is independent of military and political divergences and to this end, we have analyzed the economic effects of Doklam among other major conflicts. The evaluated and established results help analyze and predict the future of the bilateral trade relationship.

Keywords: India, China, Bilateral trade, Doklam Crisis

JEL Classification: F13, F14, F51

1. Introduction

India and China have had a very tumultuous and complicated relationship. The unresolved border and territorial issues act as a constant reminder of the conflict between the two nations, even when they take steps to pursue common goals and interests. This contradictory nature of their relationship is often described as "competition-cooperation-conflict." This research paper aims to provide an insight into India and China's trade relations in the context of the ongoing border disputes. The study will focus on the recent Doklam issue that has once again brought the border disputes to the foreground, reminding the world that while trade may be flourishing, the underlying conflicts continue to be unresolved.

The earlier modus vivendi - mode of living or the agreement formed to have peaceful relations - between the two nations was outlined in 1979 and then implemented officially in 1988 with the assertion that territorial disputes would not act as an impediment to the economic and institutional interdependence of the two countries. However, post the 1990s, with the onset of globalization and increasing competition, the operational methods and objectives of the two countries changed significantly. Additionally, especially in India, the political parties in control also changed. The Doklam standoff of 2017 took place in Bhutan's territory and raised a number of questions regarding achieving economic growth without any significant hindrance, challenging the implemented modus vivendi of 1988.

2. A Historical Precedent: Operation Shakti

An analysis of how the Doklam crisis might affect trade and economic relations between India and China would be incomplete without considering a historical precedent. Pokhran-II, also known as Operation Shakti or the 1998 Nuclear Tests by India, presented the most serious challenge for Sino-Indian cooperation. (The reason for not choosing a border conflict as a precedent is that all major border conflicts between the two nations took place before 1990, a time period during which China and India didn't have significant trade and investment relations). If one were to look at the statistics, bilateral trade between the two countries suffered a considerable setback since the growth rate fell from an average of 78% during the past decade to merely 3.4% in 1998. On further enquiry, one realizes that the seemingly simple situation is indeed very complex. In fact, the growth rate of trade between these two Asian giants started falling by 30% per year from 78% in the early 1990s to 5.2% in 1997. China's exports fell and trade declined not just with India but also with its other major trade partners such as Japan, South Korea and Pakistan. Moreover, Asia faced a major financial crisis known as the East Asian financial crisis of 1997.

On the other hand, in 1998, India's share of China's international trade increased from 0.56% to 0.59%. Afterwards, it rose to 0.9% in 2003 and 1.1% in 2004, considering the fact that China's overall exports fell from 9% to only 0.5% and imports fell by 1.6%. To quote Swaran Singh, an eminent academician, "When seen in the larger context of China's negative growth rates in their annual trade with Asia, even the low positive growth in Sino-Indian bilateral trade in 1998 was seen to bode very well for Sino-Indian ties".

Moreover, India signed agreements worth $8 million and $1.9 million with China in 1998 and 1999 respectively. Undeniably, there were strong polemics and a great deal of skepticism, leading to the cancellation of China Commodity Fair and China's near absence during India International Trade Fair, but such moves were highly symbolic in nature. We can safely conclude that Operation Shakti and all the political rhetoric surrounding it had more or less no effect on India-China bilateral trade. In fact, trade relations facilitated in undoing the damage done to the bilateral relations by Pokhran-II triggered further political and diplomatic interactions.

3. Literature Review

"India and China: Conflict and Cooperation" by David M. Malone and Rohan Mukherjee analyzes the history of Sino-Indian border conflicts and how the relations of the two nations with extraneous nations fuelled the conflicts. It gives a thorough insight into the phases of the Indio-China relationship and its impact on the foreign policy of both the nations. It also presents a deeper insight into the negotiations between the nations under the reign of different leaders. The paper enlists the possible factors that are responsible for the Sino-Indian tensions. It is an important piece of work for this study to be conducted on the basis of the history of such conflicts.

"China-India: An Analysis of the Himalayan Territorial Dispute" by Commodore Katherine Richards gives a deep insight into the Indio-Chinese border crisis. It explains the strategic importance of Bhutan (Doklam plateau) and Tibet to both India and China and how these areas are both a threat and an advantage to these regionally giant nations. It analyses the impact of Sino-Pakistan relations on Sino-India border crisis. Further, it analyses the factors that could be an impetus in negotiating and finding an appropriate solution to the border crisis. It examines whether economic interdependence through trade could help ease the tensions in the Sino-Indian relationship and in turn contribute to breaking the border stalemate. The paper proves to be an important source for it analyses the history as well its impact on various aspects of the India-China border crisis.

4. Methodology

For this research report, a number of sources were analyzed and used to get a better understanding of the issue at hand and give a holistic view of the trade relations between China and India, in the past and in the present, especially during and after the Doklam standoff. We rely on quantitative as well as qualitative methods to prove our hypothesis. However, we rely primarily on statistical evidence to support our finding.

5. Effect of the Doklam Crisis on bilateral trade

It is important to analyze the effect of the Doklam crisis on bilateral trade as in the aftermath of every major conflict between these two countries, speculations of trade war and economic relations getting hit are abound. However, as the discussion proceeds, it becomes evident that China and India share a mature economic relationship that is independent of any kind of political and diplomatic conflict. India-China trade reached $84.44 billion in 2017, according to the latest data. This is the highest that trade between the two countries has ever reached. The volume of bilateral trade touched $80 billion for the first time. This is much higher than the $71.18 bn bilateral trade registered in 2016. The figures seem all the more astounding due to the fact that India and China had a major confrontation at Doklam. Moreover, they were at loggerheads with each other over a number of issues like CPEC corridor and the latter's blocking India's efforts to bring about a UN ban on Jaish-e-Mohammad leader Masood Azhar and India's entry into the Nuclear Suppliers Group (NSG).

India's exports to China increased by 39.11 per cent to reach $16.34 billion last year whereas India's imports from China increased by 14.59 per cent to $68.10 billion. Consequently, India has emerged as the seventh largest export destination for Chinese products, and the 24th largest exporter to China. What is even more fascinating is that Indian exports to China had been declining for a few years but the post-Doklam period saw a reversal of this trend. Diamond, copper, iron ore, organic chemicals and cotton yarn contributed to the increase in Indian exports to China. Though the larger picture is in consonance with our hypothesis, there are a few exceptions that are important to note. India put restrictions on the import of a few Chinese goods that can be evaluated in the Doklam context. The Indian administration has put restrictions like the anti-dumping duty in the tempered glass and tyre industry, mainly to protect Indian domestic, small scale industries. Apart from that, India introduced tough quality standards and mandated certification of compliance for firms in toy and power equipment industries. As a result, imports from China in the latter two categories have fallen by nearly 50 percent.

Despite the exceptions, the following prophecy by a Chinese official has proved to be true, "The long-standing economic and cultural ties that India and China share will not be hit. Both India and China enjoy long cooperation as our lands are connected", news agency IANS quoted Li Rongrong, Second Secretary in the Economic and Commercial Counselor's Office of the Chinese Embassy in India.

6. Conclusion

The results of the study point to a maturing relationship between the world's two fastest growing economies. However, there should be no room for complacency. From what world history teaches us, we know that any kind of military conflict is not in the interest of a country. Therefore, the need of the hour is realizing that our 'strategic partnership' could help us both and also help Asia to emerge as the core of the world economy. The Indian Prime Minister's dream of 'India-China Millennium of Exceptional Synergies' needs hard work and the best way to move forward is the path of increasing trade and investments.

References

Singh, S. (2004). *China-India Bilateral Trade:. Strong Fundamentals, Bright Future*, Journals.openedition.org.

The Times of India. (2018). *India-China bilateral trade hits historic high of $84.44 billion in 2017* - Times of India.

Z., Zhu. (2011). *China-India Relations in the 21 st Century: A Critical Inquiry*. Indian Journal of Asian Affairs.

Malone, D. and Mukherjee, R. (2010) *India and China: Conflict and Cooperation*.

Jash, A. (2017) *Doklam Standoff: A Test of Resolve between China and India*, IndraStra Global Vol. 003, Issue No: 09

The Hindu (2017) *Has India kicked off a trade war with China? Here are 5 signs*. - The Hindu

Rethinking the Focus of our Discussion on Education from Inputs to Outputs

Prerna Mishra prernamishra25@gmail.com
Veerangna Kohli veerangna1502@gmail.com

Abstract

Utilizing the full potential of human capital requires maximization of labour productivity, in which education plays an important part. However, it has been noted that often the actual results of initiatives undertaken in this area do not correspond to the efforts invested. It is in this context that the issue of opting an output oriented approach ought to be raised. This paper uses panel data analysed using the random effects model and correlation matrices to try and determine whether focus should be shifted from education inputs to education outputs and accordingly provides policy recommendations and directions for future research.

Keywords: Education, Educational inputs, Educational outputs

JEL Classification: H52, I25, I28

1. Introduction

Nelson Mandela once said, "We all know that education, more than anything else, improves our chances of building better lives." Keeping this context in mind, one cannot deny that education must assume a priority position in policy making. Since the purpose of education is ensuring that the pupils acquire the skills that help in attainment of employment and increasing productivity, it is important that inputs translate into adequate outputs.

Educational output refers to the level of educational skills attained which we have represented using PISA's scores since it is an internationally accepted standardized test and hence lends itself to a comparative study. Pupil-teacher ratio and government expenditure on education in absolute terms are the indicators used for education inputs where the former represents the qualitative and the latter the qualitative aspect of input provision so as to compare their impact on outputs. We have also examined the relationship between the per capita GNI and education inputs and outputs in order to ascertain the nature of impact they have on labour productivity and therefore individual income.

The second section examines the existing literature on the subject while the third section outlines the methodology utilised. The fourth section contains the results of our quantitative analysis. The fifth section deals with the limitations of our study and the sixth section puts forward policy recommendations based on the results while the last section summarises and concludes the paper.

2. Literature Review

Research indicates that the benefits from even small increases in the skills of labour force can have large impact on well-being in terms of GDP, often outstripping the benefits of policies oriented towards short run benefits (OECD, 2010). Whether focus should be on education output or attainment has been a point of contention. While indicators such as mean years of schooling and enrolment ratio do indicate the effectiveness of policy to an extent, it has the drawback of not giving any indication of the quality of education being provided. Since, the labour productivity depends more on the actual skills acquired and not simply the length of time spent in a classroom, it seems reasonable that education outputs be given a place of importance. Vijay Joshi takes the example of India and talks about how despite improvement in mean years of schooling and enrolment, students of class 5 and 6 are unable to read text books of class 3. Clearly, there is something that we are doing wrong. Also, according to the conclusions of the Coleman Report, non-school factors had a greater influence on performance variance than school related factors and it also drew attention to the distribution of student performance as opposed to distribution of education inputs (Coleman et al., 1966).

It has also been observed that expansion of inputs such as increased spending or physical expansion of schools has little to no effect on student competency and learning achievements (World Bank, 2007). In fact, research by Raj Chetty, John Friedman and Jonah Rockoff proposes that the quality of teaching is one of the most significant factors influencing the performance of students on tests.

Hanushek and Kimko (2000) demonstrated in their research a statistically and economically significant positive effect of educational output on economic growth. It has also been demonstrated that these effects result from actual improvement in educational output and reforms that do not improve these results will not elicit such effects. It has also been observed that individual earnings and productivity are systematically related to the education outputs. (World Bank, 2007).

Based on these findings, our a priori expectation is to find that quality of education inputs has a greater impact on educational outputs as compared to their quantity and also that education outputs are highly correlated with per capita income.

3. Methodology

The study uses secondary data for the years 2010-2015 for 41 countries selected on the basis of highest GDP. The analysis uses Random Effects Model and a correlation matrix for the analysis.

The econometric analysis has been conducted in three steps. We have first analysed the impact of education inputs on education output using the Random Effects Model which uses Average PISA scores as the dependent and pupil teacher ratio and government expenditure on education (in absolute terms) as the independent variables. Thereafter we have examined the correlation between per capita GNI and the average PISA scores followed by a correlation matrix analysing the relationship between per capita GNI, pupil teacher ratio and government expenditure on education in absolute terms.

4. Regression Analysis

Regression of the average PISA scores on absolute government expenditure on education and pupil-teacher ratio (primary) using the random effects model. The dependent variable in the model is PISA Average which refres to the Programme of International Student Assessment (PISA). It is an international test that evaluates basic abilities of 15 year old students across countries in areas of science, math and reading; *PISA Average = (PISA science+ PISA maths+ PISA reading)/3*

The model has 2 dependent variables: Absolute government expenditure on education in PPP $, the pupil teacher ratio. Absolute government expenditure on education in PPP $ is the absolute value of expenditure on education by governments for all levels of education in PPP $ from 2010-2015.This has been taken as a proxy for provision of educational inputs. *Apriori we expect its coefficient to be positive.* Pupil-teacher ratio refers to the number of students per teacher. It has been taken as an indicator for the quality of teaching assuming that greater personalized attention to students improves the quality of teaching.. *Apriori we expect its coefficient to be negative.*

Model 1: Random-effects (GLS), using 83 observations

Included 39 cross-sectional units

Time-series length: minimum 1, maximum 4

Dependent variable: PISA Average

	Coefficient	*Std. Error*	*z*	*p-value*	
Const	553.148	13.1119	42.1868	<0.0001	***
Pupil Teacher Ratio	−5.41386	0.758563	−7.1370	<0.0001	***
Absolute Government Expenditure	3.80538e-05	2.16457e-05	1.7580	0.0787	*

Mean dependent var	471.6494	S.D. dependent var	47.67615
Sum squared resid	112042.7	S.E. of regression	37.19197
Log-likelihood	−416.8954	Akaike criterion	839.7907
Schwarz criterion	847.0473	Hannan-Quinn	842.7060

PISA Average = 553.148 − 5.41386 Pupil Teacher Ratio + 3.80538e-05 Absolute Government Expenditure

Testing for the individual significance of the coefficients, we infer that at 10% level of significance, all the coefficients are statistically significant.Testing for joint significance of regressors, we infer that coefficients are jointly insignificant, at 10% level of significance.

4.1 Interpretation of Coefficients

Pupil-teacher ratio has a negative coefficient which is significant at 1% level of significance and is consistent with our Apriori expectation. As the ratio decreases by 1, PISA average will increase by 5.41. Absolute government expenditure has a positive coefficient which is significant at 10% level of significance and confirms with our Apriori expectations. As absolute government expenditure on education increases by 1, PISA average increases negligibly. *The model was tested for and found free of multicollinearity and heteroscedasticity and the residuals are also normally distributed according to the residual plot. Hausman test verifies that REM should be chosen over FEM.* Examining the coefficients of pupil-teacher ratio and absolute government expenditure on education shows that quality of inputs has a strong impact on output, whereas, increasing the quantity of inputs available has a negligible impact. Simply providing inputs doesn't translate into improvement in outputs.

4.2 Correlation between GNI per capita and Educational Output

PISA Average	GNI PER CAP	
1.0000	0.6764	PISA Average
	1.0000	GNI PER CAP

Correlation between GNI per capita and PISA average is strong and positive, around 68%. Improvement in educational skills lead to an increase in the productivity of labour and development of human capital and has been known to improve the individual earnings. GNI per capita is the average income of an individual and therefore is positively related to increase in an individual's productivity, which in turn is positively related to educational skills.

4.3 Correlation between GNI per capita and Educational input:

GNI PER CAP	Absolute Government Expenditure	Pupil Teacher Ratio	
1.0000	0.1378	-0.6986	GNI PER CAP
	1.0000	-0.0969	Absolute Government Expenditure
		1.0000	Pupil Teacher Ratio

Correlation between GNI per capita and absolute government expenditure is around 14% (positive) and that between GNI per capita and Pupil Teacher Ratio is around 70% (negative).

Since we have already shown in REM that pupil-teacher ratio is significant and strongly impacts educational output and educational output (PISA Average) has a strong correlation with GNI per capita, it can be logically that pupil-teacher ratio will strongly correlate with GNI per capita. The negative sign is due to the negative relationship between pupil-teacher ratio and educational output and the positive relationship between educational output and GNI per capita. Following a similar line of argument, we get a positive but weak correlation between absolute government expenditure and GNI per capita. The weak correlation between pupil-teacher ratio and absolute government expenditure indicates that mere increase in the spending on education does not translate into increased quality of education provided.

5. Limitations

Often PISA tests students only from selected regions within a country. However, due to the lack of standardised tests that do not have this flaw, we have used PISA, which is one of the most widely used indicators in research related to similar themes. Also, a number of developing countries do not participate in PISA.

6. Policy Recommendations

Participation of countries in standardised tests will help indicate the effectiveness of their education policies by ascertaining performance in terms of comparable outputs, thereby allowing policy makers to be more responsive to results. Steps should be taken towards enhancing the quality of inputs. Incentives for students and teachers in the form of accomplishment based awards and prizes for the former and additional perks such as bonuses tied to performance of students, their presence in class, student reviews etc. for the latter will serve as motivation for putting in greater effort. Besides this, the influence of non-school factors such as the health sector or the state of nutrition should also be considered.

Introducing accountability of schools for achievement of education outputs requires giving them local autonomy to make decisions. This is particularly relevant in case of government schools. Centralized decision making lacks the insight into local issues. A certain level of autonomy to schools will enable them to take decisions relevant to the situation prevailing instead of the one size fit all approach. Introduction of competition and choice by way of grants linked to performance or enrolment and by providing financial assistance to underprivileged families in the form of cash rather than free schooling so that they may make informed choices about where to educate their children will help shake the stupor of complacency among schools and their administrators.

7. Conclusion

Our analysis has made it clear that an education policy must focus tailors itself according to the desired outputs. Reliance on only educational attainment can prove to be misguiding. As the results clearly show, the quality of inputs plays a far bigger role than the quantity of inputs and should be prioritized. Education sector, with its vast scope, will perhaps need time for reforms to happen and results to be visible. The key is to be patient, persistent and consistent.

References:

Hanushek, E. A., & Wößmann, L. (2007). *Education Quality and Economic Growth.* World Bank.

Hanushek, E. A., & Woessmann, L. (2010). *The High Cost of Low Educational Performance - The Long Run Economic Impact of Improving PISA Outcomes.* OECD.

Eric A Hanushek. (2015). *Education*, Economics of.

Joshi, V. (2016). *In India's Long Road: The Search for Prosperity*.

Coleman, J. S. (1966). *Equality of Educational Opportunity*. National Center for Educational Statistics, United States of America.

Data Sources:

PISA Score: World Bank

Per capita GNI: World Bank

Government Expenditure on Education (in absolute terms): UNESCO

Pupil-Teacher Ratio: UNESCO

The Personalisation Paradox

Shakthisree S shakthisree7@gmail.com
Raksha Batra rakshacbatra1234@gmail.com
Ritika Agarwal agarwalritika729@gmail.com

Abstract

Personalised advertisements have helped companies target their marketing efforts to the right audience. But how much personalisation is good? Can this ever backfire? Instances show that it doesn't take too long for personalised marketing to become intrusive. This paper attempts to draw this line and determine the factors that ring the privacy alarm in people and how organisations should be cautious of this. The paper concludes with the suggestion that companies must try more direct and transparent methods of data collection to earn the trust of its customers.

Keywords: Personalised Marketing, Privacy, Information Flow
Jel Classification: D03, D91, M31, M37

1. Introduction

'How did Target know that a teenage girl was pregnant even before her father?'

A few years ago, Target, a retailer in the United States, undertook a few measures for its promotion. It sent coupons for baby clothes, bottles, formula and cribs to all those women it inferred were pregnant, based on their consumption data. Among those ladies, was a teenage girl whose father yelled at the manager, 'Did you send this to my daughter? You are sending her ads for baby clothes. Are you trying to encourage her to get pregnant?' he asked. The manager apologized. However, after a few days, the father called the manager again, but this time to apologize as it turned out that the girl was actually pregnant and he was unaware of it due to lack of conversation between them.

Just by studying the shopping habits, Target created a model that could identify which women were pregnant. Not only this, based on the survey, it could even tell when the ladies were expecting their babies. But, at the end, this resulted in huge problems for Target. This perfectly exemplifies how consumers are vulnerable by sharing intimate details about themselves as they make purchases. Today, most companies have a "predictive analysis department" that studies customers' buying habits as well as personal habits in an attempt to more efficiently market to them.

Personalised marketing, as it is usually known, is a marketing strategy which targets ultimate consumers and focuses on their needs and wants. In past years, it has benefited a lot of companies to effectively target their customer's personal needs and interests. It not only helped in increasing sales but also in building a passionate audience and improved lead nurturing. According to a study conducted by Experian Marketing Services, "Personalised Marketing emails receive 29% higher open rates and 41% higher click-through rates than those without personalisation. Companies that used Personalised Marketing typically increase their total sales by approximately 19%". Additionally, 68% of marketers say personalisation based on behavioural data has a high impact on ROI, and 74% says it has high impact on engagement."

In a more recent survey conducted by BCG on personalization programs at more than 50 companies in ten industries, it was found that many companies are making significant investments in personalization: half of the survey respondents have more than 25 employees dedicated to personalization programs and are spending more than $5 million a year on personalization campaigns.

Thus, even as this intersection of data and human behavior is being increasingly exploited by companies, there is a high probability that their personalisation programs are turning intrusive and untrustworthy for the customers like in the case of Target. Through this study, we have attempted to understand the line that divides personalised ads and services from being useful to customers, to being unwanted and invasive.

2. Methodology

A questionnaire containing a combination of rate scale questions and preference questions was distributed to 77 undergraduate students to understand what triggered the privacy alarm in people. The acceptability and preference of respondents was intended to be measured on the following aspects:

- Nature of information source
- Inference of information
- Disclosure of purpose for which data is used
- Sensitive details like health conditions, sexual orientation etc.

2.1 Rate scale questions

Firstly a simple analysis of the rate scale questions was done to know which ones were positive (score greater than mean 2.5) and negative (score lesser than mean 2.5) to know what people found acceptable and what they did not.The next stage was to find out the precise factors and underlying reasons to explain why the respondents answered the way they did. For this purpose, the technique of Exploratory Factor Analysis (EFA) was employed on the rate scale questions using the statistical software R. Exploratory Factor Analysis is a statistical technique that is used to identify the latent relational structure among a set of variables and narrow down to smaller number of variables. The R code used to do the analysis is attached at the end.

2.2 Preference questions

Percentage of responses for a particular preference was measured to know the more popular choice.

3. Results

3.1 Rate scale questions

The chart below shows that the following questions got a positive score, i.e. people find these ways of data retrieval acceptable. Here the first three get a considerably large score than the last one.

- Facebook analyses the pages you like and the posts you share.
- Amazon recommends products based on your recent search history.
- Google analyses your viewing habits on YouTube to give personalised recommendations.
- Google analyses the contents of your email and tracks the spams which you consider important.

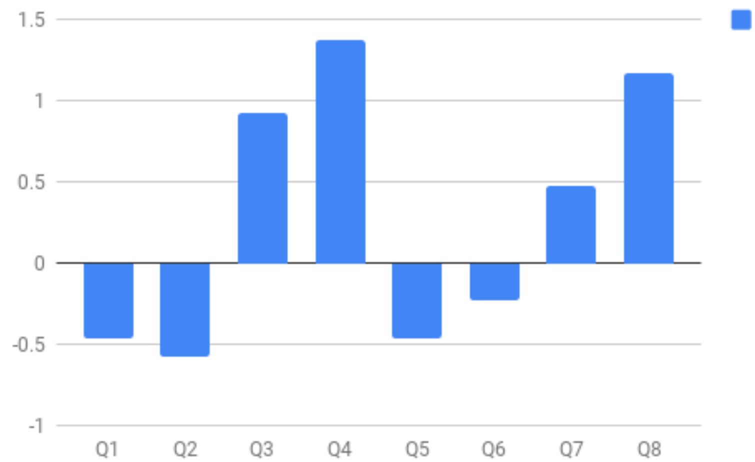

Chart 1

The questions that got a negative score, i.e. ways of data retrieval deemed unacceptable are

- When you are logged in Facebook, it can see every other website you visit.
- A website uses data about you, purchased from a third-party data broker.
- Credit card companies sell anonymous data of customers' buying habits.
- You are presented personalised ads related to your health/sexual orientation/finances.

3.2 Exploratory Factor Analysis (EFA)

Three factors were used for analysis. The results of the factor analysis is given below.

```
Uniquenesses:
   Q1    Q2    Q3    Q4    Q5    Q6    Q7    Q8
0.588 0.377 0.566 0.005 0.200 0.549 0.638 0.513

Loadings:
   Factor1 Factor2 Factor3
Q1 0.491   0.156   0.383
Q2 0.699   0.117   0.348
Q3 0.278   0.323   0.502
Q4 0.168   0.962   0.204
Q5 0.850   0.246   0.128
Q6 0.262   0.226   0.576
Q7 0.128   0.105   0.578
Q8 0.290   0.509   0.379

               Factor1 Factor2 Factor3
SS loadings      1.727   1.448   1.388
Proportion Var   0.216   0.181   0.173
Cumulative Var   0.216   0.397   0.570

Test of the hypothesis that 3 factors are sufficient.
The chi square statistic is 3.38 on 7 degrees of freedom.
The p-value is 0.848
```

Loadings:

	Factor1	Factor2	Factor3
Q1	0.491	0.156	0.383
Q2	0.699	0.117	0.348
Q3	0.278	0.323	0.502
Q4	0.168	0.962	0.204
Q5	0.850	0.246	0.128
Q6	0.262	0.226	0.576
Q7	0.128	0.105	0.578
Q8	0.290	0.509	0.379

The closer the factor loading is to 1, the more the question is correlated to that particular factor. Using this argument, we can classify the questions under each of the factors 1, 2 and 3.

Therefore, questions 1, 2 and 5 fall under Factor 1, question 4 and 8 fall under Factor 2, question 3, 6 and 7 fall under Factor 3.

FACTOR 1	FACTOR 2	FACTOR 3
Q1) When you are logged in Facebook, it can see every other website you visit.	Q4) Amazon recommends products based on your recent search history.	Q3)Facebook analyses the pages you like and the posts you share
Q2)A website uses data about you, purchased from a third-party data broker.	Q8) Google analyses your viewing habits on YouTube to give personalised recommendations.	Q6)You are presented personalised ads related to your health/sexual orientation/finances
Q5)Credit card companies sell anonymous data of customer's buying habits.		Q7)Google analyses the contents of your email and tracks the spams which you consider important

Table 1

3.3 Preference questions

- 48.1% of the respondents showed preference towards websites which display a message "We use data that we have about you to make our services better" while 51.9% did not show a preference towards such websites.
- 82.9% exhibited a belief that Netflix conducts a short online survey to ascertain one's preferences while 17.1% believed that Netflix deduces preferences from one's online activities.
- 88.3% showed a preference for an ad that has a message "You see this ad because of your past activities on our website" as opposed to 11.7% who showed a preference for a message "You see this because of your past activities on other third party websites".

4. Inference and Conclusion

Firstly, we can observe that people find ways in which websites directly use data based on their activity on their website acceptable. It does not cause a privacy concern. But, people find it highly unacceptable when ads contain personal and sensitive information about themselves. Also, when data is obtained without their knowledge and from third party sources, they find it unacceptable.

Under EFA, it is quite easy to identify the factors 1 and 2. Factor 1 could be "Third part information flow" and factor 2 could be "First part information flow and visible applicability of data". Putting a name to Factor 3 is not quite possible as no clear common thread binds the three questions under this factor.

As far as preferences go, we observe that almost 83% respondents prefer being presented with a short survey, which is the most direct way of getting information, over information being inferred from their activities. Secondly, almost 88% respondents prefer first party information flow. Lastly, 52% respondents like to be given a message about why a particular website is asking for certain information. But the small margin shows that obvious stating of reason behind data collection is not a hugely positive influence on people.

The inferences from the study show a few things very clearly. When organisations want to collect data from their customers and use it to personalise their marketing efforts they need to be cautious. Intimate information and third part information flow is highly unacceptable to the consumers. Companies must try more direct and transparent methods of data collection to earn the trust of its customers. Letting your customers know the reason behind collecting data could probably add to their positive sentiments towards the brand.

References

Galetto, M. (2018, March 08). *What Is Personalized Marketing? A Look at How Personalized Marketing Works, Benefits, Best Practices, and More*. Retrieved from: https://www.ngdata.com/what-is-personalized-marketing/

Abraham, M., Mitchelmore, S., Collins, S., Maness, J., Kistulinec, M., Khodabandeh, S., Hoeing, D., & Visser, J. (2017, May 08) *Profiting from Personalisation*. Retrieved from: https://www.bcg.com/publications/2017/retail-marketing-sales-profiting-personalization.aspx

Duhigg, C. (2012). *How Companies Learn Your Secrets*. Retrieved from: http://www.nytimes.com/2012/02/19/magazine/shopping-habits.html?pagewanted=1&_r=1&hp
Breinato, S.(2014). Pushing the limits of Personalisation. Harvard Business Review. Retrieved from: https://hbr.org/2014/09/pushing-the-limits-of-personalization

Tantry, S. (2016). *Making Personalised Marketing Work*. Harvard Business Review. Retrieved from: https://hbr.org/2016/02/making-personalized-marketing-work

Caramella, S.(2018) *Are You Creeping Out Customers? Here's How to Stop*. Retrieved from: https://www.businessnewsdaily.com/7908-creepy-online-ads.html

John, K. L., Kim, T., & Barasz, K. (2018). *Ads That Don't Overstep*. Harvard Business Review. Retrieved from:https://hbr.org/2018/01/ads-that-dont-overstep

Brain Drain and the Indian Student

Shivani Pandey iishivani@hotmail.com
Chetna H. Kumar chetnahkumar.online@gmail.com

Abstract

With an increasing number of aspirational middle class students, the number of undergraduate students from the field of humanities and social sciences from top universities of India emigrating abroad for higher education has been increasing. To find out the possible reasons for the same, a sample of 107 students were made to fill an online questionnaire, the results and implications of which have been discussed in the paper. The paper urges the government to step up higher education infrastructure in order to achieve well-rounded national brain gain.

Keywords: Higher Education, Financial Aid, Brain Drain

JEL Classification: I200, I220, I230, Y100

1. Introduction

The term "brain drain" was coined by the British Royal Society to refer to the exodus of scientists and technologists from the United Kingdom to the United States and Canada in the 1950s and 1960s (Cervantes and Guellec, 2002). However, over the years the term has evolved to mean the emigration of all highly skilled or educated human capital from developing to developed countries. In common parlance, though, "brain drain" is still mainly associated with the emigration of professionals working in Medicine or other STEM (Science, Technology, Engineering and Mathematics) fields and hence, much of the existing literature on this subject today largely deals with these trends. The present research aims to throw light on the growing inclination among academicians from the fields of humanities and social sciences from top universities of India to emigrate and the possible causes and effects of this trend.

The Indian brain drain story began in the 1990s, when the Indian-born population in the United States doubled (from one half to one million), with half of the increase being due to the arrival of highly skilled workers. To this day, Indians represent the bulk of H1-B visas holders in the United States, a visa category aimed at skilled professionals in sectors with occupational shortages (in practice, IT specialists). (-) The magnitude of Indian engineers and IT professionals migrating to the United States (and other developed countries) duly justifying the nation's long-held exclusive preoccupation with brain drain from these fields only. In fact, expatriated Indian engineers and IT professionals were even accused of being traitors to the national cause, for enhancing the economic performance of a foreign country at the expense of the development potential of the home country. It was a long time before the contribution of the resulting diaspora to the Indian growth miracle became acknowledged and celebrated. As then Prime Minister Manmohan Singh said, "Today we in India are experiencing the benefits of the reverse flow of income, investment and expertise from the global Indian diaspora. The problem of 'brain drain' has been converted happily into the opportunity of 'brain gain'." (Government of India, 2010).

Decades since the onset of the Indian brain drain phenomenon, it might now be fruitful to expand the range and scope of the term further. Over the last few years, the number of Indian students studying or wishing to study abroad has increased manifold. As per UNESCO's Report- Global Education Digest, 2009, 153,300 Indian students go abroad per year for higher studies. Therefore, rather than circumscribing the concept of brain drain to the emigration of engineers, IT professionals and health workers, this study aims to analyze the motivations driving a large number of social science graduates from top Indian universities to seek post-graduation courses from foreign countries. The present research also attempts to ascertain whether this trend qualifies as "brain drain" in its most pernicious form, wherein the emigrants go on to settle in the foreign country and contribute to its economy. The policy implications of the trends under study are also discussed.

2. Methodology

To ascertain the most prevalent reasons driving Indian students to pursue post-graduation from abroad, a survey was conducted. A sample of 107 subjects currently pursuing an undergraduate course in one of the social sciences or liberal arts subjects from across India were made to fill an online questionnaire to collect information about their preferences for post-graduate studies. Respondents pursuing a Bachelor's degree in mathematics, statistics, commerce, finance, pure sciences, technology, medicine or engineering were excluded from the sample to restrict the study only to the social sciences. The sample included respondents pursuing a bachelor's degree in economics, elementary education, political science, english, history, psychology, sociology, law, philosophy and business economics. Questions related to preferred geographical location, financial constraints and chances of permanent settlement abroad were included in the questionnaire. The questionnaire has been attached in the end for reference. Both qualitative and quantitative data were also collected from secondary sources viz. several reports, journals, magazines, web journals etc. pertaining to the field to further corroborate the survey findings with empirical data.

3. Results

The study revealed that 77.57% students responded affirmatively when asked whether they would like to pursue postgraduate education abroad. UK and USA emerged at the top of the preferred destinations for higher education (at 38% and 36.9% respectively), followed by Europe (19%). A small proportion of students (5.95%) mentioned other preferences such as Australia, Canada and Asia. Among those who were inclined towards pursuing post-graduation from a foreign country, a whopping 66.26% students cited 'Better quality of education (professors, curriculum, resources, infrastructure, etc.)' as the primary reason for this inclination. This was followed by 'Better job opportunities' (19.27%), 'Better lifestyle' (8.43%), 'Possibility of higher remuneration' (3.61%) and 'Better political environment' (2.40%). Among the respondents who did not wish to pursue post-graduation abroad, 63.41% students cited 'Too expensive' as the main deterrent. 19.51% respondents were civil-service aspirants who considered an Indian Masters degree to be better aligned with their career goals. Other reasons for this were 'Complicated admission procedure' (9.75%) and 'Fears of racial or other forms of discrimination' (7.31%). This sample did not observe 'Too far from family/home' as a cause for any student not wanting to study abroad. Interestingly, as many as 76.53% respondents said 'Yes' when asked if they would like to go abroad for further education if the financial costs were eliminated. 59.59% responded positively when asked whether they would permanently return to India after the completion of their postgraduate course abroad.

The key inferences made from the survey results were as follows:

A majority of the students wishing to pursue higher education abroad are driven by the promise of better pedagogy in the destination country. 66.26% students in the sample cited 'better quality of education in terms of professors, curriculum, resources and infrastructure' as the primary reason behind their inclination to emigrate. This result points to a widening expectation gap in the higher education sector in India; the high-performing Indian student is growing increasingly dissatisfied with the higher education options available to her/him.

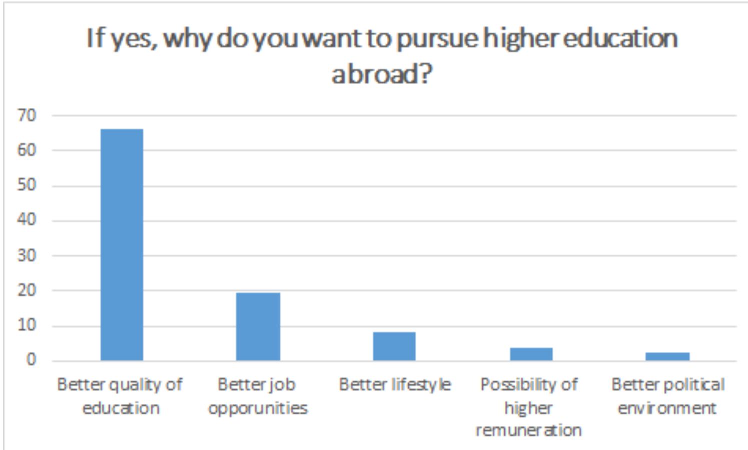

Chart 1

Among the students who do not wish to pursue higher education abroad, financial constraints emerged as the primary deterrent. 63.41% current graduate students from the sample cited 'Too expensive' as the reason behind their choice to not consider post-graduation options abroad. Moreover, as many as 76.93% respondents said 'Yes' and 14.28% said 'Maybe' when asked if they would opt for a post-graduation course abroad if financial costs were eliminated. These two results jointly point to the fact that the expenses associated with pursuing a foreign Masters degree (tuition fee, living costs, etc.) considerably affect a graduate student's decision in this regard. Eliminating this barrier from the picture may result in a reversal of the decision made; a foreign Masters degree is thus *revealed preferred* to a domestic Masters degree.

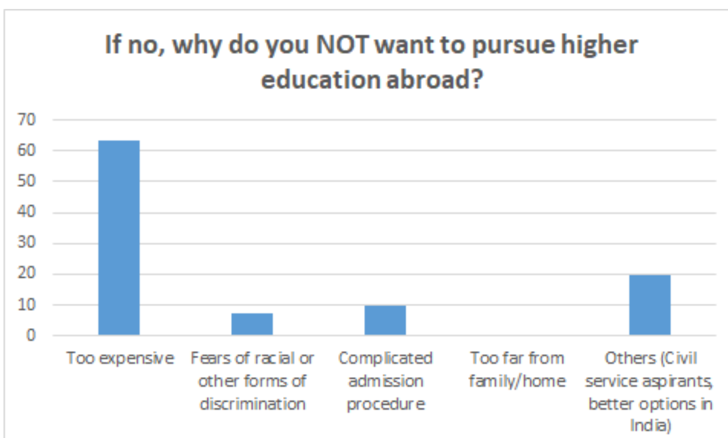

Chart 2

Finally, 59.59% respondents responded affirmatively when asked whether they would like to permanently return to India after completing their Masters course abroad; 26.26% said 'Maybe' and 14.14% said 'No'. This result bodes well for India as a sending country, as it is presented with the opportunity of high returns on investment in the form of a large quantum of highly skilled professionals returning from abroad to join the domestic workforce.

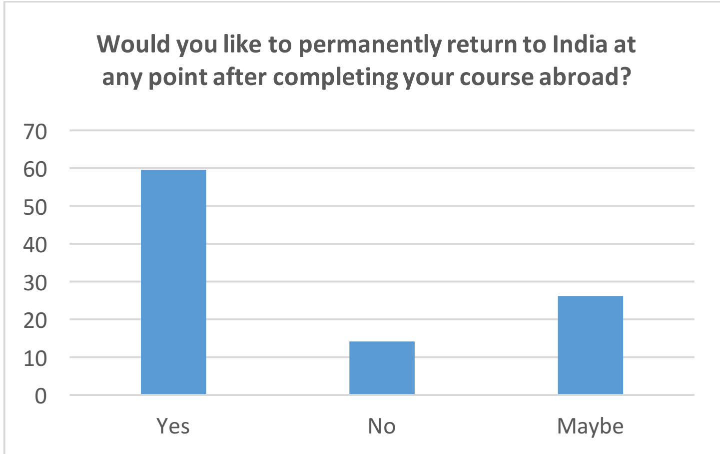

Chart 3

4. Analysis

With more than 75% of the students wishing to study abroad and almost 66% of the students dissatisfied with the higher educational facilities available in India, there is sufficient cause for concern. This calls for strengthening of higher educational facilities within the nation, as students going to study overseas costs the country close to $15 billion of forex annually as per estimates of Assocham. To this effect, the Government of India in its union budget for FY 2018-19, proposed ‘‘Revitalising Infrastructure and Systems in Education (RISE) by 2022’’ with the promise of total investment of Rs 1,00,000 crore in the next four years. However, no efforts have been made to promote research or improve infrastructure in social sciences or liberal arts universities in India. With India’s rising aspirational upper middle class, the problem of brain drain especially in the field of liberal arts and social sciences will only aggravate unless policy interventions are made immediately to improve educational facilities and infrastructure in universities.

With few scholarship options for a Masters’ program, the biggest hurdle for Indian students aiming to study abroad remains lack of adequate financial resources. In addition to the scholarship gap, there are no banks in India which provide interest-free education loans for students to pay for their Masters’ degree. The Central Government did launch an Interest Subsidy Scheme in 2009 which provides interest subsidy during the moratorium period i.e., which is generally the course period plus one year however it is only applicable for students whose annual parental income is up to Rs 4.5 lakh from all sources. The study results also reflect the fact that a large number of students stay back in India for post-graduation out of monetary compulsion rather than willingness. This presents a multi-faceted finance problem; students are being denied quality education available abroad due to lack of funding options offered by the government while at the same time, no investment is being made by the government at improving education facilities for liberal arts and social sciences colleges within the country. Meritorious students, aspiring civil servants and academicians wishing to pursue social sciences at the Master’s level are thus left at a disadvantage.

The survey reveals that approximately 60% of the students wish to permanently return to India after completing their Master’s program. Empirical data supports the result with almost the same number of students actually returning to India every year on completion of their Masters (Docquier & Rapoport, 2012) (Gibson & McKenzie , 2011) (Sen, 2016) (Burgess, 2001) program. However, more and more Indians are returning primarily due to a sloppy global economy wherein it becomes extremely difficult for emigrant students to find jobs abroad on the completion of their courses, increasing xenophobic tenor and rising visa barriers for Indians working abroad. The returning diaspora presents a valuable high-yielding investment opportunity for the Government, reinforcing the desirability of boosting investment in university resources, research infrastructure and quality of higher education in the social science fields.

5. Conclusion

As a concluding remark, it must be stated that the present state of non-STEM higher education infrastructure in the country and a persistent lack of investment in this area is doing a great disservice to the excellent students who expect and deserve more. On the one hand, the country is still struggling to ensure universal primary education and push down the dropout rates in rural government schools while on the other hand, it is faced with the reality of a large quantum of meritorious graduate students migrating to foreign countries in search of better education. Although recent education policies have shifted emphasis from elementary education to higher technical education, there is still no mention of adequate measures being taken to compensate promising students in non-technical fields. The widening gap in demand and supply thus highlighted must be closed through targeted investment and education policies catering to the dissatisfied social science graduate, in order to achieve well-rounded national brain gain.

References

Burgess, T. F. (2001, May). *A general introduction to the design of questionnaires for survey research.* Information systems services.

Docquier, F., & Rapoport, H. (2012). *Globalization, Brain Drain, and Development*. Journal of Economic Literature .

Gibson, J., & McKenzie , D. (2011). *Eight Questions about Brain Drain*. The Journal of Economic Perspectives, Vol. 25, No. 3, pp. 107-128.

Sen, D. (2016, December). *Higher education policies: The Indian experience since independence*. International Journal of Multidisciplinary Education and Research, pp. 15-21 .

Goyal, M. (2014, March 23). *Indian students with foreign degrees returning home: Lessons India can learn from China.* The Economic Times.

Ministry of Human Resource Development. (2009). Retrieved from Department of Higher Education: http://mhrd.gov.in/scholarships-education-loan-4

Pathak, V. (2018, February 1). *An initiative to step up research*

Can Money Buy Happiness? - An inquiry into the Nature and Causes of Happiness of Nations

Priyanka Dudeja priyankadudeja02@gmail.com

Abstract

This paper explores the concept of measuring the nation's well-being based on its citizens' well-being via the concept of National Happiness. The policies that a nation should adopt in order to take care of its citizens' well-being also depend on the factors impacting the happiness index. Therefore, the paper also explores the impact of few of the expected major factors affecting the happiness index namely Gross National Income per capita, the SDG index[1] (Health indicators), the Social Progress Index[2], Income Inequality and Employment Rate. The focal question is whether the material or economic well-being of a nation translates to a better life for the citizens and if yes, then to what extent.

Keywords: Happiness Index, National Income, Well-being, Development, Income Inequality.

JEL Classification Code:E20, E24

1. Introduction

"If the government cannot create happiness for its people, then there is no purpose for government to exist." – Bhutanese Legal Code, 1629

Gross National Happiness is a global indicator of progress which measures both sustainable economy and social development. It was born from the realization that the sole development of gross national product did not imply people's development since the benefits do not necessarily transfer to people equally in all cases. It also demonstrates the notion that money does not equal happiness and that material progress is not the utmost contributor to well-being.

Development in real terms should take a holistic approach towards notions of progress and give equal importance to non-economic aspect of well-being. Based on this idea, GNH revolves around seven major areas of wellness leading to sustainable development: Economic, Environmental, Physical, Mental, Workplace, Social and Political. Despite this, it is important to understand that growth and development are two different sides of a coin; whether economic growth trickles down in equal shares to even the poorest in a nation is a decisive factor for true and rounded development.

According to the official definition, the nine domains of GNH are psychological well-being, health, time use, education, cultural diversity and resilience, good governance, community vitality, ecological diversity and resilience, and living standards.

The variables thus used in the paper try to measure the impact of all these factors on the happiness index: national income, health and related facilities, social progress, distribution of income and employment opportunities.

So, should the governing body of a nation start focusing on the aforementioned factors at the opportunity cost of improving GDP? What should be the goal of the government then? If that is subjective, then what factors lead to variation in goals of different nations? If the short-term focus is improving social aspects, then how is the alignment with the long-term goal of growth possible? There is bound to be a tradeoff between social welfare and economic welfare policies. Based on the results perhaps we can judge the weights of each of the factors.

According to empirical expectations, national income is expected to impact the happiness index positively.However, income inequality definitely causes unhappiness for citizens and therefore decreases overall happiness. Improvement in social indicators is expected to increase the happiness level and thus, SDG index and SPI index both are expected to have a positive relationship with the happiness Index. Employment opportunities also lead to higher satisfaction among the masses and therefore the variable employment rate is also expected to increase happiness index. The relation between the variables is further explained in the following sub-sections.

2. Methodology

Regression model: Ordinary Least Squares.

Regression Equation: $Y= \alpha+\beta X$

Where, Y= Happiness Index is the dependent variable and X is the independent variables GNIPC, Gini coefficient, employment rate (percentage of working age population), SDG Index and SPI Index respectively. Analysis is based on the data of 40 countries, collected from sources mentioned at the end of the paper.

3. Results and Analysis

3.1 Gross National Income or Happiness?

We can start this debate by looking at the case of Bhutan-the pioneer of the happiness index. Despite scarce infrastructure and income accounting to one-fifth of that of the world, Bhutan is still one of the happiest nations of the world. Whereas on the other hand, there is a Japan where even an increasing level of income, five times that of Bhutan to be exact and the most modern of the facilities are not enough to please its citizens. This phenomenon is famously called the Easterlin Paradox which is the observation that economic growth does not always go together with increasing life satisfaction and an increasing income does not increase life satisfaction after a particular point.

The results indicated are statistically significant and display a positive relation between GNIPC and HI, which implies that an increasing GNIPC does increase HI. The magnitude of the impact

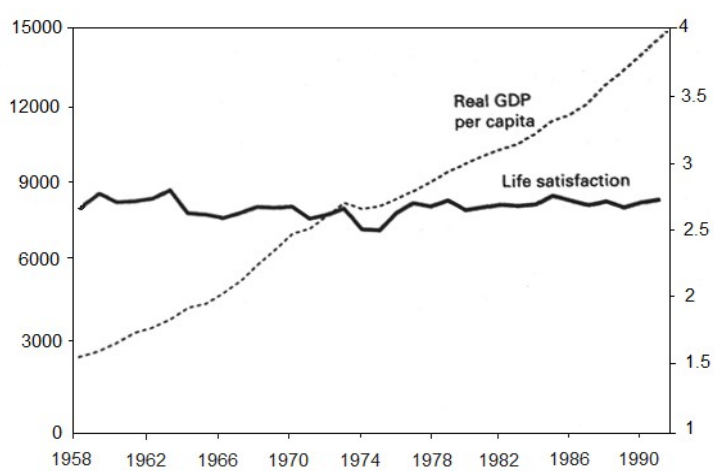

Exhibit 1: Easterlin Paradox—Evidence from Japan 1958–1991

Source: Frey, Bruno S., *Happiness: A Revolution in Economics*

is measured by the coefficient 3.77059e-05 and is positive which is considerably minimal implying that the impact of the variable GNIPC on HI is not very large.

Model 1: OLS, using observations 1-40

Dependent variable: HI

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	4.97063	0.180488	27.54	<0.0001	***
GNIPC	3.77059e-05	4.39368e-06	8.582	<0.0001	***

Mean dependent var	6.248288	S.D. dependent var	1.091878
Sum squared resid	15.82503	S.E. of regression	0.645328
R-squared	0.659646	Adjusted R-squared	0.650689
F(1, 38)	73.64833	P-value(F)	2.00e-10
Log-likelihood	−38.21181	Akaike criterion	80.42361
Schwarz criterion	83.80137	Hannan-Quinn	81.64490

3.2 Effect of distribution of Income on Happiness:

Model 2: OLS, using observations 1-40

Dependent variable: HI

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	7.74491	0.714142	10.85	<0.0001	***
IncomeInequality	−4.18343	1.94212	−2.154	0.0376	**

Mean dependent var	6.248288	S.D. dependent var	1.091878
Sum squared resid	41.43621	S.E. of regression	1.044235
R-squared	0.108817	Adjusted R-squared	0.085365
F(1, 38)	4.639946	P-value(F)	0.037642
Log-likelihood	−57.46306	Akaike criterion	118.9261
Schwarz criterion	122.3039	Hannan-Quinn	120.1474

A statistically significant coefficient of -4.18343 implies that an increase in the income inequality by one unit decreases the happiness level by approximately 4 units which is a very drastic magnitude of change. This clearly proves correct the notion that it is not actually the pie but the distribution of the pie that leads to ultimate satisfaction in the economy.

According to studies based on empirical evidence, income inequality and happiness exhibit an inverted U-shaped relationship (Yu and Wang, 2017). The same study with the use of a longitudinal dataset from US(1972-2010) and a cross-sectional dataset from Europe exhibits the following graphical relationship with the data collected on Gini coefficient and happiness level:

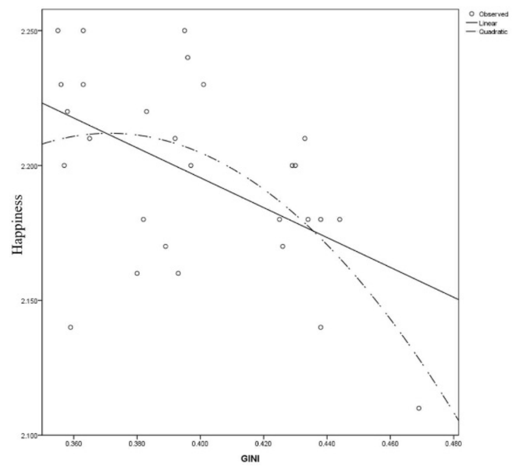

Exhibit 2: Gini-happiness curve for the United States

The rising income of richer co-nationals leads to a sense of financial optimism and ignites expectations of other individuals providing them with a sense of happiness, this explains the initial upward slope of the curve. The curve starts going down after one point until finally the gap grows representing a lack of opportunities and the jealousy effect.

3.3 Employment leads to Satisfaction?

Model 3: OLS, using observations 1-40
Dependent variable: HI

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	2.47094	1.04404	2.367	0.0231	**
EmploymentRate	0.0559236	0.0152957	3.656	0.0008	***

Mean dependent var	6.248288	S.D. dependent var	1.091878
Sum squared resid	34.39594	S.E. of regression	0.951397
R-squared	0.260235	Adjusted R-squared	0.240767
F(1, 38)	13.36763	P-value(F)	0.000772
Log-likelihood	−53.73872	Akaike criterion	111.4774
Schwarz criterion	114.8552	Hannan-Quinn	112.6987

The employment rate also positively affects the gross happiness level in an economy. This implies that the government should also work on creating ample work opportunities for citizens. As in the case of India, economic progress did not implicitly ensure employment opportunities. Therefore, lack of employment is one of the major causes for dissatisfaction amongst masses in India. Testimony to this, are the statistics where employment in the formal sector is only about 10% of the total employment in the country and 80% of the whole labor force is only able to land casual employment opportunities.

3.4 **Social Progress: A Pathway to Well- Being**

Model 4: OLS, using observations 1-40
Dependent variable: HI

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	0.640919	0.695173	0.9220	0.3624	
SPI	0.0709973	0.00870009	8.161	<0.0001	***

Mean dependent var	6.248288	S.D. dependent var	1.091878
Sum squared resid	16.89230	S.E. of regression	0.666734
R-squared	0.636691	Adjusted R-squared	0.627131
F(1, 38)	66.59425	P-value(F)	7.02e-10
Log-likelihood	−39.51711	Akaike criterion	83.03423
Schwarz criterion	86.41199	Hannan-Quinn	84.25552

With a strong R-squared of approx. 64% and a positive coefficient of 0.7 it is at least established now that social progress has a strong role say in the determination of citizens' satisfaction level. This result implies that it is social progress in terms of equality, inclusion, sustainability, personal freedom, safety and environment that increases the citizens' well-being the most.

3.5 **Health ensures Happiness**

Model 5: OLS, using observations 1-40
Dependent variable: HI

	Coefficient	*Std. Error*	*t-ratio*	*p-value*	
const	0.124109	0.977762	0.1269	0.8997	
SDGNew	0.0845618	0.0133950	6.313	<0.0001	***

Mean dependent var	6.248288	S.D. dependent var	1.091878
Sum squared resid	22.69441	S.E. of regression	0.772801
R-squared	0.511903	Adjusted R-squared	0.499059
F(1, 38)	39.85344	P-value(F)	2.12e-07
Log-likelihood	−45.42232	Akaike criterion	94.84465
Schwarz criterion	98.22240	Hannan-Quinn	96.06594

Here also, as the results are statistically significant, a positive coefficient implies the SDG health indicators affect the happiness index positively. Absence of diseases, violence and hunger and the availability of facilities such as sanitation and water do affect the standard of living at the very core and therefore are bound to have an impact on citizens' satisfaction level.

4. Conclusion

The regression analysis concludes that social factors do have the largest impact on the citizens' well-being followed by health and employment respectively. Income, on the other hand has a minimalistic effect on the overall life satisfaction of citizens. Income inequality plays a very important role among all these factors and is deemed to be the main economic cause of overall dissatisfaction and unhappiness in the economy. The paper does acknowledge that GNIPC is an average distorted by extreme values. Therefore it may not be a very good indicator of an all-inclusive progress of a nation.

Hence, for rounded growth and development governments must consider the Happiness Index. Despite the measure's positives it may host certain drawbacks that must be considered while taking it in consideration; the index may not be the most accurate as it has the possibility of being affected by the moods and whims of those being surveyed.

References

Reinert S., Humphrey T. and Safran B. (March 11, 2015), *"Bhutan: Governing for Happiness."*, Harvard Business School

Ortiz-Ospina E. and Roser M. (2013) Our World in Data, "*Happiness and Life Satisfaction*" Retrieved from https://ourworldindata.org/happiness-and-life-satisfaction

Ura K., Alkire S. and Zangmo T. (2014): *"GNH and GNH Index:OPHI"*, The center for Bhutan Studies Retrieved from http://www.ophi.org.uk/wp-content/uploads/Ura-et-al-Bhutan-Happiness-Chapter.pdf

Yu Z and Wang F. (November 24, 2017), *Frontiers, "Income Inequality and Happiness: An Inverted U-Shaped Curve"*, Retrieved from https://www.frontiersin.org/articles/10.3389/fpsyg.2017.02052/full

Frey B. and Stutzer A. (2002) *"Happiness and Economics: How the Economy and Institutions Affect Human Well-Being",* Princeton University Press,

Derek B. (2010), . Princeton University Press, *"The Politics of Happiness: What Government Can Learn from the New Research on Well-Being"*

Data sources:

Happiness Index: Gallup World Poll, World Happiness Report 2017 http://worldhappiness.report/ed/2017/

Gross National Income Per Capita: World Development Indicator Database, World Bank https://data.worldbank.org/indicator/NY.GNP.PCAP.CD

SDG Index: SDG Index and Dashboards http://www.sdgindex.org/

SPI: Social Progress Index 2017 www.socialprogressindex.com

GINI Coefficient: OECD Data https://data.oecd.org/inequality/income-inequality.htm

Working Age Population (% of total population): OECD Data https://data.oecd.org/emp/employment-rate.htm

The Big Read

This column aims to make the journal even more engaging and stimulating by providing a platform to voice opinions on the happenings of the world and the contemporary economic environment. The column hosts opinion pieces that are succinct, hard-hitting and portray the students' perspectives on a vast array of topics which are of paramount significance in the present times.

Economics of Climate Change

Pratishtha pratishthakohli@ymail.com

You can see it in the sky above us, feel it in the air you breathe, sense it all around you. Unfortunately, it is not as poetic as we would like it to be. Climate change has detrimental impacts on all walks of life. Global warming would harm agriculture, trade and even manufacturing to a large extent. Everyone would bear the consequences but it would be harder for the poor to cope up, given the lack of monetary resources and political power unlike the upper classes. When talking of solutions, a major bone of contention is whether to go for a prescriptive approach or alternatively, a market-based approach. While it is always beneficial to go for a balance between the two, I personally find market-oriented approach more reliable. It is true that the invisible hand cannot guide us to all solutions but emission taxes, pollution permits, lack flexibility. For the poor, who might not have a cleaner energy source, paying emission taxes would not be feasible. Prescriptive approach limits the solutions to the emitter. Consumers who can afford it might not wither, given the rationale that they are 'paying for the service'. The market-based approach isn't devoid of loopholes, but it gives the incentive to reduce emissions as much as possible and not stick to a certain standard. The prescriptive approach might work well for a developed economy but for a country like India, where the legal frameworks are not strong enough, relying on prescriptions would be an unwise step to take.

Artificial Intelligence

Amol Singh Raswan amolraswan@gmail.com
Shri Ram College of Commerce

While technological change has already started putting millions of people out of job around the world, the process will be made even faster with the advent of artificially intelligent machines. In such a scenario, a capitalist system of production will lead to an increase in income inequality; while huge chunks of labour will be put out of work, owners of capital will see their incomes go up. However, such a system would be unsustainable: possibility of (violent) protests against widespread unemployment and a fall in aggregate demand (due to low consumption demand) will put downward pressure on production.

What could be tenable is a shift towards a socialist mode of production wherein such labour-displacing capital would be owned by the community as a whole. In this scenario, the effects of unemployment on income would be mitigated and humans will be able to use technology in a much more equitable manner. However, there are alternatives. Emergence of a strong welfare state coupled with a policy like universal basic income (UBI) could make capitalism sustainable by shoring up consumption demand and making unemployment bearable. A major hurdle to UBI is resource mobilization; this could possibly be overcome through taxation on robot income (to be paid by the businesses). After all, since labour income is taxed today, it seems sensible to tax the income “earned” by robots during the production process as well.

What course the future takes cannot be predicted for now. However, is it not this unpredictability that makes the present times so exciting to live in?

Big Data Analytics and Privacy

Iksha Gupta itiksha2311@gmail.com

Big data analytics, an emerging field, is all about a process of collecting, organising and analysing large sets of data, called big data. It is helpful in discovering patterns and other useful information to identify data that is most important to the business and future business decisions of an organisation. Today’s advances in big data enable researchers to decode human DNA in minutes, predict terrorist attacks, determine which gene is likely to be responsible for certain diseases and, of course, which ads one is most likely to respond to on social media. Despite substantial advantages, big data analytics poses a grave threat to the privacy of millions of individuals.

The approach to collection of big data is unethical as the people remain uninformed about the fact that their personal data, which they may or may not have consented to share, is being used for commercial reasons. This leads to another question of whether the unethically collected personal data is in credible hands or not. If not, then this personal information can be simply misused for committing immoral activities. Social networking sites, the most relevant example in today’s context, have violated millions of users globally by infringing upon their privacy for making profits for their businesses.

A step to protect oneself from this attack on privacy, one needs to first become aware that their privacy is being infringed upon and secondly, assess whether the pros of such big data use outweigh the cons of the same.

Turmoil in ‘Sabka Saath, Sabka Vikaas’

Noor Kumar noor.kumar@gmail.com

The agrarian sector is an integral part of the socio-economic fabric of India. Since almost 47% of India’s workforce is engaged in agriculture, unless this sector performs well, Modi’s utopian vision is unattainable. In 2014, the National Crime Records Bureau of India reported 5,650 farmer suicides. Each death points to frequent crop failure, absence of modern irrigation measures, attacks by pests and insects, unreliable monsoons and a bare minimum support price. Moreover, according to NCRB, 80 percent of the farmers who committed suicide due to debt and bankruptcy had taken loans from banks or microfinance institutions (which were ironically started to facilitate easier credit processes for them).

As a result, the country has seen a sea of farmers protest on numerous occasions to demand a remunerative price for their crops, unconditional loan waivers, legal transfers of forestlands by effective implementation of the Forest Rights Act and equitable access to modern irrigation and electricity facilities. Moreover, agri-GDP growth has fallen to around 2 per cent per annum in the first four years of the Modi government, much below the Centre’s target and much lesser than what previous governments achieved. The real incomes of farmers have fallen as well and the government's aim to double farmers' incomes by 2022 seems unfeasible based on current analysis and projections.

All this paints quite a gory picture. With increase in farmer suicides, farm output reaches its lowest, and industrial inputs see a decline, thereby affecting the GDP drastically. Moreover, India's trading potential suffers due to fall in exports from the agrarian sector. Hence, farmer suicides create a domino effect that cripples all sectors and participants in the economy. The Centre must recognize, now more than ever, that its time to prioritize and move beyond creating and selling the image of an ideal, popular, pseudo secular and 'nationalist' state.

Till Debt Tear Us Apart

Priyanka Bareja priyabareja98@gmail.com

India, being an agrarian state, depends largely on the climate for its "Gross National Happiness" and it is not hard to imagine what a misbalance in the climatic conditions could do to our GDH as well as GDP. The recent farmer suicides are a "succinct mirror" of India's rather "obligatory over-dependence" on farming. Rather than dwelling on the depressing statistics, it is logical to study its implications on India's economy and trading potential.

Cotton and other cash crops make a large component of India's exports and the suicides of a tremendously huge number of producers of these crops will, no doubt, lead to a significant fall in the GDP. Furthermore, a vicious cycle of debts, apart from bringing future savings down to zero, forces families of farmers to a life of "disease and despair". A negative growth in the farm sector means corresponding fall in the rural purchasing power. Since the rural population in India is around 70% of the total population, any adverse impact on its purchasing power directly results in the loss of profit for the corporate sector. The entire burden of breadwinning falls on the lady, who is, in most cases, just an "under-confident, inexperienced and insecure" worker. The financial burden leads to the children's "involuntary" withdrawal from education, and this is undoubtedly the greatest possible harm to not just Indian, but any economy and its trading potential.

A major decline in the supply of food grains and other agro goods, leads to a sharp hike in prices of grains and related products. This causes a pronounced rise in the CPI, thereby further misbalancing Indian economy. To make matters worse, farms are confiscated by moneylenders, thus strangulating farmers' families' avenues for revival and indirectly, it leads to abandoning the practice of farming. This would eventually impel our trade partners to look for alternative options, thereby further degrading our trade opportunities.

No Indian can deny that each one of us who eats has a stake in small farmers' well-being. And undoubtedly, reflecting upon just the "economic aspect" of the problem would be to run away from our responsibility as Indians. A more empathic and holistic approach is indeed required to get to the core of this evil and uproot it. The Government and NGO's would have to take the initiative, which is inevitably required.

Book Review

Books and Documentary Review Club, LSR

Predictably Irrational

Predictably Irrational: The Hidden Forces that Shape our Decisions is a 2008 book by Dan Ariely which centers on the current hot topic of Behavioural Economics. This book is full of examples and theories that refute the common assumption that human beings are fundamentally "rational". Blending everyday experience with ground breaking research, Ariely very deftly shows that what really influences decisions in our daily life is not just what we think, but a whole gamut of irrational factors like expectations, emotions, stereotypes, heuristics and biases and social norms among other things which skew our reasoning abilities.

In the book, he explores and explains that human beings not only make astonishingly simple mistakes but continue to make the same type of mistakes. We consistently tend to procrastinate, overvalue our possessions, indulge in impulsive shopping, all being ignorant of the driving force behind our actions. But Ariely stresses that all these behaviours are not "random or senseless"- they are systematic and predictable- making us "Predictably Irrational".

To study the effect of "zero cost" or providing a consumer a product for "free" they sold Lindt at heavily discounted rates and Hersheys Kisses for free, turned out that mostly people chose Kisses even though choosing Lindt was logically a more profitable choice. When something is given for free, it gives us an emotional charge and we being intrinsically afraid of loss, we tend to pick up the free product even when we know we will not use it. When we pay for a product, there is a risk involved- of making a poor choice, but when it is free, there is no fear of losing anything. The marketers exploit this "Zero Price Effect" convincing us to buy something we don't need in order to collect a free gift. Ever shopped for an extra book on Amazon just to avail "Free delivery"?

To study why we overvalue things we own he conducted an experiment where people were asked to put up something like their beloved van for sale. He analyses that the emotions we attach to our possessions and the experiences we have with it hold us back in giving it up, thus we end up exorbitantly overvaluing the van. We only look at the loss of the van and the innumerable memories that we made in it while on family trips or vacations, unwilling to even consider the possibilities of gaining something else with the money received from the sale. As is rightly said, the pain from loss is much greater than the happiness derived from a gain.

Through myriad such experiments conducted to examine human behaviour, this book explains how to break through these systematic patterns of irrationality and make better decisions; whether in the social or the market world. It just makes you think about your own behaviour in ways you haven't before. It compels you to observe more closely, the everyday happenings around you and each chapter leaves you with greater. Predictably Irrational is a far more revolutionary book than its unthreatening manner lets on. The book is written in a very lucid manner, making it very simple to understand. Although it is an easy read, it is not the kind to read in a sitting or two; each chapter and experiment is to be savoured fully and then digested slowly to comprehend the predictably irrational side of the self.