HEAD OF DEPARTMENT'S NOTE

Expression of thoughts, flowing out of understanding and reasoning when penned down with the right intentions, has the power to change the world. A small quote may be equivalent to a thousand books in terms of impact. However small a water drop may be, its moisture is enough to transform a tiny seed into a prosperous plant.

With yet another year gone by, Aapoorti has shown signs of maturity in all perspectives. With great pride, I must say that the present volume is definitely an addition to the perfection it has already achieved. The content and theme of the contributions talk of the vastness and diversity of topics it includes. Ranging from the basic concept of GDP to many modern economic theories, the current volume of the journal embraces almost all the theoretical and practical aspects of Economics. The most debated and controversial issues like cash transfers, inclusive growth, trade agreements and globalization are discussed in depth and analyzed by our young scholars with great ease, which shows the awareness and cognizance of our student community. It has also been very encouraging to see the first year students use this platform to express their understanding of basic concepts of economics and their experiments with the subject.

The present volume has received contributions from not only colleges of Delhi University but also from universities in and outside the country. Ambedkar University, St. Xavier's Mumbai, IMT Hyderabad, Lahore University of Management Sciences and University of Dhaka are few names that must be mentioned. The way our students have worked to mobilize and coax their peers and student community from outside to writing for the journal is praiseworthy, I congratulate them for their efforts and endeavor.

Students have also penned down their interaction with two eminent personalities: Prof. Pulapre Balakrishnan (a well-known economist of the time) and Prof. Subir Gokarn (Ex-Deputy Governor of RBI). The memory of the day when they went to meet Prof. Balakrishnan is still afresh in my mind. Their excitement was palpable and on its peak and their queries were endless. Their industrious effort to arrange for an interview with such an eminent personality was in itself a victory. But their true success was the feeling of content and satiation they felt after the interaction. They were feeling full and answered but were still ready to dig deep into the issues. The intensity of their endless thirst for knowledge was something I could not quantify; I myself felt sinking deep into it. I am sure these interactions and experiences when read by others will have the same impact. This stream of knowledge will definitely become the source of other streams and fountains; some may flow in the opposite directions.

My heartiest congratulations to all those who have contributed to the current volume of the journal. At the same time I also want to encourage others to develop a taste for writing. I believe we all have a lot to say. Inside all of us there is the need and the desire to be heard, and nothing is more convenient and impressive than writing. Try to express yourself. Just scribble on the paper, you never know what you will create. Do not be scared of rejections and mistakes. Rejections are the first step to selection.

With immense pleasure and pride, I want to congratulate the entire editorial team for their endless efforts, coordination and excellent work in shaping the new issue of Aapoorti in its present form. I am eagerly anticipating holding this new volume of Aapoorti in my hand. I am sure our efforts would serve to carry forward the torch of knowledge and eliminate the darkness of nescience that pervades the world.

With warm regards,
Bhupinder Kaur
Head of Department (Economics)

ACKNOWLEDGEMENT

Our special thanks to Ms. Bhupinder Kaur, the Head of the Department, for her guidance and encouragement. We are also obliged to Ms. Nandini Dutta for her invaluable inputs and suggestions throughout the year. Our heartfelt gratitude to Raavi Aggarwal, President of the Economics society, for her enthusiasm and unflinching support for the journal. We are indebted to Ruby Mittal, the creative head of Arthashastra, Ritisha Mishra and the entire creative team for their indispensable contribution towards designing the cover of the journal. We extend our sincere thanks to all the authors whose contributions made this journal possible.We would also like to thank Dr Subir Gokarn and Dr Pulapre Balakrishnan who took time out of their busy schedule and obliged us with an interview.

Last, but not the least, we would like to thank our readers for receiving the previous editions so well and for enthusiastically awaiting the fifth edition.

To others without whom the journal would not have materialized, we extend our sincere gratitude.

The Editorial Team
Aapoorti

Note: We assume full responsibility for any remaining errors. Also, please note that the institution has been mentioned for authors who are not of Miranda House. The rest should be supposed to be from the Economics Department, Miranda House.

EDITOR' S NOTE

Until one finds his true calling in life, contentment evades him. And when he does, fulfillment. This is what our journey with Aapoorti has been; one of fulfillment and contentment. With yet another year gone by, we have tried to break the boundaries and transcend the success that Aapoorti has achieved in the past. The fifth edition is yet another step in the long journey, we hope, the journal will traverse.

In this world of fast paced technological innovations, when the digital media is taking over the print, we still believe that there are those who revel in the old world charm of the parchment. A true reader enjoys the smell of a new book, the crispness of its pages, the weight of the words therein reflected in its girth and this intellectual exuberance is what Aapoorti aims to provide to its readers. Born out of a need to provide a platform for undergraduate students to voice their opinions, the fifth edition of Aapoorti has achieved yet another milestone through the introduction of a research section that includes coherently and well-presented analyses of seemingly obscure topics like Econophysics. It has been instrumental in enabling students to break the rut and creatively present their analysis and perhaps think what nobody else has thought before. The response to our call for articles and research papers has been overwhelming with contributions from across the border and thus, bringing forth a myriad of opinions and perspectives. The topics covered in the journal are multifarious, ranging from world affairs to topical issues like the Jan Dhan Yojna and Niti Ayog.

This year, after much deliberation, the editor's desk brings to you the theme, ' Transitus: The Next Step Forward' . It was the Great Depression of 1929 that made Keynes question the existing paradigm of the policy of ' Laissez faire' on which classical economics rested. Over the recent years, rising wealth and income inequality has prompted development of new theories. Conventional theoretical perspectives on inequality like the Kuznets hypothesis have been undermined by new theories such as those of Piketty. In the same light, Mazzucato' s work on the public sector and its role in innovation has defied conventional wisdom. Hardin' s long-standing theory of the ' tragedy of the commons' has been debunked by Elinor Ostrom' s paper on common pool resource management.The essence of economics lies in its ability to learn from the past, adapt to the present and "predict" the future and theinterminable cycle continues. Dynamism is a function of change and so is economics. Evolution of new theories is intrinsic to economics and the theme of the journal revolves around it.

It was a matter of great privilege to serve as the Chief Editors for the fifth edition of Aapoorti. The responsibility was immense and the journey was beautiful. We would like to particularly thank Swaril Dania who stood as a pillar and selflessly supported us in all our endeavors and the entire editorial team without whom the journal would not have materialized. We hope the readers experience as much bliss reading the journal as we had compiling it.

As we bid adieu to the yester year and hand over the responsibility, we hope that this edition of the journal serves as a benchmark for the future editions and Aapoorti experiences the apogee of success.

Chief Editors

Surbhi Ghai, Debasmita Padhi

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INDIANOMICS

Is Spending Enough? Examining State Development Strategies in India

Aniket Baksy,

St. Stephen's College

Summary: *Low share of social sector spending and investments in human capital formation in overall GDP are believed to be the key factors responsible for inequalities within Indian states. This essay addresses the question of whether higher expenditure shares alone can help India's underperforming states overcome these challenges, by studying the methods India's best performing states adopted. It shows that beyond the actual volume of funds utilised, it is the nature of public institutions and incentives these states created, implemented and maintained which have enabled them to leverage existing bureaucracies towards their objectives. Simply, it isn't how much these states have spent, but how they've spent it.*

Inequality within India's states exists along a multitude of socio-economic dimensions, posing severe challenges for domestic socio-political stability[1]. It is often alleged that low shares of social sector spending and investments in human capital formation in overall GDP are the key factors responsible for such inequalities (Drèze & Sen, 2013). In this essay, I address the question of whether higher expenditure shares alone can help India's underperforming states overcome these challenges, by studying the methods India's best performing states adopted. I try to show that beyond the actual volume of funds utilised, it is the nature of public institutions and incentives these states created, implemented and maintained which have enabled them to leverage existing bureaucracies towards their objectives. Simply, it isn't how much these states have spent, but how they've spent it.

Much criticism of the Indian State focuses on *underinvestment* in essential public services, without adequate recognition of the dysfunctionality of India's bureaucracy (for instance, see (Chandra, 2010))[2]. Comparisons with the BRICS nations, particularly China, and the OECD nations on the levels of Public Investment in Health and Education are often evoked to justify such claims (Drèze & Sen, 2013). These critiques are not baseless. India's investments in human capital formation as a fraction of its GDP are indeed low[3], and the reallocation of public expenditures to education and health[4] from relatively more wasteful subsidies, including those on non-merit goods such as cooking gas, is an important component of any policy recommendation targeting sustained growth in the economy.

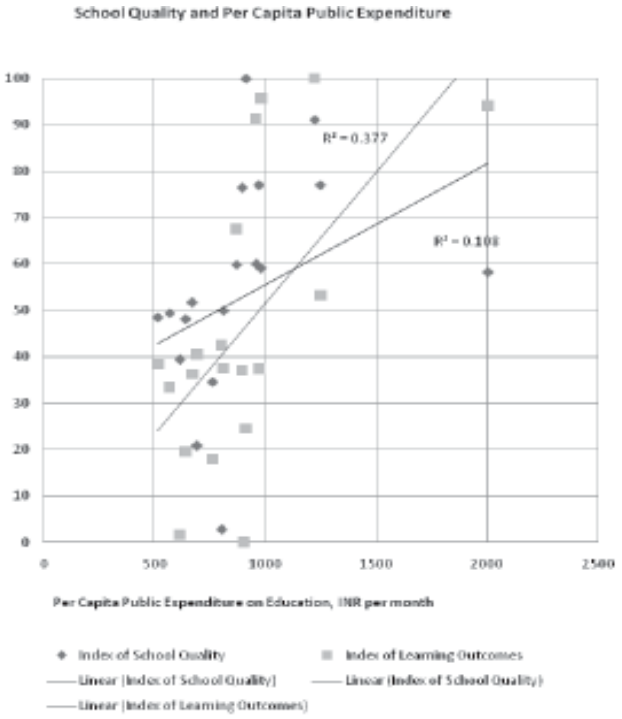
However, the examples of Kerala, Himachal Pradesh and Tamil Nadu, states recording rapid growth from a low base, appear to contradict the idea that the *magnitude* of expenditure, or even expenditures as a fraction of income, has been a factor in translating policy into outcome. Bihar has among the highest fractions of GSDP allocated to healthcare – and yet, Bihar's progress on health indices has been limited at best[5]. Public Expenditure per capita in Education has been steadily *rising*; the SarvaShikshaAbhiyan (SSA)'s allocations have risen by 360% between 2005-06 and 2011-12, even as India's education budget has more than doubled between 2007-8 and 2012-13, with an average allocation of INR 11,509 per student[6](Aiyar, 2014). Minimal progress in human capital formation must then be tied to other factors, and the political economy of modern India must feature in the evidently misplaced priorities of the state. Policymakers are failing to focus on *Outcome* and *Access* indicators of actual progress: the absence of a close relationship, noted above, indicates that in India, allocations at the

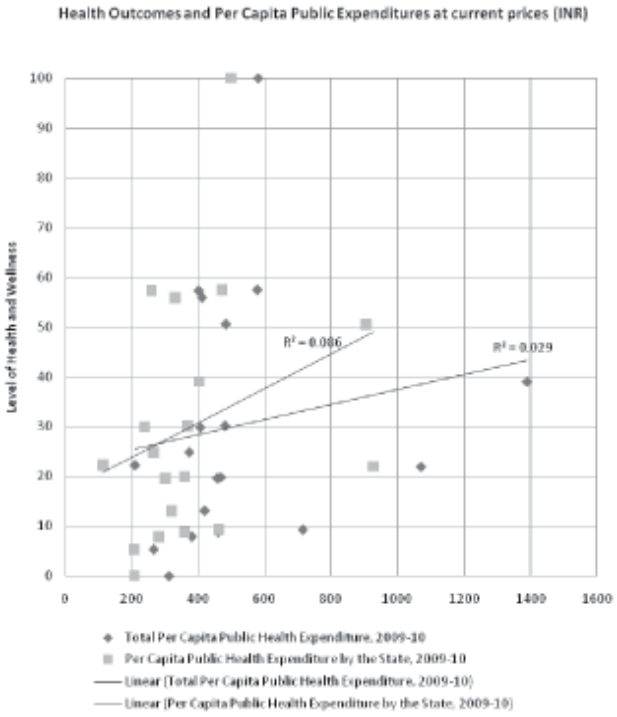
national level, even at the State level, are delinked from *local* outcomes[7], thus indicating the adverse nature of a centralised, essentially "top-down" approach to development policy. Worryingly, policymaking is increasingly being driven by *intent*: showcasing achievements in terms of high allocations to signal commitment, paying little attention to the translation of these allocations to on-ground results[8].

An analysis of the institutional regime surrounding education and healthcare programmes in India, along with the direction and allocation of expenditures is revealing. Massive shares of the budget spent on education are spent on "improving infrastructure", when successive ASER reports indicate clearly that India has built enough schools, achieved near universal enrolment and appointed a sufficiently large teaching and administrative support staff. Minimal efforts have been undertaken to improve teaching quality and skills, despite successive ASER reports indicating stagnant, if not falling, learning outcomes[9].43% of the SarvaShikshaAbhiyan (SSA) budget is allocated as compensation for teachers, while improvements in teaching quality receive 2%. Measures of School Infrastructure Quality[10] and learning outcomes[11] are only poorly correlated[12]with per capita public expenditure on education[13].

If anything, the correlations are worse in the dimension of health, although they remain positive[14].In states scoring poorly relative to their GSDP levels on healthcare, the Urban Allopathic Health Service expenditure is nearly twice that of the Rural Allopathic Health Service Expenditure, reflecting a clear urban bias in public service provision in India[15]. Unlike in Education, health infrastructure is indeed lacking across India, and yet, health expenditure on Capital account(broadly reflecting expenditure on health infrastructure) has *declined* as a fraction of total health expenditure(although the data indicate that the ratio is somewhat higher in the poorest states, including Uttar Pradesh[16])(Bhat & Jain, 2004).

Evidently, for Socio-Economic Development, high levels of per-capita fund allocation are neither necessary, nor sufficient[17]. On the Education front, Kerala and Tamil Nadu actually have among India's lowest per-student public expenditures on education – despite their exemplary performance on provisioning of education[18]. What is necessary is the existence of a set of established institutions, which can generate and enforce accountability in governance, translate allocations into outcomes, and which are able to tackle established socio-economic barriers to the success of these programmes. It is useful to digress and review the stories of some of India's States that have succeeded in doing this.





In Kerala, very high literacy rates are partly the legacy of efforts by the British State and Christian Missionaries; however, the key thrust came after the election of a Communist Government in the 1960s, among whose key aims was the achievement of "total literacy." The Leftist People's Science Movement recruited volunteers whose goal was to spread education; the movement mobilised 20,000 people, sending them out to teach through methods involving the "concrete problems of their lives." The poor were provided scholarships, as were traditionally backwards communities and the lower castes. Perhaps most significantly, violent Caste Reform movements and a militant new communist cadre helped in dismantling the hegemonic caste system in the State.

The Experiment, first attempted in Ernakulam, worked: by 1990, Ernakulam was declared India's first Totally Literate District, with a literacy rate above 96%. In 1991, Kerala was declared as a Totally Literate State[19](Chugh, 2009). It is telling that the total cost of the education provided was about $26 per capita (McKibben, 1996). The expansion of literacy led directly to an increase in political participation; public pressure on the state, made possible by literacy, ensures the provision of high quality public infrastructure and healthcare, contributing to the high life expectancy and excellent indices of access and outcomes in health[20](Drèze & Sen, 2013).

Himachal Pradesh's experience is perhaps even more significant in terms of a learning experience for currently underdeveloped States. A State commitment to Universal Education deserves credit: the state spends significant amounts on ensuring that students even in remote villages are able to access formal schooling, reflected in an unusually high per-student public expenditure. Planned interventions have led to an expansion of school facilities to bridge intra-regional disparities; this has ensured that despite adverse terrain and scattered settlement patterns, education is available to almost *all* students in the State. Himachal Pradesh's level of women empowerment in terms of female labour force participation and in family-level decision making[21] and the prevalence of an egalitarian society, have contributed in this development. The State's tradition of cooperative action and local democracy, with community participation in education has contributed positively as well (Chugh, 2009)(Infochange, 2000). While Himachal Pradesh's accomplishments[22] are often overlooked owing to the awe the Kerala model inspires, the state's rapid growth and emergence as an economic power in North India, the region with the highest concentration of poverty in India makes the institutional underpinnings of its development model worth studying in more detail.

The model of Tamil Nadu also deserves consideration, again owing to very rapid progress since the 1990s on all fronts of human development, particularly health. More importantly, Tamil Nadu's experience illustrates the power of institutions *existing today* in India's States. An interesting facet of the development of Tamil Nadu's health and education infrastructure is the use of traditional public institutions: Public Schools, Hospitals and Primary Health Centres, which differ from those across India only in the fact that they "work[23]" (Gupta, 2010). The Maternal Mortality Rate in Tamil Nadu fell by 70% between 1993 and 2008. The importance of an effective and timely public service delivery mechanism is seen as a key factor in this reduction in MMR: the introduction of dedicated one-stop emergency clinics for deliveries, staffed 24x7 by trained health officials, was the main contributor. Regular checks by the Public Health Department ensure accountability.

Impressive results have ensued: the proportion of institutional deliveries (as of 2011-12) has risen to *99.8%*. The introduction of functional institutions was accompanied by a commitment to women's education and literacy, as well as a cooperative family planning programme. The State provides incentives in the form of complete security of employment and high wages for its workers, especially at the ICDS level (Gupta, 2010). Underscoring the fact that there is no need for an additional set of schemes for healthcare, Tamil Nadu has shown that a functioning network of existing Primary Health Centres can do wonders for health indices. The state's achievements in providing school infrastructure are commendable, however Tamil Nadu still has a long way to go on improving learning outcomes.

Social evils may prove to be severe roadblocks in the implementation of welfare programmes in many of India's poorest states; unfortunately, the experiences of Kerala and Tamil Nadu do not provide clear guidance on how to rectify failures arising out of caste and class dominance in villages. In Kerala, the caste system was brought down largely through the forceful

redistribution of property and elimination of privilege, brought about often through violence aided by the cadres of the Communist Party. In Tamil Nadu, it is unclear how broad-based growth has been brought about, although the impact of Social Reformers including Periyar must also be accounted for. Despite such efforts, accounts by contemporary Dalit entrepreneurs and authors in Tamil Nadu's heavily stratified society reveal significant barriers in human capital acquisition and deficits in social capital faced by these classes, reminiscent of discrimination in the North Indian heartland as well(Bros, 2010).

The discussion above has provided certain examples of states which have successfully travelled down a path of human development. Curiously, these states remain economic powerhouses, despite governments spending significant amounts each year – and this growth has aided in poverty alleviation as well. Tamil Nadu is the third largest state by GDP with the 6th highest per capita income, the highest level of urbanisation (49%) and a thriving domestic industry with international linkages, with export turnovers in the billions(Mallaby, 2005). Despite its mountainous terrain, Himachal Pradesh has developed into a Pharmaceuticals hub, and is fast developing capacities in textiles, electronics, and food processing and cosmetics products. The 2013 Draft Industrial Policy indicates clearly the vision of *sustainable growth.* Between 2004-05 and 2009-10, poverty in Himachal Pradesh fell by 13.4%; by 2012, only 8.06% of the population was below the official poverty line. Even by the Multidimensional Poverty Index estimates, 32.7% are vulnerable to Poverty or in Severe Poverty in the State, a figure better than any other state under comparison (Alkire, Roche, Santos, & Seth, 2011).

The experiences of the States above in development present a clear case for *activist policy* which*involves community participation*. In both Kerala and Himachal Pradesh, the State has invested heavily in developing infrastructure; having done so, it has devolved regular management and expansion of education to the community. In Tamil Nadu, making existing institutions functional has been a matter of encouraging their employees through moral measures and economic incentives (Khera, 2012), as well as monitoring mechanisms. While these solutions are innocuous in themselves, their applicability in the context of the BIMARU[24] states will depend on how the political economy and social structure of these states, particularly in rural areas, responds to them. While concerns that North Indian politics may derail any reform attempts abound, it is worth noting that corruption in the PDS and the MGNREGA, two of India's "leakiest" social support schemes, has declined significantly over the period 2004-5 to 2009-10. More encouragingly, the bulk of this decline has occurred in Bihar and Orissa, states notorious for their supposedly dysfunctional politics (Khera, 2011). Whether the rest of India can learn from these experiences, allowing it to converge in living standards to the rest of the nation in the near future is a matter of crucial import for India's ambitions towards alleviating poverty and emerging as a global power.

REFERENCES

Adabar, K. (2004). *Convergence of Standards of Living Across Indian States*. Bangalore: Institute for Social and Economic Change.

Aiyar, Y. (2014). Money Matters: PAISA and the ASER survey. In Pratham, *Annual Status of Education Report* (pp. 12-13). New Delhi: Pratham.

Alkire, S., Roche, J. M., Santos, M. E., & Seth, S. (2011). *India Country Briefing*. Oxford Poverty & Human Development Initiative (OPHI) Multidimensional Poverty Index Country Briefing Series. Available at: www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-country-briefings/.

Baksy, A. (2014). *The Augmented Socio-Economic Progress Index: Measuring Development Across Indian States.* Report Submitted in Partial Fulfilment of the Requirements of the Course Indian Economic Development - I, New Delhi. Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=2525075

Bhalla, S. (2013, July 6). Manmonia's FSB: 3% of GDP. *The Indian Express*.

Bhat, R., & Jain, N. (2004). *Analysis of Public Expenditure on Health using State Level Data*. Ahmedabad: IIM Ahmedabad.

Bros, C. (2010). *Castes in India: Implications of Social Identity in Economics.* Paris: Universite Paris I Pantheon-Sorbonne.

Chandra, N. K. (2010, February 20). Inclusive Growth in Neoliberal India: A Facade? *Economic and Political Weekly, XLV*(8), pp. 43-56.

Choudhury, M., & Nath, H. K. (2012). *An Estimate of Public Expenditure on Health in India.* New Delhi: National Institute of Public Finance and Policy.

Chugh, S. (2009). *Progress in Literacy and Elementary Education: The Study of Himachal Pradesh, Kerala and Mizoram.* New Delhi: DISE.

Deaton, A., & Dreze, J. (2009, February 14). Food and Nutrition in India: Facts and Interpretations. *Economic and Political Weekly, XLIV*(7), pp. 42-65.

Drèze, J. (2014, August 23). Learning from NREGA. *The Hindu.* Retrieved from http://www.thehindu.com/opinion/op-ed/learning-from-nrega/article6342811.ece

Drèze, J., & Sen, A. K. (2013). *An Uncertain Glory: India and its Contradictions.* New Delhi: Penguin Allen Lane.

Ghate, C., Glomm, G., & Stone, J. T. (2014). *Public and Private Expenditures on Human Capital Accumulation in India.* Unpublished Working Paper. Retrieved from http://www.isid.ac.in/~cghate/EducationInIndia_2014d.pdf

Gupta, D. (2010, September 16). *How Tamil Nadu has made an incremental difference.* Retrieved March 27, 2014, from The Hindu: Online Edition: http://www.hindu.com/2010/09/16/stories/2010091652601100.htm

Infochange. (2000). *Primary Education: What is Himachal Pradesh doing Right?* Retrieved March 25, 2014, from Infochange Education: http://infochangeindia.org/education/stories-of-change/primary-education-what-is-himachal-pradesh-doing-right.html

International Institute for Population Sciences (IIPS) and Macro International. (2007). *National Family Health Survey (NFHS-3) 2005-06: India: Volumes I,II,III.* Mumbai: IIPS.

Khera, R. (2011, November 5). Revival of the Public Distribution System: Evidence and Explanations. *Economic and Political Weekly, XLVI*(44), pp. 36-50.

Khera, R. (2012, September 10). *Tamil Nadu's Striking Progress in Welfare.* Retrieved March 28, 2014, from IndiaTogether: http://indiatogether.org/tnwelfare-government

Larossi, G. (2009). *The Investment Climate in 16 Indian States.* The World Bank. doi:http://dx.doi.org/10.1596/1813-9450-4817

Mallaby, S. (2005, December 5). *Detroit's Next Big Threat.* Retrieved March 27, 2014, from The Washington Post: http://www.washingtonpost.com/wp-dyn/content/article/2005/12/04/AR2005120401094.html

McKibben, B. (1996). *What is True Development?*

The Direct Cash Transfer v/s Subsidies Debate

Arushi Gupta-2nd year

Summary: *This article makes use of microeconomic theory to further the case for cash transfers as against subsidies to be used as an instrument for social protection in India. However, at the same time, it also highlights the unrealistic assumptions underlying the microeconomic theory and seeks to establish the practical problems surrounding the implementation of the DCT scheme in India.*

Since 2005, the government has indicated a preference for the policy of cash transfers in lieu of the subsidies it provides to the populace under various social welfare schemes (health, education, agriculture, food rations, etc.). The logic behind their preference is that with cash transfers, people are free to ' buy' these services in the open market.

The main approach to social protection in India has been the provision of subsidized food and kerosene via the public distribution system, involving a vast bureaucratic edifice. The initiative behind subsidized food for ' the poor' presumes that if they are most deficient or lacking in something, then that is food. This may be true on an average. However, for an emerging market economy, the presumption that all poor people suffer from ' food poverty' may not be as reasonable as in the case of a traditional village economy. Other ' lacks' may be as or more important. The PDS is costly and provides low-quality food. Although its supporters claim that the PDS could be improved; inefficiency in the PDS is enormous, not marginal.

Keeping in mind equitable distribution of resources and not just efficient distribution, the government provides the economically weaker sections of the society with transfers in kind, or subsidies. From an economic viewpoint, we know that subsidies in kind constrain the consumer and narrow their choice set, which implies lesser utility or satisfaction. The second theorem of welfare economics states that any Pareto efficient allocation of resources is also the optimal allocation, (point of competitive equilibrium) if lump sum redistribution of income is done and then the

market is allowed to take over. This implies that if an economic authority wants to impose an efficient allocation as an outcome of social economic interaction, i.e. an efficient as well as an equitable outcome, it does not need to close the markets but instead apply the right fiscal policy that does not interfere with the allocative property of prices. In the case of subsidies versus cash transfer debate; it would imply that people should be endowed with cash rather than be given quantity or price subsidies. Subsidies tweak the prices and may disrupt the normal functioning of the markets. Cash transfers, on the other hand, affect the income or initial endowment and will lead to a competitive equilibrium as well as a Pareto efficient allocation; granted that all assumptions hold true.

If microeconomic theory is anything to go by, the government should do away with subsidies and replace them with cash transfers. But these theories cannot be directly applied to the real world because of the assumption set on which they work; people are assumed to act rationally and selfishly (homo economicus assumption). It is also assumed that there is perfect information in the economy and that preferences are convex. Also on further contemplation, the practical problems involved in replacing subsidies by cash transfers are brought to the fore. There is a problem of regular and timely indexation that takes inflation into account. In a developing country like India, where inflation is not stable and where the government takes almost 12 years to increase the old-age pensions; cash transfers would not obviously be very popular among people. Also with the existence of infrastructural constraints along with the dearth of markets in certain underdeveloped regions like the coastal towns, tribal settlements etc.; buying commodities with cash would be a challenge in itself. Given the patriarchal set-up of a majority of Indian communities, if cash flows are replaced by food, the money would not be spent on food grains but will be splurged on liquor, gambling and other such frivolous unproductive activities.

In the debate on cash transfers vs. subsidies, to further the argument in favor of cash transfers, positive experience of other countries that have implemented cash transfer schemes, especially Brazil and Mexico, are often cited. While there are many reasons as to why their experiences cannot be used to justify cash transfers in the Indian context, there are three important differences that need to be kept in mind.

1. Both Brazil and Mexico fare better in terms of both poverty and human development index compared to India. For example, 46 per cent of the households in India have per capita income of less than $1.25 a day as against 5 per cent or less in Brazil and Mexico. Therefore, whereas cash transfers are used in these countries to target only a small section of the population; in India a much larger population (which is poor and malnourished) is to be targeted that would place an enormous fiscal burden on the government.

2. In the same context, is the issue of supply of provision of social services. In cash transfers, especially in the case of conditional cash transfers for health and education, there is an implicit assumption that the problem is in the lack of demand for ‘ appropriate’ services. Cash is therefore expected to act as an incentive for households to access services such as antenatal care or improve school attendance and so on. However, in India, where there is still a problem with supply of services in the form of non-availability of functional and good quality schools or health centers; the immediate need is to improve such services.

3. Further, it is important to note that while the debate in India seems to be looking at cash transfers as a complete substitute to the provision of services by the government; in countries like Brazil and Mexico cash transfers served to complement the provision of services by the government.

To conclude, if subsidies are replaced by DCTs (Direct Cash Transfers), there will be a wider choice set and people will be able to buy what they want according to their individual preferences. However, at the same time, in a country like India, DCTs may not serve their purpose. The basic idea behind replacing subsidies with direct cash payments is a bid to eliminate the graft. The scheme aims to plug leakages in the current subsidy regime and let the benefit percolate deep down. “They always say time changes things, but you actually have to change them yourself.” Now the task is to see in which direction the newly deviated wind blows!

REFERENCES

1. http://infochangeindia.org/agriculture/analysis/the-case-against-cash-transfers.html
2. http://articles.economictimes.indiatimes.com/2011-06-01/news/29608448_1_pds-shops-public-distribution-system-national-food-security-act
3. http://infochangeindia.org/agriculture/features/a-pds-that-works-is-better-than-cash-transfers.html
4. http://www.princeton.edu/~jcurrie/publications/Inkinddsurveyrevised3.pdf
5. http://www.imcnet.org/cms/public/content/ertf_thoughtpaper/5.%20Subsidy%20through%?20Direct%20Cash%20Transfer-%20A%20Critique.pdf
6. http://www.thehindu.com/opinion/op-ed/cash-transfers-can-work-better-than-subsidies/article6665676.ece
7. http://www2.warwick.ac.uk/fac/soc/economics/current/modules/ec221/notes07/lecture_notes_vi.pdf
8. http://www.guystanding.com/files/documents/IJLE_cash_transfers_basic_income_2014_as_published.pdf

Sluggish Growth in Industry-Inadequate Skill Development or Rigidity of Labour Laws?

Raavi Aggarwal -3rd year

Summary: *It is often said that India's population is both its strength and weakness. With a workforce rivaled only by China, and demographic dividend within reach, India's future seems bright. At the same time though, moving beyond the apparent, the big question is that "Will India be able to realise this potential?" The article deals with this and moves beyond the discussion of the hindrances faced by the Indian industries in the form of infrastructural bottlenecks, and the rigidity of laws, and questions the extent of the damage caused in the process.*

It is estimated that India will become the most populous country in the world by 2025. By 2020, its adult working population would comprise 66% of the total population. The country undoubtedly provides the largest share of skilled and unskilled labour witnessed in the global economy. Yet the growth of the industrial and manufacturing sectors remains dismal. In 2013-2014, the secondary sector grew at a paltry rate of 0.5%. Notably, there's been a high degree of variation across the last decade as well. While the growth rate touched a staggering 20% in 2006, it later plunged to -7.2% in 2009, (*Trading Economics Data, MOSPI).*

Perhaps greater FDI is the panacea to the industries' problems. However, factories in India face several structural bottlenecks including water and electricity shortages that can dissuade firms from producing, despite the availability of cheap labour. Mr. Modi's central pitch with respect to FDI has been the motto, "First Develop India", rather than maintaining a singular focus on attracting foreign investment. Indeed, India's development policies play a key role in determining industrial growth in employment and output. Greater technological advancement and improvements in productivity can, in turn, aggrandize GDP growth. Nevertheless, this economic enigma requires a multi-faceted approach and other aspects yet to be examined.

"Democracy, Dividend and Demand is what India has to offer", reiterates the honorable Prime Minister, when addressing investors abroad. Democracy has its apparent benefits in a populous, multi-cultural country like India. The system ensures transparency, gives credence to public opinion and also prioritizes growing businesses. However, whether India will be able to capitalize on its favorable age structure and hence, realize its demographic dividend is, on the other hand, debatable. Advocates of the demographic bonus claim that with majority of its population being in the adult working age group (15-59 years), the Indian economy is sure to augment its growth since a greater portion of the population shall be employed (*K S James*, 2008). This age structure can be contrasted with that of the Japanese economy, which is progressing towards a comparatively ageing population with larger number of senior citizens who would, in turn, demand higher pensions and retirement schemes in the future.

Economic research establishes that the relationship

between the age structure of a population and its corresponding effects on economic growth does de facto hold strongly positive (*K S James*, 2008). However, critics of this theory argue that the Indian economy would not be able to achieve the positive benefits of the dividend due to its several infrastructural bottlenecks. Low literacy rates, poor nutritional & health status along with institutional hindrances such as water and electricity shortages, ambiguous property rights et al, all result in low industrial output. Economists also ascribe an inept macroeconomic and fiscal environment, which could lead to potential wastage of India's demographic dividend.

However, it is not merely inadequate skill development that has stymied growth in the manufacturing sector. The intensity of Indian labour laws has also played a central role in shaping the labour market environment. Labour laws in India are often perceived to be too restrictive on employers as compared to those in other Asian economies and developed nations. Further, the government places greater emphasis on laws that regulate hiring and retrenchment of the labour force than on the working conditions within factories. The Industrial Disputes Act, 1947, responsible for adjudication of disputes and modulation of laws pertaining to retrenchment & exit of workers, has been the most contentious legislation among employers. The most disputative clause of the act requires a firm that has more than 100 employees, to obtain prior authorization from the government before laying off an employee; such permission is seldom granted *(Ahsan, Pages and Roy,* 2008*)*.

The other law that has been highly polemical among firms is the Contract Labour (Regulation and Abolition) Act, 1970. This act regulates the working conditions of contractual labourers with the intention of ensuring homogeneity of work conditions across permanent and casual labourers *(Ahsan, Pages and Roy,* 2008*)*. In the end, the twin effects of both these stringent laws are more detrimental than beneficial to the Indian labour force. The intractability of such legislation generates economic inefficiency in labour markets, which otherwise demand greater flexibility. Consequently, firms attempt to circumvent laws by hiring fewer workers and offering only contractual positions.

In essence, greater FDI is not an elixir to the problems of the industrial sector. However, larger investments coupled with stronger emphasis on development-oriented policies would positively influence India's growth story. Thus, an improvement in the health and nutritional status of workers, along with substantive improvements in education and skill development of the labour force would help accentuate the industrial growth rate. In addition, greater openness to trade and mitigation of the supply-side bottlenecks would contribute positively as well. Further, greater flexibility in the labour markets through reforms of legislation would boost competitiveness of the labour force and thus, promote technological advancement. This cyclical process would, in time, generate multiplicative growth rates in the industry.

REFERENCES

1. MOSPI data on Indian Industrial Production, http://www.tradingeconomics.com/india/industrial-production
2. "Glorifying Malthus: Current Debate on ' Demographic Dividend' in India, *K S James*, 2008.
3. Legislation, Enforcement and Adjudication in the Labour Markets- Origin, Consequences and the way forward, *A Ahsan, Carmen Pages and Tirthankar Roy,* 2008

India: Growth or Inclusive Growth?

Anubhav Bigamal

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Summary: *Best-fit growth strategy conundrum has been a pivotal point of discussion among economists. Whether a top down approach to growth via a trickle down growth strategy or a bottom-up approach fits the Indian model best, is highlighted upon in this article. What is required in the Indian context? Should*

the strategy focus on mere growth thereby dismantling the inclusive aspect, or should it be a more inclusive growth model? This article makes the case for an inclusive growth model and highlights the means to achieve the objectives of such a growth strategy.

Ill fares the land, to hastening ills a prey,
Where wealth accumulates, and men decay:
Princes and lords may flourish, or may fade—
A breath can make them, as a breath has made:
But a bold peasantry, their country's pride,
When once destroyed, can never be supplied.
-*Oliver Goldsmith*

Since time immemorial, the idea of progress and development has intrigued the human mind; the advancement from the Stone Age to the age of technological revolution testifies the success in this quest. Similar has been the fate of economies and economists across nations, ubiquitously bewitched by this fascinating idea but disappointed by the bitter realization that their growth has been confined to the gigantic growth of the select few, leaving a major chunk of population in a lurch, for whom development still is a pipedream. Realizing the faux pas of their reliance over the trickle down effects of growth, many economists have questioned their parochial approach to development, resulting in much hullabaloo in the economic diaspora and a litany of debates about inclusive growth.

The incredible Indian growth story has ironically painted a two faced economy, one competing internationally and leveraging the benefits of globalization; while the other, and more prominent, face of India living in abject poverty with greater proportion of malnourished children than the poorest of sub-Saharan Africa.

While India ranks fourth in the Forbes list of country with the most billionaires, it is rather heart wrenching that 450 million Indians still live in abject poverty, below a meager $1 per day. A nation with a population of over a billion cannot boast of an equitable growth with the top 100 richest men possessing a net wealth equivalent to one fourth of its GDP. The fact that India ranks at the bottom of the pyramid in the HDI report of the UNDP (129thout of 146 economies) and 55th out of 76 economies in the Global Hunger Index (2014) paints a dismal picture of the Incredible India, and calls for a more Inclusive India to be painted on the growth canvas.

The exclusion in India is rife in terms of unbalanced sectoral growths, low employment, poor human development indicators, regional disparities, gender biases, and the glaring divides of formal and informal sector in the labour market. With the chasm between the urban affluent and the rural desolate increasing to cataclysmic proportions, Inclusive Growth has become the harbinger of hope in the 12thfive-year plan to bring about a more equitable and just society.

It cannot be naively said that growth hasn' t had the trickle down effects, but it cannot be left to function for an infinite time, for there has to be a tipping point when the rising tide, rather than pulling up small boats, will leave many rotting in sediments. Small businesses are being walloped by taxes and large businesses dictate their terms to State. Businesses that grow into behemoth corporations rather than creating jobs would soon destroy the small businesses through consolidation and mergers. The model of trickle down effects of growth is highly unstable and its effects would be uncontrollable if the approach isn' t revisited and realigned to a more inclusive sustainable bottom-up development. Alluding to this fact, India has to realize that targeting mere growth would mean barking up the wrong tree.

To make growth more inclusive and hence pro-poor, we need less of populist measures like entitlement programs for the poor, which only do little for growth. They actually worsen the fiscal deficit and act counterproductively. Even though, the government job schemes (MNREGA) and food entitlement programs are a good way to garner votes, they end up creating labour market distortions and inflation without improving rural productivity. What is required is investment in assets, which build capabilities of the poor. Studies across show those economies that invest heavily in education (human capital) and health care experience a multiplier effect on growth. Countries like China, and South Korea have reaped the benefits of this approach, which has helped in alleviating poverty. India has to work on these fronts rather than take the convenient pathway of populist measures sustained on a small tax base.

Creation of jobs in manufacturing is equally needed. Unlike China, India has skipped the growth of the manufacturing sector. It is now pivotal to make manufacturing vibrant by enabling a conducive environment for SMEs to flourish and reducing the burden of taxation and regulations on them. Imparting skills through training is important to keep labour abreast with changing technology. The advantage of demographic dividend is a boon for India; but to reap its benefits, investment in education (human capital formation) and job creation in manufacturing and service sector is necessary which will make growth more participatory.

The all-pervasive corruption specter is eating into the vitals of the economy so much so that the grand welfare schemes and programs are put on paper but hardly reach the beneficiaries due to resource drain. The delivery and the implementation systems need to be made more transparent and robust.

Apart from these, certain bottlenecks of infrastructure and power scarcity continue to cripple the economy requiring expansion and continuous upgradation to meet demands of economic growth. These bottlenecks limit the scope of development for majority of the people who are denied access to basic necessities of safe water, electricity, and sanitation in many parts. Decentralizing production and maintenance of vital resources like power will help promote inclusive growth and ease burden of centralized governance.

Financial inclusion through banking penetration and channelizing of the surplus towards the poor is essential to bring them under the growth orbit. The experience of the Grameen Bank of Bangladesh has set a new paradigm; testifyinghow financial inclusion can lead to a positive social transformation. India needs to lay greater emphasis on financial literacy and inclusion.

India also needs to learn from China in easing its red tapism in terms of clearances for business projects and streamlining government regulations especially in states like Bihar, Orissa, and Uttar Pradesh for attracting investments and flourishing business for a more inclusive development of the country.

A scratch here and a fiddle there would not help achieve sustainable and inclusive growth. What is required is a metamorphosed, proactive and responsible role of businesses and government and also graciousness of every agent of Indian growth story to share the pie of their growth and make Incredible India' s story more inclusive.

REVELATIONS

Unveiling the myth behind G.D.P.

Sumedha Mahajan- 1st year

Summary: *GDP is considered to be the singular summarising statistic of economic growth and prosperity for a nation since ages. But little did we know that it is in fact an inaccurate, untimely and vague indication of economic activity. Unveiling the myths behind GDP, this article brings to you a new overview of various economic indicators that have the capability of measuring economic growth and the reason as to why people still believe in a myth called GDP.*

Whatever you might think the progress looks like- a rebounding stock market, a new house, a good raise- the governments of the world have long held the view that only the measurement of Gross Domestic Product can really show whether things seem to be getting better or worse.

Deeply introspecting, which is better for a country's well-being: $10 million spent constructing a jail or $10 million spent producing a line of smart phones? Clear-cutting rain forests to produce $10 million lumber? Or a storm that requires $10 million in repairs?

Using today's most common shorthand of welfare, GDP, all of the above are equal. So basically GDP does what it was intended to do —offer a value of marketed goods and services produced in a country in a given time frame; a tally of manufacturer's shipments, farmer's harvest, construction spending..so on and so forth and it does it that reasonably well.

Where are we stuck then..? What is the problem in relying completely on GDP as an economic barometer?

GDP has been actively challenged by world leaders and international groups like Organisation for Economic Cooperation and Development on the fact that it has not only failed to capture the well-being of a 21st century society but also skewed global political objectives towards a single minded pursuit of economic growth.

Further, GDP doesn't tell us anything about a typical citizen. Given that it measures average income, as income rises disproportionately for the well-to-do, mean income rises even though many regular workers see their pay-checks cut.

Also, GDP is highly inadequate as a measure of quality of life that is equitably shared and is sustainable. There's a need to account for environmental degradation and resource depletion.

Environmental and sustainable indicators offer a few good examples of how big the challenge is. There is a need to build in a "depletion charge" to GDP for the natural resources - oil, gas, timber, fisheries. In countries like Saudi Arabia, China, GDP might look very different if such a charge were subtracted from their economic outputs. But again environmental accounting isn't that easy to get through. We can put monetary values on mineral stocks, fisheries and even forests, but not on things like alteration of climate, loss of species and their consequences.

It's no less challenging to create measures that describe our social and emotional lives e.g., "Putting a number on HAPPINESS"... There's a fair amount of skepticism about putting happiness into national dashboard of well-being. Currently, research suggests that increased wealth leads to increased feeling of satisfaction within our lives —a validation in effect, that higher GDP increased the well-being in a country.

DETHRONING G.D.P.?

When GDP was instituted seven decades ago, it was a relevant signpost of progress, increasing economic activity was credited with providing employment, income and amenities were supposed to reduce social conflict and prevent another world war. But the world today is very different from the one faced by global leaders who met to plan the post-war economy in 1944 in Bretton Woods, New Hampshire.

Emphasis on GDP in developed countries now fuels social and environmental instability, blinding developing countries to possibilities for more-sustainable models of development. Soaring economic activity has depleted natural resources, wealth generated is unequally distributed, leading to host of economic problems. Increasing crime rates do not raise living standards; but they can lift G.D.P. by raising expenditures on security systems. Despite the destruction wrought by Deepwater Horizon Oil Spill in 2010 and hurricane Sandy in 2012, both events boosted US GDP because they simulated rebuilding.

The criticisms for GDP have lasted since it was created, and the critics have sought to recast the criticism of GDP from an accounting debate to a philosophical one. Our reliance on such a measure suggests that we may still be equating economic growth with progress on a planet that is possibly overburdened already by human consumption.

The only way to repair such an imbalance would be to institutionalise other national indicators to reflect the true complexity of human progress.

So far, one measure has succeeded in challenging the hegemony of growth centric thinking. This is known as the HUMAN DEVELOPMENT INDEX (HDI), which turns 25 this year. HDI incorporates a nation's GDP and two other modifying factors: its citizens' education and its citizens' health.

Mahbub ul Haq has been regarded as the pioneer of human development approach of economic growth. He said," the objective of development must be viewed as a selective attack on the worst forms of poverty. Development goals must be defined in terms of progressive reduction and eventual elimination of malnutrition, disease, illiteracy, squalor, unemployment, and inequalities. The concerns for more production and better distribution should be brought together in defining the pattern of development."

Another economist who helped create the HDI was ' Amartya Sen' , a Nobel laureate in economics who is a Professor at Harvard University. The HDI made its debut in 1990.

"Beyond G.D.P." is another e-initiative that talks about various other indicators that have the capability of measuring economic growth taking into consideration the social and environmental aspect of an economy. This website aims to promote sharing of information on recent developments and ongoing work.

There are four more types of alternatives that have been precisely formulated by some researchers to overcome the deficiencies GDP offers, namely, ISEW and GPI, based on corrections of GDP, sustainable or green(ed) GDP (also involving corrections of GDP), genuine savings/investments, and composite indexes.

Gross national happiness (GNH) was another such initiative started by His Majesty, the fourth king of Bhutan, Jigme SingyeWangchuck in the 1970s. It is a big idea that started from a tiny state and holds the capacity to change the world. Bhutan has already rejected GDP, since 1971, as the only way to measure GDP. Thakur Singh Powdyel, Bhutanese minister of education, who has also become one of the most eloquent spokespeople for GNH says, "It's easy to mine the land and fish the seas and get rich. Yet we believe you cannot have a prosperous nation in the long run that does not conserve its natural environment or take care of the well being of its people, which is being borne out by what's happening to the outside world."

The replacement of GDP by a corrected GDP or another (either or not monetised) aggregate welfare indicator means effectively the elimination of GDP as such. However, there is no sign that the world is ready for this.

Certainly there are some good reasons that explain why everyone has depended on it for so long. William Nordhaus, a Yale economist once said, "If you want to know why GDP matters, put yourself back in the 1930s, where nobody had any idea as to what was happening to the economy. Comparing the crises of 1930 to that of 2008, for finding a way out and tracking

what was happening in the economy, indices like GDP came to the rescue and made enormous difference." To Nordhaus, GDP is one of the greatest inventions of the 20th century.

But critcisms of GDP go deeper and for years, economists critical of the measure have enjoyed spinning its flaws and limitations. They are somewhat correct in finding out its loopholes.

As it's often said that what you measure is what you get. Building the future we desire requires that we measure what we want, remembering that "it's better to be approximately correct than being precisely wrong!!"

REFERENCES

1. http://www.nytimes.com/2010/05/16/magazine/16GDP-t.html?pagewanted=all&_r=0
2. http://www.nature.com/news/development-time-to-leave-gdp-behind-1.14499#/b1
3. http://www.globalexchange.org/resources/econ101/gdp
4. http://ec.europa.eu/environment/beyond_gdp/index_en.html
5. http://www.economist.com/debate/days/view/501/print/all
6. http://www.foreurope.eu/fileadmin/documents/pdf/Workingpapers/WWWforEurope_WPS_no056_MS211.pdf

Economics of Religion

Aishwarya Joshi- 2nd year

Summary: *Economics has for long been known as the science of the rational. We seldom realise how society and individuals channel and mould this rationale. This article portrays the essence of economics being an omnipresent and ubiquitous science, for it is indistinguishable from other aspects of our life. 'Economics of Religion' tries to bring together the two most primitive yet immensely powerful forces that dictates man's life. The two forces that might seem like chalk and cheese at a superficial glance are indeed intricately connected and the article seeks to establish and even prove the existence of this link in the real world.*

INTRODUCTION

Economics of Religion? Praying to the Lord Almighty to accelerate economic growth somehow or for your country to join the "developed economy" club soon may be? No, this is not what I am going to talk about here. Think of what comes to your mind when I ask you, "What according to you helps/makes economies grow? Some of your very first answers would be openness to trade (in the era of globalization, this being one of the most obvious things) or an educated populace. Or maybe, greater national incomes. Some might even say that the type of political systems also have an important role to play.

But even in our wildest imaginations, what none of us will even think about is Religion. Yes, religion or religiosity as an independent variable can influence economic outcomes (such as growth/development).

HOW WE UNDERSTAND RELIGION

To grasp this, it is vital that we first reflect on our understanding of religion. Human beings possess an innate and undeniable instinct for prayer. We can assume that a mixture of fear, awe and respect towards the natural world and its phenomenon, quite naturally led to the human expression of prayer. Religion came into being in response to this. It is not the other way round. Now it only makes logical sense to conclude that something that is so primitive to human beings will definitely have a bearing on the way they "behave".

In the economic scenario, the very same human being is our economic actor who takes decisions with regard to production, consumption and savings with an underlying aim of maximizing his utility. These

decisions as we all know are the ones of prime importance with regard to growth/development of an economy. Now, according to statistics, more than eight out of ten people (i.e. almost 84% of the world's population by 2010 data) identify themselves with some religious group. The point here is that, the decisions that these 84% of the people take, which shapes the economies they live in, are to some extent influenced by the religious beliefs they uphold. Also, how a society as a whole operates influences economic outcomes. How? Talk about sex ratios, education, organizational discipline, political stability and even work participation. All these are "social preconditions" to economic growth, aren't they? And these are largely influenced by the culture prevailing in the country.

What is emerging now is a clearer picture of how an economy's prosperity can depend, to some extent, on seemingly abstract "theories" like religion and culture.

HOW ARE THE TWO RELATED?

Let me elaborate how exactly this works. The social preconditions that we stated above are majorly affected by different aspects of religion. Let's see how:

1) Education: It is important to note that when I talk of religion and education, I do not mean religious beliefs being instilled in students at school/ universities via textbooks. On the contrary, I am talking about religious beliefs being a source of encouragement for what I call a "literate culture" in society. For instance both Confucianism and Buddhism specifically lay great emphasis on increasing and enriching the possibilities of human ingenuity. Such propagation of "high literate culture" facilitates economic growth.

2) Productivity and work participation: This is somewhat tricky. How productive an individual is to an economy, is somewhat contingent upon what the religion's beliefs and interpretations are about society and profession.

   Hinduism, Buddhism and Christianity encourage active participation in society. For instance, the interpretation of Dharma, in Hinduism as "Work is Worship" seeks to promote "work culture" in society. Confucianism states, "the natural world and man's social world are seen as a unity" justifying social norms and institutions. Similarly, Buddhism encourages, giving the best one has, in the role one plays, in the drama of life.

3) Stability: All of us know that a well ordered society is as important a consideration as any other economic resource for an investment company. Research in the US for instance, suggests that religion reduces corruption and increases respect for law in ways that bring about stability in society and even boost overall economic growth. Similarly, an Italian economist presented findings that religion can boost GDP as a result of increasing trust and organizational discipline within a society. (Harvard researchers' paper - ' Satan the great motivator')

4) Savings and wealth accumulation: It is important to note that in bringing out the relationship between religion and wealth accumulation or savings, I do not intend to undermine the complex process of wealth accumulation to a single set of input. Now, taking the case of Jews, a direct effect has been observed, of Jewish religious affiliation on wealth accumulation. In Jewish culture, accumulation is seen as an indicator of success, so Jewish families encourage the ' worldly pursuits' including actual accumulation of wealth and other activities that lead to wealth accumulation such as high-income careers and investing. Or Jains in India, for example, are renowned for their religiosity and thrift.

CASE STUDIES

Let us now look at specific countries and their experiences with development with our "religious glasses" on.

For example, let us take the case of Japan with respect to industrialization and modernization. There existed and still continues to exist mainly two religions - Confucianism and Buddhism in Japan. As a matter of fact, Japan owes its high literate culture to its religious beliefs, because of which, to an extent, it has been relatively easy for it to modernize.

Japan's industrialization, as well, shows the magnificent ways by which Japanese entrepreneurs made ingenious use of their society's value systems and even their traditional social structures in the course

of industrial development. The feudal society of Japan which had, in various ways, fostered strong group loyalty over the ages, transformed into loyalty to the company one works for through lifelong employment.

Or if we look at the western orbit, (Guido Tabelline, in his paper) research shows that economic growth and per capita GDP are higher in those regions throughout Europe, which exhibit higher levels of cultural values.

Taking the case of Pakistan, where Islam is the dominant religion. I am not saying that we can, in any way blame religion, for the country' s poor economic performance. But the obsequiously submissive role that women play in Muslim nations is not only disappointing but also a factor strong enough to be an economic drag in itself. Think about it, keeping half the talent of a population away from productive activity cannot be overlooked.

INDIA : A land with many religions

Let us talk about India, a country with a diverse religious background. For our country we can in fact see a stochastic relationship between religion and economic growth with the help of clear data. Census 2001 data:

In this what should hold our attention is the percentage of people belonging to a particular religious group and the literacy rate, sex ratio and work participation of people belonging to that group. Focusing mainly on the four religions, i.e Hinduism, Buddhism, Christianity and Islam namely, we see that the smallest proportion of people follow Buddhism in India (0.8% approx) but are in fact the most active participants in the economy, with 40.6% of work participation. They are followed by Hindus, Christians, and then Muslims. If we talk about literacy rates, the highest is in the Christian community followed by Buddhists, Hindus and Muslims by order of ranks.

To substantiate the data we can see that economic growth has not been very uniform in different states within India itself. Of course, there are a lot of other factors that play and have played a dominant role when it comes to economic growth, but at the same time we cannot completely turn a blind eye to this newly found aspect as well. Compare states like Kerala and Uttar Pradesh or Gujarat and Haryana for that matter and you will know what I' m pointing at here.

The 2011 census, which is yet to be out officially, reports a decline in the percentage of people following Hinduism below 80%. What would be interesting to see is, how will, when and if there is significant change in the mix of the percentage of people adhering to these 4 religions, impact the economic outcomes of our mother land.

Religious Groups	Population	Growth	Sex Ratio (total)	Literacy	Work-Participation
Buddhism	0.77%	18.2%	953	72.7%	40.6%
Christianity	2.34%	22.6%	1009	80.3%	39.7%
Ethnic faiths, others	0.72%	103.1%	992	47%	48.4%
Hinduism	80.46%	20.3%	931	65.1%	40.4%
Islam	13.43%	29.3%	936	59.1%	31.3%
Jainism	0.41%	26%	940	94.2%	32.9%
Sikhism	1.87%	18.2%	893	69.4%	33.7%

CONCLUSION

I would like to conclude by bringing a few observations to the fore. First, Religion does not impact economic growth the same way everywhere. As suggested by Harvard researchers, this kind of a relationship is seen to work more in developing countries or while a country is still developing than in an already developed nation. Second, a lot of it also depends upon the level of engagement (faith) people have in what they follow. Lastly, and most importantly people's interpretation of the religious beliefs, are often observed to be very short and superficial. In this way, religion can and in fact it has been a cause for a lot of social stigmas, unnecessary divisions and even economic backwardness.

But the point that would like to make here is, that it is now time for us to realize that religion is not merely an obstruction to development. As suggested above, it can in fact provide favourable conditions for growth and development of economies. Our wisdom as economists and policymakers lies in taking religion into consideration as a variable , influencing the decisions of our economic actor and the society he lives in, while formulating policies and perhaps even using culture positively for its successful implementation.

I, in no way, wish to create any divide between people following any religion, nor do I seek to place one religion superior, in comparison to the other or encourage the use of religion for self serving goals of politicians. What I, on the other hand, feel is that economics is not desolate from the concepts of religion as both individuals and society are important units in any economy and religious beliefs definitely have a role (big or small) to play in influencing them in one way or the other.

REFERENCES:

1. http://www.forbes.com/sites/jerrybowyer/2013/05/29/is-religion-an-essential-driver-of-economic-growth/
2. http://www.google.co.in/search?hl=en-GB&redir_esc=&client=tablet-android-samsung&source=android-browser-type&v=141338691&qsubts=1422890550151&q=google#hl=en-GB&v=141338691&q=impacts+of+religion+on+peoples+saving+habits
3. http://www.boston.com/bostonglobe/ideas/articles/2009/11/15/the_curious_economic_effects_of_religion/?page=2
4. http://en.m.wikipedia.org/wiki/Religion_ in_India#Christianityhttp://en.m.wikipedia.org/wiki/Religion_in_India#Christianity
5. http://www.heritage.org/research/reports/2006/12/why-religion-matters-even-more-the-impact-of-religious-practice-on-social-stability

The Essence of Economics to a First Ye a r …

Haritha Vijay -1st year

Summary:*This article is more of a personal account given by the writer on her encounter with the subject -ECONOMICS. She expresses her joy in the following lines, "There is always a joy that you sense when you find things written in the textbook coming alive in life, and I feel that very joy, amidst the bewilderment of decision making." It is a light read full of witty remarks made on economic concepts of tradeoffs, opportunity costs and scarcity that makes it easy to relate with.*

After the benevolent board exams, sweeping sky high percentage to one's credit and a whole lot of ecstasy and fulfillment, most of us proceed to the next big step in life; a college life in the prestigious Delhi University. Beginning from the filling up of application forms, to the day of the last cut-offs, we eagerly wait and hope that the top colleges lower down their cut-offs. And gusto, that feeling when we make it to one of the top colleges for one of the most "elite" courses!

Just as anyone else who qualified for Economics Honours, I too was excited and relieved. Being a science student, the yearlong pain taken to swallow physics, mug up chemistry and prove all the calculus equations in dreams, bore their fruit as I stepped in to study Economics at Miranda House.

After a short phase of finding excuses for not making into the top college (classic demand supply gap issue) and having to settle eventually for the second or third best, finally, the classes commence, and you feel the kick, when you realize that college life is much more hectic than school life.

College life..the time when you are free to do anything and everything, and all these are just the beginning blues that you face when you step into a new phase of your life.

Funnily, all I want to talk about hereafter, is the way the first semester of the course, gets you ‘ thinking like an economist’ , incorporating the concepts of scarcity, ‘ no free lunch’ , trade-offs, opportunity costs and consumer equilibrium. These terms may sound like jargon to people outside the realm of economics but the beauty of the subject lies in the very fact that they can be easily demonstrated using the simplest and funniest examples in one’ s life.

Scarcity which will follow you anywhere and everywhere as long as you breathe is precisely the reason, many would say, as to why economics as a subject exists. Either it’ s money that’ s scarce for you, or if you happen to be millionaire, then I would say that it is time, which is scarcer. For me, just as for any college going teenager, pocket money is scarce and that, quite often, influences my decision to buy a choco-chip muffin than a chocolate truffle pastry. And ‘ time’ the second resource that we talk about, which unanimously is scarce for everyone, makes you fret over meeting the deadlines of assignments, studying for your periodic tests, incorporating extracurricular activities, and having the much needed fun with your friends; because all these, as economics says, have opportunity costs and involve the inevitable trade-offs. Mother ‘ Scarcity’ has hence given birth to her child ‘ trade-offs’ , which make me say that I will have to trade-off preparation for my statistics test if I wish to hang out with my friends, or sit penning down my thoughts, just because time is scarce. Then comes the opportunity cost, which makes me realize that the opportunity cost of penning down my thoughts is all the marks I may lose in the test, and makes me accept the fact that there’ s ‘ no free lunch’ ; I will have to give up one to attain another. But definitely, Economics has helped me in making rational choices. If not, I wouldn’ t have felt so miserable when I had to buy something, which had a price higher than my utility.

There is always a joy that you feel when you find things written in the textbook coming alive in life, and I feel that very joy, amidst the bewilderment of decision making. Thanks to the lovely subject, Economics!

THINKING SEEDS

Women and Work in Urban India: An Anomaly

Surbhi Ghai-3rd year

Summary: *This article aims to resolve the incongruity pertaining to low female work force participation rate in urban areas despite decline in fertility rates, education gaps and greater educational attainment among the urban women. It presents a series of demand and supply side factors, which have systematically resulted in this anomaly and which have set the Indian development experience apart from that of other developing nations.*

The sky is not my limit...I am."
T.F. Hodge

India has grown at an unprecedented rate in the past few years with growth rate surpassing 9% per annum between the time period 2005-08. Concomitantly, there has also been a sizeable decline in fertility rates, gender education gap and improvement in female education levels, which should ordinarily have led to higher female labour force participation. This is because traditionally, industrialization, modernization and development have been associated with rising share of women in labour force as can be observed through the development experience of the now developed nations of USA, UK and France.

It is indeed puzzling, that against this opportune and conducive background, India has experienced stagnation in the female work force participation rate in urban area, which has been reported to languish at 18% since the 1980s (NSS). Not only is the proportion of India's total female population that is economically active among the lowest in the world, but urban areas do even worse Few states with the notable exception of Pakistan, Iran and Saudi Arabia perform worse in terms of female work force participation rates. Thus, it is required that the anomaly of India's unique trajectory is highlighted and its deviation from the standard experience be explained.

Stephan Klasen and Janneke Pieters in their paper '*What explains the stagnation of female labor force participation in urban India (2013)?*' empirically present the case for the existence of a U shaped curve with respect to female workforce participation rate and educational attainment. It is has been observed that at very low educational level (to the point of illiteracy), the female work force participation rate is high which plummets into a downward trajectory with improvements in educational attainment and rise again at higher educational level. Thus, a woman with medium or intermediate educational qualification is less likely to work than a woman with advance or very poor level of educational attainment.

There exists a series of supply and demand side factors that have quantitatively played a significant role in accounting for the seemingly paradoxical phenomenon of low female labour participation rate in urban India. On the demand front, we have the nature and the size of the market. In the past decade, growth in urban India has been fuelled through the expansion of the building and construction sector, which are not really considered suitable avenues for employment of women. Additionally, there is also the classic case of crowding out effect at work in the urban areas. With an increase in the educational qualification of women, there has been a cumulative explosion of high skilled labor force. However, the increase in the white-collar jobs which are the only jobs likely to pull in highly qualified women have not been able to keep in pace with the increase in supply of high skilled female labor force. According to an NSS survey, the share of white-collar services in urban employment has fallen from 19% in 1987 to 17% in 2009, while the proportion of graduates in the working age population have increased precipitously from 11% to 21% reflecting the improvement in the educational levels in the country. Consequently, there has been a crowding out of female labor participation because of oversupply of educated workers relative to the growth in jobs considered appropriate by educated women.

Moving onto the supply side factors, cultural norms and stigmas attached to women working outside and participating in economic activities is still cogent and sees no sign of enfeebling in the near future. This also plays a crucial role in arresting women labor force participation in India.

According to Preet Rustagi, joint director of Institute for Human Development in Delhi, "To a certain extent, men control women's lives. And women have internalized this as the norm. In such situations, the little work they do is the result of compulsion, such as when the household income is not enough, rather than choice." The presence of parents in law in the household or existence of a large joint family places the burden of nurture and care on the women such that an inclination on her part to work is simply not enough. Women in India are constrained and their emancipation is arrested due to the existence of social and culture stereotypes that endorse patriarchy and chauvinism. Thus, despite growth and development of the country, the Indian urban women remain subservient to the cultural and patriarchal norms. The persistence of stigmas against blue-collar menial work for women has led to a lower level of participation rates among women with medium educational attainment.

Empirically, it has also been established that the existence of income effect such that that rising education and incomes of husbands serve to drastically lower female labor force participation rate, is also a dominant supply side factor influencing participation rate of women. Thus, the assignment of gender roles is internalized in our society such that the man continues to remain the provider and women the nurturer. It is not the existence of the phenomenon but the comfortable acceptance in our society that is perturbing, so much so, that not only men but also women accept it as a way of life. There is little or no protest and surprisingly very little is been done about it. Gender stereotypes and assignment of roles places the entire burden of household chores on the women. There arises the question of valuation of work done by women in the household which because it is done out of love, care and affection has no way to be valuated and accounted for.

Thus, the role of education (particularly medium or intermediate) in improving women's participation rate has declined. There has been evidence suggesting that part of the expansion of education in India has been to improve marriage prospects of women, rather than their employment prospects. (Stephan Klasen and Janneke Pieters).

The fact that, now, education (medium and intermediate) does not have a substantial positive impact on influencing the female labor force participation rate is distressing. The inertia of low female labour force participation rate needs to be overcome. Unless this is done, India is unlikely to reap the benefits associated with realization of demographic dividend. This is precisely what the East Asian countries have done for it is estimated that nearly one third of the economic miracle of the East Asian countries can be attributed to the demographic dividend (Bloom and Williamson, 1998). Melanne Verveer, the head of the U.S. State Department's Office of Global Women's Issues, calls women the 'lowest hanging fruit' in order to achieve economic growth. Laxmi Puri, the assistant secretary general of U.N. Women, noted in 2011 that India's growth rate could jump by 4.2% if women were given more opportunities to participate in the economic life of the country. It is also fairly apparent that rise in women employment and income will be associated with amelioration of the status of women and development of a more egalitarian order. Thus, the call for greater female labor participation is uncontestably justified.

Therefore, it is required that the government create employment opportunities sensitive to the needs of women and promote economic activity that would attract greater female participation. There is also need to make the workspace safe and create greater awareness and sensitization regarding gender issues. Today, the Indian women are all poised to take part in the rapidly expanding economy. What is required is that the barriers to female participation in the economy be removed and the government re-orients it growth strategy in favor of women.

REFERENCES

1. http://feministeconomicsposts.iaffeorg/2014/01/09/booming-urban-india-stagnating-female-labor-force-participation-what-gives/
2. http://qz.com/176658/india-has-the-lowest-workforce-participation-rate-of-women-among-the-brics/
3. http://www.thehindubusinessline.com/opinion/columns/c-p-chandrasekhar/where-have-all-the-women-workers-gone/article5339737.ece
4. http://www.lse.ac.uk/asiaResearchCentre/_files/ARCWP40-BhallaKaur.pdf
5. http://ftp.iza.org/dp7597.pdf

The Rise of Disruptive Innovation

Swaril Dania-3rd year

Summary:*Can a standard theory explain why some businesses fail and some succeed? In the age of innovation when businesses are threatened by the fate of Digital Darwinism, what is the future of business? With technology and society evolving faster than the pace at which organizations can adapt, Is Digital Darwinism is the way to go?*

The reasonable man adapts himself to the conditions that surround him... The unreasonable man adapts surrounding conditions to himself... All progress depends on the unreasonable man."

-George Bernard Shaw

This quote concerns itself with progress and the idea of innovation being crucial for progress has been around since forever. Innovation gives one the edge. It is often said that people who are willing to create and sustain change, to push against the existing status quo, are the ones who will sustain innovation. A quick look at the success stories in the modern business world and we can notice a new innovation trend. With an introduction of ever new products in the market, some companies with their innovation edge have been disrupting existing markets, carving a place for themselves and forcing the incumbents to completely rethink their market strategies. Whether it is Google Apps which is challenging the conventional word processing, calendaring and spreadsheet programs pushing the industry towards cloud based information sharing in the office world or the low cost telecommunication service Skype which allows customers to call and message on the same interface more conveniently and for a fraction of the price of traditional telecommunication services; Zynga, the integrated social media gaming platform which doesn' t require a console, challenging the use or need for gaming consoles, our very own Tata Nano in the manufacturing industry creating affordable cars or the Netflix phenomenon which has changed the landscape of entertainment retail and its technology integration- the world today is witnessing the rise of disruptive innovation. Welcome to the world of Digital Darwinism...

What is disruptive innovation?

Disruptive innovation is an innovation that helps create a new market and value network, and eventually disrupts an existing market and value network (over a few years or decades), displacing an earlier technology. The term is used in business and technology literature to describe innovations that improve a product or service in ways that the market does not expect, typically first by designing for a different set of consumers in a new market and later by lowering prices in the existing market.

In contrast to disruptive innovation, a sustaining innovation does not create new markets or value networks but rather only evolves existing ones with better value, allowing the firms within to compete against each other's sustaining improvements. Sustaining innovations may be either "discontinuous" (i.e. "transformational" or "revolutionary") or "continuous" (i.e. "evolutionary"). While evolutionary innovations typically improve a product in an existing market in ways that the consumers expect, revolutionary innovations are unexpected though they too don' t affect the market structure and functioning as such. Contrary to this, disruptive innovation creates new markets separate to the mainstream, often too small at the beginning to be interesting to large established firms. The term is attributed to Harvard Professor, Mr. M.Clayton Christen who tried to explain why some businesses failed on the basis of being unable to keep up technologically with the other firms in the market, a theory which he called the technology mudslide hypothesis. Focusing on the disk drive industry he sought to explain the concept called The Innovators Dilemma.

The Innovators Dilemma

Christen suggested that often companies end up putting too much emphasis on customers current needs and fail to adopt new technology or business models necessary for the fulfillment of the future needs of the

consumers and thus fall behind. Being myopic, they face this dilemma of either continuing with the existing profitable trends in the market or going for breakthrough innovations which may not be very well suited for the consumers today but which have the potential for changing the entire market dynamics in near future. It is not that they fail to spot or develop new technologies, but they fail to value them properly because the incumbent big firms attempt to apply them to existing customers and product architectures or value networks. Thus, the Rate of Investment needed to advance the innovation is low and these projects are often rejected. The small firms, however with nothing to lose enter the market, develop these technologies and over time find newer markets suited for these innovations largely by trial and error. By finding the right use of these applications these upstart ventures rapidly advance and disrupt the markets of the earlier mature firms and businesses. However this seemingly simplistic idea of innovators dilemma has also attracted some criticism of late.

Criticism of Innovators Dilemma

According to Professor Lepore, Harvard "The idea of innovation is the idea of progress stripped of the aspirations of the Enlightenment, scrubbed clean of the horrors of the twentieth century, and relieved of its critics. Disruptive innovation goes further, holding out the hope of salvation against the very damnation it describes: disrupt, and you will be saved."

Lepore presents two big arguments:

- Disruption is today's version of the idea of progress – it has become a worldview (way off what Christensen claims)
- Disruption is the low cost poorly received product that can overturn industries (pretty much what Christensen claims)

While Christen showed in his book that big companies, ignorant to the new technologies and emerging trends in customer behavior can be usurped by new entrants taking over their place, building new markets leading to the demise of the incumbent players, Lepore' s study indicates otherwise. She points out that the Innovators Dilemma is more of an interesting possibility rather than a sound business theory or model. An interesting debate opens up if we look into the analysis of the demise of the poster child of disruptive innovation – The Eastman Kodak.

The proponents of Innovators Dilemma seek to explain the failure of Kodak through the premise that it was unable to take on the challenges of disruptive innovation with the advent of digital imagery and changing patterns of customer behavior whereas advocates of the view of Lepore would be quick to point out that Kodak wasn' t unable to predict the rise of digital imaging. Rather, it invented much of it. Kodak invented much of what is now the OLED industry, the flat screen high-luminosity screens that are spreading across smartphones and TV.

Samsung, the OLED leader, first made use of Kodak' s OLED patents and then engineered a way around as many of them as it could, delaying the launch of OLED screens until many of the Kodak patents had expired. Thus according to the critics of the Innovators Dilemma, the concept is more of a theoretical possibility and not a concrete business model which could offer sound explanations for the rise or fall of businesses.

The theory proposed by Christen Clayton has indeed sparked off a debate in the business world but one thing that stands undeniable is the changing business landscape in this age of disruptive technology. In his book ' The End Of Business As Usual' , Brian Solis, digital analyst and anthropologist notes the impact of disruptive technology on business and society. He explores the landscape of connected consumerism and changes in customer behavior as a result of an extremely active digital lifestyle; the emergence of such a group of consumers poses a challenge before the companies to adapt and evolve at pace with the technology and society. Else, they face extinction in this race against Digital Darwinism.

Digital Darwinism and Digital Transformation : The Road Ahead…

Business organizations today are threatened by the fate of Digital Darwinism, with technology and society evolving faster than the organizations can adapt, the challenge is not merely a technological one. To thrive in this era, one needs a transformation of digital and philosophical kinds. It requires an overhauling of processes and systems addressing the shifts in customer behavior and the business environment. In a seminal report ' ' Digital Transformation: A Roadmap for Billion Dollar Organisations' ' by Capgemini and

MIT Sloan, it is mentioned that the key to digital transformation is ‘ ’ re envisioning and driving change in how the company operates. That’ s a management and people challenge, not just a technology one.’ ’ The answer thus, to digital Darwinism, lies in new technology coupled with new processes and business models. Mere investment in technology is not enough. This must be accompanied by a broadening of customer understanding and adoption of digitally modified business models. Technology is more of a way of life and business rather than an answer to the challenge. The main goal remains to be the creation of a culture of empowerment, agility, innovation and engagement.

REFERENCES

1. http://www.businessweek.com/chapter/christensen.htm
2. https://hbr.org/1995/01/disruptive-technologies-catching-the-wave
3. http://mediabuzz.com.sg/archives/2014/july/2337-digital-darwinism-survival-of-the-most-adaptable-to-change
4. http://www.wired.cohttp://www.i-scoop.eu/digital-darwinism-customer-centricity-brian-solis/m/2014/12/understanding-the-innovators-dilemma/
5. http://en.wikipedia.org/wiki/Disruptive_innovation
6. http://www.briansolis.com/
7. http://www.forbes.com/sites/haydnshaughnessy/2014/06/27/what-did-innovators-dilemma-get-wrong/

Sustainable Development-

“A Fundamental Break That’ s Going to Reshuffle The Entire Deck”

Priya Gaur-1st year

Summary: *“The Earth we are living in is not inherited from our forefathers but it is borrowed from our children. If future generations are to remember us with gratitude rather than contempt, we must leave them more than the miracles of technology”. This statement adequately reflects the sentiments of the article, which explicitly propounds the importance of sustainable development and its role in bringing about inclusive growth. It presents sustainable development as the only intellectually coherent concept that can systematically address the current challenges of the world.*

“Sustainable Development is the pathway to the future we want for all. It offers a framework to generate economic growth, achieve social justice, exercise environmental stewardship and strengthen governance”

According to the basic definition as described by the Brundtland commission in 1987, sustainable development means ***‘ Meeting the needs of the present without compromising the ability of future generations to meet their own needs.’*** The concept of ‘ sustainable development’ has been widely endorsed over the past two decades, yet development remains far from sustainable. Numerous policies, plans and tools have been developed to propagate and implement this concept but we have not yet triggered the pace, scale, scope and depth of change that is needed to make development sustainable.

We are taking out more than we are giving back. We are consuming energy, water, and other natural resources in a way that is leading to huge and often irreversible damage to the planet. The Earth we are living in is not inherited from our forefathers but it is borrowed from our children. If future generations are to remember us with gratitude rather than contempt, we must leave them more than the miracles of technology.

In today’ s era, sustainable development is much needed for meeting basic human needs, protecting technological resources, accommodating city development, controlling climatic changes, providing financial stability and sustaining biodiversity. Sustainable development doesn’ t always refer to environmental sustainability or other green topics.

Sustainable development also needs to take economic and social sustainability into account.

Sustainable Development is all about ***Integration and Cooperation.*** It requires development in the way that benefits the widest possible range of sectors across borders and even between generations. Sustainable Development has a very powerful impact on the society, economy, and environment and most importantly on the future generation.

It has three major aspects: social growth, environmental protection and economic development. All the three parameters are ***interconnected and interrelated;*** at a given point of time even if one of these aspects is missing, it may lead to ***unsustainable*** results. The interconnected nature of sustainable development requires intelligent decisions, which can only be made at an international platform where different nations come together, cooperate and make strategies and plans. This triggers the development of a friendly international environment .We depend on the ecosystem and the resources it provides for doing what we do: running our business, feeding the population, building communities and much more. In simple words we are ***completely dependent on the environment for our existence.*** If we damage or destroy the environment for our interest, we may face unprecedented consequences in the future.

"The world is a sacred vessel. It should not be meddled with. It should not be owned. If we try to meddle with it, we will ruin it. If we try to own it, we will lose it"

The concept of sustainable development and inclusive growth runs parallel. Inclusive growth represents growth that generates decent jobs, provides opportunities for all segments of the society, especially socially excluded groups, and equally distributes the income and non- income gains from prosperity**.** Inclusive growth takes into consideration both pace and pattern of economic growth and hence, it depends upon two factors: income growth and income distribution. It adopts a long-term perspective and is concerned with sustainable growth. Inclusive growth is about social and economic policies that focus on ensuring that the growth process better targets the inclusion of citizens into the delivery of growth. ***For achieving inclusive growth, sustainable development is a decent key.*** Unsustainable growth damages the environment, biodiversity and leads to the depletion of natural resources. Indeed it poses fundamental threats to the inclusiveness and poverty eradication. Sustainability ensures stronger business environment and regional integration as key forces for job creation, social protection, health and education, which are essential for promoting inclusive growth.

I truly believe that sustainable development is not just the pillar of inclusive growth but it is the foundation on which the very idea of inclusive growth rests.. For achieving sustainability in the long run, development has to be both socially inclusive and environmentally sound. On the other hand, for achieving inclusiveness it is crucial to have sustainability. Thus it is a two way process.

Inclusive growth can imply many things –

- Improvement in living standards and access to basic needs such as food, clothing and shelter.
- Stable Political and Economic Environment
- Equitable ownership of land and property
- Human Development
- Proper education and health facilities
- Poverty Eradication

All these aspects of inclusive growth are connected with sustainable development. Sustainable development is the sufficient and necessary condition for achieving inclusive growth. Inclusive growth needs to be achieved in order to reduce poverty and other socio-economic disparities and also to sustain economic growth.

Sustained growth is necessary to realize the urgent development needs of the world's poor. Having said this, there is substantial scope for growing cleaner without growing slower. It is efficient and affordable .It is the only way to reconcile the objective of rapid growth required to bring developing countries to the level of prosperity they aspire and the imperative of a better-managed environment. ***Sustainable Development is the pathway to inclusive growth.***

"Sustainable Development is not a fixed state of harmony but rather a process of change". In my opinion, sustainable development frames the possibilities for progress; it helps us to reach the overall

collective goal of improving quality of life globally. It is achieved when all the three pillars of sustainable development (i.e. economic growth, social growth and environmental growth) are put on the same progressive trajectory. Sustainable development provides big theory, a process and a practical guideline for making solid development decisions that do not blindly seek growth in one area, only to cause damage in the other. Sustainable development alters the predominant worldview to a more holistic and balanced view. It fixes some major problems of resource depletion, health care, social exclusion, poverty, unemployment etc. Applying principles of sustainable development is equivalent to the sound management of resources. The framework of sustainable development must promote efficiency, consistency, interdependency and equity.

Sustainable development is also very crucial for inclusive growth because it is concerned with preservation and optimum utilization of the resources. It provides an opportunity to identify environmental, social and economic problems. And it also helps us to construct an alternative future that has cleaner environment and sustained economy. Preservation of resources determines the economic activities of the nation and hence, promotes growth. Electricity supply, solar power, development of public infrastructure and advancement in technology and resources are essential factors to realise inclusive growth. A well-planned energy development and utilization road map backed by effective execution and proper management can enable the world to bridge the energy gap and achieve inclusive growth without compromising on the environment.

Building capabilities of general public causes acceleration in growth. Efforts are required to create mechanism and institutions that encourage innovations, creativity, provide equal growth opportunities to everyone and also provide a framework for all the citizens to contribute and achieve their potential. The general public can contribute most towards inclusive growth. Therefore, a lot of awareness is to be created regarding change in lifestyle and bringing sustainability into daily life amongst the general public. Empowering our communities will also provide quality education. For achieving inclusive growth it is really very important to bridge the gap between the rich and the poor people in the society. For enhancing the capabilities of poor men and women, Human Rights should be well protected. ***Human Rights place stress on environmental hygiene, safe and potable drinking water, availability of food and proper health***. This leads to the empowerment of the poor.

Poverty reduction is important for inclusive growth and human rights are essential components of poverty reduction. Another agenda of inclusive growth is ***equality***. Sustainable development goals also include gender equality, women empowerment and social equity. ***"Achieving gender equality requires equal access by women and girls to education, employment and income generating activities, health care, land and resources, as well as equal contribution to decision-making."*** Increased equality will equalize bequests, thereby promoting equality in education and income and further the higher rates of economic growth. Equality definitely results in inclusive growth. Then a high rate of youth unemployment is again a structural problem in many countries. Greater emphasis should be placed on developing their skills. Education policies and programmes must be built and decent employment opportunities must be generated so that the young people can contribute towards progress of the society. In my view people are the center of inclusive growth. We strive for the world, which is equitable and sustainable. To benefit all, we need to promote sustained and inclusive growth, social development and environmental protection.

"Sustainable Development is the only intellectually coherent, sufficiently inclusive, potentially mind changing concept that gets close to capturing the true nature and urgency that now confronts the world."

In order to achieve inclusive growth, holistic and integrated solutions are needed to facilitate rapid and sustainable development. Sustainable Development is the base of Inclusive growth. To reach a good level of development we need to *incentivise better policies* and *be technically viable*. All we need is a manageable, measurable, comparable concept that can lead to smart policies that are pro-growth and pro-inclusiveness at the same time. If we wish to get higher level of inclusive growth, we must think of sustainability.

REFERENCES

1. http://www.deloitte.com/*1*
2. Sustainable Development - Linking economy, society and environment By Tracey Strange and Anne Bayley
3. Inclusive Growth —Vision and Strategy, Planning Commission (2008)
4. Suryanarayana, M.H. (2008): "What Is Exclusive About ' Inclusive Growth' ?"
5. http://www.oecd.org

Terrorism – Is it all that Religious?

Kanika Tomar- 2nd year

Summary: *Terrorism is becoming a major concern as certain forces seek to topple the world order through destruction and violence. In this catastrophic scenario, one is often led to believe that religion and religious extremism is the be-all and end-all of terrorism. The article seeks to challenge this notion and provides an alternative view that economic and social disparities are the root cause of the backlash we see in the form of terrorism. The author of the article brings out this point in special reference to the Boko Haram incident. The article challenges the conventional mindset we often adhere to.*

' The Fifth Freedom' can be understood crudely, but with a fair degree of accuracy, as the freedom to rob, to exploit and to dominate, to undertake any course of action to ensure that existing privilege is protected and advanced (Noam Chomsky, 1989). Fifth, after freedom of speech, freedom of worship, freedom from want, and freedom from fear. I believe that a profound understanding of this fifth freedom can bring about a paradigm shift in the present socio-polity and economy.

In The Name Of God!

Atrocities committed, people butchered, abducted & tortured, children crippled, humanity violated, and all of this was and still is, punctuated with words like God or Allah.

Somehow, if not obviously so, along the way, religious fundamentalism or extremism has become synonymous with terrorism. Not only have we been led to believe or rather chosen to believe (for things are always easier when you can put the blame on somebody else) that religion is a perpetrator but also the reason for the inception of terrorism. This widely held misperception has led to increasing animosity between communities and has only aggravated communalism, entire communities are held collectively responsible and shamed for the acts of few, and their very existence demeaned.

There is little doubt in our minds that terrorism is nourished through religious extremism. And if there is any, it is washed clean by the unabashed endorsement of the grotesque acts committed by these religious extremists in the name of God.

Corroborated with such evidence our perceptions are seldom questioned. But we fail to see the bigger picture.

What Goes Around Comes Around

What happens is that we perceive what is given to us as the truth sans manipulations, without understanding the underlying processes at work. I have an easy explanation for why, I think, it happens. When an entity takes responsibility of its inhumane undertakings and passionately justifies it through means of divine verdicts or dogmas, we do not imagine there' d be any reasons to lie for they have already owned up to the most heinous acts possible, it' d seem rather naive if not comical. Even though the ideologies maybe religious but were they the reason why the organization in its destructive form took birth? What we don' t understand is that even though they are not lying, what they' re saying is not the truth in itself. Religious extremism is not causal of terrorism but they are correlated, in the sense that it is never the origin but a means of endorsement or sustenance, even.

Rather I believe that economic oppression and the consequent frustration leads to organized violent backlashes in the form of terrorism. Majority of terrorist acts and organizations, find their roots in

inequality, both social and economic. Moreover, social inequalities are aggravated by economic inequalities and become lethal only in the presence of the latter. Consequently, terrorism is a reaction to economic inequity and oppression, aided and supported by a few other minor ingredients.

Boko Haram

Boko Haram is an Islamist, terrorist, and militant movement active in Nigeria and some neighbouring areas. The organization was consolidated in its current form in the year 2002 and has become increasing violent since 2009. Boko Haram, meaning "Western education is forbidden", is officially called *Jama' atu Ahlis Sunna Lidda' Awati Wal-Jihad* which means "People Committed to the Prophet's Teachings for Propagation and Jihad". Due to its radical Islamic propaganda few understand that the organization traces its roots to the post-independence socio-economic degradation. Nigeria gained independence from the British in the year 1960. Under the colonial rule, even though Christian Missions established western educational institutions, Britain's policy of indirect rule and validation of Islamic tradition stopped them from doing so in the Muslim dominant Northern region. These differences by 1960 had accentuated the difference in access to 'modern' education and these imbalances transferred to other aspects of the functioning of the country such as politics.

70% of Nigerians are employed in agriculture. Agriculture used to be the principal foreign exchange earner of Nigeria. The contribution of agriculture to GDP, which was 63 percent in 1960, declined to 34 per cent in 1988, not because the industrial sector increased its share but due to neglect of the agricultural sector. It was, therefore, not surprising that by 1975, the economy had become a net importer of basic food items. The manufacturing sector, which was 10% of GDP in 1980, constitutes only 6.9% in the revised figures. Boko Haram opposes the Westernization of Nigerian society and the concentration of the wealth of the country among members of a small political elite, mainly in the Christian south of the country. Nigeria is Africa's biggest economy with a GDP of $521.8 billion, but 60% of its population of 173 million (2013) live on less than $1 a day.

This Looks Like The End Of The Story; But It Isn't.

The Naxalites were born of the India Government's incapability to reduce economic disparity between sharecroppers and landlords. Lord's Resistance Army (LRA), a Christian militant group active in Uganda and central Africa was nurtured in the arms of stark regional disparity and economic deterioration of Uganda, the countless terrorist groups all have in common a history of economic suppression, driven to violence as the last resort to restore some order, or dignity, utilising their 'fifth freedom'. Yes, religion becomes the brand ambassador, as has always been the case religion is used to justify that which morality cannot, be it casteism or violence. We need to understand where this need for violence germinates from and eliminate that. In 2014, the top one per cent owned 48 per cent of the world's wealth, up from 44 per cent five years ago. In Africa, the absolute number living on less than $2 a day has doubled since 1981. These preposterous imbalances aggravated by the unwavering belief in the 'free market' are frightening. In the light of this rising inequality, terrorism will only become more rampant as we dehumanise people and abuse their rights to a dignified life.

REFERENCES

1. *Economics and Terrorism: What We Know, What We Should Know and the Data We Need**, Fernanda Llussa& José Tavares
2. *The Culture of Terrorism*, Noam Chomsky
3. *Radical, Religious & Violent: The New Economics of Religion*, Eli Berman (http://www.amazon.com/Radical-Religious-Violent-Economics-Terrorism/dp/0262516675#reader_0262516675)
4. *Religious extremism main cause of terrorism, according to report*, The Guardian (http://www.theguardian.com/news/datablog/2014/nov/18/religious-extremism-main-cause-of-terrorism-according-to-report)
5. World Bank Data (http://www.worldbank.org/)
6. *An Overview of The Nigerian Economic Growth and Development*, A. H. Ekpo& 0. J. Umoh, Online Nigeria (http://www.onlinenigeria.com/economics/)
7. *Nigeria's economic transition reveals deep structural distortions*,ZainabUsman, 2014
8. *In Davos, Worrying About Ineuality*, Seumas Milne, The Hindu, 2015
9. Naxalites, Wikipedia (http://en.wikipedia.org/wiki/Naxalite)
10. LRA, Wikipedia (http://en.wikipedia.org/wiki/Lord%27s_Resistance_Army)
11. Boko Haram, Wikipedia (http://en.wikipedia.org/wiki/Boko_Haram)
12. Nigeria, Wikipedia (http://en.wikipedia.org/wiki/Nigeria)

Cost of Scams to Consumers

Ananya Goyal- 2nd year

Summary: *The shrillest accounts of corruption in the media seek to astound the reader with the enormity of sums involved; the effect of the political scams on our lives is summed up in macroeconomic figures too huge to be comprehendible. What has not been carefully illustrated is how the biggest political scams have affected us, not just as taxpayers, but also as consumers. This article seeks to draw attention to how corruption hits the consumers directly – and hard. The cost that companies incur as bribes are levied from consumers; the misappropriation of humanitarian aid makes the needy worse off as there is an artificial shortage created and the public distribution system and utility services supply inferior quality goods and services in the name of public goods.*

Political corruption increases the cost of doing business and results in a higher cost of consumer goods. What has not been carefully illustrated is how the biggest political scams have affected us, not just as taxpayers, but also as consumers. The shrillest accounts of corruption in the media seek to astound the reader with the enormity of sums embezzled or grafted; the effect of the corruption on our lives is summed up in macroeconomic figures which are too huge to be comprehendible. In the 2G scam, losses to the exchequer amounted to INR 1,76,000 crores; the fodder scam involved embezzlement of INR 940 crores (about INR 2500 crores in 2015).

But this approach may leave behind cases of incidental corruption (see Evans), like bribes to junior public officers, where the macroeconomic costs involved may be low. A bribe of INR 1000-1200 for a general utility connection may not translate into huge macroeconomic costs, but it is enough to alienate the poor who are the targeted beneficiaries of a welfare program. This article intends to focus on the cost of corruption to consumers, who directly or indirectly face the consequences of the corruption and the government scams. The cost that companies incur as bribes are levied from consumers; the misappropriation of humanitarian aid makes the needy worse off as there is an artificial shortage created and the public distribution system and utility services supply inferior quality goods and services in the name of public goods.

The road transport in India, and the trucking industry in particular, suffers from rampant corruption; the volume of bribes is pegged at a whopping US$ 4.5 billion *annually*. Even the Transport Minister NitinGadkari has often remarked on the size and institutionalization of corruption in road transport. Due to these forced stoppages by various agencies and leading to delay in the transportation time, the loss to the national economy would be in the range of INR 1130.47 crores per year. In fact, India incurs a loss of almost 3 days of GDP every week through inadequate transportation.

Transparency International report, one of the few quantifying corruption in Indian trucking industry, estimates that a typical commercial truck pays bribes amounting to INR 80,000 every year. These are paid at all stages of their operations, which starts with getting registration and fitness certificates, issuance and renewal of interstate and national permits and licences etc. Each truck driver pays INR 211-266 daily at these stopovers. This figure has only risen; Members of the Federation of West Bengal Truck Operators Association told a Statesman reporter that each truck driver paid a minimum of INR 300 in bribes daily. That is if all his required papers are in order. If not, it may even be upto INR 2000-3,000 (Murthy 2009).

Supply chain of consumer goods has grown longer with the development of transport infrastructure. These goods are ordered from distant corners of the country, not the local *kirana*stores. They travel long distances and lion' s share of all freight, about three-fourths, in India is transported by road. Thus, any change in the transportation costs can have a significant effect on prices of consumer goods. Transportation costs are often conceded to be the drivers behind food inflation, but it is fuel price that is taken as the determinant. But it is interesting to note that while fuel costs do form the majority of a truck company' s expenses, there is one purely institutional factor at play here. Bribes

constitute 5% of total costs for truck companies .The number of trips undertaken by a truck could increase by 40%, if forced delays by crooked cops are avoided (ibid). A typical truck driver spends upto 11 hours a day at such stoppages. Thus, the bribery-extortion directly results in a higher cost of doing business; not only does the cost per trip rises, the productivity per trip also falls because of the frequent stopovers. This increases the cost of transportation for every consumer good that is freighted across the road network. The cost of corruption in trucking industry to us, as consumers, cannot be estimated in the absence of data on the extent to which the increased costs are transferred to the consumers. But the effect of billions of dollars of additional cost could not be foreseen as insignificant.

Allocations of 2G/3G bandwidth and coal have figured among the most controversial scams in the recent years. The allocations of these resources is alleged to have been made at *lower* than the market price and to favoured companies. This would, at first glance, suggest lower costs for consumers too. But the prices take into account the cost of bribes as well and result in much higher prices. The rates of 2G and 3G services have been continuously rising, even by 100% in the recent years. (Times Of India 2014)

This kind of biased decision-making results in interests of a few individuals taking precedence over rights of all. Government expenditure is prioritised as per the opportunity to extort bribes rather than general welfare. The poor in these cases pay for the cost of the bribes in terms of higher prices for the necessities or in terms of inferior quality. A Tearfund report states that ‘ there will almost certainly be overinvestment in capital goods’ like defence or huge projects offering greater opportunity for graft.

The issue of cost of corruption to consumers is not just of an alternate representation of facts. It is a way of transforming mind-boggling figures into something we, as taxpayers *and* consumers, can relate to. And hopefully, change.

REFERENCES

Black, R.E., S. Morris, and J. Bryce. ‘ *Where and Why are 10 Million Children Dying Every Year?*’. (accessed Jan 20, 2015).

Bryan R Evans, Tearfund. *The Cost of Corruption: Tearfund.* (accessed Jan 2015).

Comptroller and Auditor General of India. *Performance Audit Report on the Issue of Licences and Allocation of 2G Spectrum: CAG*. 2012-11. http://cag.gov.in/html/reports/civil/2010-11_19PA/Telecommunication%20Report.pdf (accessed Jan 2015).

Murthy, Raja. *Cops turn robbers on India’s roads: Asia Times.* Aug 27, 2009. http://www.atimes.com/atimes/South_Asia/KH27Df03.html (accessed Jan 2015).

New York Times. ‘ *Fodder Scam’ Could Bring Down a Shaky Indian Government : New York Times.* 1997. (accessed Jan 2015).

Odland, Steve. *Why Are Food Prices So High?: Forbes.* March 15, 2012. http://www.forbes.com/sites/steveodland/2012/03/15/why-are-food-prices-so-high/.

Pelto, Marcus. *“Good” corruption in Enga: is corruption a culturally relative phenomenon?: DevPolicy Blog.* July 23, 2013. http://devpolicy.org/good-corruption-in-enga-is-corruption-a-culturally-relative-phenomenon-20130626/ (accessed Dec. 20, 2014).

Times Of India. *Airtel, Vodafone, Idea hike 2G tariff by up to 100%.* Oct 6, 2014. http://timesofindia.indiatimes.com/tech/tech-news/Airtel-Vodafone-Idea-hike-2G-tariff-by-up-to-100/articleshow/44480304.cms (accessed Jan 2015).

Transparency International India. *Report on Corruption in Trucking Operations.* October 2006. http://www.transparency india.org/resource/survey_study/Corruption%20in%20 Trucking%20Operations%20in%20India%20new.pdf (accessed Jan 2015).

World Bank. *Road Transport Effeciency Study :World Bank.* 2005.

The Apocalypse of Capitalism

Raavi Aggarwal-3rd year

Summary:*Is capitalism heading towards an inevitable apocalypse such that no solution to the problems that plague the capitalist structure can be found within the system?This article seeks to address this question and challenge the long held view that capitalism is the only efficient form of economic system.*

Today’s global economies are caught in what the Economists term, the ‘ modern form of capitalism’. Society has been polarized into distinct economic classes, namely, the ultra-rich, comprising mostly of entrepreneurs and company executives, and the middle class, constituting administrators, clerks and company

employees. Millions of young students (caught in the rat race to get to the top of the ladder) compete fiercely for the handful of high paying jobs that are offered to MBA graduates in Multi-National Corporations. By joining a company as a fresh graduate and working up the ranks, employees hope to make a decent living in due time, if not become rich. Unfortunately, there will always remain a distinction between the employee and the employer. A firm's ultimate motive, to earn the maximum profit possible, is brought about by economizing on costs; employees are paid their marginal valuation and the employers expropriate all surplus revenue. Thus, while incremental increases in a worker's pay will improve his standard of living, he may never become opulent, unless he were an employer himself.

A typical capitalist society is predicated on four main foundations that define and help sustain it. The buying and selling of labor power means that a worker can easily be hired and fired by firms. The employers set wages and the terms of work and employees must abide by them. Further, the establishment of property rights as well as the right to own the means of production, allocated in favor of the capitalist class, sets a clear distinction between the owners of the means of production and the workers. The owners command power whereas the workers are solely dependent on the industrialist for their employment and livelihood. In addition, the generation of surplus value, in the form of profit on investments, which is then reinvested, leads to multiplicative growth in capital and in effect, sustain the firm's rate of profit. Moreover, the existence of commodity production, which signifies production not for direct consumption but rather for sale and exchange in the market is a defining characteristic of capitalism; one that buttresses the system and ensures its continuity. [1]

The entire capitalist system favors a small affluent segment of the population but does nothing to empower the worker. The Marxian concept of Abstract labour, which defines labor as human effort exerted to complete a task, rather than specialized labor that utilizes skills and effort tantamount to the specific task at hand, implies the free mobility of labour within an industry. A worker can easily progress from one firm to another, with the same set of skills at hand, and find himself well suited for the next job. While this may count in the worker's favor, it essentially implies an easy replacement of workers by the employers and low bargaining strength of workers. The worker's employment and wage eternally remains at the firm's discretion and he must constantly prove himself to the firm in terms of his marginal output.

The question now to be pondered over is that how can the middle class be economically empowered? Is there a way to create a system where the vast majority of the population is responsible for its own livelihood rather than depended on a few employers, who, not only dictate the worker's salary and their working conditions but whose actions also lack the transparency and accountability?

The common ownership of the means of production would ensure an equitable distribution of endowments among all members of the community. Marx predicted the eventual fall of capitalism, precipitated by the inherent contradictions between the different social classes in the system. He claimed the system would evolve into a socialist one. However, recent experience, as witnessed in Russia, has disproved the sustenance of the socialist economy and Marx's prediction has, thus, been undermined.

But, what if policies could be altered such that excess profits earned by firms were blocked and instead, the surplus revenues were to be redistributed between all members of the company? However, it is observed that the progression of ideas and their conversion into innovative technologies occurs through the incentives of legal patents and a temporary monopoly power to produce and sell commodities. A legal ban on excess profits may result in decline in inventions and create impediments to development of more advanced technologies for production. However, the objective of business need not be restricted purely to earning greater profit. The preeminent car manufacturer, Henry Ford, in the 1920s, revolutionized the method of production and the process of carrying out business. By reducing the length of the workday to 8 hours and hiking workers' pay to $5/day, he set down new standards for production. [2] It was indeed the Fordist era that metamorphosed small and local businesses into large scale MNCs through use of unique modes of mass production. If businesses could, thus, join hands with the government with the intention of providing a real service to the public through invention and technology, rather than merely striving for surplus profit, the world

at large, with the haves and the have-nots, would be able to benefit from the Earth's vast bounty of resources. By devising cost-effective techniques of production, the now intangible technologies, such as surgical implants, robotic technology et al, could be provided to the poor at lower rates.

The idea of the Third Industrial Revolution, conceptualized by American Economist, Mr. Jeremy Rifkin represents another paradigm shift in the methods of production from using oil and fuel powered technology to using renewable energy resources to overcome the resource constraint currently being faced by the worldeconomies. Through the cultivation of energy provided by the sun, tide, biomass and so on, each individual can be empowered to meet his own energy needs. This process will lead to the creation of "social capital", accessible to each individual and a further reordering of economic power from the present hierarchical to a lateral scale. [3] This could redefine the capitalist system and the world in which this mode of production has hitherto thrived.

Whether this restructuring of society is plausible and feasible is a debatable issue that does not provide direct solutions. However, the eventual fall of the present day capitalist society is inevitable. A point will arrive when the inherent contradictions between the different social classes will rise to such a level as to take the form of a class struggle and thus, bring about the demise of the prevalent capitalist system.

REFERENCES

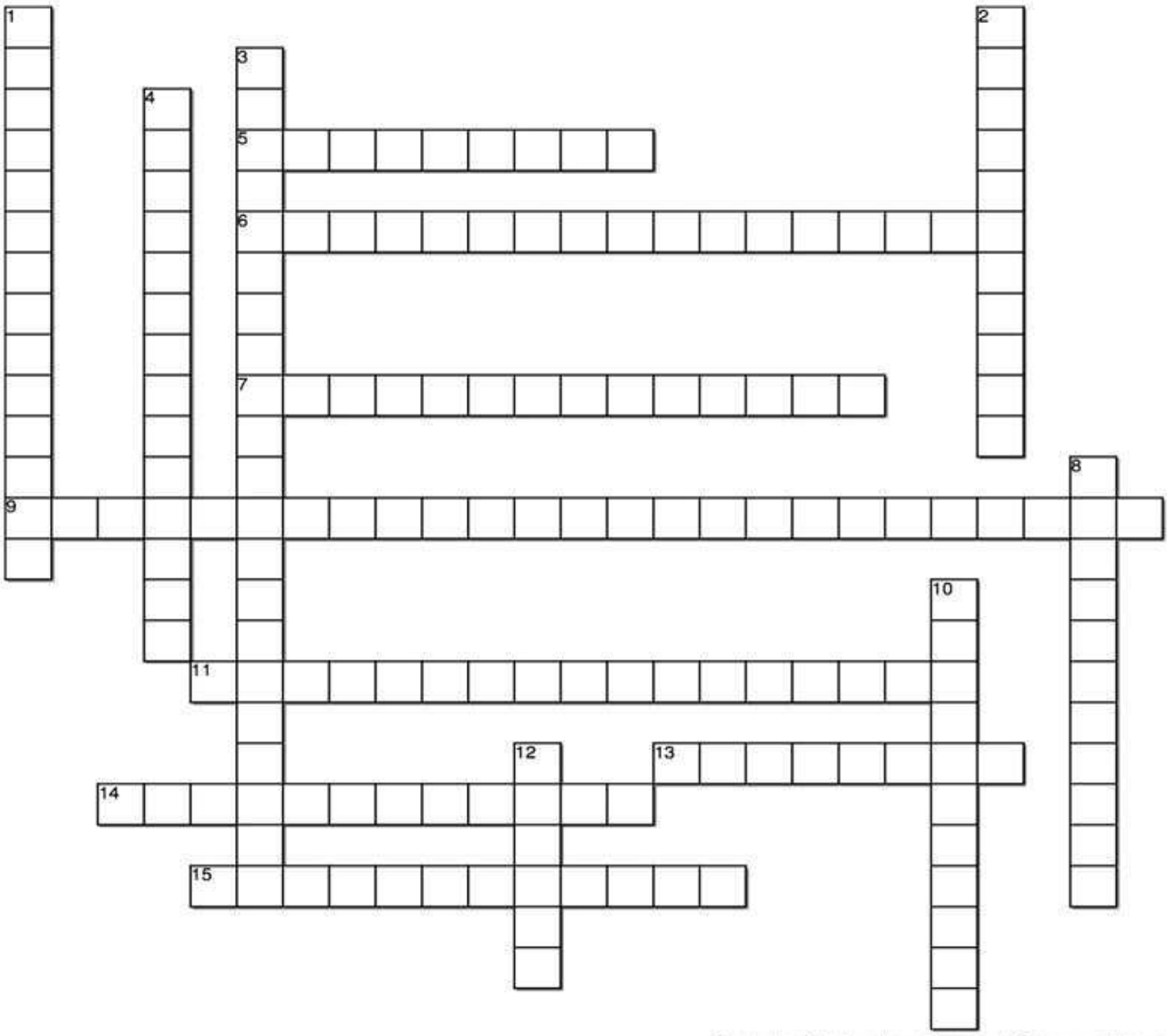
[1] *Das Kapital*, Volume I, Karl Marx, 1867

[2] *My Life and Work*, Henry Ford, 1922

[3] *The Third Industrial Revolution*, Mr. Jeremy Rifkin, 2011

Fun Arcade

Complete the crossword below



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Across

5. A market with many sellers but a single buyer.
6. When an insurance company does business with an individual who has a higher chance of committing default.
7. The role of prices in free markets.
9. The proportion of growth in output unexplained by the inputs in the production function.
11. A situation where one person cannot be made better off without making another person worse off.
13. A measure of the peak of the value of a normally distributed random variable.
14. When an individual with insurance takes greater risks than he would without it.
15. The theory that the value of a nation is derived from the amount of metal and gold accumulation.

Down

1. When human emotion drives consumer confidence.
2. A cost or benefit that one individual incurs due to the actions of another individual.
3. When the opportunity cost of production of a good of one country is lower than that of another country.
4. Temporary or unexpected income. For eg. Winning a lottery.
8. A situation where the inflation and unemployment rates are high but the growth rate remains low.
10. A theory in which people believed that the value of a country was derived by its land available for agriculture.
12. Monetary restrictions imposed on trade of goods and services.

Solutions on the Last Page

In Conversation With Dr. Pulapre Balakrishnan

Pulapre Balakrishnan is currently Professor at the Centre for Development Studies at Thiruvananthapuram. He has served as Country Economist for Ukraine at the World Bank and been consultant to the International Labour Organisation, the Reserve Bank of India and the United Nations Development Program. He has been actively involved in public debate in India through his writings. His published work spans the inflationary process in the Indian economy, productivity growth in manufacturing, the macroeconomics of the transition to the market in Ukraine, agricultural involution in Kerala and economic growth in India. He is the winner of the Malcolm Adiseshiah Award for Distinguished Contribution to Development Studies (2014).

EB: Having served as the Country Economist for Ukraine at the World Bank, what are the lessons from the Ukraine economy that you would like to point out to Indian policymakers?

That was a long time ago, approximately 15-20 years back and Ukraine was going through a very complex transition. For almost 80 years, Ukraine had been a communist economy with complete control on price and output determination. Suddenly, all of that was thrown to the winds. From a completely controlled economy, there was a movement towards a completely unregulated economy. The economy was struggling to find a new equilibrium. Economics does not have a fixed guideline on how to make a transition, especially this extreme a transition. The strategy is unique to every situation.

However, in hindsight, it is clear to me that what was being attempted was slightly ideological. The strategy was of doing it with a big bang! Those who were in charge of it were not in control of the situation and that was reflected in the chaos that prevailed afterwards.

One of the conditions for a market economy to work is a well-functioning democracy and Ukraine had its own challenges with a legitimately elected Government, opposition, *dharnas* and civil disobedience. Ukraine' s problem was as much as that of a lack of a well-functioning democracy as that of the transition that was being attempted without a clear route map.

However, China may be an exception in the sense that it does not have a democracy. It has a communist political power with a capitalist economy. The difference is that there has never been a loosening of political control in China. Moreover, a transition of this scale has never been attempted there. The learning point is that things should not be done overnight. Rather, meticulous planning is a necessity.

EB: How can we improve the quality of our PSUs in India?

This is a very important question. They do need more autonomy and less meddling. Frankly, I find that there are extreme cases like Air India but otherwise, PSUs don' t really account for a large share in the economy. Having said that, I do not think there is much scope for Air India and there is a strong argument possibly for privatising it. On the other hand, there is a large private airline industry in India already that is working efficiently. In case of coal and refineries- the core PSUs, they are inefficient and they stand in the way of coal supply being increased accompanied with increase in demand for electricity. This is an issue that needs expert attention. What we need is more autonomy and we certainly need less continuing public support in the form of a soft budget constraint.

EB: How about the railways which have been much in news in view of the government' s proposal to raise the tariff?

I don' t think railways are doing badly. However, on the other hand there should be strong resistance to populism and I think the railway rates should be raised according to the inflation rates. It makes no sense to not raise tariffs of your public utility services as inflation increases, otherwise those public utilities will go down under. They cannot invest, they cannot expand and when they cannot expand they are not much use as public utilities because the population is growing and there is demand. What is the point of having railways, which don' t raise fares, and in some sense are a moving hygiene trap. It' s extremely disturbing - there is no cleaning because they don' t have funds for that.

I was in a meeting of the Finance Minister with the economists yesterday and a fellow economist pointed out that over the past 4 years, the real value of the relative price of tariffs in relation to the general price level has deteriorated 30% or 40%. So, I am not someone who believes that railways should be privatized but there is a strong argument for improving their financial position.

But, Air India I am not very hopeful about. There is extreme political influence. The board chaired by Mr Praful Patel proposed to increase the air fleet by a factor of five. In an airline that is already making such large losses and requires public intervention to keep it alive, the question of whether this type of expansion is required is where autonomy matters. If the politicians can come in and it is funded by General budget, there is no limit to the populism that these PSUs can undertake. Air India is an extreme example of a highly modern sector of an economy performing so badly while the railways are one of the oldest sectors of the modern economy (150 years old).

Public utilities like railways are a very important part of the economy. Public enterprises are a small part of the economy but public utilities may or may not be. Public utilities that are a central part of the production structure in the economy generally need to perform better. They should be given autonomy but also simultaneously monitored by the parliament. You cannot purely leave it to the managers either, that' s not acceptable. As an economist, you know there is an interesting distinction made between ownership and control. Originally it was not thought of in the context of public sector; only in the private sector. In the private sector there are many shareholders and precisely because the shareholders are dispersed, managers cannot be left on their own- is there a guarantee that they will work in the interest of the shareholder or interest of their own i.e. maximize their own utility function? However, this problem exists in any arrangement whether it is private or public. But, in the private sector technically you can be fired and much more importantly if the company is listed in the stock market it can be taken over. Technically or theoretically, takeovers are seen as threat to self-regarding behaviour by the managers. This is also true in the public sector. On one hand you don' t want public interference in the form of meddling, expansion the kind of which we talked about in the case of Air India but on the other hand you don' t want it to be left completely in the hands of the manager either. You need monitoring which only politicians can do in a democracy. However, now the question comes as to who will monitor the politicians. This is like ' the monitor minds the class but who will mind the monitor' . Basically widespread democracy, awareness, peaceful demonstrations are the only checks to that.

EB: The RBI acted on the recommendations of Urijit Patel committee and shifted to CPI as a measure of inflation instead of WPI. Do you think it is a move for the better?

I am a bit skeptical of inflation targeting. There was a move against stabilization policy; the argument being that you can' t fine tune the economy or fix the output level very easily. But inflation targeting seems to suggest that while you can' t fix the output level, you can fix the price level or the inflation rate. So while inflation targeting and credibility etc. seem nice words, all of them assume that the price level can be targeted. I don' t think it can be and I don' t believe that the present decline of inflation rates really establishes beyond doubt the success of inflation targeting. So, whether it is CPI or WPI isn' t the point. It doesn' t mean you shouldn' t have inflation control but I' m skeptical whether the central bank can do that. Or you can do that but only in conditions, which are undesirable in terms of output loss. As for the interest rates, let me put it this way, the interest rates is only one of the calculations of the firm. By the internal rate of return principal, the firm is comparing the rate of return with the cost of fund to the internal rate, which is the return on capital. Now the point is, the internal rate of return is based on the expectations of future output, and if they are not buoyant or worsen in substance, the rate of return declines. In such a situation, reduction of rate of interest is not good enough. Having said that,

ceteris paribus, the interest rate must matter. The inflation rate is coming down, so there is an argument for lowering the interest rates. Another reason why interest rates matter is that industrial bodies in India like FICCI etc. are up in arms against it, strongly arguing for reduction in interest rates. From which I assume that the interest rates matter for investment. Raghuram Rajan, himself is not saying there is no case for lower interest rates, but he is saying he would like to wait and watch. Its lower this month but how do we know it will be lower next month so he' d rather follow some kind of average. But he is somebody who is far too optimistic about the possibility of inflation targeting than I think than there is reason to be. Let me give you an example about the ability of central banks, via the rate of interest, to control inflation. In the U.S, in the past 5 years, the money supply because of quantitative easing has increased from the billion to trillion, but the inflation rate hasn' t increased at all. And the American central bank is a non inflation-targeting bank. Its objective is maximizing employment consistent with low inflation. By a contrast the European Central Bank is a highly inflation targeting central bank. In the Eurozone, where the inflation target was 2%, inflation is in the negative region and they are worrying seriously about deflation. So the idea that the central bank can effectively target inflation is a highly exaggerated one. And, this is true particularly in the Indian economy where the problem is made complex by the presence of an agriculture sector, where the prices fluctuate. It is true even in the economies of Europe and U.S. In general, Europe and United States do not have an inflation problem as we do, because our inflation problem seems to come from the fact that we have a chronic agricultural inflation problem, food price in particular part of which comes from the government food procurement price setting, inclusive of political purposes and, there is also shortages in some sectors of the economy such as of milk, butter, or protein in general, which further leads to price rise. And such problems do not exist in Europe or United States.

EB: Do you think Narendra Modi' s election slogan ' minimum government and maximum governance' fits well with the objective of widening social infrastructure like heath, education etc. in India?

I don' t know how much of a distinction we can draw between government and governance. It is correct that in certain segments of India the government is over bloated. The ministries probably, have far too many functionaries. But the police on the other hand do not have a sufficiently large staff. The primary health centres do not have enough paramedical staff. The nurseries, the *anganwadis*, the Asha workers - in all of these sectors we are under staffed.

I' m not sure if you can draw such a big distinction between government and governance. It is a catchy slogan but even then it is correct in a way that there are far too many sectors with too much of government intervention. Government is the problem there but in some cases it is also the case that there is not enough governance. Modi wants to have greater and improved governance in various sectors of the economy.

But you are right in saying that governance is not just a matter of implementing rules. Governance should also extend to provide social infrastructure, public goods like parks, roads and sewage system etc and public services in general, like health and education for example, where the shortage in India is massive.

EB: The question of ‘ Make in India’ campaign has created a lot of buzz recently. With Make in India in place, don’ t you think that we will become too dependent on external demand and if another financial crisis was to take place, too vulnerable?

If the external demand is guaranteed then it is not necessarily a bad thing. If there exists external demand then ‘ Make in India’ is there to take advantage of that. The expression for it is- ‘ You are harvesting the demand.’ But in the current context where the world is slowing and is expected to continue (with Eurozone crisis and China’ s slowdown), to base an economic strategy on “growing by exporting” to the rest of the world seems unrealistic. So, the question is not on our reliance on the rest of the world but whether or not that demand exists. In the near future there doesn’ t seem to be that kind of demand that can be harvested.

EB: Recently, Raghuram Rajan suggested that instead of Make in India it should be Make for India and the Finance Minister tried to justify why it should be Make in India and not otherwise. What would be your take on that?

The point is that demand in India is slowing. That is why manufacturing is slowing. So you can’ t just assume that demand exists. You also need to create that demand. One of my recommendations for the same would be public investment. Public investment is the way of creating this demand. It takes care of demand as well as the supply side and it also, potentially does create infrastructure in the economy. While Mr. Raghuram Rajan is correct in saying that the rest of the world is slowing therefore you can’ t expect external demand for your product, even if you are globally competitive. And also, it is not that obvious to me that we are so competitive. Because global demand does not guarantee that you can sell your goods. The goods must be able to offer the same quality or characteristics at lower price. But assume that your goods are competitive, with the global demand you can grow by that mechanism. But I’ m not sure you can so easily assume that there is global demand. One way of ensuring great internal demand is by having a more robust agriculture sector, which can lead to greater demand for manufacturing. So the demand for manufacturing constitutes of many things. It can be increased by public investment and also by good agriculture performance.Also by greater demand for manufacturing goods by people who are non-surplus farmers, who may live by the agriculture sector or outside it. A good indicator of the higher price of food in one country compared with another is the share of food in the household budget. The share of food in India, on an average is above 50%. The share of food in China, in the household budget is about 20%. So the Chinese households have greater capacity than Indian household to spend on manufacturing.

EB: And this is true despite India being primarily an agrarian economy.

Yes, but whether or not you have a “supply constraint” depends more on how efficiently you can produce. Just because you have a large agriculture sector does not mean that supply will not be a constraint for you. I think that the size does not matter that much and it is more about productivity and efficiency. So the demand for manufacture constitutes of many things. It can be increased by public investment and also by good agriculture performance (in turn by cheaper prices).

EB: You have written about how ‘ politics trumps economics’ in the Indian polity. Do you think there is a way about the tradeoffs between economics and politics in India?

Well, as far as the political process is concerned, the solution would be a better functioning democracy i.e. putting pressure on the electorate. It is really a round about process. If you want to ensure the right decisions are taken there should be better laws and better governance structure. You need to insulate to some extent economic policy making from purely political conspiracy based on vested political interests.

The kind of politics followed by UPAII, for example, excessive focus on distribution, was certainly a case where politics trumps economics. If you were to interpret the elections in those terms, the results suggest that even the public was not approving of them. If they were such great schemes why were they not voted back?

EB: Sir, in one of your articles you have written that ‘ separate agencies for macroeconomic stability and financial stability might end up not coordinating on the first best solution’ and that ‘ there is a serious case for vesting all powers with respect to financial stability with the RBI’ . Can you please tell us more about this?

Macroeconomic stability is normally interpreted as low inflation apart from the other things and revolves around that especially in western macroeconomics. I believe that you cannot take your eyes off financial stability and focus only on inflation. Here is a very simplistic example- there is a crude level tension between financial stability and macroeconomic stability. Macroeconomic stability if it is being brought about by raising the rate of interest to reduce inflation can have an effect of contributing to financial instability. Because as the interest rate rises those who have borrowed at the flexible interest rate might find their projects unviable. Even large projects with high gestation period; 5% increase in rate of interest when you borrow in crores can tip the balance. So, if you have two separate bodies doing this they might be doing it at the cost of each other’s goal. Therefore, there is a strong argument for vesting the powers of macroeconomic and financial stability in a single organization.

EB: You have stressed on the importance of agricultural performance for the Indian economy. Do you think the present government has devoted enough attention to this sector?

No, it has not. UPA did not pay the right kind of attention to this sector either. It had taken on the responsibility of shifting the terms of trade towards the rural sector. But, they had absurd policies like raising the procurement prices by 40% when inflation was 10%. So, the relative price was around 30%. In such a situation it is only the surplus farmers that benefit and not the rural landless, at least not directly. The base of agriculture is not strong in this country. One of the indications of which is food price inflation. From 1991-2015, food prices have increased by almost 30% which is definitely not the sign of a strong, modern economy. It is not only attention in pecuniary terms that is required rather improvement of infrastructure, public services and extension services is much more important. For example, irrigation spending has been increasing over the years but the real expansion in irrigated areas is doubtful. But, States need to devote more attention than the Centre. Agriculture is a State subject and much more attention has to be devoted to this sector.

EB: How important do you think is it for the government to reduce their role in the functioning of the public sector banks? Do you think the poor or the Jan Dhan Yojana will suffer in such a scenario?

I don' t see why the poor would suffer if there is greater autonomy to public sector management. You can still impose targets on them. And maybe the Jan Dhan Yojana is overplayed. The question is whether greater autonomy would lead to better lending. There must also be some oversight because there is corruption in India. And with all public sector units, whether enterprises or banks, you can' t leave them completely to public sector managers either. There has to be some kind of oversight. But whether the oversight takes the form of continuous meddling is one thing. I don' t know if the P.J. Nayak committee has talked about it enough. But I' m for greater autonomy and there must also be an emphasis on choosing the best people for the best job. In India there is a serious underplaying of that aspect even when it comes to vice chancellors of universities. There is insufficient attention given to the fact whether the person has academic standing or not, which is also very demoralizing. So, there is a serious argument for greater autonomy and foster a culture of excellence, across the government sector, because leaving public money with private managers who would go on to maximize their private utility function is worrisome. The problem of ownership and control is relevant to all ownership forms whether public or private. You also want efficient control mechanism. You have seen terrible banking outcomes in the United States. So laidback were they about the private sector being good and then eventually they were bailed out by public money. You need a good regulatory mechanism.

EB: Productivity growth in manufacturing is one of the themes on which you have written extensively. What are some themes that may be taken up for future research by young researchers like readers of Aapoorti?

I could say that a great deal of time has gone for measurement of productivity and I think it is important because we need to get our measures right, where measures are analytically well founded and clearly interpretable. I think it would be very nice to have a research on what underlies productivity growth what can be done to increase productivity growth which I believe is not sufficiently analyzed. Most of the work on productivity in Indian economy has to do with measurement and not with respect to factors underlying productivity growth while in the western economy there has new a lot of focus on the latter including such interesting questions like has technology made a difference to productivity growth.

In Conversation With Dr. Subir Gokarn

Dr Subir Vithal Gokarn was one of the youngest Deputy Governors appointed by the Reserve Bank of India on November 19, 2009 for a 3-year term. Prior to his appointment as the Deputy Governor of RBI, Dr Gokarn was the Chief Economist of global rating agency S&P, Asia-Pacific since August 2007. Dr Gokarn has recently joined as Director-Research at Brookings Institution India Center-an independent think tank. He has been appointed as member, Expenditure Management Commission by the Government of India, which is set to submit its first report before the 2015-16 Union Budget. He has also been appointed Chairman of a task force that will set up a Financial Data Management Centre. His current research interests include policy options in health, education and financial inclusion. He also comments regularly on contemporary, global and domestic economic issues.

EB: In view of the emergence of positive drivers in the market last seen during the early 2000s, there is a speculation that India might repeat its growth performance of the 2003-08 period. In this respect, you have written, "it depends on whether there are appropriate policy responses to the major structural barriers to accelerating growth." We want to know, what are these barriers and how do you define these "appropriate policy responses"?

I have in the course of this article as well as other writings and speeches been talking about three very specific barriers. Well, everyone has his or her own list. While I am not saying it is just three, the three most important ones that I have in mind over the last few months has been food, infrastructure and jobs. The food issue is sort of under control because as you have been probably observing, food inflation has come down sharply and this is partly the result of things the new government has done in terms of selling stocks of rice and wheat to put some cap on price increases. But these are not the structural responses. These are the short-term responses and what we basically need to see in our economy is changing the incentive the farmers have in terms of what they

are producing. Most of the food inflation for the last 7-8 years has been driven by prices of pulses, proteins and essentially vegetables. The main reason for that is that the farmers don' t have enough incentive to produce these agricultural commodities. The reason for this again is that procurement by government of rice and wheat has created adverse incentives to produce more rice and wheat even though the consumers are eating more vegetables and proteins. There is a great supply demand imbalance in the economy and it is in my mind an important driver of food inflation. So rebalancing incentives in favor of what people are actually eating is a critical structural reform. That means looking at the whole procurement framework and what kind of incentives the farmers get. In fact, the consumer has been taken out of the equation, the farmer is responding to government signals and not the market signals and that is what has created the imbalance. So, my suggestion would be to move away from what I call the double guarantee procurement framework i.e. guaranteeing both the price and the quantity. Looking at the standard demand and supply curves, the government is telling the farmers that it is fixing the price and it will buy whatever the farmers produce at that price. So, there is no supporting market mechanism. The solution here would be that you move from a double guarantee to a single guarantee, focus on buying enough to ensure food security, change the buffer stocking norms and let the farmers take the risk on other parameters. So, either you say, I will pay a particular price but not commit to the quantity or I will purchase the quantity but not guarantee the price. This creates enough certainty in the farmer's mind about the value of the crops and eventually you will induce them to produce other things. So, that to me, is a very important reform needed in the agricultural sector and off course along with this comes rural infrastructure, transport etc. That is always there, but to me this is the most fundamental requirement.

On the infrastructure front, we have had some years of experience with the PPP (Public Private Partnership) model. However, it has not worked. Let' s admit that and move on. Why has it not worked? Again there is a huge diagnosis on this. In 2003, when the growth spurt started we had a huge boost in telecom. That was a capacity boost that the economy got but it is no longer available. So that apart, I think ability to get in private money is completely constrained (horribly constrained). So, we have to start thinking how to get in public money and that requires a huge bunch of institutional and financial re-engineering, which the government has got to start thinking seriously about. If you don' t break the infrastructure bottlenecks, the growth pattern would not repeat.

Also, I think there are ways to incentivize private sector to invest. But we went about it in a wrong sequence. I think what you need to see are projects coming up to a point where it makes sense for private investors to invest. Instead we got private investors in, right in the beginning. It turned out it was very difficult for them to manage the risk. Maybe, in theory they could, but in practice there were so many uncertainties about projects, delays, regulatory and policy issues. Take the Gurgaon expressway, the Supreme Court has just essentially changed the rules of the game. Obviously they were responding to consumer complaints but that brings in an element of uncertainty in projects that private capital finds very hard to deal with. I am not talking about the merits of that particularly but there are uncertainties about regulations and policies. This risk, our experience would suggest, is very difficult for private capital to absorb. So, I think, you bring private money in more effectively when the project is close to completion. I was in a TV interview today and I put across this argument. I call it FPTP i.e. first public and then private. Somebody else called it reverse BOT (build operate transfer) where you get the private sector to build, operate for 20 years and then transfer it back to the government. Let the government build it and private sector operate it. These are ways of changing the sequence without which I don' t think we will get a solution.

The third is jobs, which is obviously, if you look at the numbers, everyone is talking about; a one million per month increment which is of course 12 million new jobs a year not taking into consideration the backlog. We have no experience or record of this kind of development going on. And given that we have always believed that manufacturing is going to be a key absorber of these people, manufacturing growth has been very sluggish. Particularly, on average, it has not exceeded the growth rate of GDP. It has remained more or less constant. That has created aspiration- aspiration to raise the share of manufacturing from 16% to 25% of GDP. However, if you look at how manufacturing functions today, compared to 20-25 years ago, it has become highly automated.

Technology has moved so far away- ahead or behind is a judgment-but so different from when China entered this manufacturing led growth phase. I don' t think we can use that knowledge and parameters to decide our strategy. The number of jobs that will be created in manufacturing, the kind of skills that are required to run a modern manufacturing operation; these are issues that we really have to deal with. I don' t think that it is an automatic kind of transition. Most jobs are being created in the informal sector. That' s not necessarily a bad thing but productivity is really low in the informal sector and the only way we can improve the standard of living is to improve productivity. The only sustainable way via which the livelihood of people can increase is through an increase in productivity.

Also the manufacturing sector does not provide us dynamism in production that the other countries have experienced with their manufacturing and so on. So, this is a huge challenge. These are, for me, some big issues and as I have said before, everybody has their own list and so one could go on. But these are for me the three most important.

EB: In October 2014, the finance Minister ArunJaitely gave a go ahead to a new policy framework that the centre will specify inflation targets for the RBI. How harmful do you think, this will be to the independence and functioning of the monetary authority of the coutry?

No, in fact the whole framework of inflation targeting is that the central bank is a target taker, the central bank cannot decide the target. It' s like saying if you' re playing a game you will set the rules, you' ll decide where the goal-posts are. In any modern inflation-targeting framework, the target is set as a kind of understanding or formal contract, between the central bank and the Government or the parliament or the ministry. For example, in New Zealand, which I think is one of the first countries to adopt the inflation targeting framework, the Governor's job was contingent on the target being met, so he or she could be fired if the target was violated. In The Bank of England, it' s not so drastic or dire but every quarter the Governor has to submit a report called ' Inflation Report' to the Parliament with justifications and reasons if the target is not achieved. He has to provide explanations as to what circumstances caused the deviation and why the bank did not respond the way it should have. So the contract between the Government and the central bank, in this case, the RBI, is a necessary part of the inflation targeting framework. So it' s not a question of harming; the internal logic of the framework is that the target is set from outside. It' s like self-evaluation, you know, that you' re doing an exam and you get to grade it as opposed to you doing an exam based on certain standards which are set from outside which allows people or a system to compare across individuals. So, similarly, if the central bank sets the target, it obviously has a conflict of interest; it could set a target that it' ll find really easy to achieve. So, the target has to be set from outside and then the central banks performance can be judged on how effectively it achieves the target. And, obviously, it has to be left alone to achieve the target. It cannot be influenced in any way to do things that are not consistent. It is here that the autonomy and independence issue comes in. Now whether it works or not is separate, larger debate altogether and you have to understand that the framework is not intrinsically good or bad, efficient or inefficient. It has a set of requirements; there are conditions that need to be fulfilled that will allow it to function or not function. Some of these conditions have to do with the relationship between the government and the central bank; others have to do with the intrinsic structure of the economy, which is, in our case the variability of food prices that weakens the ability of the central bank to keep a tight lid on inflation. So, you have to work around those things if you want to introduce the framework.

EB: It has often been alleged that the central monetary authority in India does not enjoy the kind of independence that a central bank ought to have. What are your views on this?

I don' t think there is any sort of absolute standard of independence. The very nature of the appointment process

of the Governor is an indicator of independence; that is who can appoint the head of the RBI, who can fire him, who is he accountable to. That is the formal aspect of independence; there is an informal aspect to it too, which is the culture of the Central Bank. Even with all these appointments and so on, does the government regularly interfere with and try and influence the Central Bank. I think you have 180 countries and every Central Bank of these countries can be slotted somewhere in this sort of continuum.

There are issues of formal arrangement, like in US where the Governors of the Federal Reserve are appointed for an 18-year term. Now, an 18-year term would mean that the Governor is completely immune to any administrative or Presidential intervention. He can only be fired in case of malfeasance. The Chairman is appointed for a 4-year term but the Chairman is also a Governor and here, there is definitely Presidential discretion. The President can choose to or not to re-elect someone as a Chairman. But that' s the formality of the process, the culture is more important; which is regardless of how appointments are made and what legal protections the leadership of the Central Bank has, does the Central Bank and the government behave in ways that institutionalize independence and give it credibility? That' s the key question. And I think it varies, certainly both across countries and within the country depending on the economic situation.

On the Monetary Policy issue, you know, when you look at the news there are constant public statements by the Finance Ministry and other parts of the government that you should do X or Y, usually it' s to reduce rates, but effectively I think the Reserve Bank is doing what it believes is the best thing. You can question the merits of an action, but I think that should be the extent of the questioning and not whether it' s being done under duress or pressure.

So I' d say functionally, in my experience and observation, in the current framework that goes back to late 90s and mid-90s, independence is more or less in place.

EB: In the wake of the ineffectiveness of the implementation of the Jan Dhan Yojana do you think it is yet another populist policy?

Well, the criticism can be from two sides; it can be an empty promise with no prospects of any impact or it can be that it' s just not gone far enough. I think there is a very significant breakthrough in this model compared to what was earlier the case. The first phase of inclusion was emphatic on accounts. More accounts opened, that meant inclusion. However, one must remember that account is not a product, it' s a channel. It' s like saying, you have a TV set, you know but in itself it' s of no use. You have to have something that brings the content onto the display. So you need to have a cable, DTH or an antenna, whatever it is. Similarly, an account without appropriate products flowing through it is a meaningless thing. But, again without the channel you can' t pass the product. So, they are complimentary. The first phase was to create a channel and the second phase is what the Jhan Dhan Yojana has done, which says fill the pipelines with something that people find useful. The two aspects of the programme that have emphasised the product side of it and not just the channel side are the overdraft facility and insurance. The overdraft facility will be available from April 1 if you have an Adhaar number with the limit set to INR 5000. Now you take any person you pass on the street who is in some sort of trade, say a vegetable vendor or a fruit seller; INR 5000 for him as a source of credit is extremely important. Typically, his daily transactions will not exceed that. It usually falls very short of it. So, he gets to borrow INR 5000 from the formal sector with an interest rate, which is close to 10%. This means that if you borrow INR 100 you get INR 90 to spend. The interest is taken up front. You might say that this is exploitative but at that small level of capital the marginal productivity is very high. So, if you are borrowing such small amounts your productivity is high enough to justify that 10%. So, people are borrowing at 10% but probably generating a 35%-40% return on capital. Now, if you reduce the rate at which capital is borrowed, hopefully not to an extent that lending becomes unattractive, then the income opportunity goes up. You are effectively substituting overdraft for his current

dependence on informal sector. However, there is nothing wrong with the informal sector, as it is just a market outcome. But when you give low cost capital, it is bound to increase his livelihood options.

The second is insurance and that covers both life and financial. These are products flowing through the pipeline. Thus, the concept of an account or a product and the link between the two is what the Jan Dhan Yojna is trying to achieve. Therefore, I think that it is a very logical second phase to the inclusion strategy.

Now what are the critiques? One is that is that the Jan Dhan Yojna has no promise. I don't believe it has no promise for it is a logical extension or logical evolution. I think the more valid critic is the delivery mechanisms. Can banks live up to the expectations, business models, and organisation structures, which allow them to operate at this level efficiently? If not, then what other institutions are you creating to plug that hole? You have institutions like payment banks, small banks coming in. Are they going to play their role? I think those are questions we haven't been able to answer. Also, the second would be that who is going to bear the cost? Is the government going to bear the cost or is the account holder going to bear the cost or is it going to be split between the two. We need to have clarity on this. These are operational details we need to work on. At some point of time somebody is going to figure out what the best way of doing this is. There'll also be trial and error. Things will look like they are improving and then it'll look like they are being implemented. That's how systems work.

EB: The RBI acted on the recommendation of the Urijit Patel's committee and shifted to CPI as a measure of inflation instead of WPI. Do you think it was a move for the better?

I think there was never any question that the CPI benchmarking was better than the WPI. It was a matter of practicality. Before the new CPI was published in 2011 there were several different CPI's and no national index and each one had a different composition of basket. So, you could not actually aggregate or combine them to take out an average as they included different things. So, unless you have a national CPI that replicates or reflects the consumption pattern across the country, it could not have been used as an inflation index. You could have said that lets choose industrial workers basket but that again leaves you open to criticism that you are actually not representing everybody's interest. So, the transition to a national CPI was the first step towards moving to inflation targeting. Having done that now, the logical issue is that can we use it. However, the move towards CPI would have happened inevitably. You did not need a committee to focus on CPI. Instead, we need a committee to look into the transition in the monetary policy framework but not in the CPI.

Having said that, there are issues about the CPI index itself. It is still 47% food weighted and this is a lot. It is the highest weighting food has been given in the CPI in all the G20 countries, which is what we should be comparing ourself with. So, with food inflation being so volatile, it is sort of difficult to control it and I think that is a kind of issue that monetary policy needs to keep in mind. And, given that the rest of the index is significantly composed of services, service inflation is naturally linked to wages because services are labor intensive. So, food prices naturally translates into higher wages and so on and so there is a link between food and the rest. The CPI is only four years old now and it is going to take a while to figure it all out. But, in principal that CPI is a benchmark, I think it was an inevitable process. As long as you have a national index, it is highly justified.

EB: In your article titled 'Greek Tragedy Act II?', you wrote about how the road to recovery for Greece is going to be nothing less than bumpy, and with France now being called the sick man of the EU, do you think that this conglomeration of countries is losing it's solidarity and relevance in the present world?

Well, let me give you a sort of contrast to provide a context for this. India is a fiscal and monetary union. It has a centralized fiscal authority even though you do have sub power to tax, i.e. cities can tax, states can tax but the bulk of the tax is collected by the centre. And there is a single central bank with a single currency. But we are not an integrated market because every state has sub power to tax differentially from others and therefore the

movement of goods across state borders is constrained. Now, the EU actually evolved in the opposite direction. It started off as a customs union so movement of goods was the first achievement, and seamless movement of goods. That basically meant a harmonization of the indirect tax system so that you have a VAT across the union. Then it moved to monetary union but it has not yet moved to a fiscal union and a banking union. It does not have a unified banking regulator and it does not have a unified fiscal authority. All it has is a customs union and a monetary union. Now of course, the customs union is even bigger because the customs union has 32 members and the monetary union has 23 members. There are some frictions intrinsically but when you focus, it has achieved a degree of integration but it' s not perfectly integrated, just as India has achieved a degree of integration but is not perfectly integrated. So, you have very contrasting outcomes. India' s experience would suggest that fiscal and monetary union go hand in hand and the EU' s also moving towards that. But they started with a premise that even though they would not have a fiscal union they would accept certain fiscal rules. The Maastricht Treaty laid 3% of GDP as fiscal deficit target. Now, what happens when that breaks down and when countries violate the target is really what you' re seeing play out in terms of fragility and differential impact across countries. And, then, there is no unified financial regulator so banks in different countries are impacted. The Irish problem was essentially a banking related problem. All of this points to the great difficulty in harmonizing when you have multiple authorities. Well, they have reached where they are, and it is the second-generation countries by and large who have had the greatest difficulty. Italy is a first generation country and one of the original members. It has also struggled but it' s not very much on the news. However, it is all-negative news for the other countries and Italy is not very much in that. But France is actually one of the core countries and even though the economy may not be doing very well, it certainly has both the institutional capacity and the overall economic strength not to be at the same level of vulnerability that Greece or one of the smaller ones are. The core of the EU is robust because they have a common set or a compatible set of institutions. Even though the economy might not be performing very well it' s not under threat of collapse. The peripheries, which are the second-generation entrances, are more vulnerable. That is partly because when they came in, the institutional development had obviously not reached the level that allowed them to integrate fully. So fiscal management, regulatory capability and the role of the state overall are things are that are somewhat difficult. This explains to me why these economies have struggled and then they are locked into an exchange rate. Let me just give you a contrast between Greece and three Eastern European economies i.e. Poland, Hungary and Czech Republic. They joined the customs union but they did not join the monetary union, so they have flexible exchange rate. If you travel from Germany to, say, Czech Republic you' re moving from the Euro to the Czech currency, the Koruna. Floating exchange rate is a very powerful, very effective shock absorber. It absorbs the impact of external shock and prevents them from being transmitted through domestic variables. But Greece is in a fixed exchange rate because Greece is a part of the Euro. So Greek developments do not translate into a change in the effective exchange rate and this means that the shock travels through to the real variables. The lesson from this is that the merits of a floating rate are being demonstrated for economies like Greece. If you don' t have a floating rate there is nothing that absorbs the shock. It' s a very tricky situation. Greece' s GDP in 2014 is 23% below what it was in 2009, over a 5 year period. We talk about being frustrated and disappointed at 5% growth but Greece has actually declined with the average of 5% a year. You can imagine the impact it has had on the quality of life. Public services have become completely degraded because the government has fired so many of its staff. I met a number of people who visited and it really is extremely disturbing. I think this degree of problem could have been avoided by a floating exchange rate. Now whether you can go back to this is a question I raised in that article; neither choice is an easy choice. In 2010, when this option was being discussed, somebody estimated that it would take 9 months to print a new currency because of the lack of printing capacity. The press capacity, the ink, the paper, all of these are not readily available, they have to be customized. That is a logistic and not a policy issue. The policy issue is are you better off staying in the EU or are you better off exiting. And my answer to that is that I don' t question the logic of the customs union. I think the customs union is a very powerful force because seamless movements of goods and people are very good for a large economy. There are huge risks involved in getting out of this system; even if they are short-lived they could have lasting impacts. This is a tricky choice. What' s likely to come out of it is slightly renegotiated terms but I don' t have a prediction on this.

EB: From your long experience with Indian policymaking, what are some themes and questions that you think need attention for future research by young researchers like our readers?

Well, I think that there are two issues that you need to research. I have spent three years of my life in policymaking, else I was always on the periphery. I think one realisation that comes is that because often things won' t work in the kind of time that' s anticipated, the entire outcome is different. Things can actually look very different because the variability of time is a factor that theory does not take into account. If you are doing it theoretically, say if you are looking at the impact of a procurement policy change, for example, a steady state comparison- you give a farmer a different set of incentive and maybe next year he' ll do exactly what is predicted and that may or may not happen. You' ve made a change, you' ve expected an outcome but that outcome did not materialise. Is that good or bad for the economy is an open question. So, if people aren' t responding to incentives in the way that theory predicts, not because they don' t want to but because there' s something else that prevents them to, then I think it a significant analytical issue.

The second issue I think is, sort of related, and deals with contracts and governance and so on. How do you ensure that people deliver? What is the right mix of rewards, punishments, public pressures, incentives and disincentives that actually allow people to deliver? Now PPP is a very classic example of this because virtually in all PPP projects, the underlying conditions of the contract change dramatically. So you know delivery didn' t happen. But also, there is a reason for why these conditions change. Why were they not anticipated and what was the contribution of the government to this? What was the contribution of the private sector to this? These are open-ended questions. The argument that the government should be spending more money on infrastructure is essentially reflecting this difficulty of enforcing contracts. I think we have to be able to draw from our various PPP experiences to see what exactly went wrong and are there some generic factors that contributed to it and how do we address them? Is government the only solution or are there different kinds of contracting frameworks? I think that is an important research idea.

So, broadly these are the two important things if you are looking at policy-oriented research. The similar logic and questions apply to education and health. Also what determines delivery, how can we incentivise things, how can we govern and monitor things and what contributes to lowest cost delivery without compromising on quality are questions that can be researched upon.

WORLD AFFAIRS

Make in India vs. Make in China

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Summary:*The article talks about the growing competition between India and China in the manufacturing sector and the corresponding programmes the two countries have launched to compete against each other. One on hand, there is India, which is hoping to make a mark in the world manufacturing and on the other, there is China, leaving no stone unturned to retain its world supremacy. This article deals with the advantages that India has against China and also the tough competition it is up against.*

In a scintillating ceremony on 25th September 2014, Prime Minister Narendra Modi unveiled the much-awaited ' Make in India' campaign, which aims to turn the country into a global manufacturing hub. Surprisingly on the same day, Chinese president Xi Jinping silently announced the ' Made in China' program, with an aim to retain its manufacturing supremacy.

Though these two initiatives sound akin, they have nothing in common. While India is just beginning to improve its manufacturing sector, China is already in its second phase. It is trying to attract global markets by providing tax incentives and better infrastructure facilities. Tax incentives are their major tool to woo investors. It has adopted a tax policy of 50% tax break on foreign investments and is encouraging its investors through tax deduction on imported high tech machines, to upgrade their technology and increase research and development in order to boost the manufacturing sector.

On the other hand, India does not have much to offer other than high demand and cheap labor. With the crippling infrastructural facilities, inefficient transport system, chronic blackouts and lengthy processes involved in setting up a business, India is likely to have little appeal to the foreign investors. However, since the past year or so, investor confidence has built up owing to the policies of Prime Minister Narendra Modi, which have popularly been termed as ' Modinomics' . He believes that investors will invest only if the economic environment is growth oriented and the responsibility to create that kind of an environment lies with the government. The new government wants to radically de-bureaucratize offices, cut paperwork and remove legal and infrastructural hurdles to starting a business in India. Currently India stands at a dismal rank of 134 among 183 nations in the World Bank' s ' Ease to do Business' Index.

A boost in manufacturing will create wide spread employment and increase the purchasing power of people. It will help create jobs for over 10 million people. The program targets 25 sectors, which includes the principal sectors like automobiles, information technology, electronics, pharmaceuticals, chemicals, railways, defense, tourism and mining. With Asia developing into an outsourcing hub for the world, India will soon enter the league of ' the most preferred manufacturing destinations' of the world. ' Make in India' is the Indian government' s effort to harness this world demand and boost the Indian economy.

The announcement of ' Made in China' campaign has set off alarm bells for India. Therefore, the fervor and excitement surrounding the ' Make in India' campaign needs to be justified and validated in the near future and the scheme should be translated into something more than just a populist campaign. China has been pursuing its dream of being a manufacturing giant since 1976. Over the past years, it has made several consistent reforms to enhance its economy and boost the manufacturing sector. Given the simple fact that our markets are flooded with Chinese goods, certainly speaks a lot about their achievement and determination.

For years now, China has been the world's manufacturing powerhouse, leveraging its cheap labor to dominate global trade through increase in exports. But China's traditional advantage of cheap labor is slowly waning off due to increase in labour costs. Also, China has been appreciating its currency by 30% since 2006 due to pressure from the developed world particularly the United States of America. This has definitely taken a toll on its attractiveness as a manufacturing hub as the total manufacturing cost has shot up and is likely to shoot up further in the future.

Herein lies an opportunity for India. We are a country with a strong labor force of approximately 500 million workers including unskilled labourers, scientists, researchers and engineers. According to the US Bureau of Labor Statistics, the average labor cost in India is $1.46 per hour in contrast to China's $3.50 per hour. Apart from cheap labor, we have several other advantages such as engineering skills, a steadily growing domestic market and a raw material base.

Manufacturing sector contributes only 15% to India's GDP and the government wants to increase the share to about 25%. Many large companies such as Reliance, Tata motors and Micromax have already started setting up manufacturing plants across India. This is a very positive start to the 'Make in India' campaign. However, India has a long way to go for the road ahead is interminable. Further, many counties that rank higher than India as far as manufacturing is concerned, have better chances of gaining by China's loss. It is fairly apparent that India's window of opportunity is short lived and we must not squander this opportunity. The difference between ordinary and extraordinary is a little extra and to meet up this difference we must soon get our acts together, work harder and one day live the dream of becoming a manufacturing colossal.

"Unless India stands up to the world, no one will respect us. In this world, fear has no place. Only strength respects strength. "

-Dr. A.P.JAbdul Kalam

Can Regionalism Lead to Multilateralism?

Debasmita Padhi- 3rd year

Summary:*The article aims to answer the question: Are regional trade agreements a stepping stone or stumbling blocks in the process of multilateral trade liberalization?*

Introduction

The debate on multilateralism versus regionalism is not new. Some scholars suggest that regional trade agreements are a stepping-stone for multilateral trade liberalization while others who are major proponents of free trade say that it is a stumbling block. This essay tries to establish how RTAs can prove effective in promoting multilateral trade liberalization while examining arguments against it as well. We examine the history of world trade and formation of the GATT briefly before moving on to an analysis of the major research undertaken by international political economists to determine the extent to which regional trade agreements impact multilateral trade liberalization.

"Effective multilateralism requires some form of regional organization." RTAs have ceased to be regional and have now become "interregional" in nature.[25]

Trade in history: An overview

A textbook of international trade would undoubtedly start with Adam Smith's work. Adam Smith's phenomenal book 'An Inquiry into the Nature and Causes of the Wealth of Nations' published in 1776 laid down the basics of what we call classical economics and also advocated free and unrestricted trade policies. He believed that international competition would be much more beneficial to nations than mercantilism.[26] Mercantilism was characteristic of 18th century Europe where government used protectionist measures for improving gains from trade.

One country's export is the other's import and hence, it is not possible for all countries to gain.[27] According to the absolute advantage theory, countries should specialize in production of goods in which they have an absolute advantage. A country is said to have an absolute advantage in production if it can produce greater amount of output using same amount of inputs. But, even if a particular country has absolute advantage in production of both goods (in a 2 good model), it will have a Ricardian comparative advantage in production of one good.[28] And thus, there are benefits from specialisation and exchange. The first wave of trade globalization existed from 1860-1914[29]. During this period, the North saw industrialization while the South saw de-industrialization and North-South income gap increased.[30] It was the peak of the period of colonial rule and Great Britain was the world's economic leader. In the interwar period, the era of relatively free trade was replaced by protectionism which was one of the reasons that led to the Great Depression. After World War II, the US emerged as the economic superpower and it pushed for economic liberalization.[31] The IMF (International Monetary Fund) and IRDB (International Bank for Reconstruction and Development) or World Bank were set up for worldwide economic cooperation. The International Trade Organization (ITO) was envisaged as the global trade organization but as the US Congress did not support it, the GATT (General Agreement on Tariffs and Trade) that had managed post war trade negotiations became the global trade organization. The GATT/WTO follows two major rules: consensus and single-undertaking. It was originally a provisional institution until the World Trade Organization (WTO) replaced it in 1995.[32] GATT was highly successful in bringing down trade barriers substantially through its various rounds of discussions. This was the second round of globalization that industrialized the South and reduced income inequality.[33] Earlier, it was possible for US and other major countries to steer the direction of international negotiations. Now, with the emergence of many power blocs like the BRIC (Brazil, Russia, India, China) economies, the OPEC (Organization of Petroleum Exporting Countries), the emerging market economies, this ability of the developing countries has reduced. These countries are willing to go to great lengths to bargain for better deals and has led to the current stalemate situation in WTO.

A major criticism related to the GATT was the free-riding problem associated with MFN status (continued in WTO). According to the MFN (Most Favoured Nation) clause, every country must give equal treatment to all signatories of the GATT with regards to trade policy.[34] Hence, if a country lowers trade barriers for a particular good, it has to do so for all signatories of GATT. This provision has been included in order to prevent discrimination against particular countries. This implies that when two countries mutually exchange trade barriers reduction, it is automatically extended to the other members of GATT/WTO. The other members may not, however, necessarily reciprocate. This creates two kinds of problems. There is no incentive for member nations to enter into negotiations as others may free ride and they, themselves will not reap the entire benefits from liberalization.[35] The enabling clause in GATT allows for preferential trade agreements in favour of developing countries and Article XXIV of GATT allows for RTAs.[36] These two clauses override the MFN clause.

The number of RTAs has shown an upward trend since the early 1990s but since the early 2000s, there has been an exponential increase which has been a major concern for economists and political scientists. Among the best known are The European Union (a customs union), The European Free Trade Association (EFTA), The North American Free Trade Agreement (NAFTA), The Southern Common Market (MERCOSUR), The Association of Southeast Asian Nations (ASEAN) Free Trade Area (AFTA), and The Common Market of Eastern and Southern Africa (COMESA). Some figures might give us an idea about the extent of proliferation of regional trade agreements (RTAs). RTAs are reciprocal trade agreements between two or more countries. The WTO has been notified of 585 RTAs as of 15 June, 2014. 379 are in force currently.[37] Free trade agreements (FTAs) and Customs Union (CUs) are the two major kinds of RTAs. FTAs give rise to free trade areas where all tariffs, import quotas and preferences on most goods are eliminated, for example, the European Union. Members of an FTA may follow autonomous external trade policy while a CU is a type of FTA in which members have a common external tariff.[38] FTAs and partial scope agreements account for 90% and the rest 10% is made up of customs unions.

For or Against: An Analysis

The "spaghetti-bowl effect" first used by Bhagwati, is an oft repeated argument against RTAs. When a single member nation is a part of several RTAs, there are different, complex rules of origin and different standards. This leads to lobbying by various groups and hence, transaction costs. There is a possibility of trade diversion.[39] Trade diversion refers to the fact that an RTA might shift trade from a more efficient supplier outside the RTA, towards a less efficient supplier within the RTA. Trade creation refers to a case where the RTA allows supply from a more efficient producer. An RTA has both the effects. World trade is, increasingly, being channelled through these agreements and it stands in stark contrast to the most favoured nation criteria of the WTO.[40]Hence, there is a need for simplification of the world trade regime.

Freund and Ornelas state that measuring the extent of trade creation or diversion is based on assumptions. Even then, based on a wide range of studies, they conclude that trade diversion is the exception, while trade creation, the norm. Moreover, the magnitude of trade diversion is in such cases is insignificant. They further suggest that, bilateral agreements have often led to more gains than losses as Governments are careful while choosing trading partners.[41]

Another major bone of contention is the Article XXIV of the GATT,"4.The contracting parties recognize the desirability of increasing freedom of trade by the development, through voluntary agreements, of closer integration between the economies of the countries parties to such agreements. They also recognize that the purpose of a customs union or of a free-trade area should be to facilitate trade between the constituent territories and not to raise barriers to the trade of other contracting parties with such territories." [42]

Though it has been clearly outlined in the clause, that member countries of RTAs are not to raise trade barriers to other countries (non-member), it is argued that there is relative increase in trade barriers implicit in such a case.[43] When member countries reduce tariffs for each other while keeping external tariffs unchanged, the relative tariff levels for non-member countries would increase simultaneously.

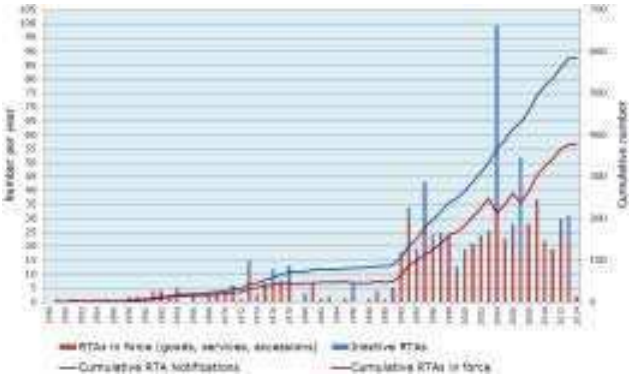
Freund and Ornelas show that there is a tendency for external tariffs to fall after a RTA which is more pronounced in case of developing countries rather than developed like UK and the US. However, since their tariff rates are already quite low, there may not be room for much change. This is proved by a simple yet logical analysis that shows marginal cost (economic) of high tariff rises while the marginal benefit (political) falls.[44] Hence, resulting in the afore-mentioned behaviour of tariff policy.

Gary Huftbauer stresses on the fact that through free trade areas there is a possibility of zero or near-zero tariff rates which is consistent with the main goal of bringing down tariffs. And though, regional trade agreements have their own problems, they are fairly easily settled between the participating countries, at least better than the pace of international negotiations. They give faster results.[45] It is true that regional trade agreements are easier to negotiate because of the fewer number of members involved and common interests. The WTO involves a large number of member nations, 159 to be precise (as of 2 March, 2013) and though there is interest group formation which reduces the effective number of members, the number of effective groups with diverging interests has increased greatly.

Bhagwati also talks of the selfish hegemon which tries to satisfy its demands through FTAs with the weaker trading nations rather than by multilateralism. The point being that, if US tried to bargain at the international level, it might not have got as good a bargain as it could through one-on-one negotiations with smaller, especially, developing countries. Though the Uruguay round was successful, NAFTA was a burden for the US during talks and NAFTA was at that time given undue importance instead of the WTO negotiations.[46] The free trade agreements might have been a strategic move on part of the US. However, today RTAs are being finalized between many developing nations, under-developed nations etc. The reach of RTAs has extended well beyond regional to become trans-national. The driving force being, that each nation wants to get the best deal and best bargains possible. There is increasing awareness of the inequalities embedded in the system against the developing countries. The conflict of interests is far from being solved.

It is also said that one of the major reasons for the proliferation of The RTAs/FTAs is the failure of the Doha round. However, this exponential rise had started from the 1990s and continued in the 2000s.

(As per the World Trade Organisation website)



The failure of Doha undoubtedly has acted as a catalyst in the process but cannot be the reason. Talks on the international level have always been slow to materialize. Even the success of the Uruguay round was not possible before crossing several hurdles. The recent abandonment of the Doha round has, however, been the longest and most impactful.

Multilateral trade liberalization definitely sounds as the ideal. If there was a free trade regime across the globe, it would definitely be a win-win situation for all provided all countries can benefit. The gains from such a process cannot be limited to a few countries because if it is so, the losers of the process will definitely make attempts to stall its progress. Every country wants a larger share of the pie. Free trade cannot just mean opening up of markets of the developing countries indiscriminately. The developed countries are unwilling to negotiate on issues which may harm their domestic economy adversely (for example, US and agriculture sector). The playing field is heavily tilted in favour of the North in these international discussions and until and unless there is an even playing field, the North-South chasm would continue to widen and free-trade would remain the dream.

Riezman uses a general equilibrium model to show that welfare losses from banning bilateral agreements are quite large and can surprisingly, lead to more protectionist measures and so the potential welfare losses are high. Even bilateral agreements may lead to more protection if trading blocks are of approximately same size but the welfare losses associated with it are quite low. Banning such bilateral trade agreements are a very risky trade policy and will hurt the world economy.[47] Although, banning of such agreements is not what is being debated, it gives an idea about the importance of bilateral agreements.

Levy argues that bilateral agreements reduce political support for multilateral free trade. The more politically popular a bilateral agreement is, the more likely it is to undermine support for multilateralism.[48] And popularity would arise from economic benefits. If the economic gains from such regional agreements are high enough, there is not much incentive for member nations to propagate free trade on a global scale. The same point is highlighted by Ornelas who notes that the source of failure for multilateral trade may be the success of the bilateral agreement in itself. If the gains from trade through bilateral agreements is large enough, these countries would not be willing to support multilateral trade.[49]

Regionalism, by allowing stronger internalization of the gains from trade liberalization, seems likely to facilitate freer trade when it is initially highly restricted. Winter raises a fundamental question about how we define multilateralism. Whether it is the degree to which discrimination is absent and/or the extent to which the country' s trading regime approximates free trade. The definition used will require different reasoning. Winter also talks of a brilliant analysis by Ethier (1996) that shows how multilateralism leads to regionalism. Developing countries are initially not very open to trade. As the world trade liberalizes, they gradually realize the benefits of opening the economy. But, if all developing countries were to simultaneously bring down controls, the investment from developed world may not necessarily flow into their country. Through regionalism, these countries can ensure investment in their own country and will lead to further openness and reforms.[50]

Institutions like the Asian Development Bank seek to promote regional cooperation in Asia and deign regional FTAs as the way forward. South Asia has remained relatively fragmented because of its political history but efforts are being made to strengthen trade relations. This will improve their bargaining power on a global platform. They can help deepen production networks for global value chains. It can also help in growth of foreign direct investments through reduction in cross-border impediments. Rationalization of ROOs and upgradation of their administration for example,

by using information technology would help mitigate the "noodle bowl" effects.[51] In fact, there is a lack of information in the industries in South Asian countries that has led to under-utilisation of even the existing trade arrangements. Studies conducted by the ADB reveal that in the South Asian region even SMEs (small and medium enterprises) view FTAs as beneficial rather than burdensome. With proper training programs, even they can benefit from these programs. They get wider market access, easier access to intermediate goods. Although the transaction costs involved may be higher because of complexities arising out of different ROOs, the benefits are far higher. For East Asia, a single FTA can help iron out the difficulties arising out of multiple ROOs (rules of origin) and standards. Further, after the East Asian financial crisis of 1997/98, the need for a mechanism of regional cooperation for stability and growth has been recognized.[52]

India is a part of almost 15 RTAs (South Asian Free Trade Agreement (SAFTA), South Asian Preferential Trade Arrangement (SAPTA), Asia-Pacific Trade Agreement, ASEAN-India and others) but neither has any major influence on world trade. It is being felt that India has lost from not joining the RTA bandwagon as other countries have. Even, the few RTAs it is a part of have not been utilized efficiently. India needs to improve its trade relations not only with its regional neighbors but also other developing and developed countries in order to grow economically as well as form strategic alliances. If Ethier's argument (as mentioned above) can be applied to the Indian case, it can ensure enough profitable investment in the form of FDI in the country.

We can take the case of Latin America where regionalism has been a building block for multilateral trade liberalization. Latin America has a complex web of overlapping preferential, regional and free trade agreements due to economic reforms implemented in the mid-1980s and 1990s. Research show that regional trade integration has favoured general trade liberalization in this case. It suggests that the rising concern of the prohibitory effects of preferential liberalization on external trade liberalization are unfounded.[53] Although it is a particular case, it is testimony to the fact that these regional trade agreements can act as stepping stones for multilateralism.

Conclusion:

Thus, regional trade agreements definitely have an impact on multilateral trade liberalization process which cannot be ignored. Many arguments emphasize the negative effects of regionalism. But when international talks have been stalled and there are no signs of revival, RTAs are the only feasible option for world trade. Regionalism may be the process by which the world will move towards multilateralism. Regional trade agreements are way ahead in terms of the issues covered. They take into consideration many sensitive topics which will certainly pose further challenges if they are to be posed for discussion on a global platform. And hence, regional trade agreements seem to be the future. Multilateralism is not the norm and will not be in the near future. Hence, if countries do not enter into trade agreements, they are missing out on a major opportunity for growth. The fear of exclusion from the gains from world trade is one of the major reasons why countries are jumping onto the regional trade agreements' bandwagon. It does not seem that countries are working towards building a multilateral system of trade liberalization anyhow. As nations progress, especially developing countries, there may be a time when all countries are on the relatively same level of economic and political power. Then, multilateralism may be the order. And regional trade agreements will be the stepping stones for reaching that level of worldwide economic integration. It does not really seem possible, in the current scenario, for countries to chart out a path for multilateralism through step-by-step multilateral liberalization. This is not to say that because of this failure, all efforts for taking multilateral trade talks to the next level should be given up. Persistent endeavours in that direction, by the major economies of the world, are necessary if we are to realize the dream of multilateral free trade.

Bibliography

n.d. *World Trade Organisation.* Accessed June 24, 2014. http://www.wto.org/english/tratop_e/region_e/region_e.htm .

Baldwin, Richard E., and Philippe Martin. 1999. "Two waves of globalisation:Superficial Similarities,Fundamental Differences." *NBER working paper,6904.*

Bhagwati, Jagdish. 1993. "Regionalism and multilateralism: An overview ." In *New Dimensions in Regional Integration*, by De Melo J and A Panagariya.

Bhagwati, Jagdish. 1994. "Threats to the World Trading System: Income Distribution and the Selfish Hegemon." *Journal of International Affairs.*

Bhagwati, Jagdish. 1995. "US Trade Policy:The Infatuation with FTAs." *Discussion Paper Series.*

Cohn, Theodore H. 2011. *Managing the global economy since world war II:The Institutional Framework in Global Political Economy* . London: Longman.

Das, Monica. 2008. "Absolute and comparative Advantage." In *International Encyclopedia of the social Sciences*, by William A Darity, edited by 2nd. MacMillan References USA.

Estevadeordal, A., Caroline Freund, and Emanuel Ornelas. 2008. "Does Regionalism Affect Trade Liberalisation Towards Non-members?" *Quarterly Journal of Economics. 123(4)* 1531-1575.

Freund, Caroline, and Emanuel Ornelas. 2010. "Regional Trade Agreements ." *Policy Research Working Paper,WTO.*

Freund, Caroline, and Emanuel Ornelas. 2010. "Regional trade agreements:blessing or burden?" *Centrepiece Summer.*

Johnson, Anders. 2008. "The Three Waves of Globalisation." *Journal of Nordregio.*

Kawai, Masahiro, and Ganeshan Wignaraja. 2010. "Free Trade Agreements in east Asia:a way towards Trade Liberalization?" *ADB Briefs,Asian Development Bank.*

Kawai, Masahiro, and Ganeshan Wignaraja. 2008. "Regionalism as an Engine of Multilateralism:A Case for a Single East Asian FTA." *Working Paper Series on Regional Economic Integration* 14.

Kelton, Maryanne. 2012. "Global Trade." *Introduction to International Relations* 347-378.

Levy, Philip I. 1997. "A political-economic analysis of Free Trade Agreements." *American Economic Review* 87: 506-19.

Lombaerde de, Philippe, and Luk Langenhove van. 2007. *Multilateralism, Regionalism and Bilateralism in Trade and Investment:2006 World Report on Regional Integration.* New York: Springer. http://www.kcl.eblib.com/patron/FullRecord.aspx?p=337197.

Ludema, Rodney D, and Anna Maria Mayda. 2009. "Do countries free ride on MFN? ." *Journal of International Economics.*

Ornelas, Emanuel. 2005. "Trade creating free trade areas and the undermining of multilateralism." *European Economic Review* 49.

Riezman, Raymond. 1999. "Can Bilateral Trade Agreements Help Induce Free Trade?" *Canadian Journal of Economics* 32 (3): 751-766.

Schumacher, Reinhard. 2012. "Adam Smith' s theory of absolute advantage and the use of doxography in the history of economics." *Erasmus Journal for Philosophy and Economics.*

Winters, Alan L. 1996. "Regionalism versus Multilateralism." *Policy Research Working Paper 1687,The World Bank.*

Who Bit the Dragon? Understanding China' s Downward Trajectory

Falak Arora- 2nd year

Summary:*China's economic thrust on the world map has increased over the years. So much so that it was predicted to be the next superpower of the world. But since, a few dents have appeared on the picturesque growth. Zooming in on the fault lines would point towards a structurally weak growth model, a corrupt government, rampant investment in infrastructure and a pending need to increase workers' wages. There is a need more than ever, to shift to a consumption driven model from the present export driven model. The only silver lining is that the government seems to have acknowledged that the so-called Chinese dream needs immediate rescuing. Over the next few years, while the same growth rates will remain elusive for China's citizens, it can still be saved from Japan like conditions if the right policy changes penetrate the economy.*

Rewind back to 1978 and China would have been one of the poorest countries, cowed by the puissant powers of the world. Since then, of course, China has miraculously steered its economy, such that it seems to betray its own history today. Deng Xiaoping, China' s reformist leader triggered the economy' s unprecedented chase in 1982 to realize its potential, catapulting China to the front. In 2012, China accounted for close to 15% of the world' s GDP and has lifted more than 500 million people out of poverty since(World Bank). Although, what' s redoubtable is the speed at which China has ascended to the top. China recently overtook U.S, adjusted for purchasing power parity, as the world' s largest economy. Its GNI per capita is close to $11,805 PPP dollars, almost 37 times more than what it was in the1970s.(McKinsey)

However, ominous predictions now cloud the ‘ Chinese miracle’ . If its critics and the recent growth data are to be believed, China is headed for a definite slow down. Growth in China has fallen to 7.4%, the lowest since 1990(The Economist). With rising manufacturing costs, softening demand, and property slump, there are definite signs that the economy is sputtering. Mounting debt and increasing job losses, spell bad days ahead. Chinese premier, Xi Jinping calls this the ‘ new normal’ , as there is a fervent attempt to shift its export-led growth model to one driven by consumption demand. The Chinese middle class, which has become accustomed to the fruits of economic growth, has been worst hit, with rising unemployment and falling wages. According to Financial Times, fall in demand for oil in China too contributed to the overall slump in oil prices.

Mapping China’ s growth model would tell you that it was always built on shaky foundations and hence, the strong tremors. China’ s export driven model largely follows from Japan and South Korea’ s economic models, wherein exports and investment fueled by credit are the major drivers of the economy. Low wages while attracted business from around the world but kept the internal consumption demand low. Hence, the economy is dependent on export demand, which has been drying up, ever since the financial crisis. Economists now worry that China will soon experience the kind of deflation and stagnation that Japan and South Korea did.

After the financial crisis of 2008, the government induced a $652 billion stimulus package into the economy, in a bid to avoid unemployment (Bloombergview). The government directed heavy funds into its state engines, to prevent them from closing down. China controls the banking system of its country; hence its state owned companies have an all-time access to cheap credit. The government has been accused of creating a large number of state-owned companies in industries such as energy, telecommunications, infrastructure, and auto making, which are inefficient and corrupt. The banks prefer lending money to such low risk avenues than the private players or budding entrepreneurs, thus, preventing the flow of funds into possible profitable ventures to revive the economy. This major misallocation of capital to unproductive firms, are the first signs of a debt crisis in waiting. To quote The Economist‘ For the past few years China has been on a borrowing binge. Its total debt—the sum of government, corporate and household borrowings—has soared by 100% of GDP since 2008, and is now 250% of GDP; a little less than wealthy nations, but far higher than any other emerging market’ (The Great Hole Of China). This has given rise to shadow banking- a kind of lending that doesn’ t make its way to the banks balance sheet. Such massive lending to inefficient businesses will lead to inflation and rising production costs, causing China to lose its competitiveness in exports. The past would teach us that any country with such debt bubbles have a hard landing. Japan, in the 1990s too pretended that its banks were solvent and firms productive, but is now caught in stagnation, that has lasted forever.

China is even more dependent on exports than Japan ever was. Despite the governments reassurances about plugging financial loopholes, non performing assets in 2014 have risen at a pace faster than in 2013. This has incredibly weakened the banking sector. Debt in China grew at 16% in 2014, which is even higher than its GDP growth(World Bank).

Following the stimulus programme and availability of easy money, China undertook over 100 ambitious infrastructure projects. The overdrive has been such that well built roads were rebulit for the sake of generating economic activity. This has led to the creation of ‘ ghost cities’ - completely uninhabited empty cities, with world class infrastructure. The worlds largest mall New South China mall, barely sees any visitors. China is replete with copious bridges, factories, malls etc which lie completely vacant.According to CNBC, ‘ China’ s problem now is that each yuan of new investment is yielding a diminishing amount of new GDP’ (China Risks Following Japan). So while short term jobs and economic activity was created, much of this new capacity was not required by the market. Adding to this enormous bubble is China’ s housing sector. Easy money, encouraged developers to build properties, and expectation of inflation induced potential home buyers to save money in the form of property. But the sudden rise in housing prices has led to a large number of unsold houses. Developers are now left with a large debt which they can’ t pay off and are rampantly exiting the business. The risk further remains that if these properties are not filled soon, they are likely to remain empty forever.

The surplus labour advantage that supported China's growth model has dwindled thanks to the ' One Child Policy followed by the republic. China's population is ageing fast and by 2050 people above the age of 60 will form 30% of the population as opposed to 15% now, while the working age poulation will fall sharply(The Economist). Manpower, a business-recruitment firm, has estimated that workers may even need to be imported by 2030. This has created a dire need for a large pension system, since single children may not be willing or able to take care of their families alone.

China needs to rebalance its economy, away from investment and more towards consumption. A view that even noted economist Paul Krugman has supported is that in any economy with such high growth rates, consumption should form a much larger share of the GDP. Private consumption relative to GDP is still the lowest in China, as compared to other major economies. And with fears of inflation, due to rising production costs, goods are likely to become costlier, futher detering private consumption. Already due to poor health insurance and pension system, households are forced to save more. China's saving rates is among the highest in all economies, close to 51% of the GDP(CNBC). According to the IMF, "without fundamental reform to rebalance the economy toward consumption and stimulate productivity growth through deregulation, growth is likely to slow considerably." Apart from this the service sector has a large potential for creating jobs and needs heavy investment,while the banking sector needs to be given financial independence to play along the market rules.

The demographics need to be rebalanced and so China must do away with its ' One-Child Policy' completely. Farmers, in China, do not have property rights over their land. It can be confiscated by the government as and when they wish to. Such rights need to be given, especially to those at the bottom of the pyramid. There is a clamour, more than ever, for China's impending need to transform to a functioning democracy.

It is the pages of history that predict the future. China's future, ofcourse, seems saturnine. It is therefore, important for the Chinese government, to realise its ability to alter the future, and to protect the aspirations and dreams of its people!

REFERENCES

1. http://www.economist.com/news/leaders/21625785-its-debt-will-not-drag-down-world-economy-it-risks-zombifying-countrys-financial
2. http://www.businessweek.com/articles/2013-10-09/a-slowing-china-needs-reform
3. http://www.economist.com/news/finance-and-economics/21627627-new-study-asks-how-long-chinese-economy-can-defy-odds-even-dragons-tire
4. http://www.economist.com/news/leaders/21601027-worlds-sake-and-its-own-china-needs-change-way-it-builds-and-runs-its
5. http://www.forbes.com/sites/kenrapoza/2014/07/30/the-four-trends-driving-chinas-future-growth/
6. http://www.bbc.com/news/world-asia-china-21666152
7. http://www.imf.org/external/np/speeches/2014/060914.htm
8. http://www.cnbc.com/id/100922670

Anatomy of Alliances

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Summary: *"Nations have no permanent friends or allies, they only have permanent interests". This article aims to validate the above statement made by Lord Palmerston in the 19th century. The analysis of India's relations with USA, UK, China and Japan forms the basis for the conclusion that nations are guided by their own self-interest rather than historical friendship. Therefore, lasting alliances requires that both domestic compulsions and international dynamics be accommodated.*

The character of Bhishma in the Mahabharata claimed that "the force of circumstances creates friends and foes" and this sentiment was again echoed in Lord Palmerston's statement in the 19th century when he

asserted that "Nations have no permanent friends or allies, they only have permanent interests." This holds well even today. Global frictions have waxed and waned, public sentiments have ebbed and flowed, allies have become enemies and vice versa. Nations across the globe have strategically and rationally chosen allies so that they get the maximum payoff possible, something that game theory will also endorse. Nation-states take into consideration the needs and interests of other nation-states only when these other nation-states are ' credible threats' i.e. they have the power to threaten or perform damaging actions.

Our new government is committed to forge new allies and rekindle the warmth with the old ones. A very cautious approach has been taken in dealing with the nations that India doesn't get along well with. Campaigns like ' Make in India' are being publicized and promoted on a huge scale to lure international investors with superior technological skills to exploit a skilled Indian labour force. Many leaders from across the globe have also visited India recently.

India has the world's second largest population. According to GDP measures, it is the third largest economy in Asia. India has the world's second largest army and it is expected to become the world's fourth largest defence spender by 2020. The country shares a 2,500-mile border with China and sits near critical chokepoints in the Indian Ocean, through which over 80 percent of the world's seaborne oil passes, along with almost one third of global trade. Thus, India is an important player in the geopolitical dynamics and it's in the interest of many nations to forge an alliance with it. New Delhi is learning well the art of treading the dicey waters of pleasing allies along with signing profitable deals. Plethora of international examples supports the above claim.

INDIA – UK

India and the UK have a shared history that goes back to the colonial days, and these historic links make Britain (to quote Mr Cameron's phrase) India's ' partner of choice'. The large Indian diaspora and other soft ties, all lend warmth to the Indo - British relation. So, when the Indian government choose the French consortium-led Dassault Rafale over the UK–German consortium-led Eurofighter Typhoon as the preferred bidder in the tender process for defence aircraft, it was met with much disbelief in the UK and Germany. India's Ministry of Defence emphasized that price would be the most important factor in its decision. The Rafale was quoted to be 15–17 per cent cheaper than the Typhoon. Rafale has an advanced reconnaissance pod and the latest electronic scanned array radar. None of these features were offered by the more expensive Typhoon. This contract was important for Britain because it would have provided a significant boost to their national economy, particularly, in the hard-hit manufacturing and defence sectors. Even though India and Britain have been allies for a long time, but the warmth of that partnership wasn't good enough to seal the much-needed deal in favor of UK. India chose to go with the bidder who served her interests the most (i.e. gave the maximum payoffs), much in a way that game theory predicts.

INDIA - USA

Historically a non-aligned India and an allied USA had separate political trajectories and national interests for decades. But post the cold war, a lot has changed, and pragmatism and enlightened self-interest have brought these two countries together.

The Indo-U.S. strategic partnership is based on increasing convergence of interests on bilateral, regional and global issues. However, in April 2011, the Ministry of Defence rejected bids from US firms Lockheed and Boeing, which offered the F-16 Fighting Falcon and F/A-18 Hornet, respectively. The rejection was consistent with the Indian government's refusal to sign arms transfer agreement with the US. The weakened ties with Pakistan gives India an even greater significance in America's efforts for stability in Afghanistan when most NATO troops leave by the end of the year. Also, America's desire for co-operative relations with China have degenerated into a form of strategic competition, thereby favoring India as a partner.

Overall, however, America's economic ties with India do not come close to the huge, symbiotic relation it has with China. India itself now trades more with China ($74 billion in 2011) than it does with America ($58 billion), and undoubtedly, American officials would like to see that change more in their country's favor.

INDIA – CHINA

China has also extended a warm hand of friendship to Mr Modi. The first telephone call Prime Minister Modi received following his May swearing-in ceremony was from the Chinese Premier Li Keqiang who for 40 minutes conveyed China's desire to build ' robust ties' with his new government. Despite the recent Chinese-Indian standoffs, the deployment of additional troops and weapons near their contested border, China backing Pakistan and a growing Chinese presence in the Indian Ocean, Beijing and New Delhi enjoy increasingly productive ties.

Between 2003 and 2012, the trade between the two countries increased by an average of 30 percent each year. Their armies are conducting joint military exercises, and in February 2014, China offered to fund Indian infrastructure development with $300 billion in loans. The synergistic benefits from this alliance could boost the economies of both nations, if both are mature enough to handle their differences smartly.

INDIA - JAPAN

China has played the cupid that has brought about the recent India-Japan honeymoon. Japan is open about its strategy of being an ally of India with an eye on China, while India remains the bashful bride, enjoying the attention of the two leading Asian economies. New Delhi not only secured huge economic investment from Tokyo but also found a partner for economic growth. Japan has committed to investing nearly $34 billion in India; it is involved in almost seventy infrastructure projects (with more being negotiated) and Mr. Modi and Mr. Abe have upgraded their countries' relationship to a "special strategic" partnership. Japan's difficult relations with China may have nudged it to look for stable economic opportunities and for India, it helps, as it can now more confidently present itself to the world as the next best investment option after China, because of the two assets India has that China does not: democracy and non-aggressive diplomacy.

But India will have to balance its relations with these two countries wisely. As a neighbor, China must surely remain India's priority. National interest will drive India to seek peaceful relations with China. In the meantime, closer defence engagement with Japan might be helpful in ensuring its longevity. This need not be anti-China in nature (which India can ill-afford anyway), but rather a contribution to maintaining peace and prosperity in the region.

CONCLUSION

Nations are led by their own motives and not historical friendships. India and the United States have common interests in fighting terrorism and in providing a strategic counterweight to China. But India has a fruitful relationship with Iran that it see's no reason to sever. France and USA are also allies, but France did not provide much support in the war in Iraq and though UK supported the US in Iraq, the US didn't provide so much support to Britain during the Libyan war. Russia and USA were involved in the cold war few decades ago, but Russia did support the US in the war in Afghanistan.

Preventing the domination of any single power, promoting democracy, fostering economic growth, preserving global commons, promoting energy security, safeguarding the global environment and fighting terrorism are few-shared interests that form or break allies. But, shared interests do not mean that any country will subordinate its national interests. Issues such as competing national preferences, absence of any tradition of cooperation, and diversity of domestic interests may not allow countries to form a formal alliance. Most nations want to lead, and none wants to be subservient, so, whatever engagement emerges, it has to be sought on equal terms. Statecraft today, requires nations to accommodate both domestic compulsions and international dynamics for a lasting alliance.

REFERENCES

1. http://www.forbes.com/sites/stephenharner/2014/09/03/a-japan-india-anti-china-alliance-no-this-is-about-economics/
2. http://www.economist.com/node/21556935
3. http://www.bbc.com/news/world-asia-india-16809532
4. http://www.mea.gov.in/Portal/ForeignRelation/India-U.S._Relations.pdf

Is Dollar Losing its Status as a Reserve Currency?

Pallavi Wats- 2nd year

Summary: *The writer explains why the dollar is losing its lofty status as a reserve currency and if there is a possibility of it being replaced by any other currency in the near future.*

"Money is my military, each dollar a soldier. I never send my money into battle unpreparedand undefended. I send it to conquer and take currency prisoner and bring it back to me."

Towards the end of World War II, the US dollar was given the status of reserve currency by international treaty following the Bretton Woods Agreement. There was no other currency that could match the dollar, despite the fact that it was ' delinked' from gold. The phrase ' full faith and credit of the United States Government' was sacrosanct throughout the world.

A few years later, a number of governments are calling for the replacement of dollar as the world's principle reserve currency. Reserve Currency is a currency that is held in significant quantities by governments and institutions as part of their foreign exchange reserves. It is commonly used in international transactions and often considered as safe-haven currency.

A definite trend in the direction of ' de-dollarization' can be easily seen from the decline in the percentage of dollar denominated securities in the world's reserves (i.e. from 90% to 62%). China, which holds $1.3 trillion of U.S. treasuries and other debt instruments, has been calling for the end of the dollar as the world's reserve currency for years. Furthermore, China and Japan have executed bilateral agreements to conduct trade with one another in their own currencies, and so has Russia. Recognizing the emergence of the Yuan, Australia recently announced it would transfer 5% of its currency reserves into Chinese bonds.

The Governor of the Russian Central Bank has shown keenness in discussing, with China and its ' BRICS' partners, the establishment of a system of multilateral swaps that will allow the transfer of resources from one country to another. China has also offered the European Union to deal with it directly through their respective central banks' currency swaps, thereby avoiding the usage of the dollar which up till now has been used dominantly as a universal currency.

Why has the dollar started to lose favor? The dollar is susceptible to losing its vaunted position as first reserve currency to any major trading country that stops inflating its currency. There is evidence that China understands what is at stake, and therefore it has increased its gold holdings and has instituted controls to prevent gold from leaving China. If the world's second largest economy and one of the world's greatest trading nations tie its currency to gold, demand for the Yuan would increase and demand for the dollar would decrease. In practical terms this means that the world's great trading nations would reduce their holdings of dollars, and dollars held overseas would flow back into the US economy, causing prices to increase.

Although steps have been taken to diversify global currency requirements, and despite calls for change by China and other nations, the fact remains that the dollar is likely to retain its lofty status as the world's reserve currency in the immediate future. The U.S. has the largest economy, the most liquid and accessible financial markets and a readily traded currency and despite financial problems, is still considered a ' safe-haven' in periods of turmoil. The US economy is the dominant player in global trade.

So, will the dollar lose its reserve currency status at some point? Yes. In fact, it's already starting to lose its reserve status to Europe and China. Will it cause everyone to suddenly ditch the dollar? Probably not. It just means that the US will produce a lower proportion of global output and therefore, as a matter of accounting, the rest of the world will hold a lower percentage of US dollar denominated financial assets as a percentage of global output. We all know that all good things eventually do come to an end, and as T.S. Elliot once wrote, "What we call the beginning is often the end. And to make an end is to make a beginning. The end is where we start from."

The Role of Regional Cooperation in Changing the Lives of South Asian People

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Summary: *With faith in the power of regional cooperation, this article serves to explicitly conclude through a coherent analysis as to how regional cooperation can play its utmost role as a stimulator in changing the lives of people in South Asia.*

I' ve stepped into the ocean twice in my life, once as a 9-year-old and again as a 23-year-old. When we were little, our elders made us tightly hold onto each other's hands while riding the waves in the ocean. That saved us from slipping and getting pulled into the waters. When we became older, it wasn' t as vital to grip so hard to stay firmly on our feet when the waves hit. But still, we were ordered to hold hands because that made it safer. Of course, being a grownup, I could' ve probably held my balance on my own. But I found it wiser to stick together. I see greater regional cooperation in South Asia as something exactly like the scenario of riding waves. It' s better for the South Asian countries, especially at their developing stage, to opt to grow together instead of walking alone.

Only through a united approach, can there be hope of bringing about the much-needed change in the lives of the people in South Asia. And only when regional cooperation can bring about such change, will it be worth pursuing. Despite the steps already taken, stronger steps are now direly required. Besides rescuing the present generation, focus should be laid on saving the future generations from falling into the same traps as their predecessors. Regional cooperation is the only stimulator that will strengthen the potential sectors and direct them towards the path of betterment.

If there' s anything that can change peoples' lives, it' s education. Education has the power to change the fate of a man' s family by ensuring that his children and grandchildren get an opportunity to stand on their own feet, despite the man being illiterate himself. An education has the potential to build a stable society through enlightenment of children[54] (Friedman, 1962). Believing that like charity, ' Everything, be it good personality or bad habits, begins at home[55]' and because the importance of parents' education in shaping the future generations has been proved to be indispensable (Gratz, 2006) - growing up in the care of educated[56], moral parents could be the magic ingredient in the recipe of development we are searching for in South Asia.

But education itself should mean more than literacy and it should be understood that these days there is a difference between ' education' and ' graduation' .[57]

As income and employment generating platforms, Health and Tourism are two sectors that hold prospect. The combination of access to health care, proper education and the utilization of the tourism prospect in South Asia will help build human capital; which will then bring about a breakthrough for the habitants of South Asia (Todaro, 1980). In visualizing improvement in the health and tourism sectors of South Asia, a crucial thing to remember is the importance of human resource development through proper training and education in these fields to obtain efficiency in jobs and sufficient profits from both these industries. The lack of experience, technical competence, training, communication skills of people involved in the health sector has led to the perpetuation of medical malpractice (Rogers et al., 2006) (Huntington & Kuhn, 2003); and the tourism sector of South Asia also needs trained people in order to function well enough to be a standard destination for tourists coming from all over the world. Proper knowledge and training of people in services is a must, especially training for the use of a common language such as English. For the benefit of tourists and patients from other countries in the region and also from anywhere outside of the region, it' s imperative that people working in the health and tourism sectors have a minimum ability to comprehend English properly.

It's now time to construct schemes that incorporate education, health, and tourism more strictly through greater regional cooperation. 'THE' scheme, which stands, as the abbreviated form of 'Tourism, Health and Education' is one such scheme I'd like to propose is. This would be a long-term plan, whose functioning would involve starting with the tourism and then moving towards the health sector. The paramount importance among these three sectors would be given to education, whereas the other two sectors would be the two most important building blocks needed on the journey towards development. By gradual improvement of these two sectors, and in the meantime by accumulating a certain amount of start-up cost to take on the education part of the scheme, adequate implementation of this scheme would require the unity of South Asian nations.

'THE' scheme	Aims and agendas
Tourism	By relaxing the visa regulations among South Asian nations for visiting tourists, this project will aim to put forward package deals for touring these nations at reduced fees.There should be a 'THE' fund, which will be built by saving to accumulate enough funding to support development of tourist spot infrastructure and facilities. In development of tourist locations, there will be an opportunity for employment generation by introducing complementary tourism facilities such as taking photos, food stalls etc. Such tourism packages at lower cost and easier border-crossing regulation will surely attract many tourists and generate revenue. This revenue, can then, be used for further improvement in the tourism and health sector and later in the education sector.
Health	Combining the attributes of health and tourism seems like an appealing deal that will catch the eye of many foreigners. Training of doctors and nurses is an important step here. There is also a large scope for creating more jobs since there is a shortage of properly trained health technicians, paramedics and nurses in most South Asian nations. The fundamental issue of doctor-nurse and doctor-patient confidentiality should be taken into account and all these issues should be dealt with diligence. For example, training programs could be started in each of the countries where a team of reputed physicians from all the countries would give briefings as part of a tour to increase the quality of healthcare. Reduced fees could be introduced for people of this region desiring medical attention. Revenue from 'THE's projects and help from the monetary fund of 'THE' could be used for medical research and medical technology development and should also be directed towards creating easier transportation facilities between the countries. An accreditation system could be recognized within the South Asian nations as a process of certifying a level of quality for healthcare providers and programs. Joint training tours and programs will ensure efficiency in the jobs.
Education	After building up the tourism and health sectors and the 'THE fund', the education part of the scheme should kick into action. For improvement in the education sector, 'THE' scheme will emphasize on the targets of ensuring standard education for every child and also increasing the quality of education. Leaving the religion studies and country-centric studies out of the ambit of the scheme , some common subjects of English, Mathematics, Science, Geography etc. should be taught up to college level in a similar way at reduced fees so that under-privileged children can take part. In every educational institution, this particular system could be introduced and educational material could be funded by the 'THE scheme'. Students studying under this system could get a uniform basic education at affordable fees and existing classrooms in educational institutions could be used for classes after school/college hours under other systems. In that way, destitute children that earn livelihood by day could participate in this system even on evenings. On the

	other hand, THE scheme could use its accumulated funds to set up institutions all over the South Asian nations, in every village and remote area there is. Having gotten an education from ‘ THE’ system will verify the knowledge base of students from any of the eight South Asian nations and after college there could be a generalized standard test[58] which will give them a place in any of the universities in South Asia at decreased fees. All the existing universities could have 20-30 seats for students from this system and through passing the standardized tests, students of this ‘ THE’ system could qualify for a university education anywhere in South Asia. In doing so, ‘ THE’ scheme would be harmonizing higher education in South Asia. A university-ranking list should be created amidst South Asian universities and the results of the standardized test would indicate a place in these institutions accordingly. ‘ THE’ system would certify that more and more students get an education and most importantly- without dropping out every student completes education until graduating from university. This will assure security for the students in the job market, which in turn will help them, bring themselves and their family out of poverty. ‘ THE’ could use its funds and resources in improving the access to technology and knowledge sharing among the South Asian nations. For example, an ‘ E-library’ for South Asian students to access and share available information among the nations would be a good step of both regional cooperation and education.‘ THE’ will basically advocate higher education and will pave the way for many students who are deprived of such opportunities. Similar to the concept of relaxed border crossing regulations for tourists, students of ‘ THE’ system will have facilities of travelling easier without visa, visa fees or related formalities. So, through greater regional cooperation- the South Asian nations will make it easier for both students (of THE) and tourists to enter and travel within this region.

Being a long-term plan- the ‘ THE’ scheme will change peoples’ lives by creating income sources and jobs for insolvent people of the current generation- who in turn will give priority to making sure the next generation gets the proper education needed. And so, each of the South Asian nations will have incentives to join in ‘ THE’ scheme as there are scopes of better prospects through all or any of the three sectors of tourism, health and education.

A game theory approach can be taken to verify whether there is a Nash equilibrium and evidence that any of the South Asian countries would be interested in this scheme.

Let, C= benefits from joining in ‘ THE’ ; and D=no extra benefits and continuing with the prevailing systems in education, health and tourism. Thus it is assumed that C>D, which indicates that ‘ C’ is a better pay-off than ‘ D’ .

		Country with one of the four highest HDI among the eight South Asian countries [Country 1] (Sri Lanka/Maldives/India/Bhutan)	
		Participates in ‘ THE’	Doesn’ t participate in ‘ THE’
Country with one of the four lowest HDI among the eight South Asian countries [Country 2] (Bangladesh/Nepal/ Pakistan/Afghanistan)	Participates in ‘ THE’	C,C	D,C
	Doesn’ t participate in ‘ THE’	C,D	D,D

Here, [C,C] is a Nash equilibrium, because participating in ‘ THE’ scheme is the best response of each country in spite of whatever decision the other country is making. This validates that each South Asian nation would be interested in the scheme as long as the benefits are viable.

The three sectors of focus in ‘ THE’ have been given great importance to all around the world. Today, transnational education is an endeavor being strongly pursued. It’ s no wonder that European Union (EU), Association of Southeast Asian Nations (ASEAN), African Union (AU) have given great priority to education in their strategies and have also given extreme importance to enrichment of their tourism and health industries.

With all these real examples as inspiration, the idea of ‘ THE’ scheme is something I believe in. I believe that if researched and implemented, a scheme of this sort could be a breakthrough for South Asian change. Because, while it’ s necessary to immediately help people in trouble, it’ s more important to find out ways to pull them out of their hardships. That’ s where the aspects of education, health and tourism could truly make a difference and could be ‘ the right steps in the right direction’ .

Regional cooperation is a stepping-stone to a better future. In a family, the stronger the bond, the better the upbringing and strength of each person. The same holds true for greater regional cooperation between countries. Sharing the same sort of backgrounds, common goals and problems makes South Asia a family. Therefore, it’ s high time we start acting like one and move past our issues so that we can venture towards a stronger and brighter tomorrow together.

Citations:

(n.d.). Retrieved from Wikipedia: http://en.wikipedia.org/wiki/Bank_run

(n.d.). Retrieved from The United Nations Educational, Scientific and Cultural Organization (UNESCO).

Aiyar, Y. (2014). Money Matters: PAISA and the ASER survey. In Pratham, *Annual Status of Education Report* (pp. 12-13). New Delhi: Pratham.

al, R. e. (2006). Analysis of surgical errors in closed malpractice claims at 4 liability insurers.

Alkire, S., Roche, J. M., Santos, M. E., & Seth, S. (2011). *India Country Briefing.* Oxford Poverty & Human Development Initiative (OPHI) Multidimensional Poverty Index Country Briefing Series. Available at: www.ophi.org.uk/policy/multidimensional-poverty-index/mpi-country-briefings/.

Bangladesh Bank. (n.d.). Retrieved from http://www.bangladesh-bank.org/pub/annual/anreport/ar1213/index1213.php

Bangladesh Bank. (2014). Retrieved from http://www.bangladesh-bank.org/econdata/exchangerate.php

Bangladesh Economic Update. (2014, July). Retrieved from http://www.unnayan.org/reports/meu/MEU_July_2014/MEU_July_2014.pdf

Bhat, R., & Jain, N. (2004). *Analysis of Public Expenditure on Health using State Level Data.* Ahmedabad: IIM Ahmedabad.

Black, R., Morris, S., & Bryce, J. (n.d.). *‘Where and Why are 10 Million Children Dying Every Year?’*. Retrieved Jan 20, 2015, from The Lancet, vol. 361, no. 9376.

Bloombergview. (n.d.).

Bouët, A., Mevel, S., & Thomas, M. (2010). *Is SAFTA Trade Creating or Trade Diverting?* Retrieved from International Food Policy Research Institute: http://www.ifpri.org/sites/default/files/publications/ifpridp00950.pdf

British Council. (n.d.). Retrieved from http://www.britishcouncil.org/sites/britishcouncil.uk2/files/the_shape_of_things_to_come_2.pdf

Bros, C. (2010). *Castes in India: Implications of Social Identity in Economics.* Paris: Universite Paris I Pantheon-Sorbonne.

Bryan R Evans, Tearfund. (n.d.). *The Cost of Corruption: Tearfund*. Retrieved Jan 2015

Bullock, & Trombley. (1999). *The New Fontana Dictionary of Modern Thought* . London : Harper Collins .

Chanda, R. (2002). Trade in health services. *Bulletin of the World Health Organization* .

Chandra, N. K. (2010, February 20). Inclusive Growth in Neoliberal India: A Facade? *Economic and Political Weekly , XLV* (8), pp. 43-56.

China Risks Following Japan. (n.d.).

Chugh, S. (2009). *Progress in Literacy and Elementary Education: The Study of Himachal Pradesh, Kerala and Mizoram.* New Delhi: DISE.

CNBC. (n.d.).

Comptroller and Auditor General of India. (2012-11). *Performance Audit Report on the Issue of Licences and Allocation of 2G Spectrum: CAG*. Retrieved Jan 2015, from http://cag.gov.in/html/reports/civil/2010-11_19PA/Telecommunication%20Report.pdf

Drèze, J., & Sen, A. K. (2013). *An Uncertain Glory: India and its Contradictions.* New Delhi: Penguin Allen Lane.

Erling, D. E. (2013, November). *The importance of English in South Asia's job market*. Retrieved from http://blog.britishcouncil.org/2013/11/08/the-importance-of-english-in-south-asias-job-market/

FIS. (2014). Retrieved from http://www.fisglobal.com/C031314

Friedman, M. (1962). Retrieved from http://www.edchoice.org/The-Friedmans/The-Friedmans-on-School-Choice/The-Role-of-Government-in-Education.aspx

Glucina, M., & Mayumi, K. (2010). Connecting thermodynamics and economics. *Annuals of the New York Academy of Sciences* .

Gratz, J. (2006). The Impact of Parents' Background on their Children's.

Gupta, D. (2010, September 16). *How Tamil Nadu has made an incremental difference.* Retrieved March 27, 2014, from The Hindu: Online Edition: http://www.hindu.com/2010/09/16/stories/2010091652601100.htm

Harrison, & Myers. (1964). *Education, Manpower and Economic Growth: Strategies of Human Resources Development.* New York: McGraw Hill Book.

Harrison, D. (2001). Human Resources in Tourism Development. In *Tourism and the Less Developed World: Issues and Case Studies.*

Hoyt, Moore, & Leibenberg. (2008). *The Value of Enterprise Risk Management: Evidence from the U.S. Insurance Industry* . Retrieved from file:///C:/Users/Lenovo%20E/Downloads/mono-2008-m-as08-1-hoyt.pdf

Huntington, B., & Kuhn, N. (2003). *Communication gaffes: a root cause of malpractice claims.* Retrieved from http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1201002/?report=classic

In Globalization, Growth and Poverty: Building an Inclusive World Economy. (2001). Retrieved from The World Bank.

Infochange. (2000). *Primary Education: What is Himachal Pradesh doing Right?* Retrieved March 25, 2014, from Infochange Education: http://infochangeindia.org/education/stories-of-change/primary-education-what-is-himachal-pradesh-doing-right.html

Janiak, A. (2006). Does Trade Liberalisation lead to Unemployment? Theory and Some Evidence.

Kainuwa, A., & Yusuf, N. B. (2013). Influence of Socio-Economic and Educational Background of Parents on their Children's Education in Nigeria. *International Journal of Scientific and Research Publications* , http://www.ijsrp.org/research-paper-1013/ijsrp-p2258.pdf.

Khera, R. (2011, November 5). Revival of the Public Distribution System: Evidence and Explanations. *Economic and Political Weekly , XLVI* (44), pp. 36-50.

Khera, R. (2012, September 10). *Tamil Nadu's Striking Progress in Welfare.* Retrieved March 28, 2014, from IndiaTogether: http://indiatogether.org/tnwelfare-government

Mallaby, S. (2005, December 5). *Detroit's Next Big Threat.* Retrieved March 27, 2014, from The Washington Post: http://www.washingtonpost.com/wp-dyn/content/article/2005/12/04/AR2005120401094.html

Martínez, J., & Martineau, T. (2002). Human resources in the health sector:an international perspective.

McKibben, B. (1996). *What is True Development? The Kerala Model.* The UTNE Lens.

McKinsey. (n.d.).

Meritt, M. (2000). The Physics of Marxism.

Murthy, R. (2009, Aug 27). *Cops turn robbers on India's roads: Asia Times*. Retrieved Jan 2015, from http://www.atimes.com/atimes/South_Asia/KH27Df03.html

New York Times. (1997). *'Fodder Scam' Could Bring Down a Shaky Indian Government : New York Times*. Retrieved Jan 2015

Nordhaus, W. D., & Yang, Z. (2009). *A Regional Dynamic General-Equilibrium Model of Alternative Climate-Change Strategies.* Retrieved from The American Economic Review, Vol. 86, No. 4: http://www.jstor.org/stable/2118303

Odland, S. (2012, March 15). *Why Are Food Prices So High?: Forbes*. Retrieved from http://www.forbes.com/sites/steveodland/2012/03/15/why-are-food-prices-so-high/

Oxenham, J., Diallo, A. H., Katahoire, A. R., Petkova-Mwangi, A., & Sall, O. (2002). Skills and Literacy Training for Better Livelihood. *Africa Region Human Development Working Paper Series* .

Pagach, D., & Warr, R. (2010, April). *The Effects of Enterprise Risk Management on Firm Performance* . Retrieved from http://www.garp.org/media/51855/firm%20perf ormance%20and%20the%20implementation%20of%20erm%20-%20warr.pdf

Pelto, M. (2013, July 23). *"Good" corruption in Enga: is corruption a culturally relative phenomenon?: DevPolicy Blog*. Retrieved Dec. 20, 2014, from http://devpolicy.org/good-corruption-in-enga-is-corruption-a-culturally-relative-phenomenon-20130626/

Regional Cooperation and Integration in a Changing World. (2013). Retrieved from Asian Development Bank: http://www10.iadb.org/intal/intalcdi/PE/2013/11842.pdf

Regional Cooperation: Conceptual framework and Asia-Pacific experience. (n.d.). Retrieved from UNESCAP: http://www.unescap.org/sites/default/files/ch2_0.pdf

Roegen, N. (1986). The Entropy Law and the Economic Process in Retrospect . *Eastern Economic Journal* .

Rogers, S. O., Gawande, A. A., Kwaan, M., Puopolo, A. L., Yoon, C., Brennan, T. A., et al. (2006). *Analysis of surgical errors in closed malpractice claims at 4 liability insurers.* Retrieved from

http://www.atulgawande.com/documents/Analysis ofsurgicalerr orsinclosed malpracticeclaimsat4liabi lityinsurers.pdf

Sinha, S., & Chakrabarti, B. (2012). Econophysics, An Emerging Discipline . *Economics and Political Weekly* .

South Asian Energy MarketT: Advancing low carbon growth through regional cooperation and cross-border energy trade. (2011). Male, Maldives: United States Energy Association.

Sustainable Tourism Cooperative Research Centre. (2008). Retrieved from http://www.crctourism.com.au/Page/Tools+and+Products/Service+Quality+Enhancement+Tool++Welcome+and+Foreword.aspx

Tahir, I. M., & Razali, A. R. (2011). The relationship between enterprise risk management (erm) and firm value: Evidence from malaysian public listed COMPANIES. *International Journal of Economics and Management Sciences* , Vol. 1, No. 2, 2011, pp. 32-41.

Teale, W. H. (1986). *Home background and young children's literacy development*. Ablex Publishing.

The Daily Star, Bangladesh. (2014, February). Retrieved from http://www.thedailystar.net/taking-school-to-street-children-12580.

The Economist. (n.d.).

The Great Hole Of China. (n.d.). *the economist* .

Times Of India. (2014, Oct 6). *Airtel, Vodafone, Idea hike 2G tariff by up to 100%*. Retrieved Jan 2015, from http://timesofindia.indiatimes.com/tech/tech-news/Airtel-Vodafone-Idea-hike-2G-tariff-by-up-to-100/articleshow/44480304.cms

Todaro, M. P. (1980). Internal Migration in Developing Countries: A Survey. In *Population and Economic Change in Developing Countries.* http://www.nber.org/chapters/c9668.pdf.

Towards The Next Era Of Growth. (n.d.).

Transparency International India. (2006, October). *Report on Corruption in Trucking Operations*. Retrieved Jan 2015, from http://www.transparencyindia.org/resource/survey_study/Corruption%20in%20Trucking%20Operations%20in%20India%20new.pdf

UCL. (2011). Econophysics: Entropy and its discontents? *Approaches to Knowledge* .

Wikipedia . (n.d.). Retrieved November 3rd, 2014, from http://en.wikipedia.org/wiki/Entropy

World Bank. (n.d.).

World Bank. (2005). *Road Transport Effeciency Study :World Bank*.

World Health Organization. (2013).

REFERENCES

Asia Regional Integration Center,. (2014). *South Asian Association for Regional Cooperation (SAARC) Initiative*. Retrieved 8 November 2014, from http://aric.adb.org/initiative/south-asian-association-for-regional-cooperation

Asiafoundation.org,. (2014). *Real-World Problems of South Asian Integration | In Asia*. Retrieved 30 October 2014, from http://asiafoundation.org/in-asia/2014/02/26/real-world-problems-of-south-asian-integration/

Does education improve citizenship? Evidence from the U.S. and the U.K.. (2014). Retrieved 8 November 2014, from http://eml.berkeley.edu/~moretti/citizen.pdf

Early childhood education as an eesential component of economic development. (2014). Retrieved 8 November 2014, from http://www.peri.umass.edu/fileadmin/pdf/published_study/ECE_MacEwan_PERI_Jan8.pdf

Ekantipur.com,. (2014). *Member states agree to form Saarc Development Bank | Business*. Retrieved 30 October 2014, from http://www.ekantipur.com/2014/07/26/business/member-states-agree-to-form-saarc-development-bank/392710.html

Feil, M., Klein, D., &Westerkamp, M. (2009).*Regional cooperation on environment, economy and natural resource management*. Retrieved 9 November 2014, from http://www.initiativeforpeacebuilding.eu/pdf/Synthesis_Regional_cooperation_ on_environment_econ omy_and_natural_resource_ management.pdf

Harmonization of Higher Education Programmes: A Strategy for the African Union. (2014). Retrieved 30 October 2014, from http://www.nba.co.za/harmonization-higher-education-programmes-strategy-african-union

Human Capital Investment as an Effective Tool for Economic Development in Nigeria. (2014). Retrieved 8 November 2014, from http://www.ijmbs.com/31/imoisi.pdf

Open Data,. (2014). *Child mortality: new data and faster progress*. Retrieved 30 October 2014, from http://blogs.worldbank.org/opendata/child-mortality-new-data-and-faster-progress

People's SAARC.Peoplesaarc.blogspot.com. (2007). Retrieved 30 October 2014, from http://peoplesaarc.blogspot.com/

Search.worldbank.org,. (2014). *adult literacy rate south Asia - World Bank Search*. Retrieved 30 October 2014, from http://search.worldbank.org/data?qterm=+adult+lite racy+rate+south+asia+&language=EN&format=

Shamsi, A., & profile, V. (2011).*Current Affairs, Socio-Economic Issues, Current Events, News —NewsDawn: Success of SAARC After 25 Years of Establishment. Newsdawn.blogspot.com*. Retrieved 30 October 2014, from http://newsdawn.blogspot.com/2011/11/success-of-saarc-after-25-years-of.html

Syead, F. (2014). Regional Cooperation in South Asia: Myths and Realities. *The Daily Star*. Retrieved from http://www.thedailystar.net/regional-cooperation-in-south-asia-myths-and-realities-31471

TopUniversities,. (2014). *The Rise of Glocal Education: ASEAN Countries*. Retrieved 30 October 2014, from http://www.topuniversities.com/where-to-study/region/asia/rise-glocal-education-asean-countries

Vision - SAU - South Asian University. (2014). Retrieved 30 October 2014, from http://www.sau.ac.in/about/vision.html

Wcl.american.edu,. (2014). *South Asia's Regional Initiative on Human Rights*. Retrieved 30 October 2014, from http://www.wcl.american.edu/hrbrief/v4i2/saarc42.htm

Wikipedia,. (2014). *Erasmus Programme*. Retrieved 30 October 2014, from http://en.wikipedia.org/wiki/Erasmus_Programme

Worldbank.org,. (2014). *How to Fix Poor Quality Education in South Asia*. Retrieved 30 October 2014, from http://www.worldbank.org/en/news/feature/2014/06/30/how-to-fix-poor-quality-education-in-south-asia

Worldbank.org,. (2014). *South Asia Regional Brief*. Retrieved 30 October 2014, from http://www.worldbank.org/en/news/feature/2014/03/24/south-asia-regional-brief

From the Editor's Desk: Transitus

The State: Saviour or Enemy?

Kanika Tomar, Aishwarya Joshi

Summary: *The state is often viewed as an evil force that can only damage in its quest to stay in power. Policies are labelled ' populist' and interventions as ' distortions' . Marianna Mazzucato's theory of the Entrepreneurial State challenges this widely held view. The article, though short, seeks to capture the essence of the theory and critically analyze it.*

Introduction:

Since the late 1950s, when the word ' market failure' first gained prominence, the government has been viewed as a villain juxtaposed to the market mechanism, which is portrayed as the protagonist of today's economic story. While some fiercely propagate the force of the invisible hand, this market-loving approach has received its fair share of criticisms. Marriana Mazzucato's theory on the role of the government as an innovator and entrepreneur has, to a great extent, changed the dynamics of the game, stacking the odds in favour of the government.

Once Upon A Time:

Our veterans have held close to their heart the belief that any (emphasises on any) intervention by the State leads to market distortions, hence, making the citizenry worse off in the State's show of benevolence.

"The great advances of civilisation, whether in architecture or painting, in science or literature, in industry or agriculture, have never come from centralised government."

-MiltonFriedman, Capitalism and Freedom

This ideological enthusiasm is shared by many other economists who believe that the government should ' get out of the way' for it is nothing but a hindrance to innovation. The Government is believed to be notoriously inefficient, having fabricated a long drawn process susceptible to multiple points of failure, facilitated by the un-informed and greed ridden bureaucracy.

It seems that Mazzucato's theory has ushered in a phase of letting go.

The Game Changer:

Mazzucato's theory, expounded in The Risk-Reward Nexus[59] and The Entrepreneurial State[60], hinges on her characterisation of the innovation process. The innovation process, as characterised by her, is uncertain (i.e. there is risk), cumulative and collective. While the former two are self-explanatory, the latter deserves a line or two. Collective is defined in two senses: First, when the government innovates, the taxpayers are collective risk-takers; second, even when a firm innovates it's not just the entrepreneur but all constituents of the organisation that are to be identified as risk-takers. Extensive case studies[61] substantiate Mazzucato's argument for the State being the prime innovator. Neatly aligning all her arguments, she formulates the Risk-Reward Nexus (RRN) framework as an instrument to help study the asymmetry between risks and rewards. The major culprit, according to Mazzucato, that induces this incongruency is the financial market which allows certain players to extract more value than they create. The incongruency between risks and rewards then creates a domino effect and leads to the inception and perpetuation of inequality in the society and compromises the innovation process itself.

Having completed the diagnosis, Mazzucato delves into the possible treatments:

1. Resource Allocation; 2. Taxation; 3. Map/Reward the Division of Innovative Labour; 4. Distinguish between Productive/Unproductive Risk; 5. Direct Returns to the State

He Said, She Said:

Nothing new is accepted into the community without facing the wrath of the old &conventional. Following

the tradition, Mazzucato's theory is in for the treat as well.

Some scholars have questioned the very definitions proposed by Mazzucato, such as that of Public goods.

"Well, I think I'd prefer to think that it is philosophical trickery rather than an economics professor not actually knowing the definition of public goods."

- Tim Worstall, Forbes

"Ms. Mazzucato laments that private businesses are too short-termist. But governments also routinely make investments on the basis of short-run political calculations rather than long-term pay-offs."

-Schumpeter (Blog), The Economist

But if the theory has been criticised, it has also been praised and appreciated by many.

"Conventional economics offers abstract models; conventional wisdom insists that the answer lies with private entreprenuership. In this brilliant book (The Entreprenuerial State), Mariana Mazzucato argues that the former is useless and the latter is incomplete."

- Martin Wolf, Financial Times

The Last Word:

After a thorough analysis, we, too, have reached a verdict. Although we stand in support of the theory vis-a-vis government participation and contribute our voice to the appeal for equitable distribution of rewards, we also have our doubts and apprehensions.

A major take away for us has been the emphasis laid on the point concerning taxation. The big-shot entrepreneurs and other private players have often raised hue and cry over the government not being "tax-friendly". Mazzucato, very sensibly, argues that when the State is funding the basic level R&D and providing the ground for innovation, where do we expect these tax cuts to come from?

Also, when she advocates direct returns to the State from all the major companies she very well puts forward the point that their products (for instance, the iPhone) or the technology they use (Google's original algorithm) are nothing but a beautiful integration and application of the State lead innovation.However,we believe that while the government is surely an agent facilitating innovation, the degree of involvement can and should be questioned with respect to different countries and their satge of development.

Even though one might be able to appreciate Mazzucato's unflinching belief in the overall human asset/capital as she goes on to glorify the much neglected role of the employees, the outlook of employees being risk-takers is not only objectionable but also subjective to a great extent.

".....the key to successful innovation is the extra time and effort that employees expend interacting with others to confront and solve problems in transforming technologies and accessing markets, above and beyond the strict requirements of their jobs..."

- Lazonick & Mazzucato, The Risk-Reward Nexus, 2012

In the end a question that's left lingeringand which intrigues us thoroughly is that would these workers have taken the risk to 'invest' their labour in an uncertain process had they not been guaranteed a wage?

Well, irrespective of the verdict you may reach, Mazzucato has definitely provided us with an ingenious way to look at inequality and society today.

REFERENCES

1. Wikipedia (http://en.wikipedia.org/wiki/Market_failure)
2. Milton Friedman, *Capitalism & Freedom*, 1962
3. William Lazonick & Mariana Mazzucato, *The Risk-Reward Nexus*, 2012
4. Mariana Mazzucato, *The Entreprenuerial State*, 2013
5. Tim Worstall, *Forbes* (http://www.forbes.com/sites/timworstall/2013/12/15/the-intellectual-hole-at-the-heart-of-mariana-mazzucatos-entrepreneurial-state/)
6. Schumpeter (Blog), The Economist (http://www.economist.com/news/business/21584307-new-book-points-out-big-role-governments-play-creating-innovative-businesses)

Out With The Old: Kuznets Curve Refuted

Falak Arora, Ananya Goyal

Summary: *The popular approach to studying the income inequality in developing economies has long been the Kuznet's Relation, which hypothesizes an inverted U-shaped curve. This article explores how this theory has been refuted by subsequent research, particularly by Thomas Piketty's. Piketty with the help of an impressive dataset, challenges the claim that developed economies succeed in abating inequality.*

Inequality - whether of income or wealth - is an infirmity, not endemic to just any particular economy. It is a gap that has widened more than it has closed . Capitalism for long was thought to be the panacea that would eventually bring those at the top ,the middle and the bottom together. But it is Thomas Piketty' s700 page long rebuttal that has ushered a paradigm shift in our thinking.

Kuznet' s Curve

Back in the old world, when Thomas Piketty had yet not become the ' rockstar economist' and when the global economy was still aggrandizing from the fruits of industrialization, Simon Kuznet proposed the hypothesis for the Kuznet' s curve. In simple terms , the hypothesis states that as a country experiences economic growth, income inequality would first rise and after a certain point, it would start falling. Hence, the inverted ' U' shaped relation that the Kuznets curve reflects.

His assumptions were less purported by empirical data and more by speculations. He had focused mostly on the data from U.K and U.S.A, and his hypothesis was based on those trends. Initially, he had assumed a two-sector model economy, comprising the agrarian sector and the industrial sector. He had begun with the reasoning that before industrialization takes place an economy is predominantly agrarian, which is low in productivity. Everybody earns about the same income and are equally poor. Hence inequality is low. But as the country faces industrialization, there is a tendency among farm workers to move towards the industrial sector, which is considered to be more productive and provides higher wages. So for example, when a factory is established in a village, farmers leave their jobs to work in the factory, where the average income is higher. So the inequality first increases, (because the factory workers are now earning more on an average than the farm workers), as the factory owners too experience increasing profits. Hence as the country' s GDP rises, income inequality also rises. This continues till such a large exodus has taken place from the agrarian sector, that very few people are left behind. It then becomes more productive and the fewer workers left experience increase in their wages. This is the point in the Kuznets curve after which it begins its downward journey and inequality starts to converge to equality.

The curve has since been extensively debated upon. His theory, mostly based on precarious premises, has often been refuted, as an invalid extrapolation. For example the East Asian Miracle, which saw rapid economic growth in some East Asian countries, was not accompanied by any increase in income inequality but rather an absolute decrease in it.

Evidence: World Wars and beyond

Kuznets work, published in 1955, was based on Income Tax returns data from the U.S. which was available only after its introduction in 1913. In the data from 1913-48, Kuznet found that there was a sharp decline in income inequality in the US. This led Kuznet to conclude that the economy had now reached the downward sloping part of the curve where inequality falls. However, later theories debunk the claim; the sharp reduction in income inequality that we observe in almost all the rich countries between 1914 and 1945 was due above all to exogenous factors like the world wars and the violent economic and political shocks they entailed (especially for people with large fortunes) (Piketty 2014). In fact, it is claimed that Kuznet himself was aware of and had talked about the results being largely accidental at the American Economic Association.

Piketty has broadened the temporal and spatial limits

of Kuznets data on distribution of wealth and income spanning three centuries and over twenty countries called the World Top Incomes Database (WTID), which he says ' is the largest historical database available concerning the evolution of income inequality' .

He uses the data to show that income inequality in the US is back to the levels last seen before the Great Depression; the top decile claimed as much as 45–50 percent of national income in the 1910s–1920s before dropping to 30–35 percent by the end of the 1940s. We subsequently see a rapid rise in inequality, until by 2000 we have returned to a level of 45–50 percent share of national income by the top decile (Piketty 2014).

In European countries, inequality is not as extreme as in the pre-World War era but it is still extremely high. In the 18-19th century and until WW1, about 90% of aggregate wealth accrued to the top 10% wealth holders and about 60% of aggregate wealth accrued to the top 1% wealth-holders. Piketty calls this ' the classic patrimonial (wealth-based) society' where a minority lives off its wealth, while the rest of the population works. Now, the figures are about 60-70% for the top 10% and about 20-30% for the top 1%. The bottom 50% still owns almost nothing (<5%) but the middle 40% now owns 20-30% of the aggregate wealth and thus, suggesting the rise of a patrimonial middle class. (Piketty 2014)

Debunking the old theory: Piketty' s Capital in the Twenty First Century

With this data,Thomas Piketty refutes Kuznets claim that developed economies are successful in abating inequality. Piketty says that as long as r> g i.e. the rate of return on capital is greater that rate of growth, the wealth will get concentrated in the hands of those with capital. With this, it is not income inequality but wealth inequality that he has brought to the forefront. He also contends that deviations from equality can be attributed to disparity in skills, knowledge and productivity. Wealth, he asserts, has become more concentrated among the top 1%. The so-called rich evade income taxes by showing income as expense incurred, while their wealth remains untouched. The returns they receive from investments, such as in stock market or real estate, average at 5%, clearly more than the GDP of most developed countries. He has shown how the top 1% rich almost control the entire stock market. According to him, the amassed wealth is passed on from generation to generation and thus there is little scope for equality without redistribution of this wealth. So capitalism itself creates such inequality.

In the past, the justification to capitalism was provided through the ' marginal productivity theory' . That is markets, through the laws of supply and demand, allocate the resources according to every individuals productivity. So those with higher incomes were more productive than those with lower income. But Piketty counters this theory by giving the example of the L' Oreal heiress who does not do a days work but has amassed huge amount of wealth. Family dynasties and not talent find their place at the top of the pyramid. That is the rich earn more than the proportion of labour they put in. The brief period of fall in income inequality after the Second World War and the Great Depression ,according to him, was an exception that is unlikely to repeat itself.

He asserts that the wealthy are growing wealthier and he even points the finger at the superrich managers who are being paid 200 times the income of an average employee. He doesn' t believe that inequality will fall any time soon as wealth will grow at a rate higher than the growth rate of an economy and the rich cannot spend all that they have. That is ' capital reproduces faster than output is produced' .

Joseph E.Stiglitz in his book ' The Price Of Inequality,' supplements Piketty' s findings. Stiglitz faults the political system, which he claims is completely in the hands of those at the top. The loudest clamour for lowering the regulatory bars have always come from the rich corporates,who were largely also responsible for the financial crisis. The reason the rich circumvent the taxes on their income so easily is because ' they design the rules of the game' . They model the political system to suit their needs. To quote Joseph E.Stiglitz ' The rich are not creating wealth; they' re just shifting wealth around' .

Solutions for an equal society

Solution would be lowering ' r' i.e. the rate of return on capital enough so that ' g' i.e. economic growth overtakes it. For this, Piketty suggests a progressive

annual tax on capital. Capital as he defines it would be buildings, machines, patents, factories, stocks and bonds etc. The basic idea is to take away the capital of the rich veiled as tax. Now if such a tax were to be introduced it is quite possible that the rich would simply hide away their wealth abroad. It is for this very reason that he insists that the tax be ‘ global’ . But such an ideal world of equal taxation is hard to imagine. Eminent economists have also refuted his solution of eradicating tax havens. The political system is ultimately in the hands of this top 1%. Also Piketty’ s solution does little to fix the system.

Criticism of the new theory:

The criticism of Piketty’ s work, like any other theory as ambitious as his, is loud and multi-hued. The critique ranges from the theoretical foundations of his work, his policy recommendations to the accuracy of the data and the analysis itself.

It is one of his major claims that has raised the most eyebrows. Piketty says that when r>g, inequality increases because capital income would grow faster than non-capital income. However, Piketty does not engage in hypothesis testing, statistical analysis of causation or even correlation. Even when there are arguments about inequality increasing *because r* exceed *g*, this is not supported by standard econometric or even correlation work, which in fact do not provide much evidence to support the claim (Dr. Acemoglu and Robinson). Joseph Stiglitz, in his new book *The Priceof Inequality,* says that inequality is what causes low growth, instead of the other way round as Piketty claims.

To counter his argument about wealth accumulation being the major factor that results in inequality, it has been said that ‘ today’ s super-rich mostly come by their wealth through work, rather than via inheritance (The Economist 2014). ‘ In the Forbes 400 list of the wealthiest Americans, about half the people on the list are entrepreneurs whose companies did very well (thanks to hard work as well as a lot of luck). Contrary to Piketty’ s rentier hypothesis, I don’ t see anyone on the list whose ancestors bought a great parcel of land in 1780 and have been accumulating family wealth by collecting rents ever since..that old money is long gone—through instability, inflation, taxes, philanthropy, and spending.’ (Gates 2014)

Chris Giles, of The Financial Times, had raised serious concerns on the data and the analysis. He has pointed out some embarrassing mistakes in Piketty’ s data entry, but his other concerns the analysis have been dismissed for most part (Reed 2014)

Piketty’ s data and analysis while can be questioned; the fact that inequality is becoming a natural characteristic of every economy cannot be doubted. What’ s terrifying is the idea that for those at the bottom and the middle, there might not even be a ladder to climb up from. Piketty has definitely succeeded in refocusing the world’ s attention on the mess that remains untangled and there is, if at most a hope, that the problem now figured out, a solution will likely follow... and soon.

REFERENCES

1. Gates, Bill. Why Inequality Matters. October 13, 2014. http://www.gatesnotes.com/Books/Why-Inequality-Matters-Capital-in-21st-Century-Review (accessed January 3, 2015).
2. Piketty, Thomas. “Capital in the Twenty-First Century.” In Capital in the Twenty-First Century, by Thomas Piketty. 2014.
3. Reed, Howard. Piketty, Chris Giles and wealth inequality: it’ s all about the discontinuities. 2014. www.theguardian.com/news/datablog/2014/may/29/piketty-chris-giles-and-wealth-inequality-its-all-about-the-discontinuities (accessed Jan 7, 2015).
4. The Economist. The Economist Explains: Thomas Piketty’ s Capital summarised in four paragraphs. May 4, 2014. http://www.economist.com/blogs/economist-explains/2014/05/economist-explains (accessed January 10, 2015).
5. Mccloskey, Deirdre. Measured, Unmeasured, Mismeasured, and Unjustified Pessimism.www.deirdremccloskey.org/docs/pdf/PikettyReviewEssay.pdf (accessed Jan 4, 2015).

The Tragedy of the Commons: Inevitable or a Myth?

Swaril Dania, Surbhi Ghai

Summary: *If rational actions by individuals lead to socially sub-optimum result, what is the most effective way to govern a common property resource? Privatization, Government regulation or some other systematic framework? This article attempts to summarize Ostrom's thesis with respect to the common pool resources that debunk the belief of the inevitability of ' the tragedy of the commons' as proposed by Hardin.*

"What is common to the greatest number has the least care bestowed upon it. Everyone thinks chiefly of his own, hardly at all of the common interest"- Aristotle

This statement by Aristotle adequately reflects the sentiment and logic of Garrett Hardin, when he first proposed the theory of ' the Tragedy of the commons' in 1968, which has come to signify the inevitable destruction of the natural resources when many individuals use the resource in common. The intrinsic nature of the common pool resources such as forest, groundwater, fisheries, pastureland and global environment makes costly or impossible the exclusion of potential beneficiaries. Thus, the total amount of resource withdrawn is greater than the optimal amount. This is where the theory of ' the logic of collective action' proposed by Mancur Olson comes in, which propounds that "rational, self interested individuals will not act to achieve their common or group interest"

Thus, paradoxically individually rational strategies will lead to collectively irrational outcomes and this is what constitutes the basic premise of Garrett Hardin's theory of ' the tragedy of the commons'. Hardin makes use of the example of cattle grazing on common property to illustrate the logical structure of his argument. He asserts that because each cattlemen benefits from increasing the size of the herd and bears only a small portion of the negative cost that is inflicted on resource due to overuse; exploitation of the common pool resource is inevitable. Thus, according to Hardin,

"**Ruin is the destination towards which all men rush, each pursuing his own best interest in a society that believes in the freedom of commons."**

The policy prescription given by Hardin to overcome this paradox and hence, prevent the potential destruction of resources involved the independent formulation of either of the two institutions each in insolation to other, private markets or the use of Leviathan (government coercion). The first required the introduction of private property rights and was hailed by many scholars as means via which optimal solution for common pool resources could be achieved. The latter institution required that central governments control most natural resource systems. Heilbroner (1974) went as far as to say that it would take iron governments to mange the common pool resources.

However, Elinor Ostrom has recently debunked this long held popular view with respect to the inevitable destruction of common pool resources in the absence of private market or government control. Ostrom through documentation of various communities that sustainably managed their common resources without use of private market or government control has arrived to the conclusion that the phenomenon of the tragedy of the commons is not inevitable as it is orthodoxly held to be.

OSTROM' S THEORY

In order to propose a solution to the problem of finding effective ways to limit the use of natural resources so as to ensure their long-term economic viability, Ostrom demonstrated that within communities, rules and institutions of non-market and not resulting from public planning can emerge from the bottom up. This, according to her could ensure a sustainable, shared management of resources, as well as an economically efficient outcome. Rather than presuming the situation to be one of a remorseless tragedy and focusing on policy prescriptions with models such as that of a

prisoners dilemma game or the logic of collective action which serve more as metaphors than sound solutions to the problem of governing commons, Ostrom suggested a system of polycentric governance i.e. the existence of a plurality of interdependent decision making centers on the management of the resource.

According to her theory the great dichotomy of state and market is partial and too narrow and hence untenable. Ostrom challenges this over-simplification of the public-private nexus. Indeed "governance" is neither markets nor state. Ostrom points out that the conventional solutions proposed to the problem of the tragedy of the commons are two contradictory positions.While one set of advocates favor centralization, the other presents privatization as the panacea to the issue but both centralization advocates and privatization advocates accept as a central tenet that institutional change must come from outside and be imposed on the individuals affected. Despite sharing a faith in the necessity and efficacy of "the state" to change institutions so as to increase efficiency, the institutional changes they recommend could hardly be further apart. Ostrom's point is that contradictory positions cannot both be right and her theory recognizes the fact that often, institutional arrangements do not work in the field as they do in abstract models unless the models are well specified.

Ostrom and the new institutionalism: rethinking institutions and incentives

Individuals are rational actors who respond to incentives which are shaped largely by institutions-both formal and hard institutions such as the system of property rights or legal systems and soft institutions such as cultural attitude. Economists have traditionally focused on the role of institutions and incentives, but have often approached the interrelationship between them in a simplistic way. Most analysts have assumed that all common-pool resources suffer from the same deficient incentive structure, which leads to widespread 'free riding' that forms the basis of all tragedy of the commons problems. Ostrom's work represents a direct challenge to this form of theorizing because, while recognizing that incentives matter, she argues that incentive structures are more varied and complex than conventional analysis assumes. To illustrate her viewpoint she cites the instances where communities or users have devised ingenious exclusion methods to avoid the tragedy of the commons such as the commonly owned pastures of Swiss Alps, sustainable management of inland fisheries by cooperatives in U.S. She also cites several examples of how attempts to privatize or regulate common resources have at times led to disastrous consequences.

Rather than providing a simple 'one size fits all' prescription, Ostrom tries to address the question which seeks to discover the factors that can guide the decisions about when to rely on spontaneous processes of governance and when to rely on external generation of rules.

Design Principles for Common Pool Resources

Boundaries to facilitate exclusion

Exclusion mechanisms are the key to overcoming free riding, and resource boundaries increase the capacity for those who use a resource to limit access by those living outside the community in question. Thus, for common property management through community arrangements, it is important that we have well defined resource boundaries.

The importance of internal rules

Though the existence of boundaries to limit access by those outside a community of resource users is important, rules which prevent people within the community concerned from appropriating too much of the resource are crucial as well. There exists a need for the system of internal rules to prevent excessive use of the resource. Communities, which have been able to develop this form of internal legislation, are better suited to manage the common pool resources.

The importance of locally adapted rules

The smaller the population of resource users the easier it will be to detect people who are violating the rules. Similarly, a culturally homogeneous and relatively stable community where people have strong reputational and social ties and a commitment to long-term development is less likely to invite free-riding than a more mobile community with no strong sense of local or cultural identification. Groups, which possess a high degree of interpersonal trust or social capital, are more likely to arrive at commonly agreed

rules and adhere to these rules than those who lack such social capital. These kind of local culture based factors also play a major role.

The importance of monitoring and enforcement

Any kind of rule would cease to be effective in the absence of monitoring mechanism. The most successful systems for common pool resource management include strong monitoring and enforcement mechanisms. Without these, efficient management of resources is not possible.

Dispute resolution

The existence of clear and well-established procedures for dispute resolution may also increase the scope for the decentralized resolution of common-pool resource problems. Interaction between systems of effective rules are more likely to arise in situations where those who have an immediate stake in overcoming common-pool resource problems are actively involved in shaping and enforcing governance arrangements. When communities make rules for themselves they have strong incentives to make the rules work and to learn from their mistakes. When locally established rules and property rights are not respected by higher tiers of governance, and especially when higher authorities respond to the demands of external interest groups to allow access to a resource base, then common-pool resource systems may be highly fragile.

Based on these principles Ostrom talks about ‘ Action Situations’ where decentralized community governance can work well. Specifically, when there are clear boundaries to a resource; where a community has high levels of interpersonal trust or social capital; where there are procedures for resolving disputes; and where the community concerned has sufficient decision making autonomy to create, monitor and enforce its own rules and to exclude outsiders, then incentives can operate to avoid the ‘ tragedy of the commons’ . In these ‘ common property regimes’ resources are exclusive to a particular community rather than being ‘ publicly owned’ , but, instead of parceling out the assets to individuals, the exclusive owner is a decentralized communal unit (McKean and Ostrom, 1995: 6).

When is privatization feasible?

The creation of individual property rights may prove more effective when there are clear boundaries to a resource but where the community is highly mobile and culturally heterogeneous thus rendering incentives insufficient to enforce communal rules. In such situations the need for agreement between resource users doesn’ t exist and the individuals internalize the costs and benefits-earning rewards from conserving a resource and suffering losses from failing to do so.

When is government regulation feasible?

Government regulation is most likely to be feasible when there are no clear boundaries to the resource; where there is a large-scale and highly mobile and diverse population of resource users. This leads to a situation where the transaction costs of arriving at and enforcing decentralized solutions may be prohibitive. Regional and international problems of trans-boundary air pollution and the problem of anthropogenic climate change seem to be the most obvious candidates to fall into this category.

Arguments against Central Planning

1. Distant bureaucrats lack the knowledge of specific character of the assets to be managed and the nature of the incentives facing resource users. Also, knowledge of the cultural norms and values that structure the way in which people perceive and respond to resource-management issues and how these values evolve is embedded in the minds and everyday culture of those who inhabit the communities concerned. It is unlikely that external regulators will understand these factors.

2. The act of regulating from the centre undermines the incentive for resource users themselves to devise an appropriate set of rules. When the state takes over responsibility for managing an asset, individuals and groups that do not already have their own institutions in place will simply wait for the government to handle their problems for them.

3. A final and perhaps most important reason to presume against central planning is that it removes the scope for people to learn how to address common-pool resource problems more effectively. Decision-making over natural resources does not start from a situation where the most effective institutional form for managing the resource is ‘ given’ in

advance. On the contrary, knowledge of the kinds of rules, institutions and technologies that can be combined in order to internalize externalities needs to be discovered through a dynamic, evolutionary process of trial-and error learning (Ostrom, 2005)

Ostrom and Classical Tradition

Ostrom's analysis goes beyond any kind of ideological labeling. The Classic liberal theory relies on protection of private property, extensive reliance on civil society and voluntary association, and a limited and decentralized form of government, based on the view that the dispersed (though unequal) ownership of property in a market system is more robust in the face of imperfections of limited knowledge of the actors and limited benevolence of the planners, than more centralized alternatives. Ostrom's research is not at all in refutation of this classical neoliberal belief about the importance of private property rights and at no point does Ostrom refute the case for private ownership per se, though she questions the wisdom of external agents imposing individualized property rights in communities which have evolved effective common property regimes. Common property regimes are themselves, according to Ostrom, a form of exclusive private property – it is just that private property rights should not always be equated with individual property rights. In the words of Ostrom and her co-author Margaret McKean, ' It is crucial to recognize that common property is shared private property .∴.

Ostrom's theory and the relevance of new institutional economics

Ostrom's analysis is crucial in several respects. Not only for the issue of governance of commons but on a wider level too, her work has been instrumental in promoting a perspective that is beyond the textbook theorists' world of quantized models often based on unrealistic assumptions of hyper rationality and ideal conditions. Rather than basing the theories on the standard assumptions of an ideal world, Ostrom in her work has sought out new institutional arrangements that could be used by people, communities and societies facing real world problems. When Ronald Coase expressed -" Existing economics is a theoretical system which floats in the air and which bears little relation to what happens in the real world" - he clearly shared the same opinion about economic theory building that it was detached from reality. But Ostrom went out into the field to see what people and communities were doing differently —and then thought about how it worked. Her logic challenged math.

Milton Friedman had once said: "Economics has become increasingly an arcane branch of mathematics rather than dealing with real economic problems." Ostrom's work isn't mega quantitative. Rather, it is mega *qualitative*, packed with rich, sharply unexpected new insights about how models should be built. Evolution is intrinsic to economics and Elinor Ostrom's thesis on the management of the common pool resources is yet another example of embracing the heterodox and questioning the old.

REFRENCES

1. http://www.yesmagazine.org/new-economy/the-victory-of-the-commons
2. http://www.aei.org/publication/elinor-ostrom-and-the-solution-to-the-tragedy-of-the-commons/
3. http://www.onthecommons.org/magazine/elinor-ostroms-8-principles-managing-commmons
4. http://www.iea.org.uk/publications/research/the-future-of-the-commons-beyond-market-failure-and-government-regulation

Austerity: The Bitter Medicine that Doesn't Cure

Sumedha Mahajan, Debasmita Padhi

Summary: *By being minimalistic, austerity aims to curb the deficit in the economy through policies like spending cuts, cutting taxes or both. But it's not as great an idea as it seems. Greece is testimony to this. Cutting spending during depression may not be the best idea after all!*

Originating from something that is minimally functional, grim or forbidding in aspect, austerity can be rightly described as the policies that are used by the government to **reduce** budget deficits or imbalances in the economy. These policies comprise of spending cuts, tax increases or both. When there' s a threat that the government cannot honour its debt liabilities, austerity measures are pursued.

Mark Blyth, author of "Austerity: The history of a dangerous idea", talks about austerity policies as being called "class–specific put option" in finance and are harmful because they don' t meet the set targets or goals and often scar the least politically powerful. By doing critically analysing austerity, Blyth also provides a damning critique of orthodox economics and shows the existence of class politics in government' s actions. Once austerity is institutionalised, it becomes a dangerous idea. But it' s dangerous because most of all, it doesn' t work!!

As Blyth correctly portrays, "While it makes sense for any one country to reduce its debts in a time of growth, if many countries that are each other's major trading partners and share the same currency, that none of them print, all try to save at the same time, the result can only be a common shrinkage of GDP, a rise in debt as a smaller economy tries to pay back a reciprocally larger amount of debt and a prolonged recession. All of this was predictable and was predicted. But it continues because it is institutionalized".

Austerity can also be termed as the policy of draconian budget cuts, to pose solutions to the financial crises. Both Europe and United States tell us the success story of politicians in stating government' s spending as a wasteful expenditure that has done no good to the economy. It was believed that people out there have lived beyond their means and that now it' s time for them to undertake contractionary practices. This view conveniently forgets where all the debt came from. Not from an orgy of government spending, but as the direct result of bailing out, recapitalizing, and adding liquidity to the broken banking system. The moral argument being that the tax payer bore the losses during the crisis, it was his money that bailed out the banks and then his standard of living shrunk drastically when austerity was imposed.

Austerity, the policy of cutting state spending to solve debt and growth problems, sells itself to us through a strange combination of morality and seduction.In this morality play, saving leads to investment, and investment leads to growth. Spending, in contrast, leads to consumption, and consumption leads to debt, especially when the government is involved. Austerity suggests that you can have your cake and cut it too, but only when you cut the cake first. Cuts are seen to be growth enhancing, not growth retarding. They restore that all-important "business confidence" necessary for the economy to function.

Austerity has been described as a dangerous idea because it affects the economy like a silent killer and the outcome really becomes uncontrollable.In the worst case, austerity policies worsened the Great Depression and created the conditions for seizures of power by the forces responsible for the Second World War: the Nazis and the Japanese military establishment. The arguments for austerity are tenuous and the evidence thin. Rather than expanding growth and opportunity, the repeated revival of this dead economic idea has almost always led to low growth along with increases in wealth and income inequality. Also, for people to save, they need to have income from which to save. So, if you are, for example, a state in the Eurozone today, and every similar state saves at the same time by cutting spending, the result is the shrinkage of everyone' s economy since they are each other's trading partners and source of income. Perversely their debt goes up, not down, relative to their (shrinking) GDP, which is what has happened to every European country that has undergone an austerity program since 2010. They now have more debt, not less. On everyone trying at once, austerity makes the debt bigger, not smaller. The E.U. is one of the two largest centres of the global economy.If U.S., the other big one, decides to join in this "austerity binge", the result will be more and not less U.S. debt and an even bigger growth crisis for the global economy.

Written not for the academia, but for all of us with an interest in how we' ve come to our current disastrous economic situation, Mark Blyth through his book demands that we recognize austerity for what it is, and what it costs us.

Well-framed, well-crafted and often repeated, the austerity story is the dominant political narrative in Britain today. It shapes how most of us think and talk

about the economy. It has convinced most of the country that there is a need for huge public spending cuts.

The coalition tells a powerful story about the economy to make the case for austerity in the media and public communications. There are several frameworks that underpin it – the most important economic issue the UK Faces in the form of the size of the public sector debt caused by excessive public spending (dangerous debt), the UK' s public finances are like an individual household having spent all their money (Britain is broke), there' s no economic alternative to spending cuts (austerity is a necessary evil), the government is getting in the way of progress (big bad government), state support is tempting but ultimately dangerous (welfare is a drug), and lastly that all the faults of our economy can be pinned on the previous labour government and their out of control spending (labour's mess).

Austerity —the deliberate deflation of domestic wages and prices through cuts to public spending – is designed to reduce a state' s debts and deficits, increase its competitiveness, and restore what is referred to as "business confidence."

Advocates of austerity believe that slashing spending spurs private investment, since it signals that the government will neither be crowding out the market for investment with its own stimulus efforts not be adding to its debt burden. Consumers and producers, the argument goes, will feel confident about the future and will spend more, allowing the economy to grow again.

The Greek Tragedy:

With a new anti-austerity Government elected in January 2015, Greece is trying its best to get funds from the European Central Bank on its own terms. The results of the election proved that the public is fed up with the slew of austerity measures imposed on it since early 2010.

Greece was one of the many countries in the Euro zone that were in a sovereign debt crisis after 2009 with its debt to GDP ratio hovering around 150%! Unable to pay back their debt, the outgoing party decided to accept bailout funding from the Troika and accept the stringent austerity conditions imposed on it.

Currently, unemployment is at 26% and the Government is running a budget surplus. Nominal wages have fallen, public health spending has been drastically cut, massive layoffs have taken place, imports curbed and output has fallen. In 2014, there was a meagre growth of 0.6% which is not because of the austerity dose but rather because the noose around the Government' s neck of a tighter fiscal spending has been relatively loosened.

Many economists have proposed alternatives to these severity that would help the economy recover gradually instead of following through the austerity programme. Though the ECB is not convinced and wants Greece to continue with its prescriptions, the public has had enough and the leftist Government is not willing to accept the terms any longer. Whether Greece will exit the Union or the EU agree to withdrawal of its conditions is a game of chicken.

But, what is evident is that austerity has not worked. Rather, the social costs of the program have aggravated the situation in Greece. It has been more thanfour years since these measures have been taken but there has been no sign of improvement of the economy' s health.

According to Paul Krugman, global austerity is an "unethical experiment on human beings." It is definitely time to stop this and look for alternatives.

REFERENCES

1. Declan Jordan, ' Book review: Austerity, The history of a Dangerous Idea' , http://blogs.lse.ac.uk/politicsandpolicy/book-review-austerity-the-history-of-a-dangerous-idea/ , / may, 2013
2. Mark Blyth,' Why Austerity is a Dangerous idea' ,http://ideas.time.com/April 2013.
3. Christopher Mathews,' Why the Argument for Austerity Took a Big Hit Yesterday' ,http://business.time.com/April 2013.
4. Michael Hoexter,' Austerity:the Pol itical struggle over Who controls the Evonomy' sLiquidity' ,http://neweconomic perspectives/Feb 2013
5. Mark Blyth,' Austerity:The History of a Dangerous Idea,in Oxford University Press ,http:// blogs.ise.ac .uk/politicsandpplicy/Book review/May 2013.
6. CarysAfoko,DanielVockins,' Framing the economy-the austerity story' ,http://www.new economics.org/September 2014.
7. http://www.cepr.net/documents/greek-economy-2015-01.pdf

BUZZWORDS

Pradhan Mantri Jan Dhan Yojna: The Way Forward

Anshul Aggarwal

Jamia Millia Islamia

Summary: *This article discusses the key provisions and identifies the challenges of the latest financial inclusion scheme, Pradhan Mantri Jan Dhan Yojna, backed by the author's own experience.*

The Financial Inclusion is the new buzzword in the area of banking and finance, bringing with it immense career opportunities for finance students along with social welfare for urban and rural poor, hitherto excluded from formal finance and banking system of the country. From as early as 1950s, when findings of ' All India Rural Credit Survey' highlighted the importance of greater financial access to all households in India; financial inclusion, based on the principle of equity and inclusive growth, has attracted the attention of policy makers nationally and internationally. Concomitant to the above development, both State as well as national government and the Central Bank has formulated many policies and programmes to promote financial inclusion, the latest & most popular among them being the Pradhan Mantri Jan Dhan Yojna (Here after referred to as PMJDY).

PMJDY is a new time bound financial inclusion mission aimed at providing bank account to every household in the country. The scheme is supplemented with a bouquet of many other financial services aimed at viable financial inclusion of poor, which is one of the reasons for the scheme's huge popularity.

Outline of PMJDY

a) It targets opening of over 7.5 crores bank accounts in the first five months.

b) Each Bank account opened under this scheme will come with additional facilities such as provision of a Rupay Debit Card, accidental (cover of Rs. 1 Lakh and overdraft facility up to Rs.5000 after 6 months

c) Accounts to be linked with Aadhar card for Direct Benefit Transfer schemes such (as MNREGA, Subsidies, LPG subsidy, etc.)

d) All accounts to be online in nature &connected with CBS network of Banks and will provide services such as Mobile Banking, Balance Enquiry, Online transfers, etc.

e) Business Correspondent Model will be used access remote villages and 50,000 Business Correspondents will be recruited for the same.

However, to examine the implementation of the scheme and to see for myself whether the hullabaloo surrounding it is justified, I decided to visit banks in my area and open an account under PMJDY. I visited 3 banks and 1 Business Correspondent outlet and none opened my account citing issues such as form unavailability or simply postponing future dates, which sets the tone for the various challenges ahead for this apparently rosy scheme.

Challenges Ahead

§ The Scheme sets an ambitious target of covering 7.5 households in 5 months. This target lacks feasibility since the State run banks suffer from dearth of infrastructure and have not yet been provided with basic necessary resources such as stationery.

§ The scheme targets opening up of around 7,000 bank branches, 20,000 ATMs and 50,000 Business correspondents (BC) in coming years. However, recruiting staff to meet the requirement of growing branches and recruiting rural cadre as BCs will pose a huge challenge to banks, who are already facing shortage of about 50,000 personnel and about 1,00,000 employees are expected to retire in the next 5 years as per Khandelwal Committee Report of the RBI.

§ Even if the above challenges are met, the banks will require an additional corpus of Rs. 37,500 crores to provide overdraft facility to 7.5 crores new account holders.

§ This scheme aims to provide universal banking facilities to all account holders through CBS network of banks. However as per census 2011, 50,000 villages do not have internet connectivity and in much larger number of villages the telecom infrastructure is not fit for banking operations.

§ Low level of financial literacy in rural areas will continue to pose a big challenge to the success of new age banking technology such as ATMs & Debit Cards.

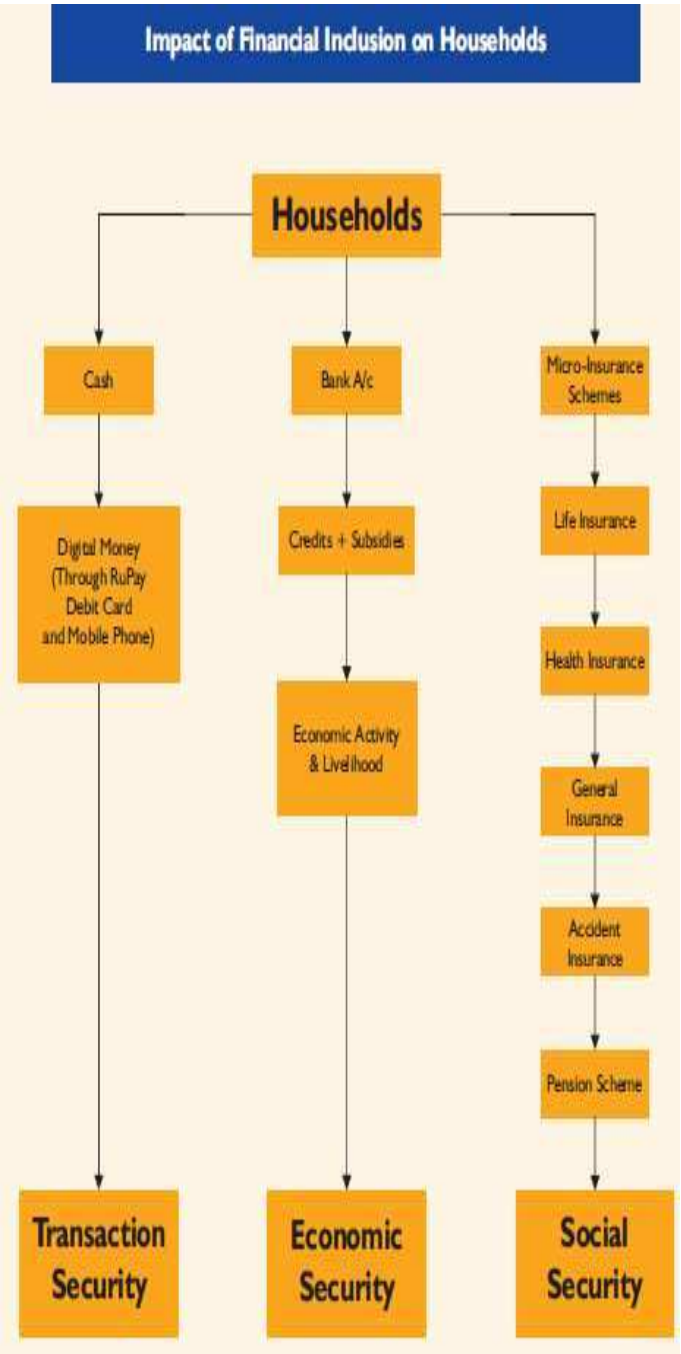
§ High Level of Rural NPA (Non Performing Assets) is another factor to be considered.

Conclusion

PMJDY is an innovative and new age technology enabled financial inclusion mission with ambitious targets and strict time frame and hence, worthy of applause from all classes. But success of this scheme essentially depends on critical examination of the various challenges and steps taken to address the same. If issues pertaining to it are not addressed timely, the PMJDY may end up to be another populist scheme; not serving any purpose other than political gains. We wish all the success to this scheme and expect issues are addressed and it proves to be a milestone in the financial inclusion mission of India.

REFERENCES

1. http://financialservices.gov.in/Banking/PMJDY%20BROCHURE%20Eng.pdf
2. http://financialservices.gov.in/reports/HRIssuesOfPSBs.pdf
3. http://articles.economictimes.indiatimes.com/2013-08-25/news/41446084_1_public- (sector-banks-442-gms-state-bank
4. http://rbidocs.rbi.org.in/rdocs/Publications/PDFs/14T_BBS300810.pdf
5. http://www.rbi.org.in/scripts/AnnualPublications.aspx?head=Statistical%20Tables%20R (elating%20to%20Banks%20in%20India



India from Planning Commission to Niti Ayog

Bhumika Soni-3rd year

Summary: *This article is based on the dismantling of the Planning Commission and its replacement by a new institution, which we know as the NITI AYOG. It is mainly divided into two broad sub topics. While the former retraces the journey of the Planning Commission since its inception, the latter highlights how the new institution is different from it's predecessor and talks about the challenges that lie ahead of the AYOG. In the end the writer concludes that "The Niti Ayog may be an old wine in a new bottle*

but it has got some new added flavours and is expected to satisfy everybody's taste".

On the 67th Independence Day, from the ramparts of the Red Fort our honourable Prime Minister, Mr Narendra Modi announced the dismantling of the Planning Commission of India. This was indeed alarming, to see the winds of change sweep apart a historical framework linked to the history of the Indian development process. But for an economics student like me, it was relatively more startling purely for a selfish reason- I would no longer get the chance to intern or work with such a reputed policy making institution of the country. However, our benevolent Prime Minister who is trying his utmost to attract foreign investment and build a conducive buissness environment could not keep the budding economists and strategists sad for long. Therefore, he soon announced a new institution in place of the Planning Commission, which we know as the NITI Ayog.

A great respite, isn' t it?

Meanwhile, the curiosity bug starts its work. What was the need of replacing such a reputed and age old institute? Is it a mere political game of changing the name plate from Planning Commission to NITI Ayog or is there some substantial difference between the two? Will this change make any difference?

Retracing the journey of the Planning Commision since its inception

The spring of 1950 saw the blooming of a new institution within the democractic framework of independent India. The then Prime Minister Jawaharlal Nehru, constituted this institution to formulate a long term strategy for development of independent India. The institute came to be known as the Planning Commission of India- the name reflecting the function it was to perform. The objectives of the Planning Commission were to be met through the execution of ' The Five-Year Plans' in which the government set a target growth for the economy as well as the various sectors of the economy and accordingly allocated the fund for a balanced utilisation of the available resources.

An institution like the Planning Commission was the need of that time. In order to heal the wounds inflicted by hundred years of British exploitation and rule, central planning had became a necessity. Thus, the commission was meant to form policies with an objective to increase the standard of living of the general populace through increase in the production levels and employment opportunities.

The First Five-year plan (1951-56) was applauded nationwide for its approach and its success as the actual growth rate surpassed the targeted rate by 1.5%. The then Economic Advisor to the Planning Commission, I.G. Patel, adequately echoes the sentiment surrounding the Plan by stating that "there is nothing in the economy which does not find a reflection in the plan, and there is nothing in the Plan which is not found in the Indian reality" .

The Second Plan (1956-61) placed greater emphasis on the capital goods industry in the public sector. It came to be known as the heavy goods model (Also known as the Nehru-Mahlanobis Model; eponomyously named after Jawaharlal Nehru and P.C. Mahlanobis.) It bagged mixed response and missed the target by a small margin.

The Third Five-Year Plan (1961-66) was interrupted by the 1965 India-Pakistan war and by the deep struggle for power within the congress after the death of the then Prime Minister Lal Bahadur Shastri. Also the economic crisis in the mid-1960s, triggered by successive droughts and poor harvest, led the government to abandon planning for an interregnum of three years (1966-69). The spirit of economic planning never revived thereafter. The focus shifted to crisis management. The process of planning could have been revived in the 1970s but it wasn' t. This was the beginning of the decline of the Planning Commission. In addition to this the set target of growth was mostly missed in the subsequent plans. (See the table)

Apart from the missed targets, there has been some serious charges against its functionality. The Planning Ccommission had become increasingly autocratic and had typically enforced its diktat over different states. It could not succeed in establishing a consultative framework between the central government and states as equal partners. Many times, it was brought to notice

Plan	*Year*	*Target Growth*	*Actual Growth*
First	1951-56	2.1	3.6
Second	1956-61	4.5	4.3
Third	1961-66	5.6	2.8
PLAN HOLIDAY	**1966-99**	**-**	**-**
Fourth	1969-74	5.7	3.3
Fifth	1974-79	4.4	4.8
Rolling Plan	1978-80	-	-
Sixth	1980-85	5.2	5.7
Seventh	1985-90	5.0	6.0
Eighth	1992-97	5.6	6.8
Ninth	1997-2002	6.5	5.4
Tenth	2002-07	8	7.6
Eleventh	2007-2012	9	8
Twelfth (cancelled)	2012-2017	8	-

that state allocation was decided by the commission without any prior consultation with the states.

Another equally serious charge levied is that the Commission had become an agency of the ruling government in the centre. The Planning Commission acted as a mediator in the process of transferring finances from centre to state. The finances are both discretionary and non-discretionary. There is a lot of evidence that shows that a large proportion of funds for the centrally sponsored schemes which are mostly discretionary in nature went to those states that were politically aligned with the ruling party (/parties) in the centre.

Also, increasing reliance on market economy in a globalised world and the growth of the domestic private sector has resulted in the Commission becoming more or less irrelevant; though the Planning Commission played a crucial role in the initial years when the public investment was a large part of the overall investment in the economy.

Thus, its demise can significantly be attributed to its poor performance and growing redundancy.

NITI Ayog- New wine in the old bottle?

NITI Ayog, the acronym for National Institute for transforming India Ayog, is a policy ‘ think tank’ that will provide government at the central and state level with relevant strategic and technical advice across the spectrum of key elements of policy.

One of its functional property that it no longer possesses the power to allocate funds, separates it distinguishingly from the Planning Commission; the Finance Ministry will now handle all the funds and the financial matters will remain under the guidance of the Prime Minister who remains the supreme authority with respect to policy matters. Also, a governing council comprising the Chief Ministers of the states and the lieutenant governors of Union territories has been formed (Under Planning commission, States’ role was limited to the National Development Council and annual interaction during Plan meetings). While the Planning Commission had a Deputy Chairperson, a member Secretary and full-time members, NITI Ayog has a full time organisational framework comprising of a Vice Chairperson, two full time members, Part-time members, Ex Officio members, Chief Executive Officer and a Secretariat.

The big challenge before the NITI Ayog would be to restore the credibility of the consultation process with the states and to bring Central Ministries into the equation in the absence of any real financial power. It has been proposed that there will be a basket of schemes available from which the states could pick and choose according to their needs and that each scheme would be further tailored to meet specific local needs. Restructuring of the centrally sponsored schemes would be the most sought after development. Another most important issue that it needs to address is to expedite the slow and tardy implementation of policies.

The NITI Ayog will be a welcome change if it spearheads a dynamic growth process based on social considerations rather than becoming another centre-based think tank. One can say that it may be an old wine in a new bottle but it has got some new added flavours and is expected to satisfy everybody’ s taste.

Research Section

Oil Economies: Venezuela and Nigeria

Falak Arora, Gauri Pandey- 2nd year

Abstract: *The American economy's ' unconventional' discovery of shale gas is what set the stage ' slippery' for most traditional oil suppliers. The paper will focus on two such economies namely, Venezuela and Nigeria.*

Nigeria

Oil exports account for about 75% of the country's revenue and 35% of its GDP. With United States' decision to stop importing oil from Nigeria and the falling crude oil prices, the economic outlook for the economy has further dampened. To add to its woes, Nigeria has been facing labor union strikes demanding improvement in infrastructure, working conditions, etc. Nigeria is also scheduled to go for elections on 28 March, 2015 and a change of power threatens the economy's stability, because the same party has ruled Nigeria since 1999.

Venezuela

Oil accounts for 95% of Venezuela's export earnings. Falling oil prices has hit their economy hard due to mounting debt and lower cushion for public finances. The government spends far more than its oil revenue. Fiscal deficit amounts to 20% of the GDP. Inflation in the Venezuelan economy has hit the roof and the scarcity index for food and other basic goods remains high. For an economy like Venezuela, which is highly dependent on imports of necessary commodities such as medicines and food, finding creditors is likely to be a Herculean task.

Reasons for an increase in oil price in 2013

Oil prices were as high as $ 100 per barrel in 2013 and still increasing. This was a bit surprising considering that the world economies had recently faced a severe recession. According to me, the main reason for the oil price increase was the supply constraint. In 2013, emerging economies such as India and China saw an increase in their demand for oil and petroleum, they being a necessary commodity. However, the overall oil production could not be increased because the supply of oil remained relatively inelastic.

The increase in the supply of oil began to slow down in 2005. This created a situation of excess demand and hence, an increase in oil prices. The supply of substitutes of oil such as biofuel and natural gas could not make up for the shortage of oil. The other reason for high prices was the adverse situation in Iran, a country that is responsible for exporting around 2.4 million barrels of oil a day. It exports its oil to big economies such as India, China and the EU. In a world where there was already shortage of crude oil supply, additional lag in supply just exacerbated the situation.

Reasons for a fall in the oil price

The price of oil has decelerated sharply since the beginning of 2014, when it was $115 per barrel. It is now priced at $49.80 per barrel. The oil price has fallen by 30% since. then A lot many vicissitudes in the global events has resulted in this sharp decline. As per Forbes, "According to recent estimates, Saudi Arabia needs the price back to $99.20 a barrel to break even. Even at that point, many OPEC nations would still be in the red." Despite such dire needs, the cartel has still maintained low prices.

The answers of course lie in the standard demand-supply chase. The world demand for oil has fallen due to the general negative outlook and slowdown. Most developing countries are now cutting back on energy subsidies in view of rising budget deficits. India is a major example of such a move. Hence, higher costs have further encouraged lower demand. Slowing growth in China too has contributed to the overall slump because of the fall in demand. Countering the expectations, Libya has increased its oil output, which has increased the total supply of oil. America is the surprise entrant with its shale gas revolution. To quote The Economist, "America has become the world's largest oil producer. Though it does not export crude

oil, it now imports much less, creating a lot of spare supply." As a result,imports by OPEC have been cut by half. OPEC's internal infighting has also kept the prices low. Saudi Arabia and Kuwait don't want to lose their share of the oil market. They are consequently unwilling to cut down on production. Being the most puissant of the lot, they have hectored the smaller economies into giving in.

The worst hit are the economies of Nigeria, Venezuela, Iran and Russia, which are largely dependent on the export revenue from oil to fuel their economy.

Case Study 1- Venezuela

Venezuela or the Bolivarian Republic of Venezuela is a country located on the Northern coast of South America. It is the fifth largest member of the Oil and Petroleum Exporting Countries (OPEC) in terms of oil production. The Venezuelan economy is largely based on petroleum and manufacturing sectors. Revenue from oil exports accounts for nearly 50 percent of the country's Gross Domestic Product (GDP) and 97 percent of its export earnings.

After 1960, the oil market was taken over by OPEC and the 7 companies that belong to the OPEC members are called the "New Seven Sisters" of the oil industry. Petróleos de Venezuela, S.A. (PDVSA) (Petroleum of Venezuela, S.A) which is a state owned oil and natural gas producing company is one of the "New Seven Sisters".

An overview of the Venezuelan Economy: 1980-2013

Just before the oil crisis of 1980-1990s, all was well for Venezuela. There was a boom in the oil market and Venezuela being one of the biggest oil producers, was benefitting from the boom. It was a time when its currency, Bolivar, peaked against the US dollar. Venezuela was seen a model democracy.

The era of Hugo Chavez

Late Hugo Rafael Chavez Frias was the President of Venezuela from 1999 to 2013. He belonged to the United Socialist Party of Venezuela[62].

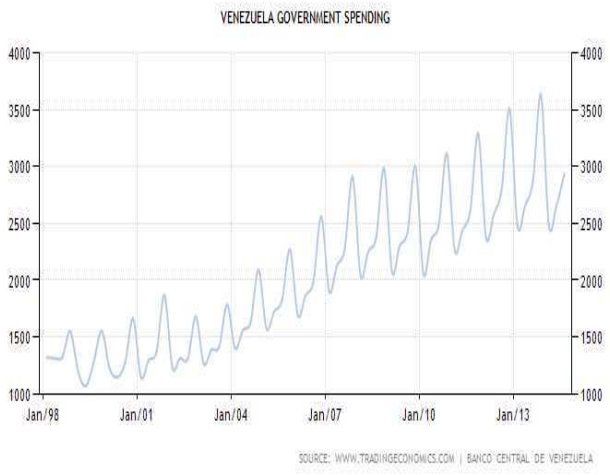
In 1980s, Venezuela struggled through falling oil prices, increasing foreign debt and decreasing welfare of the nation. After Hugo Chavez assumed office in 1998, he planned the economy of Venezuela. Venezuela, which was previously under the US rule, played a pivotal role in recovering oil prices by holding an OPEC Summit in Caracas. Therefore, Venezuela secured a vital source of income for its economy. After this, the Chavez Government went on to overturn what is referred to as the "the most perverse and antinational system of oil production", *la aperture petrolera* (the petroleum opening). By opening the petroleum sector, the PDVSA gave transnational oil companies the right to extract oil while giving an insignificant portion back to the Venezuelan state. According to this policy, it meant that even if oil prices recovered slightly, most of the profits went to transnational companies. The Chavez government took complete control over the PDVSA by implementing Currency Exchange Control (CEC). This was done in order to avoid capital flight[63]. This led to a rapid increase in the oil production and ultimately an increase in the International Reserves (IR) of Venezuela. He shut down most of the manufacturing sector and invested more in oil, making Venezuela more oil dependent.

Venezuelan economy expanded at an average of less than 3 percent a year during Chavez's long tenure as President, even when the oil prices soared as high as $150 a barrel in 2008. The IMF predicted that the economy would grow at an approximate rate 2 percent in 2011.

The 2008 financial crisis hit major economies such as the United States, which is one of prime exporters of Venezuelan oil. This affected the Venezuelan economy adversely. Post 2008, the Venezuelan economy experienced a recession for 2 years (2009-10). The recession was fuelled by the economic crisis and the electricity crisis, brought on by a prolonged drought. Venezuela imported most of its necessities, which were disrupted because all the countries from where Venezuela imported were severely hit by the crisis. This led to fall in welfare for the Venezuelan population and hence, oil production took a toll. The government under Chavez was handicapped. They couldn't do anything. Even if they ramped up the production, it wouldn't do any good because the major countries to which Venezuela exported were down. They didn't have the money to buy the oil. This was made worse by the fact that Chavez's socialist government spent insane amounts on social welfare and development and the government ran a deficit throughout.

In 2011, the economy was finally able to reach the 4 percent mark for economic growth. It proved all the predictions wrong. While the developed nations struggled through poverty and ever-increasing unemployment, in Venezuela, it was just the opposite. The growth rate was on an upward trend.

Income inequality gradually declined in Venezuela under the Hugo Chavez government and his socialist reforms. The Gini coefficient[64] that measures the income inequality fell down to 0.397, which is the lowest Gini coefficient in the region. Although the income disparity declined, but there wasn't much income to be equally distributed. "Venezuela is the fifth largest economy in Latin America, but during the last decade, it's been the worst performer in GDP per capita growth," says *Arturo Franco of the Centre for International Development at Harvard University in 2013.*



Post Chavez period (2013)

2013 and 2014 were very crucial years for all economies around the world, especially for the oil producing economies such as Venezuela.

2013 was characterized by increasing crude oil prices. This was a result of a mismatch between the demand and supply of crude oil. All over the world demand for crude oil increased, especially in emerging economies such as India and China. Petroleum being a necessity, the demand for it was more or less inelastic[65]. However, the supply was a constraint and could not be matched with the increasing demand. This, along with the fact that the Iran's political scenario hindered its oil exports, created a situation of excess demand, which led to a sharp increase in prices. However, the situation in Venezuela was far from the best.

Venezuela faced a very high inflation rate, which was close to 50% in October 2013. The Chavez government with its socialist objectives left a hole in the government's pocket. The fiscal deficit was so huge that even with high petroleum prices, the government was in tatters. Since the Bolivar is not a hard currency[66], the inflation led to its devaluation. According to *Kenneth Rapoza for Forbes*, "The devaluation of the currency in the case of Venezuela represents a reallocation of resources from the private to the public sector, which is practically the only exporter thanks to oil giant PDVSA. Private consumption moderated from 7.0% growth in 2012 to just 3.2% yearly growths in the first." Even the International Reserves were dwindling.

To add to the misery of the Venezuelan people, President Nicolas Maduro, successor of late Hugo Chavez, didn't acknowledge that Venezuela was, in fact, in trouble economically. He followed Chavez's footsteps without realizing what it would do to the economy. He continued with the social welfare programs and made a statement blaming the private sector for the country's economic problems.

Present Scenario (2013 onwards)

2014 saw a drop in the oil prices. The worst hit were the economies of Venezuela, Nigeria, Iran and Russia who are largely dependent on the oil exports to fuel their economies. It was assumed that the OPEC would intervene to cut down the supply and bring the oil market back in equilibrium but nothing like that was done. In an OPEC meeting in November 2014, Saudi Arabia, which is the second largest crude oil producer in the world decided not to cut down on its production of oil because they didn't want to give up their market share of oil. This caused the prices to crash even further.

Venezuela was in for a world of trouble. The fact that their President wouldn't act on the already high inflation didn't help the situation either. By the end of

2014, the inflation rate was as high as 65 percent. The fiscal deficit was worse than ever. In order to cover up the deficits, the government had borrowed huge chunks of money and now is in a situation where it would not be possible to pay the debts. The skyrocketing inflation has led to a devaluation of the Venezuelan currency (the Bolivar costs around 90 USD in the black market). On top of all this, the government under Maduro isn' t willing to cut down on social expenditure such as subsidies. The government spends way more that the revenue it generates from exporting oil. Venezuelan economy is characterized by scarcity of certain necessary goods such as medicines and food. With all that has been happening around the world, the scarcity is worse than ever. The Bolivar has lost its value in the black market (around 80 to 90 Bolivars per US dollar), the inflation is soaring and hence the people of Venezuela are unable to afford a lot of basic necessary goods.

Conclusion

The worst is not over for Venezuela, it seems. According to the *Latin Focus Consensus Forecast* panelists, inflation is expected to peak at around 79 percent by the end of 2015. According to forecasters,the oil prices are unlikely to increase in the near future. There is resentment among the people of Venezuela as they are unable to afford a lot of necessities of life. In the coming year, the scarcity is going to get worse in the light of the facts presented above. Taking all of this into consideration, I think that Venezuela is in for a hurricane of protests and strikes. The people are unhappy with the government, who is unwilling to take the initiative and solve the woes of the economy. The Petro Caribe program (2005) allows many Caribbean states to buy oil from Venezuela on a deferred payment basis. This essentially meant that some countries could buy oil from Venezuela by paying some amount upfront and the rest of it in a period of 2-3 years. The PetroCaribe has resulted in huge deficits for the Venezuelan government. Although, the deficits from PetroCaribe is not as much when compared to the losses caused by huge fall in price of oil. According to the country' s foreign minister, Rafael Ramirez, "Venezuela is perfectly capable of sustaining the PetroCaribe agreement". This, in my opinion is highly unlikely, considering where the Venezuelan economy stands. Even a small blow to the economy can make matters much worse. China, which is one of the major lenders for Venezuela has now refused to lend any more money to the Venezuelan government.

There is hope for the economy if the government intervenes to cut back on its expenditure and adopt policies to reduce inflation. Only when the inflation is reduced, can the Bolivar regain its value and scarcity can be controlled to some extent. The country should also try to boost its manufacturing sector. However, it is easier said than done. It had been seen that even in times of a booming oil market, the fiscal deficit was close to 17 percent of GDP. Even, the manufacturing sector requires initial investment for which the government does not have money. Therefore, it is safe to say that even if the government adopts all the desirable policies, it will be long before the economy is put back on the path of recovery.

Case study 2: Nigeria

BACKGROUND

The Nigerian economy presents an irony of sorts also called as the ' resource curse' by economists. While it is replete with legion natural resources on one hand, on the other it is struggling with gouging poverty. The modern part of the economy is said to be dependent on oil while the traditional sector of the economy thrives on agriculture. Until 1960s oil was yet to be discovered and agriculture was the prime driver of the economy. Oil is now major component of the Nigerian economy. It accounts for 95% of Nigeria' s export earnings and for 65% of total government revenue. The Nigerian government has been accused of corruption and inefficiency because of which proportionate gains are not spread out and eventually on the 1% are benefitted. Despite the augmenting revenue from oil, investment in agriculture has declined such that there is a need to import food.

THE 1980S ERA: FALL IN OIL PRICES

With the oil crisis in the 1980s, revenue fell sharply. Inflation was already doing rounds. Consumer goods, including necessary commodities, became extremely expensive. Government' s focus on the industrial sector, at the expense of the agricultural sector, caused severe shortage of food, such that it had to be imported. Also,

most of the workers had shifted to the urban sector to work in the industries. This caused a shortage of workers in the agrarian rural sector and created an ever increasing unemployment in industrial sector. The government defaulted on its loans. More debt began to mount because food had to be subsidized. Immigration, especially from West Africa, was stopped to save jobs.The urban unemployment rate rose to 28 percent in 1992, and crime also increased as 31.4 percent of the population lived below the poverty line. The Government further implemented Structural Adjustment Program, to reduce Nigeria' s dependence on oil and to create a basis for sustainable non-inflationary growth. But, this further worsened the situation by increasing inflation and unemployment. Spending on education and health care reduced considerably. As per *The New Nigerian* "GNP per capita per year decreased 4.8 percent from 1980 to 1987, which led in 1989 to Nigeria' s classification by the World Bank as a low-income country" . Presidential elections being terminated in June 1993, Sani Abacha became the authoritarian ruler. The next 6 years would prove mean even more detrimental for the economy. Gross corruption and violation of fundamental rights of its citizens, abated Nigeria' s tarnished reputation further on. Unemployment and poverty reached higher levels than ever before. Very little of the revenue from oil exports reached the common man. A large amount of this money was embezzled to Swiss banks.

The 2000s: getting back on track

The election of a civilian president, Olusegun Obasanjo, in 1999 was the first steps towards achieving economic stability. Incidentally, inflation rates fell to 6.1% and the foreign exchange rate stabilized to N92.00 per dollar. The new president aimed to reinstate global confidence in the economy and bring back credibility in the government. While his attempts at getting debt relief failed, he did manage to pass anti-corruption bill in the legislature. He privatized inefficient and corrupt state owned companies. With the help of the World Bank, Nigeria succeeded in recovering US$458 million of public money stashed off abroad.

In 2003 he introduced National Economic Empowerment Development Strategy (NEEDS) program. It encapsulated the range of social and economic reforms that the president wanted to introduce. Major concerns were fighting off poverty, fuelling the economy and luring foreign investors.

The reforms could not bring any major shift in the economy. Unemployment instead rose from 12% to 19%. The manufacturing sector collapsed and the number of Nigerian graduates increased year on year. Infrastructure deficit still plagued the economy. Foreign capital did not inundate the Nigerian economy as had been expected. This is in part because of the high cost of doing business in Nigeria and a lack of transparency in economic decision-making in the country. GDP per capita in 2006 was same as in 1980. *The BBC reported in 2005 that* "Nigeria is one of the world' s biggest oil exporters, but it is also one of the world' s poorest countries, with the majority of the population living on less than $1 per day."

In 2005, Nigeria reached an important agreement with the Paris club regarding debt relief. Nigeria agreed to pay the Paris Club $12.4bn (£8.2bn) in exchange for the remainder of its $30bn official debts being written off. This helped the country remove its name from the international black credit list. In 2006 it settled the remaining debt becoming the first African country to do so.

Before the financial crisis, the fragile economy was regaining investor confidence. Oil prices had been on an upward trend. But catastrophe came in the form of the 2008 financial crisis. Price of oil was at $147 around the time. But due to speculative pressures it fell to $50 per barrel. Consequently the government experienced a shortfall in revenue and also in foreign exchange reserves. The stock markets crashed and panicked foreign investors withdrew their money from the economy. Inflation shot up to 15% from 6%.

Post the financial crisis, the economy had again stabilized. Capital markets are bullish and most indicators are fine.

Oil revenue still accounts 70% of government revenue and 90% of its exports. The recent fall in oil prices due to shale gas revolution, global slowdown have again clouded the troubled economy. Nigeria failed to take any lessons, from the first time, in diversifying its economy. Even the annual budget of the government is based on the oil price benchmark. It is 68 dollar per

barrel for 2015, IMF recently cut Nigeria's forecast from 7% to 5% for 2015. Their official currency, Naira, has been depreciating and is currently being traded at N208 for every dollar. It has depreciated by almost 16% since June and the government refuses to devalue the currency. Reserves are enough only for the next 6 months as a result. With oil revenue falling, foreign exchange earnings are likely to fall down too. Their current account surplus has been positive since 1970 but, excluding oil, the balance is mostly negative.

Nigeria exports 2 million barrels per day. Nigeria's oil was prized for its low sulphur content and unfortunately, oil discovered in America is also low in sulphur content. As a result price of oil with low sulphur content has fallen more. Nigeria has also lost its entire share of oil exports to the United States.

Election, between President Goodluck Jonathan and General Muhammed Buhari of the opposition APC scheduled for February 14th, are also preventing the government from raising interest rates or devaluing the currency. The dollar reserves, as a result, are dwindling fast. Nigeria is also dealing with its militant Islamist group Boko Haram - which has caused havoc in Africa's most populous country through a wave of bombings, assassinations and abductions - in an attempt to overthrow the government and establish its rule. They have been dominating the northern region for the past 5 years and recently kidnapped 200 girls in Chibok region in the northern state of Borno, Nigeria's northern region is hence poorer than its southern region. While the southern regions house multi-nationals and a growing middle class, the northern is poverty stricken. Another major economic loss to Nigeria is that agriculture is mostly concentrated in the northern states. Due to the presence of Boko Haram, production is slowing down.

Conclusion

Nigeria's overdependence on oil export revenue is its Achilles heel. Nigeria's economy has been undulating along the fall and rise in oil prices. The economy needs to invest in sectors such as agriculture, which has already been the mainstay of the economy. 35% of the population is employed in agriculture while the sector has a potential to absorb more people. Nigeria has a huge infrastructure deficit and the oil revenues need to be directed to build better roads, highways, factories etc. The country should ease rules for foreign investment by bringing transparency, reducing red tapism and corruption. Nigeria has abundant natural resources known and unknown. The bureaucracy needs to optimize on its wealth.

Impact Evaluation of Spaghetti Bowl Effect on South Asia-East Asia Trade

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Abstract: *Trade relations between South Asia and East Asia have seen an upward trend since the start of the millennium. Before 2000, there was only one trade agreement, the Bangkok Agreement, connecting South Asia and East Asia. As per the current data in 2014, the number of operational trade agreements linking the two sub regions has grown to 10. Economists have pointed out that due to their overlapping conditionalities, these proliferating trade agreements are causing trade diversion and thus leading to overall loss of benefit for the trading nations. This phenomenon is referred to as 'spaghetti bowl syndrome'. In order to study its impact, this paper carries out an econometric analysis (by using gravity model) of the trade flow between a selected group of South Asian and East Asian countries. The results show that the increasing number of trade agreements is indeed negatively affecting the trade relations between South Asia and East Asia.*

1. Introduction

As this paper is about the poor trade relations between South Asia and the rest of Asia, particularly East Asia, it is imperative that we briefly delve into the history of economic, political and cultural relations between the two sub-regions (East Asia and South Asia).

Rana P. (2012) reveals that up till 18th century, China and India accounted for around half of the world's Gross Domestic Product (GDP).[67] He also points out that during that time, Asia was quite well integrated, with Northern Silk Road and Southern Maritime Highway providing major impetus for intra-Asian trade.

Then industrialization followed, and the balance of power shifted to the West. A period of isolation dawned upon South Asia, and its strong historical linkage with East Asia plummeted.

1990s witnessed a shift in the isolation policy of South Asia as India opened up its economy. At the start of the millennium, world saw a new era in South Asia-East Asia relations, which the economists commonly call South Asia's 'looking east' policy and East Asia's 'looking west' policy. Both the regions once again came closer. For example, India's growing attempts to link itself with East Asia eventually led to the signing of ASEAN-India free trade agreement in 2010.

Political scientists term these growing attempts at linking the two sub regions as the Renaissance of Asia. Two events, though not very important per se, holds considerable symbolic value in the' Re-birth of Asia'. First, the reopening of Nalanda University after 800 years.[68] Second, on the wish of the then Indian Prime Minister Manmohan Singh, a commemorative ship expedition was carried out which went through the historical routes, which used to link the Indian subcontinent (South Asia) to the ' Maritime Asia' (East Asia).

Knowing trade statistics is important to comment upon where the economic relations between the two sub regions stand today. Trade data collected from IMF's online database, Direction of Trade Statistics (DOTS), can help us in this.

In 2013, South Asian exports to East Asia stood at $ 67,914 million as compared to $7441 million in 2000 and $3955 million in 1990. We can witness a considerable trade boom in the lastdecade or so, with annual percentage growth of around 15%. Imports from East Asia to South Asia were valued at $167,327 million in 2013, which grew from $8,000 million in 1990.

However, these huge jumps should not be considered, as a sign of victory because the total share of South Asian trade with East Asia has almost remained stagnant at around 22%. On the other hand, South Asia only constitutes around 3% of total East Asian trade. Thus, the statistics are not encouraging in real sense.

Some economists believe that the reason why trade integration between the two sub regions has not grown at a pace at which it should have, is the proliferation of Free Trade Agreements (FTAs) between them. Number of FTAs between East Asian and South Asian countries has gone up dramatically over the last decade or so. The mushroom growth of FTAs leading to slowing down of trade is known as ' spaghetti bowl syndrome'

This paper studies the impact of South Asia-East Asia spaghetti bowl using gravity model of trade. The regression results show that spaghetti bowl does exist and has indeed led to dampening of trade relations between the two sub regions.

2. Literature review

Before moving on to theoretically understanding the negative effects of spaghetti bowl, it is important to recognize the factors that drive the demand for such trade agreements.

The reasons behind growing number of FTAs are many. In Asian context, Jayant Menon (2009) identifies some specific reasons of proliferating BTAs (bilateral trade agreements). Generally, disillusionment from the liberalization at the worldwide level creates demand for small scale trade agreements.

In some cases, already created trade agreements gives impetus to the creation of more agreements. Talking about Market Restoring BTAs, Menon (2009) writes, "Countries that did not belong to a Preferential Trade Agreement (PTA) felt compelled to form or join one in order to secure regional markets, or compensate for markets in other regions that were becoming more isolated and less accessible as a result of preferential arrangements."

Furthermore, it is apparent that arriving at a conclusion is easier with less number of negotiators involved. Thus, a number of small PTAs emerge with members overlapping in them.

Some PTAs are formed to strengthen relations between members of a bigger PTA. This strengthening might not be possible in a larger PTA where a country may feel comfortable with some members but not with others due to political and/or economic reasons. Malaysia-India BTA can be one such example where both countries are also part of the larger India-ASEAN agreement.

Rai (2010) points out that the Asian financial crisis of 1997 further exacerbated the FTA creation amongst Asian countries as they came to realize that increased regional cooperation is necessary to sustain economic growth.

There is an interesting debate about whether this growing trend of trade agreements actually benefits the trade flow between the signing countries or not.

Bhagwati (1995) coined the term ‘ spaghetti bowl’ for the first time; he explained that the growing number of preferential trade agreements (PTAs) are just like spaghettis that tangle up with each other, restricting trade instead of facilitating it.

FTA proliferation can deflect trade through a number of routes.

1. Members of Free Trade Agreement (FTA) reduce tariff amongst them, but maintain their own external tariff on imports from non-FTA members. According to Bhagwati (1995), one of the ways through which increasing FTAs leads to reduction in trade is the complexity caused by Rules of Origin (ROOs). ROOs determine the country of origin of a traded product. This is important in order to identify what tariff rates are to be applied. These rules are designed to prevent goods from being imported into the FTA member country with the lowest external tariff and then transshipped to the country with higher external tariffs.

Because of globalization and other factors, classifying products according to the country of origin is near to impossible, as a product may have passed through tens or more of countries before reaching a final destination for assembly. ROOs multiply under proliferating FTAs because different members have different external tariffs. What happens is that countries avoid taking advantage of the most efficient supply network because of the fear of losing the ‘ origin’ status due to overlapping ROOs. Thus, spaghetti bowl can divert trade through Rules of Origin problem.

2.Bhagwatti (1995) also argues that apparent trade creating impact of FTAs can often turn to be trade diverting. He writes, “Thus, if the US crowds Mexico in an industry, potentially creating trade in the Vinerian sense, Mexico can, and probably will, start anti-dumping action against nonmember suppliers and seek to accommodate thus both its own and the US firms at the expense of nonmember suppliers, transmuting trade creation into trade diversion.”

3.Rana and Dowling (2009) add that many Asian countries have limited infrastructure for carving out trade policy, and thus the proliferation of free trade agreements cause huge financial and administrative burden on such nations, often outweighing the trade creating benefits of any such agreements.

Most of the studies on spaghetti bowl are theoretical in nature. There have been very few attempts to empirically study this phenomenon, especially in Asian context.

Elina (2011) tried to test the phenomenon of spaghetti bowl for African countries econometrically using the gravity model of trade. The regression results conclude that the growing number of trade agreements negatively affects extra- African trade; however intra-African trade is not.

This paper uses a similar econometric model.

3. Econometric Analysis

This section deals with the econometric methodology applied in assessing the impact of spaghetti bowl in South Asia-East Asia context.

3.1. Using Gravity Model Of Trade

Our model uses data for the following selected countries. Wherever this paper refers to the‘ initially selected countries’ , it is referring to the following eight South Asian and twelve EastAsian countries.

Eight countries from South Asia are selected[69], namely

1. THE PEOPLE’ S REPUBLIC OF BANGLADESH

2. BHUTAN
3. THE REPUBLIC OF INDIA
4. THE REBUPLIC OF MALDIVES
5. NEPAL
6. THE ISLAMIC REPUBLIC OF PAKISTAN
7. DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA
8. AFGHANISTAN.

Twelve countries from East Asia are selected[70], namely

1. SOCIALIST REPUBLIC OF VIETNAM
2. KINGDOM OF THAILAND
3. REPUBLIC OF SINGAPORE
4. REPUBLIC OF THE PHILLIPPINES
5. UNION OF MYANMAR
6. MALAYSIA
7. LAO PEOPLE' S DEMOCRATIC REPUBLIC
8. REPUBLIC OF INDONESIA
9. KINGDOM OF CAMBODIA
10. BRUNEI DARUSSALAM
11. CHINA
12. JAPAN

This paper uses the gravity model of trade to assess the impact of spaghetti bowl on the trade volume. The model assumes that trade volume between two countries is positively related to their Gross Domestic Product and negatively related to the geographic distance between them.

In its general form as per academic textbooks, we can write the gravity equation as

$X_{ij} = (G)\ (S_i)\ (M_j)\ (Ø_{ij})$, where[71]

X_{ij} = Monetary value of exports from country to country

S_i = Factors affecting the supply of exports (such as exporter's GDP)

M_j = Factors affecting the demand of imports (such as importer's GDP)

G = Factors affecting which are independent of or

$Ø_{ij}$ = Ease with which exporter can access market (such as bilateral distance)

For econometric analysis, the original equation can be transformed as follows

$InXijt = \beta 1 + \beta 2lnGDPit + \beta 3lnGDPjt + \beta 4lnDISTij + \varepsilon ijt$, where

Xijt = Monetary value of exports from country *i* to country *j* at time *t*

GDPjt = Gross Domestic Product of the exporting country at time *t*

GDPit = Gross Domestic Product of the importing country at time *t*

DISTij = Geographical distance between country *j* and *i*

β1, 2,3,4 = Respective coefficients

εijt = other factors which affects *Xij* at time *t*

Up till now, there has been no talk of the spaghetti bowl in the gravity model. The spaghetti bowl impact will now be incorporated in the gravity equation by using dummy variables.

First one will be called the ' PTA dummy' . It will take the value ' 1' if the trading couple (importer and exporter) have signed a trade agreement with each other, and ' 0' otherwise. Trade agreement can be bilateral (involving only country and country) or plurilateral (country and not being the only members).This dummy will judge the impact of signing a trade agreement on the trade volume between the signatories.

Second dummy variable can be called the ' spaghetti bowl dummy' . In order to capture the impact of proliferating trade agreements, this variable will take value ' 1' if both of the countries have signed another

trade agreement with a third party, and ‘ 0’ otherwise. This dummy will not take into account the trade agreement accounted for in the first dummy – the ‘ PTA dummy’ .

To assess the impact of spaghetti bowl, we now introduce a third dummy variable. This one can be called the ‘ interacted dummy variable’ , as it is formed by multiplying the values of ‘ PTA dummy’ with the corresponding values of the ‘ spaghetti bowl dummy’ . The interacted dummy variable will help us in answering our research question as it will capture the impact of spaghetti bowl on the original PTA affect.

After introducing these dummy variables, our final regression line now becomes

$InXijt = \beta 1 + \beta 2 lnGDPit + \beta 3 lnGDPjt + \beta 4 lnDISTij + \beta 5 PTA + \beta 6 INTER + \varepsilon ijt,$[72] where

β5 = coefficient of the ‘ PTA dummy’ which will measure the trade creating impact of a trade agreement

β6 = coefficient of the ‘ interacted dummy variable’ which will measure the impact of signing additional trade agreements (spaghetti bowl) on the PTA’s trade creating affect

3.2. Data Collection

By looking at the regression equation, it is clear that the following data is required

- Trade flow between each South Asian and each East Asian country
- GDP for all the initially selected countries
- Bilateral distance between each selected South Asian and each selected East Asian country
- Trade agreements linking South Asian and East Asian countries (required for assigning values to dummy variables)

Data on trade flows was collected from World Integrated Trade Solutions (WITS), an online database of The World Bank. Trade of the eight South Asian countries with the twelve East Asian countries was recorded.[73] Import statistics were used rather than export data because it is believed to be more carefully reported as countries gain tariff revenue on imports. The trade data was collected over a period of 4 years, from 2008 to 2012. This makes a total observations of 384 (12x8x4).

Gross Domestic Product (GDP) figures were collected from World Development Indicators (WDI), an online database of The World Bank. A total of 80 values were collected (4 year data for twelve East Asian and eight South Asian countries). Note that all figures are in current US dollars.

Air distance between all South Asian and East Asian countries was collected in miles using Google Map statistics.

Each observation in the database can be identified through three unique indicators: importer, exporter, and year.

These separate data records were merged and compiled in one single file in STATA.[74]

1.The Bay of Bengal Initiative for Multi-Sectoral Technical and Economic Cooperation (BIMSTEC), 2004

South Asia	*East Asia*
Bhutan	Myanmar
Sri Lanka	Thailand
Bangladesh	
India	
Nepal	

2. Asia Pacific Trade Agreement (APTA), 1976

South Asia	*East Asia*
Sri Lanka	China
Bangladesh	Lao
India	

3.ASEAN-India Comprehensive Economic Cooperation Agreement (ASEAN-India CECA), 2010

South Asia	*East Asia*
India	Lao
	Cambodia
	Myanmar
	Singapore
	Malaysia
	Indonesia
	Vietnam
	Thailand
	Brunei
	Philippines

4. India-Singapore Comprehensive Economic Co-operation Agreement (India- Singapore CECA), 2005

South Asia	*East Asia*
India	Singapore

5. Japan-India Comprehensive Economic Partnership Agreement (Japan-India EPA), 2011

South Asia	*East Asia*
India	Japan

6. Malaysia-India Comprehensive Economic Cooperation Agreement (Malaysia-India CECA), 2011

South Asia	*East Asia*
India	Malaysia

7.Malaysia-Pakistan Closer Economic Partnership Agreement (Malaysia-Pakistan CEPA), 2008

South Asia	*East Asia*
Pakistan	Malaysia

8. People's Republic of China-Pakistan Free Trade Agreement (PRC-Pakistan FTA), 2007

South Asia	*East Asia*
Pakistan	China

9.Trade Preferential System of the Organization of the Islamic Conference, (TPS- OIC), 2004

South Asia	*East Asia*
Pakistan Afghanistan Bangladesh Maldives	Brunei Indonesia

10.Preferential Tariff Arrangement - Group of Eight Developing Countries (PTA-D8), 2006

South Asia	*East Asia*
Pakistan Bangladesh	Malaysia Indonesia

Information on Trade Agreements in Asia was taken from an online data base of Asian Development Bank, namely Asia Regional Integration Center (ARIC). This information was then used to assign ‘ 0’ and ‘ 1’ values to ‘ PTA dummy’ and the ‘ spaghetti bowl dummy’ .

ARIC data reports that a total of 10 trade agreements are operational between the selected South Asian and East Asian countries.

The trade agreements, with their names and the date of becoming operational are listed on the following pages. It also shows which of the South Asian and East Asian countries are connected through each of these agreements.

List of Trade Agreements (bilateral and plurilateral) operational between the selected South Asian and East Asian countries.[75]

To depict how the codes to the dummy variables have been assigned, let's take the trading couple India and Malaysia. We know that from 2010, both are part of a common trading agreement, the India-ASEAN CECA. This means 'PTA dummy' for India-Malaysia couple would take value of '1' from 2010 and onwards, and '0' before 2010. The 'spaghetti bowl dummy' would take value '1' because both India and Malaysia are part of pacts other than the

ASEAN-India pact. For example Malaysia is part of PTA-D8 and India is signatory to Japan- India EPA. The 'interacted dummy' would equal '1' in this cases as 1x1=1.

3.3. Regression results

The results from the regression analysis are presented and commented upon in this section.

Table below shows the coefficients obtained through running the multiple regression on STATA.

Before explaining each variable and its associated coefficient, it is important to discuss R-square and P-value.

R-square comes out to be 0.688. This means that explanatory variables in our model describe 68.8% of the dependent variable (trade volume).

Variable	*OLS Coefficients for Gravity Model*
GDP of Exporting Country	1.578***
GDP of Importing Country	0.999***
Bilateral distance between importer and Exporter	-1.953***
PTA dummy	0.614**
Interacted dummy (PTA dummy x spaghetti bowl dummy)	-1.825***
R-Squared	0.688

* Significant at 10%, **Significant at 5%, and *** Significant at 1%

P-value is used to test the overall reliability of the regression model. In our regression, it comes to be very small (0.000). This means that the group of variables (GDP of exporter, GDP of importer, bilateral distance, PTA dummy, and the interacted dummy variable) can be completely relied upon to test the trade volume.

As our model is log linearized, the coefficients of the explanatory variables predict the percentage change in the dependent variable caused by changing the concerned explanatory variable by 1% point.

As expected, the coefficient of the exporting country' s GDP is positive and significant. For every 1% increase in exporting country' s GDP, the bilateral trade volume increases by1.57%.

The GDP of the importing country shows the same positive trend with the coefficient value of 0.999. Again, the p-value is 0.000, which means that the coefficient is significant at all levels. For every 1% increase in importing country' s GDP, the bilateral trade volume increases by0.99%.

The distance variable shows a strong negative relation with the trade volume. For every 1% increase in distance between the two trading countries, the bilateral trade volume goes down by 1.953%. Again, the p-value is 0.000, which means that the coefficient is significant at all levels.

The coefficient of ' PTA dummy' , which shows the impact of signing a trade agreement between two countries, is positive and significant at 5% significance level (The p-value is 0.048 which is less than 0.05). The value of the coefficient is 0.614. It is important to note that when PTA dummy switches from 0 to 1, the percentage impact on trade volume is given by

$$100 \times (\exp^{\text{coefficient of PTAdummy}} - 1)$$

Thus, by signing a trade agreement, the trade volume between two countries increases by 84.7%.

Now comes the ' interacted dummy' , which measures the impact of the spaghetti bowl on the PTA effect. The coefficient of this variable is negative (-1.825) and significant. This means that if both countries in the bilateral couple are engaged in trade agreements with other countries, then it would have a negative impact on the effect of PTA and thus on trade volume. Thus the hypothesis that spaghetti bowl is negatively impacting the trade between South Asian and East Asian countries holds true here.

4. Policy Recommendation

As the result of this paper goes against the increasing trade agreements, we need to cautiously look at the future integration plans of the two sub regions. The list of South Asia-East Asia preferential trade agreements shows us that there was only one agreement, Asia Pacific Trade Agreement, before 2004. In the last decade (2004 to 2014), the operational FTAs have gone up to 10 and there is no stopping. A number of other FTAs in the pipeline. Many have been signed but have not come into effect yet. Considering the current growth trend of FTAs, it seems very likely that these FTAs will be operational soon.[76]

The remedy to deal with the spaghetti bowl is the consolidation of all FTAs into a region wide FTA. In our case, a pan-Asian FTA could work. A quantitative study done by Wignaraja (2014) shows substantial benefits for South Asian countries in particular and the world in general by the formation of an ASEAN+3 – South Asia FTA. Though this agreement does not cover all Asian countries, it serves the purpose of this paper well as it includes all South Asian and nearly all East Asian countries. The study takes 2017 as the baseline year (at constant 2001 dollars). The simulations predict an income gain of 2% of base income for South Asian countries and 2.4% for East Asian countries. However, there are variations in gains amongst the different countries of the two sub regions. For example, India's gains are estimated to be about

2.29% while Pakistan' s gain is quite low (0.20%). The world as a whole is expected to gain 0.54% of its baseline income. The study also compares the gains from this FTA with some other proposed FTAs such as ASEAN+3 – India FTA and EU-India FTA. The results corroborate our recommendation as the gains from ASEAN+3 – South Asian FTA are expected to be the largest amongst all.

REFERENCES

Asia Regional Integration Center – Tracking Asian Integration. Asian Development Bank, n.d. Web. 11 Nov. 2014. http://aric.adb.org/fta

Bachetta, Marc. Beverelli, Cosimo. Cadot, Olivier. Fugazza, Marco. Grether, Jean-Marie. Helble, Matthias. Nicita, Alessandro. Piermartini, Roberta. (2012). A Practical Guide to Trade Policy Analysis.World Trade Organization.

Bhagwati, Jagdish. (1995). US Trade Policy: The Infatuation with FTAs. Columbia University, Discussion Paper Series No. 726

Direction of Trade Statistics – DOTS. International Monetary Fund, n.d. Web. 11 Nov. 2014. http://elibrary-data.imf.org/DataReport.aspx?c=1449337 &d=33061&e=170921

Durgesh, K. Rai, Asian Economic Integration and Cooperation: Challenges and Ways Forward for Pan-Asian Regionalism (November 22, 2010). GIGA (German Institute of Global and Area Studies) Working Paper No. 152.

Fergin, Elina. (2011) Tangled Up in a Spaghetti Bowl-trade effects of overlapping preferential trade agreements in Africa. Lund University, School of Economics and Management.

Menon, Jayant (2009). What to do about Asia' s spaghetti bowl. Malaysia: Office of Regional Economic Integration Asian Development Bank.

Rana, P. and J. M. Dowling (2009) South Asia: Rising to the Challenge of Globalization, World Scientific Press, Singapore.

Rana, P. Prandumna (2012). Renaissance of Asia. Evolving Economic Relations Between South Asia and East Asia. World Scientific.

Wignaraja, Ganeshan (2014). Assessing the Experience of South Asia-East Asia Integration and

India' s Role.ADBI Working Paper 465. Tokyo: Asian Development Bank Institute.

World Development Indicators.World Bank, n.d. Web. 11 Nov. 2014.http://data.worldbank.org/data-catalog/world-development-indicators

World Integrated Trade Solution.World Bank, n.d. Web. 11 Nov. 2014. <http://wits.worldbank.org/>.

Thermodynamics and Economics:
Entropy, Environment and Globalization

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***Abstract**:The paper focuses on an obscure yet fascinating analogy between the laws of physics and the proofs and laws that govern economics. It seeks to understand the reasons for economic entropy such as movement of human capital through the laws of physics and builds upon the argument that as economic entropy is maximized, the economic outcome would largely be detrimental.*

"It is the business of the student of nature to know assign the "why" in the way proper to his science—the matter, the form, the mover, that for the sake of which" - Aristotle

Using theoretical constructs of physics to make sound arguments and deductions in economic analysis is a major, yet rare trend today. Econophysics, while being strong in foundation and analysis is an infant branch of economics and its relevant analogies are not talked about in mainstream discussions. "Modeling itself on mathematics, mainstream economics is primarily deductive and based on axiomatic foundations. Econophysics seeks to be inductive, to be an empirically founded science based on observations, with the tools of mathematics and logic used to identify and establish relations among these observations." (Sinha & Chakrabarti, 2012) This paper intends to diminish the gap between pure empiricism and inductive social science and hence, presents the case for a confluence of the study of the nature/properties of matter/energy and mainstream economic analysis.

The main argument of this paper revolves around an

analogy, first mentioned by Nicholas Georgescu-Roegen, a protégé of Joseph Schumpeter, who related entropy and the second law of thermodynamics with the nature of economic activities and deduced vital conclusions that are of concern to environmental economists. He mentioned that economic activities convert all energy into a state of high entropy (less usability) and while the quantity of energy remains constant (as per the first law of thermodynamics) the quality does not. Hence, as soon as economic entropy reaches its maximum value, economies will drain out and civilization will come to a standstill. The paper would not only build upon his argument but also extend it to other economic arenas such as developing-developed nations as high entropy-low entropy spaces with respect to the globalization policies being erected. The Washington Consensus can be dubbed as the legislative catalyst that would in fact, in all probabilities and absence of constraints, convert human identities, cultures and capital into a high entropy state beyond which innovation and economic growth would cease to exist. While the environment related analogy mentioned by Roegen and the globalization extension made here may sound prophetic and an exaggerated version of scientism, sound mathematical analysis can prove otherwise.

The *objectives* of this paper are as follows-

a) To understand how energy transformation, production of entropy and economic activities are intrinsically related in the modern industrial era and what implications it may have on the environment. Show how economic policies based on empiricist and unemotional/unbiased constructs can prevent the high entropy-low usability doom predicted by analysis.

b) To relate thermo-economic constructs with the Washington Consensus and the innate nature of globalization in bringing about social degeneration. The Boltzmann Expression can be used to understand how greater realization of possibilities would lead to greater entropy and hence, less usability of matter. With the economic parallel of W, having different values across nations, nations would have disparate levels of entropy leading to massive inequalities, post liberalization. The paper, taking a Marxist perspective, would investigate whether the entropy levels would finally be maximized leading to a high entropy global state or not.

Physics and economics are considered to be vastly different sciences but certain inter-connections can be used to make the latter more empiricist and analytical. "While it is perhaps not surprising for physicists working on social and economic phenomena to be critical of mainstream economics and suggest the emerging discipline of *Econophysics* as a possible alternative theoretical framework, even traditional economists have acknowledged that not everything is well with their discipline." (Sinha & Chakrabarti, 2012)Theories rooted in physics can be used to make improvements in economic theory and can certainly change the way an economist looks at his discipline. Using the thermodynamic construct of entropy, this paper intends to do the same.

Nicholas Georgescu-Roegen mentions that the entropy law is the "the most economic in nature of all natural laws" and "the taproot of economic scarcity" . Entropy refers to number of different ways in which a thermodynamic system may be arranged and therefore, it qualifies to be a measure of systemic disorder. While scholars differentiate between entropy and disorder, it can be said that, greater the level of disorder in a given system, the higher its entropy. While the first law of thermodynamics states that energy cannot be created nor destroyed, the second law states that the sum of entropies of all thermodynamic systems increases naturally over time. Further, it has been proven that "higher the entropy, the lower the quality of energy, whereas the lower the entropy in a system refers to higher quality energy being used" (Glucina & Mayumi, 2010). Considering the two, scientifically evident statements, it can be said, that- as sum of entropies of thermodynamic systems is bound to increase, the quality of energy deteriorates. Expressed in a mathematical form, this implies,

max $\left(\sum_{i=1}^{n} Si\right)$ implies qe falls. Where S refers to entropy of a given system, the summation represents the total sum of entropies of n thermodynamic systems and qe refers to the quantity of energy. Hence, given $S(t+1) > S(t)$, $qe(t+1) < qe(t)$. It is this nature of entropy and its relation with energy which can have major repercussions in the field of environmental economics, the first of which was mentioned by Roegen. He maintains that entropy is equal to unavailable energy divided by temperature and hence, the equation by itself is a tautological representation

of the above-mentioned axiom that relates entropy and energy quality. (Roegen, 1986) Two basic constructs need to be established before analyzing his deductions-

a) All thermodynamic laws, as opposed to natural laws, express an impossibility

b) In order to survive, a living organism, does not only need energy but also, low entropy.

Having these two constructs in place, one can relate a thermodynamic system to that of a macroeconomic state. Since every production process involves a series of input-output processes which relies on energy consumption and energy quality is bound to decrease (since entropy is bound to increase), economic processes are in fact leading humanity, involuntarily, to a "technological crisis, an energy crisis as we call it." (Roegen, 1986). Coal, for example, after being used up gets converted into gaseous form (possessing higher entropy and more disorder in the nature of its existence in gaseous form), which has far less economic value (less usability/low quality) and thus, becomes unavailable for economic use. The economic system, consisting of several such nonrenewable input production functions is driving itself to form a high entropy state, which would lead to the much anticipated collapse. While this prediction is of minor importance to environmental economists today, since the energy crisis is well discussed, it gets aggravated if two things are realized. One, the law exhibits an impossibility and hence, no renewable energy substitution can *prevent* the inevitable crisis from taking place (can only *prolong* it further), and two, Roegen's predicts that given energy consumption standards, 2100 would be the year when entropy of the energy sources would be maximized, economies would drain out and production functions would have access to zero inputs. "No matter how much our technology may improve, no technology can reach thermodynamic maximum, thus 100% efficiency is impossible. Indeed, no matter how efficient our technology can be, all of our resources will be depleted by 2100." (Roegen, 1986) The cataclysmic prediction raises vital concerns for environment economists and has several academic followers who propose sustainability, village economy and steady state theories as mechanisms to prolong the crisis predicted. Roegen, himself, mentions that "there is a far more dreadful crisis than that of energy, namely, the crisis of the wisdom of the homo-sapiens" and raises the concern to "economize energy" (conserve it) to prolong the crisis, since is occurrence is inevitable. Just like thermodynamic systems reach the entropy maximization state, economic systems also will. The period of occurrence, however, depends on the nature of economic processes and the sustainability of every micro-process involved. As entropy gets maximized, the ' economic value' of resources shall reduce, thus indicating a negative relationship between entropy and value.

Examine, the Boltzmann equation which relates entropy to the realization possibilities of a given system- $S = k \log (W)$ where S refers to entropy and W refers to the realization possibilities of a system (number of ways a thermodynamic system can be arranged). Comparing a thermodynamic system to the global economy, with independent units being human capital, one can say that W can represent the realization possibilities of human capital i.e. the way human capital can be allotted different type and nature of work in different ways. Consider the example, if the world consists of three people a,b,c and three jobs x,y,z, the realization possibility would be equal to three, since the three people can be allotted jobs in three ways- (ax,by,cz), (ay,bz,ca), (az,ba,cy) and hence, the realization possibility in this macro-economic state would be three. Just like different positions accorded to different units of a thermodynamic system (say atoms) form the realization possibilities of the system, the same can be done for human capital. As economies get liberalized and there is seamless flow of goods, services and human capital, the realization possibilities increase and hence, the entropy of the macroeconomic state (with respect to human capital) increases due to the nature of the Boltzmann equation. This implies higher disorder and less usability of human capital (higher the entropy, lesser the usability) and the factor that explains this phenomenon is technological substitution of labour. Further, just like heat flows from hotter to colder regions (regions with high entropy to regions with low entropy), human capital is bound to transfer itself from macroeconomic states exhibiting high entropy to states exhibiting low entropy. This raises the following concerns-

a) Developing countries have higher realization possibilities for human capital post liberalization and hence, economic entropy is higher. Human capital thus flows from regions of high entropy to

low entropy (developed nations). Labour flows and brain drain are real-life examples of this thermodynamic analogy. Further, due to high entropy many developing countries have shown higher levels of unemployment post their watershed year. This is because of the job reallocation that takes place within the country premises. Just like heat movement in a thermodynamic state, "when trade is liberalized, workers relocate from the least to the most productive firms (high entropy to low entropy states), leading to an increase in aggregate productivity and welfare gains. But, when labor markets are characterized with search frictions, job destruction due to small firms exit exceeds job creation by large firms" (Janiak, 2006)

b) Several policies working in ' favor' of the under developed nations, are in fact converting such nations into high entropy states (by rapidly increasing the realization possibilities of human capital through liberalization policies) and just like transfer of heat from high to low entropy states, transfer of labour takes place leading to the shut-down of domestic producers. (United Nations statistics for the year 2000 mention that over 175 million people in the world live outside the country of their birth, two thirds of which are in advanced nations). Hence, global immigration flows post globalization; necessarily favor advanced nations, which according to the entropy-analogy is inevitable. If the proletariat-bourgeoisie relationship was analogous to the developing-developed country relationship and the second law of thermodynamics was applied, one would deduce that "the laborer works, exerts energy, and is thus the source of heat. The heat then flows to the entity that is not working, that is generating less energy: the ' cold' heartless capitalist." (Meritt, 2000) The physics of Marxism applied to the ' global state' , then reveals a lot of what mainstream economics refers to as ' outsourcing' .

The transfer of labour and decline of domestic producers would continue till the time, total entropy of the economic system with respect to human capital is maximized. Hence, if S_1 and S_2 are respective entropies of developed and developing nations before the economy of the latter is opened up, we have- S_1= log W_1 and S_2= log W_2 where W_1 and W_2 represent the respective realization possibilities of the macro-economic systems. Now, since entropy is bound to get maximized, two cases emerge-

a) If the two macroeconomic systems remain isolated-

$\frac{dS1}{dW1} = \frac{1}{W1}$ and $\frac{dS2}{dW2} = \frac{1}{W2}$ Thus, respective entropies are maximized, when the realization possibilities rise to infinity. Hence, if the two macroeconomic states remain isolated their respective entropies (with respect to human capital) are maximum when the realization possibilities for the two economies are infinite. Keeping endogenous growth theory in mind, the previous statement is an obvious fact and hence, doesn' t need reiteration.

b) However, if the two macroeconomic systems are combined- i.e. if the developing economy is opened up and total entropy S is to be maximized, where- S= log W_1+ log W_2 and W_1+ W_2= k (total realization possibilities at given time t are constant), the function can be maximized with respect to W_1, if the equation is re written as S= log W_1 + log (k-W_1), $\frac{dS}{dW1} = \frac{1}{W1} + \frac{1}{k-W1} = 0$ and hence, maximum entropy is established when, k=0 i.e. W_1= -W_2 i.e. realization possibilities of one nation are formed by reducing the realization possibilities of the other. It can be said that opening up of the economy with higher entropy S_2, would inevitably lead to reduction of its innate realization possibilities in the long run, as total entropy is maximized. According to this perspective, liberalization policies will always favor the developed nation (the stronger nation exhibiting low economic entropy). Hence, the inherent inequities involved in the formation of the multi-national global state are visible.

The Washington Consensus which proposes deregulation and trade liberalization as policy imperatives is essentially combining macroeconomic spaces and maximizing total entropy where realization possibilities of one nation are formed by reducing the realization possibilities of the other. If W_1 is said to represent the realization possibilities of capital-intensive developed nations and W_2 is said to represent the realization possibilities of labour intensive developing nations, the Washington Consensus leads

to maximization of economic entropy with the maxima condition- $W_1 = - W_2$. Hence, the second law of thermodynamics, applied to modern economic frameworks, can show how a policy like the Washington Consensus is a legislative catalyst that maximizes global entropy and leads to the formation of massive inequities in the process. However, the third law (also known as the zero law) which says that heat transfer between two bodies of the same temperature does not take place (molecular motion ceases at absolute zero) implies that as soon as inter-nation entropies are equal and total entropy is maximum, human-capital flows will stop. Thus, according to this perspective, inequalities arising as a result of globalization appear to be unavoidable and would maximize at a particular time period. (shown in the graph below).

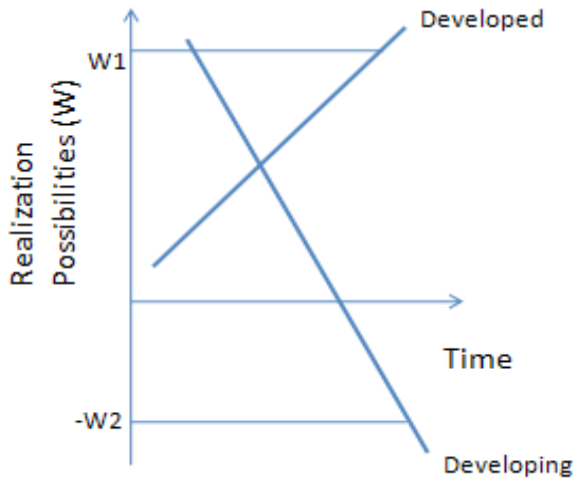

Figure: Entropy Maximization with respect to the Washington Consensus Paradigm

While the above made analysis can be criticized on the basis of scientism, it leads to the conclusion that several economic activities that base themselves on rational, empiricist models are primarily focused on short-run objectives. Using various analogies from the study of matter, one can make various predictions, which might highlight the ‘ dismal’ character of the economic science if they come true. Economic inequality is not just a social phenomenon but a lot of its causes and effects have a strong scientific logic. Since the matters of a natural science are considered indisputable in popular discussions, certain analogies have been used to interpret the social science in a new way. What qualifies as progress and development in the pure economic sense, might lead to a catastrophic outcome, which given the prophecies made using physics, can be prolonged but not avoided.

BIBLIOGRAPHY

Bullock, & Trombley. (1999). *The New Fontana Dictionary of Modern Thought* . London : Harper Collins .

Glucina, M., & Mayumi, K. (2010). Connecting thermodynamics and economics. *Annuals of the New York Academy of Sciences* .

Janiak, A. (2006). Does Trade Liberalisation lead to Unemployment? Theory and Some Evidence.

Meritt, M. (2000). The Physics of Marxism.

Roegen, N. (1986). The Entropy Law and the Economic Process in Retrospect . *Eastern Economic Journal* .

Sinha, S., & Chakrabarti, B. (2012). Econophysics, An Emerging Discipline . *Economics and Political Weekly* .

UCL. (2011). Econophysics: Entropy and its discontents? *Approaches to Knowledge* .

The Validity of the Cournot Model in Present Times

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ABSTRACT: *Game theory is one of the most studied topics in the subject of Economics. The presence of many firms, increased competition and market conditions give scope for research. Strategic behavior of the firms in an industry is an interesting aspect. Strategic decision making with the use of mathematical models enables the producer of a firm to achieve leadership in the market. Nash equilibrium, Cournot Competition model, the Bertrand model, the Stackelberg model and price and quantity leadership models are various strategies that producers use in their best interests. This paper attempts to understand the Cournot competition model and analyze it by understanding the Cement industry in India. The paper*

checks how far the cement industry puts into use the Cournot model while it also questions the applicability of the model in India in the present time.

Introduction:

Competition between markets is inevitable. Each firm chooses a strategy that it thinks is appropriate so as to achieve profit maximization. The Cournot model is a simple model that explains competition between two firms i.e. competition in a duopoly. Here, output is the variable under consideration.

The Cournot model gets its name from the French economist who introduced the model- Antoine Augustin Cournot. The theory was developed in his book ' Researches on the Mathematical Principles of the Theory of Wealth' , which was first published in the year 1838. As he was more of an economist than a mathematician, he has used mathematical tools extensively in his work on economic models.

According to the model, "each firm must decide how much to produce, and the two firms must make their decisions at the same time. Each firm treats the output level of its competitor as fixed when deciding how much to produce" (Pindyck, Rubinfield and Mehta, 2009).

Cournot' s model is the study of the ' behaviour of independent decision makers whose fortunes are linked in interplay of collusion, conflict and compromise' (Shubik, 1983 cited in Rutherford, 2002). Similar to Cournot' s model is Bertrand' s Competition Model and the Stackelberg model which can be used to analyse strategic behaviour.

The model initiated by Cournot works under certain assumptions. Firstly, the two firms under consideration produce homogenous goods and secondly, the cost of production of the firm is zero. Since it is only the demand side of the market that is analysed, it is also assumed that the duopolists are aware of the linear market demand curve. The duopolist also believes that regardless of his decision, the output of his rival firm will remain constant (Ahuja, 2011).

Cournot equilibrium and Reaction Curves

The output reaction curve is not the reaction of the rival firm that the seller anticipates. Rather, it is the reaction of the seller to the rival' s decisions . This view is supported by Ahuja (2011).

Thus, as Sciubba (n.d.) has pointed out, equilibrium occurs when the quantity that one firm produces is the optimal quantity for that firm, given the quantity produced by its rival; and the quantity that the rival produces is the optimal quantity for it, given the quantity that the former firm produces. The reaction function for each firm would then be the optimal quantity produced by that firm for each level of output by the other firm. The point where these two reaction functions intersect represents equilibrium for this market. (See appendix, fig. 2)

Cournot' s model of duopoly can be extended so as to study markets with more than two firms like the Cement Industry. Here, "each firm has an expectation about the output choices of the other firms in the industry and seeks to describe the equilibrium output" (Varian, 2010, pp.511-12). The cement industry is one such oligopolistic market where the Cournot model can be analyzed so as to see whether it holds true in the real world scenario.

The cement industry in India is very large. However, due to existence of homogeneity in the product there are not many players. Hence, the cement industry can be analyzed through the Cournot model. The analysis will be based on the data obtained in the last three years.

India, being the second-largest producer for cement in the world has seen a large increase in the rate of growth of the cement industry. The demand for cement continues to expand due to the huge infrastructural developments. Under such circumstances, it can be well assumed that the players involved in this market definitely employ economic game theories so as to carve their way to the top along with the aim of profit-maximization.

Therefore, this paper tries to study the game play of the cement industry using Cournot model of competition. It seeks to arrive at a conclusion as to whether the classic duopoly model is still applicable to the industry or has it since been replaced by some others strategic competition model

The Case Study:

The cement industry in India is a classic example of oligopoly market structure such that the product under consideration (cement) is homogenous in nature and new/potential producers face barriers to enter the market that is dominated by big players.

The major domestic cement companies in India include Ultratech Cement, Ambuja Cement, JK Cements, ACC Cement, Century Cements, India Cements, Sanghi Cements, Dalmia Cements, Saurashtra Cements and Madras Cements.

It is expected that the cement industry will grow at a compound annual growth rate (CAGR) of around 12 per cent during time period 2011-12 to 2013-14. The estimated production output of the cement industry is projected to be 303 Million Metric Tons at the end of

the time period, according to Indian Cement Industry Forecast 2012.

Analysis of the case study:

Output is the essence of the Cournot model. If each firm decides to produce its output depending on the output of its rivals, it can be said that the Cournot model game strategy is being used.

As mentioned before, firms under duopoly and oligopoly face barriers to entry. The cement industry faces barriers like high capital costs and long gestation periods and access to limestone reserves (key input). (Equity Master.com)

According to reports in IIFL, Ultra Tech Cement Ltd. will increase their volume to 62 mtpa in the next financial year (2014). On the other hand, India cements have already increased their volume by about 11% during this financial year .

Both Ambuja cements and ACC have experienced a growth in volume, the former at 2.5% and the latter at 5.5%.

Reports and statements given by each firm specify the volume produced each year, the increase in their volume, the estimated increase in the future and so on. This could merely mean expansion of the plant or it could be a result of decisions taken by rival firms. For the firm to employ the Cournot model, it should speculate the output of its rival firms because the model works on the assumption that all firms under consideration make their decisions simultaneously.

An article in The Hindu in November, 2013 had pointed out that India Cements went through a loss of Rs. 22.53 crore in the last quarter that ended in September due to a weak demand and increased costs. Since then, the company has decided to increase their exports to 20,000 tonnes a month so as to recover from their losses. Such a decision is independent of the decisions of its competitors. This example explicitly points out to the fact that the decision of a company to increase its output may not necessarily be a response to the speculated output of the other companies.

Looking at various studies, reports and analysis, one cannot say that the cement industry does not employ other game strategies. It is therefore essential to look at other competitive models so as to understand the game strategy/strategies used by cement companies.

The Bertrand model is a response to the model given by Cournot. According to this model, the firms choose the price at which they would sell their product and the market decides the quantity, unlike the Cournot model where the price is determined by the market (Varian, 2010).

However, the Bertrand model cannot be applied to the cement industry. In a Bertrand equilibrium, price equals marginal cost. In the case of multiple firms, competitive bidding is observed where prices are much lower than can be achieved by other means (Varian, 2010). A cement industry incurs huge production costs and would not be able to thrive if the prices are so low that production costs cannot be recovered. Also, cement is price inelastic as there is no substitute for it. Therefore, cement companies do not engage in price cutting strategies.

The only route for profit maximization for a cement company is to raise the price of cement or the volume of production. Recent articles (TOI and World Cement, 2013) show that the price of cement has shot up drastically from about Rs. 215 to Rs. 315 per 50kg. Analysts have stated that the reason cannot be attributed to any demand and supply changes. All cement manufacturers have hiked up the cement price. This tendency of the cement manufacturers is an example of price leadership.

A firm may either set a price on its own accord or set the price of its product based on the price set by its competitor. When a firm gets to set the price before its rivals, it is a price leader. Such a firm is a major player in the market. The other firms would have to set the prices of their product keeping in mind the price set by the price leader. These firms are called price followers. In the cement industry, Ultra Tech Cement Ltd. and Ambuja Cement are the big market players and smaller cement firms are forced to be price followers.

Quantity leadership is similar to price leadership, except the variable involved here is quantity. The firm that decides its output first is the leader. This model is also called the Stackelberg model eponymously named after the economist Stackelberg who first studied the leader-follower interactions. The firms act according to the decisions made by the dominant player, the dominant player being the Stackelberg leader and the smaller firms being the Stackelberg follower (Varian, 2010). Statistics provided by ISE (2011) show that UltraTech Cement Ltd. has an annual capacity of producing 24.3 metric tonnes of cement. The other firms, the Stackelberg followers have lower capacities of production. It would be unrealistic and irrational if these firms try to produce as much as the dominant firm. It would only increase production costs and generate a surplus stock.

Market conditions force firms to alter their decisions constantly. The cement industry also succumbs to various conditions, which compel the firms to make

new decisions regarding the price, quantity, etc. Cartels could also be formed for the benefit of the industry. The Routledge Dictionary (2002) defines a cartel as an association of producers who agree to fix common prices and output quotas in an oligopolistic market. As the aim of a cartel is to prevent competition, there is a tendency for the producers to strive to maintain existing market shares, with the consequence that a firm can only increase its output if total market demand rises. The device of a cartel has long been used as a method of restricting competition.

Last year (2012), eleven cement companies including ACC, Ambuja Cement, Ultra Tech Cement and Jaiprakash Associates were fined as they had engaged in cartelization. The cement companies allegedly decreased production in a bid to increase prices, which restricted output and had an adverse effect on the economy. The top 11 companies by the virtue of the fact that they collectively hold more than 57% of the market share in India enjoy a position of dominance and arbitrarily increased the price of cement (Mishra et al, 2012). The smaller companies were forced to change their strategy as well as output decisions owing to the market dominance. A cartel in the industry would take game play to another level where each firm is tempted to sell more than the output that was agreed upon if it believes that the other firms will not respond. This will eventually lead to instability (Varian, 2010).

Applicability of the theory in India:

The Cournot classical model uses a duopoly market structure. It has been further developed by many economists so as to analyze oligopolistic markets. Firms in the cement industry do use output as a variable to compete against their rivals. This strategy is used along with interplay of one or more game theories. As analyzed above, price leadership models are also used. This does not limit the applicability of the theory.

Other industries where the Cournot model could hold true are the timber industry, the airline industry and the computer industry, and more recently, the tablet industry, to name a few. These industries are oligopolistic in nature and sell homogenous goods to some extent. They do compete once in a while, using output as their variable. What is impossible to believe is that these industries always use the Cournot model as their strategy.

The current market situation is complex where one market analyst cannot hope to bring out a result that is the same as that of another market analyst. Market forecast changes quickly, which compels the firms to constantly change their game play. Therefore, firms depending on the market situation employ a variety of strategies. This does not make an age-old model redundant. In fact, the model is altered so as to suit present times.

Conclusion:

The Cournot model, by itself is not enough if a firm has to survive the tough competition prevalent in the economy. The theory has certain flaws in it that do not allow for testing in the market. For example, the assumption that all firms simultaneously make their decisions does not hold true in the real world. It is impossible to speculate randomly and expect to arrive at an equilibrium. Firms speculate based on the reports published by other firms. The assumption of the behaviour of the two firms in the model is rather unrealistic and more theoretical. It would be hard for two or more firms to behave exactly as explained in the model. Consequently, the theory has been retained for academic purposes but it has definitely left scope for alterations and additions.

A firm finds it easier to maximize profits by using multiple strategies. Therefore, it can be observed that the cement industry puts to use leadership models, both price and quantity, along with a limited use of the Cournot competition model.

Thus, the study of the cement industry in India with respect to the Cournot competition model is easier said than done.

REFERENCE BIBLIOGRAPHY:

1. Ahuja, H.L., 2011. *Advanced Economic Theory.* 17th ed. New Delhi: S. Chand and Company Ltd.
2. Mishra, U. Et al, 2012. *Cartel in cement industry in India: Is there enough evidence?*. [pdf] Amrita School of Business. Available at: <http://amrita.edu/asb/pdfs/workingpaper/Working-Paper-No.133.pdf> [Accessed 8 November 2013].
3. Pindyck, R.S., Rubinfield, D.L. and Mehta, P.L., 2009. *Microeconomics.* 7thed. New Delhi: Dorling Kindersley Pvt. Ltd.
4. Research and Markets, 2011. *Indian cement industry forecast to 2012*. [pdf] s.l., s.n. Abstract only. Available at: <http://www.researchandmarkets.com/reports/616568/indian_cement_industry_forecast_to_2012> [Accessed 9 November 2013].
5. Rutherford, D., 2002. *The Routledge Dictionary of Economics*. 2nd ed. London: Routledge.
6. Suibba, E., n.d. *Cournot oligopoly*. [pdf] s.l., s.n. Available at <http://www.ems.bbk.ac.uk/faculty/sciubba/gd_slides2.pdf> [Accessed 27 October 2013]
7. Varian, H.R., 2010. *Intermediate microeconomics.* 8th ed. New Delhi: East-West Press.
8. Vora, B.R., 2011. *Indian Cement Industry*. [pdf] s.l. Inter-connected Stock Exchange of India (ISE). Available at

<http://www.iseindia.com/ResearchPDF/Cement_Update2.pdf> [Accessed 8 November 2013]

REFERENCE WEBLIOGRAPHY:

1. Anon., 2013. *India Cements posts Rs. 22.53 crore Q2 Loss*. The Hindu. [online] 7 November. Available at <http://www.thehindu.com/business/Industry/india-cements-reports-q2-net-loss-of-rs-2253-cr/article5325418.ece> [Accessed 7 November 2013].
2. Equity Master.com, 2012. *Cement sector analysis report*. s.l. s.n. Available at <http://www.equitymaster.com/research-it/sector-info/cement/Cement-Sector-Analysis-Report.asp> [Accessed 27 October 2013].
3. IIFL, 2012. *Cement sector research reports*. s.l. s.n. Available at <http://www.indiainfoline.com/Research/Sectors/Cement> [Accessed on 26 October 2013].
4. Invest India, n.d. *Cement*. s.l. s.n. Available at <http://www.investindia.gov.in/?q=cement-sector> [Accessed 26 October 2013].
5. Manish, 2013. *Cement prices jump by 46% in 20 days*. The Times of India. [online] 6 June. Available at <http://articles.timesofindia.indiatimes.com/2013-06 06/visakhapatnam/39788019_1_50-kg-bag-cement-prices-cement-manufacturers> [Accessed 10 November 2013].
6. Menon B. D. And Iyengar, S. P., 2012. *CCI finds cement firms guilty of forming cartel*. Business Line. [online] 19 June. Available at <http://www.thehindubusinessline.com/industry-and-economy/cci-finds-cement-firms-guilty-of-forming-cartel/article3547504.ece?ref=relatedNews> [Accessed 8 November 2013].
7. Starling R., 2013. *Indian Builders Association act against cement prices*. Worldcement.com. [online] 25 October. Available at <http://www.worldcement.com/news/cement/articles/Indian_Builders_Association_act_against_increase_in_cement_prices_340.aspx#.Un-Lh3BF2VU> [Accessed 9 November 2013].

APPENDIX

(Source: Ahuja, 2011. Advanced Economic Theory. p.856)

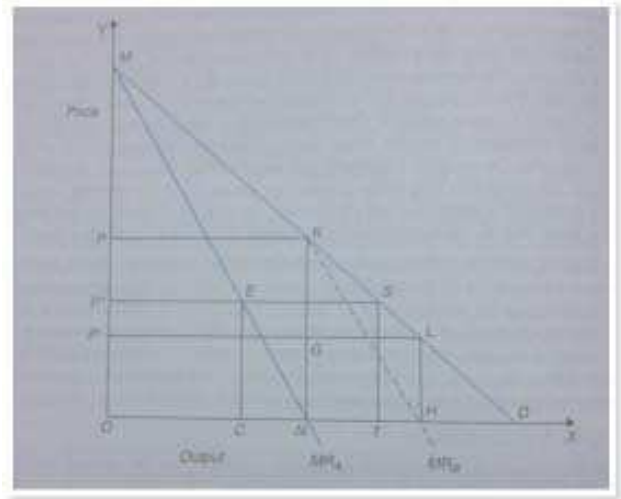

Figure 1: Cournot Duopoly Equilibrium

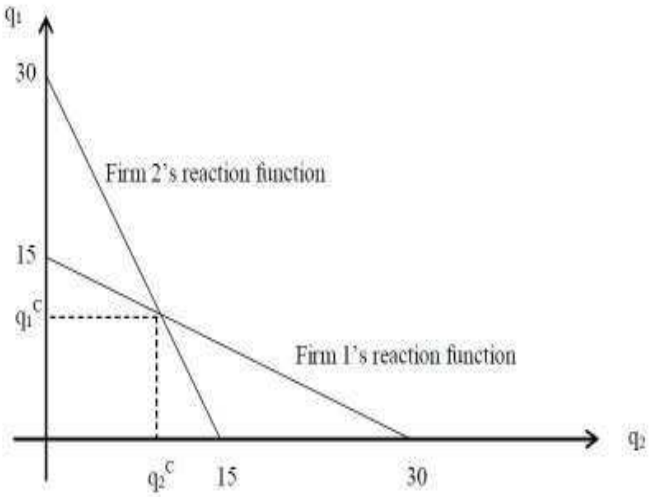

Figure 2: Reaction Curves in Cournot equilibrium

Can India Achieve 9% Growth in the Next Five Years?

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Abstract *This paper attempts to reconcile the view as to whether or not India is likely to repeat it's high growth pattern as experienced in the years 2003-08. The author presents a wide range of issues that are likely to impede India's growth in the future.*

1. Introduction

The time period between the years 2003 and 2008 is considered as the ' Golden Period' for the Indian Economy because India' s GDP grew at an impressive

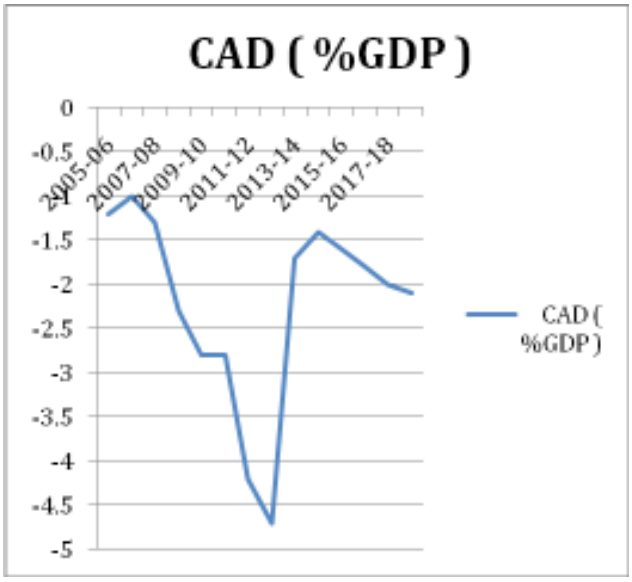
rate ofaround 9% per annum.This was made possible due to export led growth in IT Outsourcing and Capital-Intensive manufacturers. Also, while the Private Corporate Sector (PCS) served as the engine of the investment boom, the public sector and agriculture performed indifferently (Nagaraj, May 2013). With a view at this unprecedented growth, it was felt by many at that time that India is on its way to becoming one of the powerhouses of the 21st century.

In the year 2008, the World Economy was plagued with the global economic crisis that slowed down the entire global economy. Despite a slump in the Global Economy, between 2009-2011, growth rebounded and India experienced a growth rate of 8.5% in the financial year 2009-10 and 10.3% in the financial year 2010-11 (World Bank database). However, this growth was a ladle of honey with teaspoonful of vinegar with double-digit inflation making headlines in the newspapers and News TV Channels. From 2011 onwards, there was again a slump in the Economy and the party was over. Most of the Scholars and the Media was of the view that the internal factors such as credibility deficit of the UPA Government, emerging Corruption scandals, infrastructure bottlenecks, policy paralysis, etc. put downward pressure on the economic fundamentals of the Indian Economy.

The General Election 2014 bid adieu to the UPA Government and Narendra Modi led BJP formed the Government. All the stakeholders,thereupon, have become buoyant about the prospects of the Indian Economy and believe that P.M. Narendra Modi has the capability to embargo India's sclerotic, corrupt, and self-serving bureaucracy by shunning archaic laws and regulations which would result in faster clearances of investment proposal projects by the central government. India today is in a very optimistic mood with hopes of recovery and prosperity that have led Scholars to speculate, hypothesize and ponder on whether India would be able to grow at 9% per annum in the next five years.

2. Macroeconomic Trends of India –

From the graphs below, it can be inferred that macroeconomic indicators are projecting optimistic growth for the Indian Economy in the next five years compared to what has been the trend in the last 4-5 years. All the indicators signify that there will be stabilization in the economy but still a 9% growth rate in the next five years seems difficult to achieve and a lot depends upon how the Government is able to overcome the challenges to the proposed policies for the Economy and how well it is able to insulate itself from any type of blow on part of the global Economy, which is what has been discussed in the subsequent sections.



(Source: Centre for Monitoring Indian Economy Pvt. Ltd. (CMIE) Database)

(Source: Centre for Monitoring Indian Economy Pvt. Ltd. (CMIE) Database)

3. Policy Response of the new Government for fuelling growth in the Economy -

The Union Budget presented by the new Government (Modi led NDA Government) had spread an optimistic investment climate in the Indian Economy. Many Scholars and dignitaries believed that the budget has a huge potential to take the Indian Economy towards the road to prosperity.

Some of the prominent Policy responses of the New Government are –

- Financial Inclusion – In order to boost financial inclusion in India, the new Government has proposed opening up of ' Payment banks' that will open accounts and facilitates deposits and remittances. Moreover, a payment bank license for India Post, where India Post has a deeper penetration than India's largest Bank ' State Bank of India', would help in boosting financial inclusion by facilitating banking in the remotest corners of India.

- 3% Fiscal deficit target - Fiscal deficit was cited as the main reason for the sluggish performance and high inflationthat has plagued the Indian Economy.The new Government has shown its commitment to fiscal consolidation and inflation targeting by targeting the fiscal deficit to 4.1 percent in 2014-15 and 3 percent in 2016-17.

- Skill India Programme – This is a campaign organized by the new Government designed to impart employability and entrepreneurial skills to the youth to harness and reap the benefits of the huge young labor force.

- Make in India - This is a campaign that invites Companies and Governments across the World to come and set up their manufacturing base in India. The main aim of the Campaign is to make India a global manufacturing hub and create huge employment opportunities for the country that will boost economic growth.

These were the policy responses of the new Government, which made the headlines in the Media.

4. Impediments on the way to a for 9% GDP growth rate over the next five years –

- Speculations about another Global Economic Crisis –

  Since 2011,many Economists like Raghuram Rajan, Prof. Jayati Ghosh, Prof. Robert H. Wade,

Paul Krugman, Joseph Stiglitz, etc. have been claiming that it is highly likely that the world economy enters into another Global Financial Crisis in the near future. There is a venomous combination of debt and slow growth in the global economy, which is very much evident from the fact that the global debt has actually surged to $100 trillion, according to the Bank for International Settlements (Bloomberg, 9 March 2014) and the surge is constant. Moreover, the BIS has also warned that the world economy in many respects is more vulnerable to a financial crisis than it was in 2007. Eurozone countries have for a very long period of time, now been locked in low-growth, low-inflation, plummeting stock prices and high-unemployment with little or no signs of recovery. International Monetary Fund (IMF) has cut its global economic growth forecasts for the third time in the year 2014 warning of weaker growth in the core Eurozone countries, Japan and emerging markets like Brazil. It's Chief Economist – Olivier Blanchard is also of the view that the interest rates are almost close to rock bottom in many advanced economies and is creating impediments to demand boosts(Reuters, October 2014). Uncertainty and sputtering in the global recovery will negatively impact the Indian businesses because much of their exports depend upon the developed nations, which in turn will automatically impact the economic fundamentals of India.

- Policy Challenges adopted by the Modi Government –

Narendra Modi has initiated and implemented the 'Make in India' programme to boost-up the manufacturing sector and create jobs in India. However, this programme has its own set of bottlenecks and challenges. One of the challenge is easing the ways of doing business in India by getting procedural and regulatory clearances easily and at the same time making sure that the MSME sector does not suffer as it helps in reducing regional imbalances and provide employment opportunities in rural and backward areas; hence financial as well as regulatory support should constantly be given to the MSME Sector. Also, given the rate at which the World Economy is performing, there is a low probability that the 'Make in India' programme will give us fruitful results. Rajan (2014) has opined to the media that when we discuss 'Make in India' campaign the underlying assumption that it focuses on manufacturing should be made with caution because this is an attempt to follow China's export-led growth path. 'Make in India' should also not be seen as an import-substitution programme either, as this strategy has been tried and has not worked because it ended up reducing domestic competition, made producers inefficient, and increased costs to consumers (Rajan, 2014).

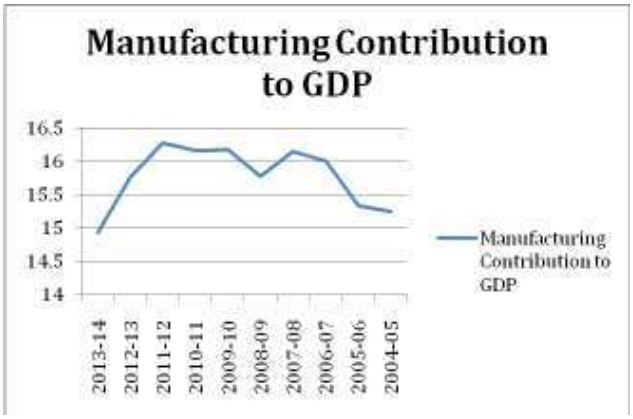
Although the financial inclusion was driven by great pomp and splendour by the Modi Government, it failed to check the issues that this drive brought with itself. The Government needs to understand that opening up of bank accounts is not enough; it also requires easy accessibility to the bank coupled with viable financial products for these account holders. If this issue is not taken into consideration, the bank accounts will remain in a state of comatose. In other words, the government needs to address this question of how many of these bank accounts (via the financial inclusion programme) will indeed be used. If we talk about the fiscal deficit target of 3%, which the Union Budget has envisaged, there is no clear roadmap of how that number would be achieved. In fact, a weak recovery from India's longest growth slowdown in decades, is pushing Mr. Narendra Modi's advisers to consider loosening the fiscal deficit targets and hence, risking the ire of investors, rating agencies and the central bank in order to fund infrastructure projects to remove bottlenecks constraining growth and to create jobs for a burgeoning workforce (Reuters, 9 January 2015). Many Scholars and Social Activist also believe that the new government is tinkering at the margins.

5. Impetus to 9% GDP growth rate for India (Growth drivers) –

- Boosting Manufacturing Sector and expanding Industrialization –

Since the inception of reforms, the Indian Manufacturers have been performing below their

potential. The contribution of manufacturing to GDP as can be seen from the graph below,has been hovering at around 14-16%. Since, the financial year 2011-12, the share of manufacturing in GDP has been showing a decelerating effect, thus, plunging our economy towards the lower phase of the business cycle. Therefore, the share of the manufacturing sector needs to increase from the current levels of 14-16% of GDP to 25%of GDP, which will put India back to the growth rate path of 8% per annum. The manufacturing sector has a huge potential to create jobs for India' s burgeoning labor-force and cushioning India from the effects of downturn in the economy. During the second five-year plan regime, it was industrialization that provided jobs to millions of people in India and gave us Companies like SAIL, which changed the face of many Indian cities.

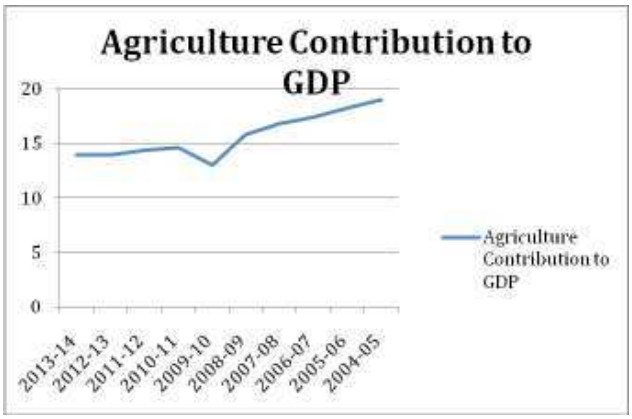


(Source: Database on Indian Economy, Reserve Bank of India.)

In the year 2011, "National Manufacturing Policy" was enforced with the aim of accelerating the share of manufacturing in GDP to 25% within a decade and creating 100 million jobs. However, by looking at the trend of its (Manufacturing Sector) performance from the above graph the possibility of achieving the vision of ' National Manufacturing Policy' seems like nothing but a mirage. There are various issues in the Manufacturing Sector of India, which needs to be redressed as soon as possible if India wants to grow at a rate of 9%. Some of these issues are complex labor laws, cumbersome regulatory framework, multiple land acquisition policies and environmental clearances that create bottlenecks for this sector to grow and flourish.

- Creating Breakthrough in Agriculture -

India is an agrarian economy. This is the only sector that employs 54.6% of the total population of the country (Source: Centre for Budget and Governance Accountability). But Post-reform, with passage of time, this sector is encountering delinquency and disdain. The crisis in Indian agriculture has been brewing up ever since 1996-97(Himanshu, 2008) and the main reason for the downward shift in agricultural growth is declining investment (especially public investment in agriculture), R&D, irrigation, combined with inefficiency of institutions in providing inputs and services (inclusive of rural credit and extension) (Paul Sharma, 2007). In the graph below, it can be seen that marginal growth did pick up in FY 2010 but it hovered around 13-14% upuntil the financial year 2013-14.



(Source: Database on Indian Economy, Reserve Bank of India.)

I have always believed that agriculture has tremendous potential in reviving the economy and helping India curb poverty. In the year 2007, Waynad, a district in Kerala had been struggling with poverty and lower prices, which led to decrease in the productivity of the farmers. However, the entry of Reliance Fresh brought new hopes and opportunities, which helped these farmers, uplift themselves from poverty. Reliance Fresh directly came to these farmers, purchased the agricultural goods at better prices and weakened the hold of middlemen. This example highlights the possibility of bringing in the private sector that can play an instrumental role in curbing poverty by linking farmers to the formal market. Hence,the Government should encourage private

players to invest in agriculture. At the same time, the linkages affect of agriculture should not be forgotten as it acts as a source of raw material for other sectors of the economy.

6. Discussions and Conclusion –

From the above, it can be inferred that achieving 9% GDP growth rate in the next five years is conditional upon overcoming a lot of barriers. Firstly, there are symptoms and speculation of recession likely to unfold in the global economy and a global economic slowdown can act as a tough deterrent for the growth of the Indian economy as India is more integrated today than it ever was. With exports comprising 27% of the GDP, the events in the World Economy are likely to have an impact on the Indian GDP (Gita Gopinath, December 2013). So, at this point, it is important that we strengthen our economy internally rather than increase our reliance on foreign investors. Secondly, there are a lot of policy challenges that Government faces and which need to be strategically dealt with. Government needs to initiate new reforms that will help Indian economy to grow at an unprecedented level. It needs to invest more on quality education and human capital. Thirdly, it is very important to boost the manufacturing sector of India because this is the only sector that has the potential to provide jobs to a burgeoning young labor-force. Fourthly, we need to increase the share of agriculture's contribution to the GDP because 55% of the population depends on this sector for its survival and sustenance. This is also a sector, which produces raw materials required by the other sectors of the Indian Economy. Fifthly, the Government needs to do away with the social welfare schemes like MGNREGA, food security bill, wasteful subsidies, etc. as they are non-productive in nature and give no revenue stream to the Government and do not create any multiplier effect in the Economy in addition to inviting corruption. Therefore, the Government should invest in employment generation activities, which have interlinkages with other economic activities as well.

According to OECD, India's growth is expected to moderate to 5.9% in the time period between 2014-18. Hence, going by the speculation and prospects of future growth of the Indian economy and the extent to which the bottlenecks would be cleared in the policy framework, the prospects of India growing at 9% seems dull and unrealistic. However, India will grow at 9% provided that the global economy revives in the coming years, there is existence of good governance, improved infrastructure, timely clearance of the bottlenecks in the policies and projects, investments in the productive economic activity of the country, revitalized manufacturing and agriculture sector, zero corruption and maintenance of transparency.

REFERENCES

- Outcome Document of Delhi Economics Conclave 2013 International Conference, "The Agenda for the Next Five Years", held at Hyatt Regency, New Delhi, December 11-12, 2013 organized by Department of Economic Affairs, Ministry of Finance, Government of India.
- Nagaraj, R. (2013), "India's Dream Run, 2003-08: Understanding the Boom and Its Aftermath", *Economic and Political Weekly*, Vol. XLVIII, No.20.
- Mohan Rakesh, KapurMuneesh (2014), "India's Recent Macroeconomic Performance: An Assessment and Way Forward", IMF Working Paper, WP/14/68, International Monetary Fund.
- Vijay Paul Sharma (2007), "India's Agrarian Crisis and Smallholder Producers' Participation in New Farm Supply Chain Initiatives: A Case Study of Contract Farming", W.P. No.2007-08-01, IIM Ahmedabad. Retrieved from - http://www.iimahd.ernet.in/publications/data/2007-08-01Sharma.pdf.
- Dr Himanshu (2008), "Growth, Employment and Poverty Reduction: Post-Reform Indian Experience", Asia Research Centre Working Paper 23, Asia Research Centre, London School of Economics, London. http://www.lse.ac.uk/asiaresearchcentre/_files/arcwp23-himanshu.pdf
- CBGA (July 2014), "Has the Tide Turned - Union Budget 2014-15", Centre for Budget and Governance Accountability, New Delhi.
- John Glover (Mar 9, 2014), "Global Debt Exceeds $100 Trillion as Governments Binge, BIS Says", Bloomberg. Retrieved from - http://www.bloomberg.com/news/2014-03-09/global-debt-exceeds-100-trillion-as-governments-binge-bis-says.html
- Anna Yukhananov (7 October 2014), "IMF cuts growth outlook, warns on euro zone, Japan", Reuters. Retrieved from - http://www.reuters.com/article/2014/10/07/us-imf-economy-idUSKCN0HW15Y20141007
- OECD (2013), "Economic Outlook for Southeast Asia, China and India 2014", OECD Development Centre, ASEAN Secretariat. Retrieved from - http://www.oecd.org/site/seao/Pocket%20Edition%20SAEO2014.pdf

- ET Bureau (13 December 2014), "Need to rethink ' Make in India' ; must strengthen Indian economy from within: Raghuram Rajan", The Economic Times, Bennett, Coleman & Co. Ltd. Retrieved from - http://economictimes.indiatimes.com/articleshow/45499427.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
- Rajesh Kumar Singh (9 January 2015), "Calls for higher spending put deficit targets in jeopardy", Reuters. Retrieved from - http://in.reuters.com/article/2015/01/08/india-budget-idINKBN0KH28C20150108

Resource Curse – An Inevitability?

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Ambedkar University

Abstract: *This paper is an attempt to draw a relation between the abundance of hydrocarbon wealth and the prospects of economic growth and good standards of democracy in oil-rich countries. It stitches together a connective link between the three in the course of this essai[77]. Initial explanations of hydrocarbons and why it's synonymous with wealth, the correlation of wealth with growth and democracy and the working definitions of economic growth and good standards of democracy which are contentious terms and cannot be defined in black and white, set the tone for two case studies of separate oil-rich states and how both dealt with oil discovery in different ways. The two oil rich states analyzed in this essay are – Norway, considered a full democracy and highly ranked on all democratic indices, and Nigeria, with an authoritarian regime and a dismal and rankling democratic record. Norway is an exception while Nigeria is representative of most other oil-rich states. The prime objective of this paper is to conclusively put forward evidence to show that the resource curse is not a predestined inevitability; rather it can be a boon if sound economic policies are pursued.*

Hydrocarbon wealth or crude oil (as it is known in its liquid extracted form) is today, one of the world' s prime sources of energy. Its use is widespread in industry, transportation (as automobile and airline gasoline), electricity generation and various other economic activities. According to the International Energy Agency, oil as a percentage of world total primary energy supply is the single largest source at 32.4 % (IEA 2010), even though its contribution has come down from 46.1% in 1973 to 32.8% in 2009. This decline in no way reduces oil' s importance in today' s global scenario. Rather it simply highlights greater awareness of issues such as global warming, and the need of alternative energy sources such as nuclear, hydro, wind and solar power. The binding agreements with regard to bringing down carbon emissions signed at the Copenhagen Climate Change Conference 2009 have played their part in this. The predominance of oil as an energy resource can be judged from its consumption patterns – up from 57 million barrels per day in 1970, (Wright, Oil: Demand, Supply and Trends in the United States, p. 1) to 89 million barrels per day as of 2011. (IEA 2011) And oil is here to stay at least in the foreseeable future, as alternate sources of energy are a lot more expensive and aren' t ' qualitatively superior' either (Smil, 2006).

Thus, a direct link may be drawn between these patterns of consumption of the scarce resource that is oil and the massive capital receipts from exports by countries endowed with hydrocarbon riches. No wonder then that the term ' hydrocarbon wealth' is used to refer to these reserves. This term is justified as oil is a non-renewable scarce resource, and it is thus a resource which can be exploited by states in possession of it, as per the demand supply scenario and in line with current consumption trends to maximize their revenues and hence wealth.

But, does this unearned wealth have a correlation to wider economic growth and the flowering and sustainability of democracy in such states? We may be slightly mistaken here. Rather the usage of the word ' slight' is a gross understatement. The existence of authoritarian regimes and a dismal performance on democratic and developmental indices faced by many

such hydrocarbon, oil rich countries suggests otherwise. These states face what British economist Richard M. Auty called the ‘ resource curse’ i.e. states where regardless of the plenitude of resources (in this context oil) and wealth inflows caused thereby, the benefits derived for the common people are negligible. Georgina Allen plainly defines the ‘ resource curse’ as a phenomenon when countries rich in natural resources remain relatively undeveloped because of government mismanagement and corruption (Balaam, 2011, p.498). Dystopian tendencies in such states therefore glaringly highlight that wealth is not necessarily an indicator of all-round development.

States afflicted with the ‘ resource curse’ may be described using the rentier oil state effect. Preconditions for the existence of a rentier state include the dominance of external rent, and the concentration of rent exclusively in the hands of the state government. This concentration is an existential reality in oil-dependent economies as major ownership of oil production is in the hands of state firms as opposed to private enterprises. The rentier effect derived eponymously from the term ‘ rent’ is a widely accepted explanation for the existence of authoritarian rule in such states. Wealth generated through oil production is the major form of income in oil rich states. This wealth may thus substitute the tax burden on citizens, in the process dissolving resistance for democratic accountability and subsidiary democratic rights which come attached with taxation. Additionally, this wealth can purchase political support and vitiate civil rights groups. Also as is increasingly evident, this entrenching of authoritarian regime goes hand in hand with increasing corruption in government departments, bureaucratic inefficiency and resultant stagnation of various economic sectors with the obvious exclusion of the petrochemical sector.

Before getting into in-depth case studies of two oil rich states withopposing governmental systems, analyzing the strength of their economies and democratic standards, and putting the same into perspective with respect to their hydrocarbon wealth, it is of immense empirical value to define beforehand the indicators of democracy and economic growth so as to make observations and comparisons of a fairly uniform nature. In the process ambiguity will be minimized.

According to the Economist Intelligence Unit Democracy Index 2012, the key indicators of democracy are electoral process and pluralism, functioning of government, political participation, political culture and civil liberties. Apart from citing the ‘ Democracy Index’ , other indicators such as unemployment and literacy rates will also be referred to. Widely used indicators of economic growth are Gross Domestic Product and Gross Domestic Product per capita, which again will form the basis for further analysis. Additionally, the Index categorizes states around the world into four broad groupings – full democracies, flawed democracies, hybrid regimes and authoritarian regimes. Full democracies in all obviousness are the best form of government while authoritarian regimes fall at the extreme of the spectrum.

These groupings form the basis of the selection of the two oil rich states to be analyzed in this essay – Norway, considered a full democracy and highly ranked on all democratic indices and Nigeria, with an authoritarian regime and a dismal and rankling democratic record.

THE NORWAY EXCEPTION

Norway is an exception of sorts when it comes to states with a plenitude of oil wealth. It stands out like the veritable knight in shining armor amongst nations such as Iran, Iraq, Saudi Arabia, Chad, Nigeria, Equatorial Guinea and Venezuela when it comes to performance as far as democratic and economic indices is considered. In Norway, post oil discovery, there has been a burgeoning of economic growth and welfare. The only probable similarity between these states is the presence of and the reliance on oil reserves. Therefore within these oil rich states it wouldn’t be wrong to group them as Norway and the rest, apart from the other obvious grouping of OPEC (Organization of Petroleum Exporting Countries) and non-OPEC oil rich states.

How has Norway managed to escape the ‘ resource curse’ , which has brought down each of the oil rich states previously mentioned to a situation where finding oil is synonymous with the state and its economy heading into an impending dystopian future? Has Norway done something differently or is it just a

coincidence? The answers to these will become clear in the following paragraphs.

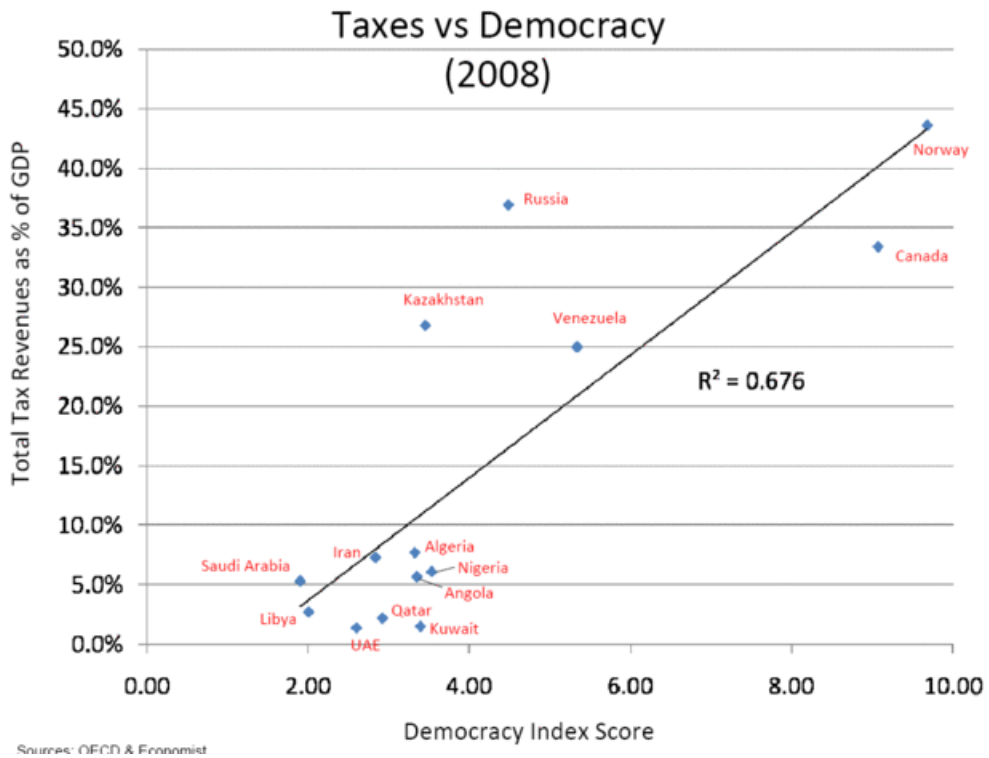
In countries with producer friendly institutions, with good protection of property rights, reliable public bureaucracy, and little corruption, natural resources are more likely to lead to economic growth (Mehlum, Moene and Torvik, 2006, 2008). Norway has had a long-standing democratic tradition since 1814. Oil was discovered in Norway in the 1960s. This therefore implies that by the time Norway discovered North Sea oil, democratic traditions had already set in and it was a way of life in Norwegian society. The bureaucracy was efficient and accountable, and equally efficient and effective was the government framework in place.

Nevertheless the discovery of oil was sudden since the National Geological Survey had all but given up hope of finding oil. Equally sudden would have been the spiraling of the state and economy such that it would have succumbed to the ' resource curse' and rentier state tendencies had the government not come up with strict policies and frameworks, which prevented any such occurrence.

One such policy was of giving out only two drilling permits a year to limit the money made from oil fields and in the process preventing the oil money from destroying Norway's already existing industries. (Blumberg, 2011) Despite the skepticism of the oil industry, the government did not dither from safeguarding the economy. In addition to that, it came up with the '10 Oil Commandments' underlining the principles of Norwegian oil policy (Norad, Norway's Oil for Development Program, 2012). In this context, three of the original Ten Commandments are rather important and should be taken note of. These three commandments relate to the national supervision of all drilling activities, the development of new business activity and industries based on petroleum and the safeguarding of existing commercial activity regardless of the development of the oil industry. Now the consequences of these three commandments in all likelihood would have been as follows – supervision would have led to development of the oil industry within acceptable limits so it did not hinder other economic commercial processes; development of new jobs as a result of the subsidiary industries based on petroleum; and, protection of already existing jobs.

Now these consequences in essence show why Norway did not fall into the ' resource curse' trap. For one, sectors of the economy apart from the petro-industry were protected. And it is a truism that the economy cannot grow only on the back of growth of one industry (say, the oil industry) because in such a case benefits would be lopsided and unevenly distributed, as we will later see in the case of Nigeria (a classic example of a ' resource cursed' nation).Additionally, there was conscious job creation apart from protection of already existing jobs. This was another effective measure at blinding the effects that are seen in traditional ' resource curse' afflicted oil reliant states. Oil industries are capital intensive in nature, thus job-creation is minimal and unemployment rates in such oil dependent states are relatively high (though not without exception). Jobs further reduce when other industries are neglected, as the oil industry in itself is a massive generator of revenues. An unemployment rate of merely 3.3 for Norway (a result of policy-success) stands in contrast to 23.9 for Nigeria and 12.3 for Iran as a percentage of their respective total population, thereby reflecting the resource curse phenomenon in Nigeria, Iran and other such states (IMF 2011). Add to that, oil exports inflate the exchange rate so that whatever else a country manufactures is less competitive abroad (Rosenberg, 2013).

In addition, the bulk of petroleum revenues in Norway are deposited in a state-owned sovereign fund called the Government Pension Fund – Global. Only the government spends the interest generated from this fund, while the principal remains largely untouched. As a result of this fund being invested primarily outside Norway and the annual maximum withdrawal being maintained at 4%, Norway managed to avoid hyperinflation or the so-called ' Dutch disease' [78]. The tax levels in Norway are also consistently sustained at a high level, which implies two things. One, the petroleum revenues are essentially being saved in the form of the sovereign fund at the same time reducing the economy's reliance on it. And two, higher taxes mean the government is expected to be accountable to the people which results in the perpetuation and sustenance of high economic and democratic standards, while escaping the rentier state and thus, the resource curse trap. Unconnected but lastly, oil policies cannot be used as an election campaigning



Source: OECD, Economist (2008)

tool which means that regardless of the political party in power, the stability of the economy remains intact.

This graph reflects the relation between tax rates and democracy. It justifies the incidence of the rentier state-resource curse trap on states with low tax rates which results in lower governmental accountability. The ability of Norway to escape the resource curse trap and come out on top with regard to democratic standards corresponds to it maintaining a high tax rate (as has been previously explained), while states such as Nigeria and those in the OPEC have visibly taken a hit in democratic standards while having low tax rates.

This brings us to the robustness of the Norwegian economy and democracy. Its GDP stands at 485.8 billion dollars, with its per capita GDP valued at 98,080.91 USD (World Bank 2011). Even though oil amounts for a little more than half of Norway's total exports, it is very strong in other sectors such as sea and fish-food, and the paper-pulp industry as well. In fact, total fish and sea food exports amounted to 7.1 billion USD (The Globe and Mail, 2009). Also, Norway's second largest export sector is ' supplies for the petro industry' , thus generating employment, (apart from revenues) through the petro sector itself.[79]

In 2012, Norway's real GDP grew by 3%, which compares fairly well with other developed European economies (The Economist). With respect to Norwegian regard for democracy, Freedom House gave it the highest possible rating in dispensation of political rights and civil liberties. In addition, grouped under ' full democracies' , it was Numero Uno on The Economist's Democracy Index 2012, with all of its indicators falling between 9 and 10 (10 being the maximum possible).[80] Norway's literacy rate stands at an impeccable 100% (CIA World Factbook 2013).To infer, almost all studies without exception point to Norway as a successful economy as well as a democracy, with the latter being pronounced in almost gushing terms. Norway's hydrocarbon wealth has led to its prosperity rather than dampen prospects of economic growth and good standards of democracy. It has used its subsequently generated wealth to its advantage – it has put in place firm frameworks, created a sovereign wealth fund diverting oil revenues into it, and utilized the interests thus generated by pumping it back into the economy. If there is a nation

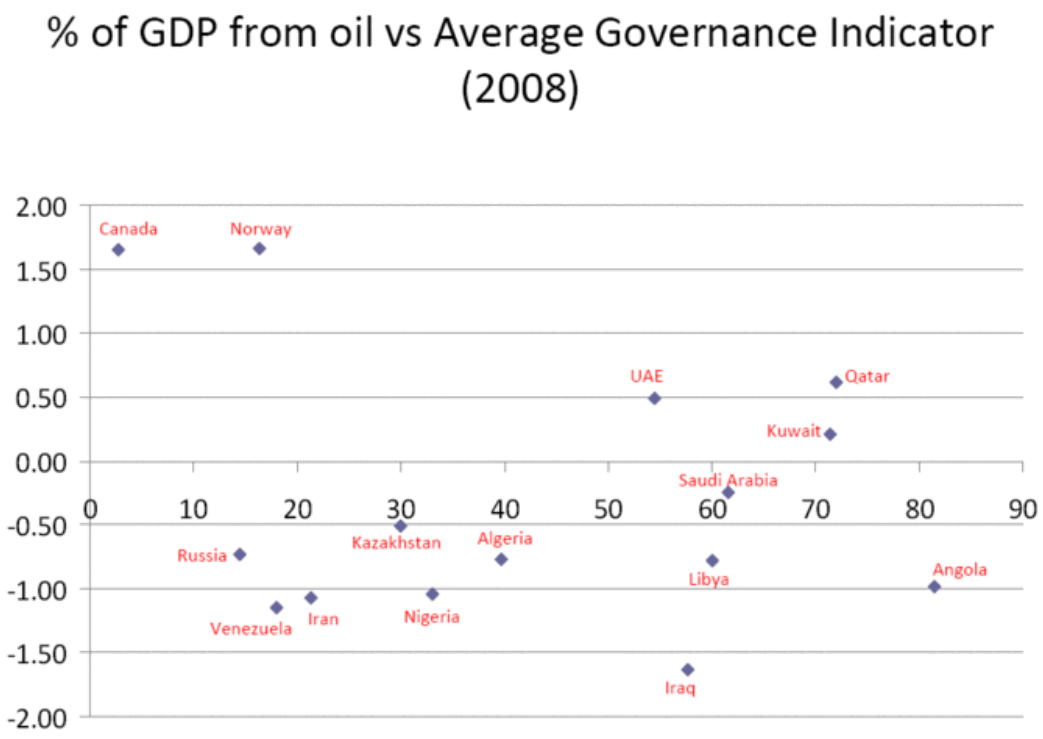
that has undermined the ‘ resource curse’ , it has to be Norway.

NIGERIA AND THE RESOURCE CURSE

Nigeria on the other hand, is an oil- rich state at the other extreme end of the spectrum. It is one of the prominent examples of ‘ resource curse’ afflicted nations – a state where oil revenues haven’ t translated into development and progress on the ground. But it is not an isolated example with most other oil-rich states facing a similar paradox.

Nigeria struck oil in 1956. But since then little has changed. According to Rosenberg, petro –dependence may lead to conflict (Rosenberg, 2013). This may be justified by the studies conducted by economists Collier and Hoeffler which showed that the likelihood of conflict was 22% when a third or more of a country’ s GDP came from the export of primary commodities, and was 1% for countries which did not export primary commodities (Collier and Hoeffler, 2002). Nigeria seems almost tailor-made to justify this theory: 95% of its export earnings are in the form of oil revenues (U.S. Energy Information Administration 2012). And Nigeria is conflict ridden. It has fought two civil wars in 1967 and 1980 respectively. Though the causes for these civil wars were more political than anything else; the current state of conflict - the rise of militancy and the recently declared state emergency clearly point at something else.

The answer lies in the link between oil, oil revenues and conflict that I wish to draw attention to. If we read between the lines, the link seems obvious. When oil was initially discovered in 1956, there were expectations from the Nigerian citizens of emancipation, better opportunities and the ushering of a new era. In contrast, it was only the government and a few people in power who benefitted. According to the Standard Bank, the government which is a majority shareholder in Nigerian oil fields, has made over 1.6 trillion USD from oil revenues in the space of 50 years, while over 70% Nigerians still languish below the poverty line (as of 2010) living on less than 2 USD a day (CIA World Factbook). In light of this, the rise of militancy seems almost inevitable – masses of people who have become disillusioned over time while Nigerian government seems to be amassing wealth shrouded in an invisibility cloak i.e. the only beneficiaries of this wealth are the corrupt government officials.



Source: World Bank, EIA (2008)

This graph reflects the % of GDP from oil (X axis) against the average governance indicator (Y axis). This graph is self-explanatory and simply reinstates Norway as a state, which can be emulated for its governance, while Nigeria and all of the other prominent oil-rich states have dismally low levels of governance. These low levels in turn indicate corruption, the ineffectiveness and the weakness of government institutions and economies, which thus cannot perform at their best.

We see a carry-over of this in most measures and indicators in studies conducted by international agencies. Nigeria's GDP stands at 244 billion USD, with its GDP per capita holding out at a low 1,501.72 USD (World Bank 2011), even though it rakes in massive annual oil revenues. It had a growth rate of 7.4% in 2011 (World Bank), but it is important to take note that this growth is concentrated primarily in southern Nigeria, and a double-digit growth is a bare necessity to see a perceivable improvement in living standards. Norway's growth rate of 3% would seem a pittance when compared to Nigeria's, but it would not be right to compare their growth rates since Norway is considered a developed nation, while Nigeria is as yet developing.[81] Additionally, Nigeria has low tax rates making it susceptible to the rentier state - 'resource curse' trap. The Economist Democracy Index for 2012 ranks Nigeria a lowly 120 (amongst 167 nations), and groups it under countries having the worst form of government with minimum respect for democracy i.e. authoritarian regimes. On all its democratic indicators, Nigeria comes up short, with an average of 3.77 (0 being the worst possible score and 10 being the best). According to the Human Rights Watch, the government has doled out financial incentives to the tune of an annual 400 million USD from additional oil revenues, but it has still not addressed the underlying causes of violence and discontent in the region, such as poverty, government corruption, environmental degradation from oil spills, and impunity for politically sponsored violence (HRW, World Report 2013).

Despite the presence of oil production activity, very few Nigerians are employed. For example, Shell in Nigeria employs 5000 people most of whom are foreigners. Shell in turn laments the lack of suitable labour amongst the native Nigerians. Only 1% of Nigeria's total labour force is employed in the oil industry, which in turn generates more than 95% of its export revenues. The malaise runs deep with Nigeria's adult literacy rate at 56.9% (National Literary Survey 2010, National Bureau of Statistics, Nigeria) well below the world average of 84.1% (UNESCO 2010), and with a ghastly unemployment rate of 23.9% (IMF 2011). Comparing this data with nearby African countries (taking Cameroon and Ivory Coast as examples) that are unlucky or lucky not to be as oil-rich as Nigeria (depending on how one looks at it), the findings are staggering and reinforce the resource curse argument. Data suggests they sure are lucky. Cameroon and Ivory Coast had literacy rates of 71% and 56% respectively (UNESCO 2007-2011), the former being much higher than Nigeria's while the latter being almost as good as Nigeria's. Ideally Nigeria should have been better off had it used its oil revenues judiciously. But, most importantly this is the consequence of government embezzlement of oil revenues and lack of any framework in place.

CONCLUSION

The case studies of the two oil-rich states i.e. Norway and Nigeria have been chosen for a reason. Nigeria and the 'resource curse' it faces with respect to oil is representative of most oil-rich states including most of the OPEC countries such as Iran, Iraq, Venezuela and Saudi Arabia. Thus, the Nigerian case study serves as a mirror for a lot of the other oil-rich states. Norway on the other hand is an exception, and that is exactly why it was important to put forward its case. What was it that it did right, that others didn't, and what is it that others can do to escape the 'resource curse'! Norway shows us that the resource curse is not as inevitable as it seems.

It is perhaps to Norway's advantage that pre oil discovery, it already had a flourishing democracy in place. That is something which cannot be replicated by its oil-rich counterparts, as that would require changing the past and so much more and time-travel is as yet not a reality! But what can definitely be replicated is Norway's management of the economy, post oil discovery. Its stable governance frameworks which don't change with the coming and going of political parties; its regulations which foremost have the welfare of citizens in mind; government accountability which can be equated to a stable and high tax rate and the creation of an independent oil

fund, (which is a necessity as oil markets are susceptible to high levels of instability). Nigeria did not adhere to any of these including the creation of an oil fund and is consequently facing severe economic woes, domestic inflation and balance of trade problems apart from issues listed previously.

Other oil-rich states would thus do well to implement Norway's policies with necessary tweaks to suit their domestic environments. But how should the 'resource curse' plagued oil-rich states bring about the policy change is a big question in itself? There is not much incentive for the ruling class in such states, as they are already 'raking in the moolah'. Expecting international organizations such as the United Nations, the IMF and the World Bank to bring in change would amount to being overoptimistic, as these organizations have often been criticized for serving vested interests and the United States' hegemonic designs (the support of the Saudi Arabian authoritarian regime by the U.S. to serve their own interests may be cited as a proof of this). This leaves only citizen uprisings as a means to bring in change. In the short term though, as the Arab Spring in Egypt shows, there is bound to be political instability. The long-term consequences are as yet unknown.

To infer and to reiterate, the current scenario shows that hydrocarbon wealth does in fact 'de-energize' the prospects of economic growth and good standards of democracy to a great extent in oil rich countries leading to what is commonly known as the 'resource curse', illustrated in Nigeria's case and likewise evident in most other oil-rich states. Yet, Norway's case shows that this 'resource curse' is not all encompassing and through it, is answered the question raised in the title. The 'resource curse' is not a predestined inevitability and can instead be turned into a boon. As Norway showed, all it takes is a little socio-political will, a motivated populace and some sound policies.

REFERENCES

- Accessed on 3rdJuly, 2013.

  http://www.theglobeandmail.com/report-on-business/economy/canada-competes/what-norway-did-with-its-oil-and-we-didnt/article11959362/
- Accessed on 3rd July, 2013.

  http://www.iea.org/aboutus/faqs/oil/

Dependency and Resource Curses", Introduction to international political economy, Boston: Longman, pp.489-506.
- Blumberg, A.(2011),How To Avoid The Oil Curse, NPR.

  Accessed on 3rdJuly, 2013.

  http://www.npr.org/blogs/money/2011/09/06/140110346/how-to-avoid-the-oil-curse
- CIA World Factbook 2013.

  Accessed on 6th July, 6thJuly, 2013.

  https://www.cia.gov/library/publications/the-world-factbook/fields/2103.html
- Collier, P. and Hoeffler, A. (2002), Greed and Grievance in Civil War.

  Accessed on 3rdJuly, 2013.

  http://economics.ouls.ox.ac.uk/12055/1/2002-01text.pdf
- Coopedge, M. and Gerring, J. (2011), Conceptualizing and Measuring Democracy, Perspectives on Politics, Vol.9/No.2 ,

  Accessed on 2nd July 2013

  http://people.bu.edu/jgerring/documents/MeasuringDemocracy.pdf
- Economist Intelligence Unit Democracy Index 2012

  3rd July, 2013, http://www.eiu.com/Handlers/WhitepaperHandler.ashx?fi=Democracy-Index-2012.pdf&mode=wp&campaignid=DemocracyIndex12
- Freedom House, (via Global Finance)

  Accessed on 3rdJuly, 2013.

  http://www.gfmag.com/gdp-data-country-reports/206-norway-gdp-country-report.html#axzz2XyTiHEgW
- Hsieh, E. (2013), "What Norway did with its Oil and we didn't", *The Globe and Mail*.
- Human Rights Watch, World Report 2013.
- International Energy Agency, Key World Energy Statistics, 2012.
- IMF, World Economic Outlook, October 2012 (Inclusive of 2011 Data).
- Mehlum, H., K. Moene and R. Torvik (2006), Institutions and the Resource Curse, Economic Journal 116, 1-20.
- Mehlum, H., K. Moene and R. Torvik (2008), Mineral rents and social development in Norway, Mimeo, University of Oslo.
- National Literary Survey 2010, National Bureau of Statistics, Nigeria

  Via National Literacy Action Plan (2012), Nigeria, UNESCO

  Accessed on 4thJuly, 2013.

  http://www.unesco.org/new/fileadmin/MULTIMEDIA/HQ/ED/pdf/Nigeria.pdf
- Norad Evaluation Department (2012), Facing the Resource Curse: Norway's Oil for Development Program.

Accessed on 3rdJuly, 2013.

http://eiti.org/files/Facing%20the%20Resource%20Curse_Norway-s%20Oil%20for%20Development%20Program%20%281%29.pdf

- Rosenberg, T. (2013), Avoiding the Curse of the Oil-Rich Nations, Opinionator: New York Times.

  Accessed on 3rdJuly, 2013.

  http://opinionator.blogs.nytimes.com/2013/02/13/avoiding-the-curse-of-the-oil-rich-nations/?_r=0

- World Bank Report, 2011.
- Smil, V. (2006), "21st Century Energy: Some Sobering Thoughts", OECD Observer 258/9.
- The Economist Intelligence Unit

  Accessed on 3rdJuly, 2013.

  http://country.eiu.com/Norway

- U.S. Energy Information Administration 2012

  Accessed on 3rdJuly, 2013.

  http://www.eia.gov/countries/cab.cfm?fips=NI

- Wright, J.C., Oil: Demand, Supply and Trends in the United States, University of California, Berkeley, pp. 1

FOOTNOTES

1 Since the returns to private capital are lower in areas where human capital is underdeveloped and institutions, especially Public institutions such as law and order, are at best dysfunctional, states which remain underdeveloped are unable to attract the investments and funding they require in order to invest in improving these aspects, thus remaining stuck in a debt-trap of sorts. If such states cannot improve their provisioning of social services and generate economic progress to add jobs, the possibility of mass migrations across States to areas of higher Socio-Economic Development is an increasing possibility, one whose challenges with regards to social stability are only too clear (Subramanian, 2010). The existence of a North-South divide in development is discussed and analysed in (Paul & Sridhar, 2013).

2 These issues have reappeared in the public domain, especially after surveys have indicated that India's poorest states have made massive strides in reducing leakages from programmes like the MGNREGS and PDS. While far from conclusive, the results appear to indicate significant reductions in the losses from corruption in some of India's "leakiest" states, including Bihar and Orissa. (Drèze, 2014)

3 In the 15 largest states of India, the share of Gross State Domestic Product allocated to public education varies from about 2.5% to 6.4%, with amedian of 3.2%, as of 2014. At the national level, the proportion of GNP allocated to education in 2005-6 was 3.8%, lower than the average of many developing nations(Ghate, Glomm, & Stone, 2014).

4 Over time, the fraction of GSDP allocated to healthcare expenditure has actually declined, indicating a falling degree of importance granted to Health in State-level policymaking(Bhat & Jain, 2004). This is a matter of significant concern, notwithstanding India's improvements in anthropometric indices over the past few decades(Deaton & Dreze, 2009).

5 For example, Bihar's health indices remain among India's worst, even though up-to-date data on this simply does not exist(Drèze & Sen, 2013). As of 2005-6, 78% of Bihar's under-5 children were anaemic, while 56% were underweight(International Institute for Population Sciences (IIPS) and Macro International, 2007). Later surveys, such as the UN's Coverage Evaluation Survey in 2009, showed no major difference from this trend(United Nations Children's Fund, 2009).

6 This works out to around 686 USD equivalents per capita per annum, as per the 2011 ICP programme, which is around 13% of India's PPP GDP. For comparison, this is marginally higher than Colombia, at around 550 USD equivalents. Brazil's level is around 2,600-2,700 USD equivalents (18% of GDP PPP), and the OECD average is 8,200-9,300 USD equivalents (around 24% of average OECD GDP PPP)(OECD, 2014).

7 The PAISA Study in 2013 showed that a INR 1000 increase in per capita allocation raised the proportion of 3-5th graders who can read a Grade 2 Text by just *0.2%*(Aiyar, 2014).

8 In 2013, India passed an ambitious Law to massively expand its existing system of food subsidies for the poor to cover about 67% of the total population. The cost to the exchequer of such a move was widely debated, between 1.2% (Sinha, 2013) and 3% of the GDP (Bhalla, 2013); but what is revealing is that in delivering a rationale for the bill and discussing its financing, the Ruling Party's chairperson Sonia Gandhi stated, "It is the question is not about resources; we will have to manage resources for this. The question is not if we can do this; we *have* to do this (emphasis added)"(NDTV, 2013).

9 Annual Status of Education Report. The ASER is India's largest learning outcomes survey, surveying up to 3 lakh villages across the country, and is conducted by Pratham, a NGO working actively in the area of education in India. The survey involves asking a set of standardised questions to establish a student's reading level and arithmetic capabilities. The 2014 report (released in 2015) discusses the worrisome finding that learning outcomes in India, and within individual states have trended downwards or have remained stagnant, Tamil Nadu being a prominent exception(Pratham, 2015).

10 We measure School Infrastructure Quality by the Index of School Quality utilised in the evaluation of the Augmented Socio-Economic Progress Index. The data involved pertains to ASER 2013(Pratham, 2014), and correlates performance measured in 2013 with outlays in 2009-10 to account for delays in outcomes of expenditures. No significant change is observed if correlations use 2013 SSA outlays(Baksy, 2014).

11 We measure learning outcomes by the simple average of four variables provided by ASER 2013: the fraction of 3rd graders at the Grade-1 reading level, fraction of 5th graders at the Grade-2 reading level, fraction of 3rd graders conversant with 3-digit subtraction and fraction of 5th graders conversant with division of a 3-digit number by a one-digit number.

12 In a univariate regression of School Quality on the level of public expenditure, the p-value for the F-Test is 0.16, indicating absence of significance. Note that factors for which we have not controlled, such as income levels of the State and average MPCE which are likely to be positively correlated with per capita expenditures, are likely to further weaken the relationship. When we change the dependent variable to the Index of Learning Outcomes, we observe that the p-value falls to 0.0051, thus making the relationship significant at 1%, but still very poor. Removing Himachal Pradesh further reduces the R^2 value for both series.

13 Data from (Tilak, 2009).

14 Data from (Choudhury & Nath, 2012).

15 Data taken from (Ministry of Health and Family Welfare, 2013).. Andhra Pradesh's excessive drive towards industrialisation under Chandrababu Naidu's government and self-promotion among industrialists to attract foreign investment has been blamed for this concentration of

investment in the urban sector. This is to be contrasted with States like Himachal Pradesh, wherein expenditure is allocated roughly in the ratio of population in rural and urban areas.

16 On the other hand, Andhra Pradesh spent only 2.18% of its Health expenditure on Capital Account, indicating a slowdown in the development of health infrastructure. Assam performs even worse; in 2010-11, the State spent 0.39% of its Health Expenditure on Capital Account. At the Macro Level, as of 2004-5, The States of India spent 5.33% of their total health expenditure on Capital Account. Provision of Public Health and RCH Programmes, General Administration and Insurance absorb 20.81% of allocated expenditure at the State level and 47.85% at the Central Level. Health Administration, Insurance and Medical Education and Training of Health Personnel absorb 19.25% of the Allocated Healthcare expenditure; 46.92% is allocated to Curative care. A measly 6.21% is available for Capital Formation. At the State level, 10.69% of the budget is spent on Administration and Direction(National Health Accounts Cell, 2009). This, of course, is indicative of a misallocation in terms of expanding availability of healthcare.

17 There are commentators in India who argue for a vast expansion of such programmes as the Public Distribution System, the intent behind the "Rights-Based" Approach to social policy. It is instructive that the numberof PDS shops per unit area in States like Tamil Nadu (0.24) is lower than that of Uttar Pradesh (0.30), Assam (0.43) and Bihar (0.47) (data from (Press Information Bureau, Government of India, 2013). This reveals the success behind Tamil Nadu's system isn't merely in expanding a system but in raising the *functionality* of the same(Nakkiran, 2004).

18 Data from the *SarvaShikshaAbhiyan's* website. Note that this result can be interpreted in terms of diminishing returns to education outlays: once basic infrastructure is in place, expenditure on additional school buildings, additional teachers and staff are unlikely to pay dividends owing to their initial "fixed cost" nature. As a result of this, states with adequate education systems in place only need to cover the variable costs of maintaining the educational system.

19 It is curious to note the similarities between Kerala and Mizoram in terms of the mechanisms these States have used to achieve total literacy. In Mizoram, volunteers specific to villages ("animators") were identified. Each animator was required to teach 5 students. Adult education bodies were formed in each village to oversee the project of full literacy, through the involvement of a large number of community members(Chugh, 2009), a move which handed power to individuals with natural incentives in to engage with the community, in the form of existing social networks.

20 Kerala has over 2,700 government medical institutions, with 330 beds per 100,000 population(Suryanarayana, 2008). State-supported programmes for pregnant women and training of women towards breastfeeding and best practices in childcare ensure that Kerala has among the lowest rates of undernourishment in India. 99.8% of Kerala's villages are within 3 kilometres of a Sub-Centre and 94.9% are within 10 kilometres of a Primary Health Centre. Further, Kerala's physical infrastructure supersedes most States in terms of overall access and quality. Kerala's Road Network is more than twice as dense as the next closest State (Punjab), measured by length of roads per square kilometre. In 2012, 100% of all villages in Kerala were connected to India's postal service and had a Public Telephone in the form of an STD/ISD/PCO booth. By November 2013, 100% of Kerala's Villages were electrified, as compared to 88% for Uttar Pradesh.

21 Out of 28 states, Himachal Pradesh ranks third on the Gender Empowerment Measure, an index evaluating the social status of women on the basis of political and economic participation and control over economic resources.

22 In 1950, the Literacy Rate in Himachal Pradesh was 4.8%. By 1991, it stood at 75% for males; this rose to 86.02% by 2001 (for females, the rise was from 52.1% to 68.08%). By 2011, the overall literacy rate was 82.8%, with female literacy at 75.9%. In 2005, Himachal Pradesh had just 0.54% of its children out of school. While Tamil Nadu's achievements too stand apart by themselves, the excellent enrolment rates in Tamil Nadu are marred by poor educational outcomes. The ASER 2013 report (Pratham, 2014) notes that only 18.5 of Tamil 3rd graders can perform a simple division problem. For more on issues facing Tamil Nadu's Education sector, see(Sen, Amarnath, Choudhury, & Mukherjee, 2008). Preliminary analyses of ASER 2014 data indicate massive improvements in educational outcomes in the state, both in reading and writing(Pratham, 2015).

23 This fact is further seen in the low Access Deprivation Score of 33, indicating that the average Tamilian is deprived of access to about 33% of all public services, as computed in developing the Empowerment Line for the evaluation of poverty in India(McKinsey Global Institute, 2014).

24 Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh, which have traditionally been the low-development states dominating the North Indian Heartland. These states are among India's most densely populated, with Uttar Pradesh's population (204 million) being greater than Brazil's (200.2 million).

25 Philippe de Lombaerde, Luk van Langenhove, *Multilateralism, Regionalism and Bilateralism in Trade and Investment:2006 World Report on Regional Integration* (2007):7-11

26 Reinhard Schumacher, "Adam Smith's theory of absolute advantage and the use of doxography in the history of economics", *Erasmus Journal for Philosophy and Economics* no. 5, Issue 2 (2012):2

27 Monica Das, "Absolute and Comparative Advantage",ed. William A. Darity, Jr., *International Encyclopedia Of The Social Sciences, 2nd edition.* pp. 1–2.

28 Das,"Absolute And Comparative Advantage", pp 1-2

29 Anders Johnson,"The Three Waves of Globalisation", *Journal of Nordregio* (2008):3

30 Richard E. Baldwin, Philippe Martin, "Two Waves of Globalisation: Superficial Similarities, Fundamental Differences", *NBER Working Paper*, 6904(1999): 7-10

31 Maryanne Kelton, "Global Trade", *Introduction to International Relations*(2012):350-353

32 Theodore H. Cohn ed., *Managing the global economy since world war II: The Institutional Framework in Global Political Economy*(London:Longman,2011)

33 Richard E. Baldwin, Philippe Martin, "Two Waves of Globalisation: Superficial Similarities, Fundamental Differences": pp 7-10

34 Rodney D. Ludema,Anna Maria Mayda, "Do countries free ride on MFN?", *Journal of International Economics*(2009):2

35 Ludema, Mayda, "Do countries free ride on MFN?":4

36 World Trade Organisation, http://www.wto.org/english/tratop_e/region_e/region_e.htm (accessed on June 24,2014)

37 World Trade Organisation,http://www.wto.org/english/tratop_e/region_e/region_e.htm (accessed on June 20,2014)

38 Caroline Freund, Emanuel Ornelas, "Regional Trade Agreements", *Policy Research Working Paper,WTO* (2010)

39 Jagdish Bhagwati, "US Trade Policy:The Infatuation with FTAs",*Discussion Paper Series(*1995)

40 JagdishBhagwati,interview by Keith Rockwell on 13 September,2007, World Trade Organisation,http://www.wto.org/english/tratop_e/region_e/region_e.htm (accessed on June 20,2014)

41 Caroline Freund, Emanuel Ornelas, "Regional trade agreements: blessing or burden?",*Centrepiece Summer,2010*

42 World Trade Organisation,http://www.wto.org/english/tratop_e/region_e/region_e.htm (accessed on June 20,2014)

43 Jagdish Bhagwati, "Regionalism and multilateralism: An overview"(1993), in: De Melo, J., Arvind Panagariya, *New Dimensions in Regional Integration*

44 Caroline Freund,Emanuel Ornelas, "Regional trade agreements:blessing or burden?",*Centrepiece Summer*,2010

45 Gary Huftbauer,,interview by Keith Rockwell on 13 September,2007,World Trade Organisation,http://www.wto.org/english/tratop_e/region_e/region_e.htm (accessed on June 20,2014)

46 Jagdish Bhagwati, "Threats to the World Trading System: Income Distribution and the Selfish Hegemon"(1994*), Journal of International Affairs.*

47 Raymond Riezman, "Can Bilateral Trade Agreements Help Induce Free Trade?",*Canadian Journal of Economics(1999),Canadian Economic Association*,vol.32(3)

48 Philip I.Levy, "A political-economic analysis of Free Trade Agreements" *,American Economic Review vol.87(1997),American Economic Association*

49 Emanuel Ornelas,"Trade creating free trade areas and the undermining of multilateralism",*European Economic Review 49* (2005):15

50 L. Alan Winters, "Regionalism versus Multilateralism",*Policy Research Working Paper 1687,The World Bank*(1996):3-7

51 Masahiro Kawai, Ganeshan Wignaraja, "Free Trade Agreements in east Asia:a way towards Trade Liberalization?", *ADB Briefs,Asian Development Bank,June 2010*

52 Masahiro Kawai,Ganeshan Wignaraja, "Regionalism as an Engine of Multilateralism:A Case for a Single East Asian FTA", *Working Paper Series on Regional Economic Integration* No. 14 (2008)

53 A. Estevadeordal, Caroline Freund and Emanuel Ornelas., "Does Regionalism Affect Trade Liberalization Towards Non-members?" (2008) *Quarterly Journal of Economics*. 123(4):1532

54 Noted economist Milton Friedman, in 1962, depicted that- "A stable and democratic society is impossible without a minimum degree of literacy and knowledge on the part of most citizens and without widespread acceptance of some common set of values. Education can contribute to both. In consequence, the gain from education of a child accrues not only to the child or to his parents but also to other members of the society. The education of my child contributes to your welfare by promoting a stable and democratic society."

55 In his research, William Teale (a professor of education and an early childhood literacy expert) concludes that "Home background plays a significant role in a young child's orientation to literacy [and to education]." (Teale, 1986)

56 The importance of parents' education has been deemed irreplaceable through many studies. Parents' personal educational backgrounds and economic backgrounds have a significant effect on their children's' education (Kainuwa & Yusuf, 2013).

57 The poverty-stricken adult population existing in South Asia today sadly could not be educated parents to their children, and the best that can be done is to provide them facilities of basic education, training, skill development so that they have opportunity to earn livelihood and give their children the edification they themselves were deprived of (Oxenham, Diallo, Katahoire, Petkova-Mwangi, & Sall, 2002). So, the aim should be to find a source of income for these adults so that they can accumulate revenue enough to educate their children, who in turn will one day be aware parents to their children who will shape the future of South Asia even farther.

58 Such as the GRE or SATS

59 'The Risk-Reward Nexus: Innovation, Finance and Inclusive Growth' is a paper written by William Lazonick & Mariana Mazzucato, published in November 2012.

60 'The Entrepreneurial State: Debunking Public Vs Private Sector Myths' is a book written by Mariana Mazzucato which was published by Anthem Press in 2013.

61 In her book The Entrepreneurial State, Mazzucato undertook case studies concerning the government's contribution to the establishment of the internet, the pharmaceuticals industry, the biotechnology industry et cetera.

62 This party was founded by Hugo Chavez

63 A capital flight refers to a situation where there is huge capital outflow from a country.

64 Named after the Italian statistician and sociologist Corrado Gini

65 Inelastic demand means that even with huge changes in price, the demand for the commodity wouldn't change much

66 Hard currency is the one, which can be used for imports as well. Example: US dollar

67 Rana refers to the work of famous economist Angus Madison on calculating GDPs.

68 Nalanda has a historical significance of being the Asia's center of intellectual excellence.

69 They all are SAARC (South Asian Association of Regional Cooperation) member countries.

70 The East Asian selection can be thought of as ASEAN+2 (ASEAN + China + Japan)

71 WTO. Practical Guide to Trade Policy Analysis – Chapter 3 (Analyzing Bilateral Trade Using The Gravity Equation)

72 Note that the interacted dummy will only equal 1 when both the PTA dummy and the spaghetti bowl dummy equals 1.

73 This data do not include intra-South Asian or intra-East Asian trade.

74 Information regarding how to fit gravity data into STATA was taken from 'Practical Guide to Trade Policy Analysis'– Chapter 3 (Analyzing Bilateral Trade Using The Gravity Equation)

75 Note that only those countries are listed in this compilation, which are part of the initially selected eight South Asian and twelve East Asian countries. For example, Iran, Nigeria, and Egypt are also part of Preferential Tariff Arrangement – Group of Eight Developing Countries (PTA-D8), but they are not listed here in this compilation.

76 Examples of such FTA's are Pakistan-Singapore FTA, India-Indonesia CECA, Regional Comprehensive Economic Partnership (RCEP), and China-India RTA.

77 French for essay.

78 The Dutch disease is a reference to the phenomenon of hyperinflation. It is so named as the state of Netherlands, (or the Dutch) was the first to experience it. The Dutch disease is synonymous with the decline in exports, (other than that of natural resources) due to a strong currency which comes about by an increase in revenues as a result of the discovery of natural resources.

79 This means that Norway has managed to escape rentier state tendencies by generating ample employment in the petro and its subsidiary sectors.

80 The indicators have been defined previously in this essay itself.

81 Development is a teleological process. At all stages of development there is a propensity to move towards an expected outcome. The closer a state is to such an outcome, the more likely that its growth rate would slack.