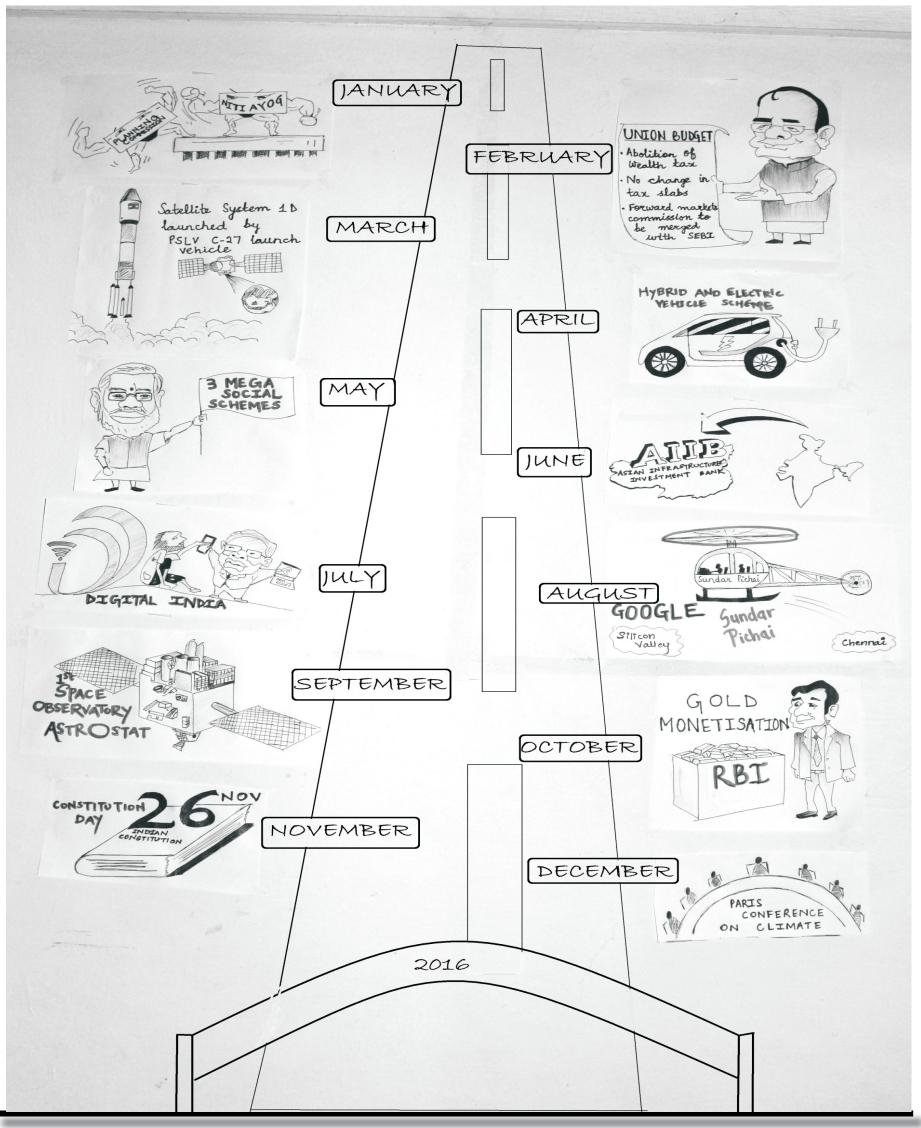
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THE YEAR THAT WAS!

By Kiran Awale, Suharsh Shirke & Hafsa Syed



THE RAJAN EFFECT

Expectations – a belief about what might happen in future. In the economic world, expectations play a much larger role. Markets can make huge money and lose the same due to mere words of some bureaucrat, government official or political big wig because public and stakeholders have expectations. We live in a significantly uncertain world. However, expectations are built over a period of time by observing the events that occurred in the past and remain embedded for quite some time.

A fresh water economist, who understands this better than nobody else, is currently leading the Reserve Bank of India. Dr. Raghuram Rajan, a genius admired by all, for his ahead-of-his-time thinking and clarity of thought and action, has given our monetary policy a clear framework. When he took over in 2013, nobody was sure as to what guided India's monetary policy. A true monetarist, he established a mechanism of inflation targeting towards which we are slowly moving.

India has been a victim of the expectations effect. Despite low CPI and negative WPI for a long time, inflation expectations have remained high. According to the recent data released by the RBI, mean household inflationary expectations for three month ahead rose to 10.7%. According to Rajan, this is because of a long spell of 5-6 years of high inflation that prevailed in India. This is because the public's inflation expectations are adaptive – meaning they change only after they see a sustained change in realized inflation, implies that we require a long period of low inflation before expectations come down. High inflation expectations and low actual inflation have created a wedge between the lending rate that savers expect and that that banks offer. When people expect inflation to be high, they cut on their consumption expenditure and save more. Hence, expecting greater interest rates. Even in the past, when this did not happen, India suffered a huge distortion in forms of saving in the country with a major chunk going into non-productive assets like gold, and land as a result of unattractive real interest rates.

Succumbing to the repeated demand of the Finance Ministry, Rajan-the inflation warrior, surprised the economy by lowering the interest rates by 50 bps. The amount of weightage given to the household expectations in the respective decision remains unclear. However, markets rose significantly that morning when this 'investor friendly' decision was taken in RBI Headquarters at Bombay. Prima facie, it was seen to be an effective decision especially when the RBI governor had clearly stated that rate cuts are not goodies offered by the RBI. However, when the reserve bank reduces interest rates, there also takes place a cost-benefit analysis between its effect on borrowers and savers. While a 50 bps cut is ineffective beyond sending a positive signal to the rich borrowers, it discourages a middle-class household from storing its earnings in a bank particularly when they are already expecting high rates. Failure of transmission mechanism has made things worse, leading to a scenario where both, borrowers and lenders are unhappy. Moreover, prevailing supply constraints in the economy would only lead to inflationary scenarios proving households right. Hence, a major challenge remains in bringing inflationary expectations down. As expected, the US has hiked interest rates in December 2015 for the first time in 10 years. This has set the ball rolling. With foreign reserves and the current account deficit in a comfortable position, Dr. Rajan along with markets have welcomed the rise in interest rate. But, concerns remain over further

strengthening of the US dollar and the timing and extent of further increase in the same. Unlike 2013, with strong fundamentals in place, there is little to lose from this increase in the interest rates. It can also turn things in our favour and India can actually stand as a gainer with no supply pressure on government securities and excellent economic growth outlook. This will also keep the actual inflation in control and help in bringing inflationary expectations down. Until the time of publishing of this article, the RBI would have already rolled out its decision in December monetary policy review. It will be interesting to watch out whether RBI will have reduced the interest rates further, which is unlikely considering the current rise in the CPI, competitively increases the interest rates as a reaction to the US hike or remains calm and cool, and let 'The Rajan Effect' work!

> _*Rhythm Behl* M.Sc. Economics (Part -I)

INDIA'S MACROECONOMIC POLICIES: PAST CHALLENGES AND POLICIES AHEAD'

Dr.Shankar Acharya at G.I.P.E.

In an event organized by the Pune International Centre (PIC) at Kale Hall, Dr.Shankar Acharya visited GIPE on 16th December 2015. He was delivering the third lecture in a lecture series titled 'Art and Science of Policy Making'. Dr.Acharya began by speaking about the past challenges faced by the economy, their reasons and how Indian Policy makers have tackled them. He stressed on the fact that in order to deliver and create better policies, one needs to have a deep and accurate understanding of the prevailing economic situation. He was of the opinion that the question policymakers should ask is whether the Indian macroeconomic situation and the prevailing policies are sound enough to deliver the growth that India wants and strives for.

After a brief introduction, Dr.Acharya went on to talk about the major causes of the spurt in growth of the Indian economy between 2003 and2008. He commented that India did 'miss some buses' like labour reforms but 'did not miss some buses' like maximizing on the service sector growth.. He attributed the slowdown in the economy after 2008 to primarily the 'Jairam Ramesh effect' saying that there was some un-needed regulatory tightening. He also commented that the Manmohan Singh period was not particularly productive. He then went on to comment upon the present situation. He cited numbers explaining how perplexing the CSO estimates on GDP were that came out in January 2015. He quoted Y.V. Reddy saying "In India, there is not only uncertainty about future but uncertainty about past as well" in the context of confusion about the numbers released. He further forecasted the world economy to grow by 3-4%. To place things in a relative context, he cited that India is a mere 2 trillion dollar economy out of a 77 trillion world economy. The focus, he said, should lie on domestic reforms. He also spoke about the

constraints that bind the Indian economy from moving up its growth curve. He mentioned in particular the Land Acquisition Act, Excessive entitlements and crony capitalism in terms of high corporate borrowings as the constraints that have plagued the UPA regime.

He spoke about GST being in a major deadlock, the revival of fiscal populism with regards to OROP scheme and the need of growth to be jobfull. He credited the Modi government on being active about Coal auctions, pushing efforts towards pursuing reforms in GST and the amendments that have been brought in the Mines and Minerals Act.

Finally, giving a growth rate projection of about 5-6.5% for India, he claimed that the policy priorities that remain for India are flexibility of labor laws, resisting fiscal populism, strengthening banking and credit system, effective exchange rate management, revamping energy sector, improving the ease of doing business and meeting the challenge of urbanization.

The lecture concluded with a vote of thanks by Dr.Vijay Kelkar and Dr.Rajas Parchure.

-Udita Makhija M.Sc. Financial Economics (Part - II)

DELHI'S ROAD SPACE

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While it is tempting to use this column to ridicule Arvind Kejriwal and the Aam Aadmi Party, it would only be a waste of intellectual space and a futile exercise for the reader's eyes. The Delhi Government recently announced the commencement of a new policy for allowing only even or odd numbered cars on specific days of the week. Of course nothing has been confirmed yet, but our elected representatives are split between whether to make the even-odd formula dependent on the days of the week (that is, Monday, Tuesday, Wednesday etc.) or on the days of the month (first, second, third etc. of the month). In either case, the policy still reflects borderline madness. The insanity lies not in the policy but in the absence of any significant data to support its need.

Road Space Rationing has been tried out in many countries. The most famous example was in Beijing where the policy was introduced some time before the start of the 2008 Summer Olympics. The idea seemed right to the Chinese authorities and the objective seemed blessed for the law intended to reduce pollution which had exceeded the threshold for danger. From an administrative point of view, this policy could be easily managed by the Chinese government because they practically have a grip on every aspect of the country. But critics even within China began arguing that the road space rationing initiative was an infringement on the fundamental rights of the citizens as the car is considered to be a legal private entity. Thus, does the Government have any right to decide for the citizen when he or she could drive the car? It must be also understood that the Chinese government consider this policy as a temporary arrangement where as Arvind Kejriwal has offered no such guarantee.

But since when did fundamental rights matter; intolerance has been brewing in the country anyway for the last nine months and people have learned to live with it. Talking about the problems associated with road space rationing in Delhi brings us perhaps to the big question: Who is exempt from this rule? The government has announced that individuals or groups in emergency situations, the disabled, and senior citizenry may be

exempted from this rule. Not to mention, it is most likely that Government officials including the Chief Minister himself would be exempted. Taxis would also have to be exempted. So how many cars does that leave us with? The two issues that this author views as consequences of this concern are the likelihood of rampant corruption to take over and the possibility of increased sales of fake license plates and other illegal activities that could allow drivers to evade this rule.

Scientifically, no one including the government is even sure by how much the pollution levels will come down if such a rule is even implemented. Alternatives to driving have been advised by the government such as car pooling and using bicycles and other two wheelers (which are also exempt from this rule). Of course carpooling is a 'half-assed' solution because if a family of five travels in a car then it is occupying full capacity. In fact most cars in Delhi, at least in evenings on weekends are full capacity with families. So do we start co-owning trucks to move a whole score of families? Bicycles may not add to the pollution levels, but certainly increase the chances of mortality. Without proper bicycle lanes and the lovely pretense of Delhi drivers being in a 'Fast and Furious' movie, accidents are surely to happen. Delhi isn't safe for bicycles.

Lastly are cars the only source of pollution? Would the even-odd formula really work for its intended cause? Why not shut down factories and plants releasing harmful toxic material and gases for alternate days? Why not argue for smoke free days where smoking is banned on all places? Banning cars will not necessarily do the trick of reducing pollution. What the government should've instead focused on is making the cost of owning cars more expensive. Progressive taxes on fuel, loans, and buying a car could impinge on the rising sales of automobiles.

But for that some thought needs to be put. And the Delhi Government clearly lacks that.

-Sameedh Sharma M.Sc. Agribusiness Economics (Part-II)

THE PINK COLLAR

Any avid reader, pursuer of knowledge and certainly, a student of Economics as a discipline, recurrently comes across literature pertaining to innovative branches of the social science. Commonplace is the sighting of the word 'Economics' next to a kaleidoscope of terms -'Business', 'Environment', 'Public'. This is where the charm of it lies: Identify the problem of choiceand-outcome in a sphere of work, follow it with the application of simplifying economic laws and you have enthralling, albeit incompletely functional, areas of exploration.

Did your initial encounter with National Income Accounting not leave you wondering why did the housewives of the first and the third world alike not have their domestic chores accounted for? Has the controversial issue of gender-pay gap never irked your line of living and conscience? Have you stopped to think about the subtle difference between Alfred Marshall's definition of the subject as "a study of wealth...a part of the study of man" and Lionel Robbins' "a science which studies human behaviour as a relationship between ends and scarce means..."? If you have or haven't, then it might be astounding for you to know that there is a league of thinkers who brand themselves as 'Feminist Economists' and further the cause of such an ideology. They have a simple, founding concern – If economics is a social science, then how can you trust the skeleton that props it up on the basis of the age-old society that constructed it? If markets and economies function as per demand and supply, then who sifts through the choices behind them to pick out the biases imposed on both men and women?

Despite the ancient rationale for it, such economists find it hard to take the exclusion of homely care-giving in their stride. Household is the source of most production and consumption. Why then, should the nurturing by its women not be given economic significance? How can the production of machines be accorded a greater pedestal than the upbringing of healthy individuals? How can muscle-labour trump society-building? Undermining of the dedicated efforts of a homemaker is sensed. Not only do such accounting rules induce rage for the origination of the divide lurking in the society but also make all prospects of gender equality bleak.

The workspace jargon of 'Equal Pay for Equal Work' still fails to materialize in the real world. Male full-time workers in the US were paid 18% more than

their female counterparts in 2013. Canada has a distinct record of negligible number of women making it to the topmost circles of the corporate world. Keeping aside the exceptions making up 10% of the female labour force, most women employees are found concentrated in jobs at low-scale or lowbiz companies. Work-time flexibility is offered in lieu of compromising on the aspired place of work or pay scale. Giant firms abhor hiring working mothers; a blind eye turned to proficiency and credibility. The need to pass something called a Pregnancy Discrimination Act in the States is dumbfounding and categorically funny. Did any recruiting board ever trash the resume of a hale and hearty candidate just because he had the obvious curse of mortality? But then it isn't completely unjust on their part to not induct a woman, biologically capable of bearing children being the female of the species, in their workspace. Just because social convention deems the greater responsibility on "mothering" of a child. There is never an equal division of errands to be run between a new parenting couple irrespective of the incomparable joys and troubles that spring from the same.

A low average of working life salaries heralds low pension schemes. This, and other gender downgrading reasons bundled together, dumps the most shameful discriminatory outcome on the society: Feminization of Poverty. Firms know for a fact that women stand in the low-bargaining-power zone in the labour market. Single mothers have struggles that can be profitably leveraged against. Education as a criterion is a farce. Macroeconomic policies of hacking off public expenditure piles on to the inability of women to enter the labour force. To dilute inflationary pressures, job creation takes a back seat and a cut-throat war ensues for a limited number of jobs; a war in which men start out as victors. Measures like Gender-related Development Index (GDI) look like battles already lost. But have you looked up the glorious narrations about the significance of women in the growth of Ghana's economy? The career orientation, the independence, the dignity and the self-ordained responsibilities. That is where the hope lies and the light shines bright.

> *-Kshama Mishra* M.Sc. Financial Economics (Part-I)

MEETING PI

Literature leaves behind most confounding of marks on people; one experiences an over-whelming awe at the power of words to weave, at times with what seems like divine skilfulness, men and women and places that so decidedly make a place in the heart of the reader. It is a beautiful process- when words guide us, aid us to conjure a world in our minds as imagined by the writer and yet give us the liberty to add a tinge of ourselves to the imagery. A classic example being JD Salinger's Holden Caulfield – an enduring character that conveyed with dissenting honesty the predicaments of adolescence, Holden has evolved into a symbol, a spokesperson for the young and yet we remember him not because what he means to the collective but to us as individuals.

He tumbled out of the pages, awkward and aloof and offered me kinship in his unfeigned fascination for religion. Pi, from The Life of Pi, is stunningly articulate when it comes to God and religious- An ability that has eluded me since I can remember. Matters of faith can be bafflingly disconcerting; while faith often costs us rationality, pure logic and reason may deprive us of a sense of defiant hope. Pi reaches an enviable equilibrium, of deep spirituality and unyielding logic –a mix that, as the book will tell you, is essential to survive the Pacific Ocean by oneself.

The book begins with an account of Pi's childhood in Pondicherry. His town, a quiet quant place, is where he spends his days ambling about. He climbs every tree there is to and leaves unexplored no crack or crevice, as one day lazily dissolves into another. The best of his fondness though, he has pledged to his father's little zoo. Pi's time spent at the zoo evidences his uncommon ability to love and in doing so explains, to some extent, Pi's instinctive pull to anything that preaches of the emotion. While Ravi, his older brother, would be off playing cricket and such, Pi would be quite satisfied to watch the Orang-utans munch at their food with leisurely slowness. As he romances the zoo's inhabitants, Pi learns a thing or two about the

animal psyche; how animals establish their territory, what prompts their defences, how to gain their favour, their social hierarchy etc. lessons that would eventually prove to be life-saving.

Pi's father devotedly tries to caution the boys of the perils of actions wanting for reason and logic, when hisworry is whether he'd reach the mosque in time for namaaz after the service at the church- a particularly resonant aspect of the story, staying true to what one believes in dearly in the face of a storm of opposing ideas.

The author, Yann Martel, skilfully instils a sense of foreboding in one as one reads of Pi's despairing journey across the Pacific; the sea that far out can be brazen and unfriendly and a seasick tiger for a companion doesn't greatly add to one's prospects. The length of the journey compels an unlikely friendship between Pi and Richard Parker and the two together demonstrate, upon the uncompromising waters, that hope can do wonders.

As Pi progresses on the ocean, the story darkens and realism is sidelined to make way for a human-eating Island and a ghostly French cook, also offering the reader newer context to engage with the story. The sudden jump leaves one in a lurch and comfortably banishes all familiarity. The culmination of the novel is Pi's interaction with a duo from Japan investigating the shipwreck. The author gives a wild spin to the tale here, and offers ever so kindly, to have our pick of the story.

Life of Pi is a heartfelt endeavour; the writing is immediately engaging and aided with meticulous research. The book more than suffices as a nerve-wracking adventure of a puny boy and a stately tiger, yet it offers, to those who seek to swim deeper, an assortment of allegories to comprehend. The book is sure to allow every reader their personal take-away, founded on their life experiences, and yet, life of Pi,foremost, is a loud and defiant call to always hope against hope.

> -Dona Tomy M.Sc. Fiancial Economics (Part-II)

UNDERSTANDING THE GOLD MONETIZATION SCHEME (GMS)

such that gold deposits earn interest and use of the same to extend it as incentivise investor for the same. standard gold bars. The interest earned will be in terms of gold itself, while RBI has given discretionary authority to the banks to determine this interest rate. Say if the interest rate on gold is 2.5% per annum, then for every 10 grams of gold, the annual interest payable is 0.25 grams of gold itself.

The deposited gold is usable for the purposes of CRR/SLR, Gold loan account, Foreign currency, Coins, Commodity Exchanges and Lending to jewellers.

1)What are the investment opportunities in GMS? What is it ideal for?

There are three types of deposit available: short term (1-3 years), medium term (5-7 years) & long term (12-15 years).

Short term gold deposits will be accepted by banks as their own liabilities, for both – the investors and the potential borrowers. which banks will have to maintain CRR & SLR. The redemption of these deposits plus interest can be either in gold or in Indian Rupees. However, the The government is well aware of the Indian consumer demand for gold and option in this regard will have to be be chosen at the time of depositing the gold itself. (This will help the banks to do their asset-liability management in a better way).

The medium and long term deposits will be accepted by banks on behalf of the Central Government. The redemption of initial gold plus accrued interest, on imports of gold. in this case, will be made in equivalent Indian Rupees of the value of gold The import duty on gold imposed by former FM P. Chidambaram is still in prevailing at the time of redemption. (This is representative of public-private cooperation for risk sharing. During long time horizon the price of gold is The duty on gold was imposed in order to discourage gold demand in order to uncertain, thus government backing for such an asset keeps investors' confidence intact and the pressure off the private banks).

higher education starting when he/she is born.

2)There have been other such schemes from banks in the past. How it is different from them and what effect would it have on the existing ones?

GMS is a replacement over the previous Gold Deposit Scheme (GDS). GDS was unpopular as its precedent GDS, only time will tell. introduced in 1999 with similar purpose of reducing the burden of gold on current account deficit.

Nevertheless, GMS remains an improvement over GDS by focusing on how the deposited gold can be utilized, introducing deposits of varied maturities

The recently launched GMS is engineered to create a banking system for gold, to suit investor preferences and the tax benefits from GMS are expected to

credit. The gold deposited can be in any form, that would be melted into 3)There are various NBFCs that provide gold loans. What changes are they planning to carry out in response to GMS?

Loans provided against depositing gold (as a collateral) is different from opening a interest earning gold deposit. What NBFCs do is the former, which is also offered by banks. The latter, however, refers to a process of depositing gold in order to earn returns and will only be provided by banks. Within this framework, if one were to take loan it would be taking loan in terms of gold which is a feature of GMS, specifically conceptualised for jewellers.

How the NBFCs would respond to GMS is quite uncertain since the scheme is relatively new and it depends on the kind of popularity GMS gains, among

4)Why is the government keen on mobilizing the idle gold holdings?

how it has been one of the most significant determinant of the ever increasing CAD. Objectives of the schemes include mobilizing the gold held by households and institutions in the country, allowing the gems & jewellery sector to use the gold lent to them as raw materials, and reducing the reliance

effect. Will this have significant impact on the prospects of the scheme?

bring current account deficit in control. A scheme like GMS is complimentary in nature as it is another way to incentivize consumers to reduce gold Medium & longer term deposits can be a great value addition for the demand, and to compensate by earning returns on the gold that the portfolio; especially for those planning for retirement, or saving for child's consumer already owns. A plausible scenario is that if a consumer makes an initial deposit of gold, he/she may continue to import gold, however in lower quantity and make recurring deposit to earn returns on the asset.

It is too soon to say whether this scheme will gain investor nods or remain

-Arushi Chopra M.Sc. Financial Economics (Part-II) Dhruv Goel M.Sc. Economics (Part-I)

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INTERESTING FACTS YOU DIDN'T KNOW ABOUT 5 FAMOUS ECONOMISTS (OR ERR...WERE THEY?)

1. P.C. Mahalanobis: A man is known by the company he keeps. And one cannot get luckier than him with the kind of the companions he had. During his days in the Presidency College, the curator of the Mahalanobis Model and the Trickle Down Effect, had among his teachers the great Jagdish Chandra Bose (who was a physicist by the way) and Prafulla Chandra Ray (a chemist). His seniors included Subhash Chandra Bose (a student of Philosophy) and Meghnad Saha (an Astrophysicist!). Being a physicist himself and also one of the brightest jewels in the golden crown that Presidency College had always worn, he won a scholarship to study in England.

During his days in the Cambridge University, he became roommates for a short period with the genius and math wizard, Srinivas Ramanujan. Beat that!

2. Franco Modigliani: We have all read the life cycle hypothesis by him, but his greatest contribution came in the form of the Modigliani-Miller Theorem with his colleague Merton Miller during his days in the Carnegie Mellon University. Both of them had been teachers of business graduates of corporate finance, a subject about which they had no earlier exposure. In preparation and on examination of the available material, they had found many inconsistencies. The researcher awakened them, and they started working on the subject, the result of which was the Modigliani-Miller Theorem, still considered a cornerstone in the modern thought of capital structure.

3. John von Neumann: Remember the VNM functions (or the expected utility functions, as they are called)? "Vn" is actually von Neumann. A true genius with works encompassing the fields of mathematics, quantum mechanics, hydrodynamics, computing, statistics and economics of course. He proved the Minimax Theorem, used to minimize the maximum possible loss, i.e., in the worst case scenario. He had also originally formulated the zero sum game.

Turns out, he advised the US administration to bomb Russia before they also

got hold of a nuclear weapon. He had famously remarked, "If you say why not bomb them tomorrow, I say why not today? If you say today at five O'clock, I say why not one O'clock?"

4. Amartya Sen: Ever wondered why Sen's work occurs in a more philosophical nature than an economical one? One reason, he is a philosopher! In fact, at Harvard he has his office in the philosophy department and not in the economics department. But why? At the time he was in the Trinity College at Cambridge, he won the prize fellowship, awarded only to a single student each year. This scholarship allows the student to pursue anything (!) of his choice for the next four years. And he chose philosophy. Later, he would explain, "The broadening of my studies into philosophy was important for me not just because some of my main areas of interest in economics relate quite closely to philosophical disciplines, but also because I found philosophical studies very rewarding on their own".

5. Albert w. Tucker: Remember the supervisor of John Nash in a Beautiful Mind? That's Tucker. Who Tucker? It's that Tucker from the Kuhn-Tucker inequality conditions for optimization. He also popularized and gave modern interpretation for what he called the Prisoner's Dilemma. A Canadian mathematician, he was no prodigy. In fact, he had to repeat his senior year in high school to win the scholarship that he needed to attend college. He has the distinction of never publishing a single paper in any journal, wanting to "make way for the future generation". Most of his work is in the form of conference papers.

-Shubham Gupta M.Sc. Economics (Part-I)

FINANCE AND GAME THEORY

Game theory traces its inception to sixteenth century, on simple theoretical grounds. It's only Neumann's contribution in the eighteenth century that game theory got popularized as a unique field. Game theory found its application in almost every field, from economics to botany to political science and to philosophy, and became a mathematical weapon to further their literature. Finance too, faced a game theoretic intervention.

Capital Asset Pricing Model is one of the crucial models in asset pricing stream of finance. Markowitz developed Neumann's axiomatic approach to expected utility to develop a theory of portfolio choice. He considered the case where investors were considered with mean and variance of the payoffs of their portfolio choices. Tobin's contribution on liquidity approach established the framework of this mean-variance approach. The next development following CAPM was Efficient Market Hypothesis, which simply developed on the idea that the differences in returns are due to differences in risk. Continuous Time Models also remain a significant contribution to finance. It got culminated into an inter-temporal capital asset pricing model. One of its most important contributions is the pricing of derivative securities like options. However, these models were faced with their own set of anomalies. It was discovered by Basu that P/E (price to earnings ratio) provided more explanatory power than β in the CAPM. Certain papers have also pointed out the importance of firm size and ratio of book to market equity in explaining the average stock returns. January Effect remains one of the most popular anomalies. It's a hypothesis that the price of securities increases more in the month of January, when investors try to offset capital gains by prompting a sell off.

Another field of finance is corporate finance. The subject deals with financial decisions made by firms. These include choice between debt and equity and the amount to pay out in dividends. Miller and Modigliani worked together to demonstrate the importance of taxes and capital market imperfections in determining corporate financial policies. However, the theories were not seen as a description of reality.

The inability of finance theories to explain certain phenomenon led to the development of finance into game theoretic models. Game theory incorporated asymmetric information and strategic interaction into picture.

"Dividend Puzzle" has been one of the most challenging issues in Finance. The puzzle has been to explain the pattern of dividends in the sense how firms treat them. Miller and Modigliani suggested that dividends might convey important information about a firm's prospects. However, this came to be clearly understood only when game theoretic models were applied. Battacharya's model of dividends was the first to make use of this. He assumes that managers have superior information about the profitability of their firm's investment. They can signal this to the capital market by committing to a sufficiently high level of dividends. If the project is profitable, dividends can be paid from earnings. If the project is not profitable, then the firm has to resort to external finance and sustain deadweight transaction costs. However, this smooth signaling that dividends are supposed to provide can only work best until new information is arriving. So Kumar develops on a coarse signaling theory which is consistent with the fact that firms smooth dividends.

Another development in game theoretics has been the trade off theory of capital structure. The empirical magnitudes of bankruptcy costs and interest tax shields do not seem to match observed capital structures and it is here, that game theory comes to the rescue. A further contribution remains in signaling models. Ross develops a model where managers signal the prospects of the firm to the capital markets by choosing an appropriate level of debt. The reason this acts as a signal is because bankruptcy is costly. Added assistance of game theory remains in agency costs (agency problems between equity holders and bond holders, and between equity holders and managers, elaborating on the conflict of interest), asymmetric information (managers being better informed about the firms' prospects than the capital markets) and the market for corporate control, in which the basic finance theory could not include much. Conventional belief establishes that participants not only are concerned with their beliefs, but also about other's beliefs. Mainstream finance literature ignored this for long. It is the development of game theoretic models which stressed the importance of coordination aspects to a strategic situation, where such high order beliefs are important for fully rational actors.

The developments of game theoretic models in finance have indeed revolutionized it, and they still continue to develop incorporating richer informational models.

APPROACHING THE DEMOGRAPHIC DIVIDEND

After the proclamations of demographic dividend awaiting India, the familiar, burdensome spectre of reality looms. Per current trends, our working population will enlarge to gargantuan scale and thus will reduce the dependency ratio, the proportion of non-working to working population. To harvest the benefits of a large productive population, the crucial condition is that the labour market will absorb the increasing number of people demanding productive occupation. Prime focus in this challenge has been laid on assessment and enhancement of manufacturing capacities - industry, services and trading included. This is just as well. But the State must not, in this endeavour, betray the pivotal challenge facing the planet today, that of human-induced climate changes. This means that labour policies designed will need to be environmentally sound. In tandem with the recent Intended Nationally Determined Contributions framework and the Paris Agreement signed off at the 2015 United Nations Climate Change Conference, the State must show itself to be a serious actor in preventing and mitigating the dangers of adverse environmental change.

Indeed the latest round of discussions on tackling global warming requires winding down carbon-intensive industries and transforming to a renewables-led economy. If efforts are concerted toward this end, relocating those currently engaged in polluting industries is an urgent and difficult task in itself. Many traditional sources of mass employment will presumably no longer be in business even as the labour force grows unabated. Effectively, we have a two-fold problem - one of relocation and the other of fresh entrants. Solutions will require careful deliberation. Consider Brahmaputra Cracker and Polymer Limited's petrochemical complex situated in Dibrugarh, a district in upper Assam. The project employed thousands of low-skilled workers, has drawn in technical expertise and serves, no doubt, as a significant revenue source for the local government. Yet the mismatch between potential for harvesting clean energy and swathes of smoke pollutants emitted from the plant makes for a grievous long-term concern. These anomalies must now become the prime, not incidental, contention in any scope for growth and development.

Furthermore, whether we reap any dividend at all is contingent on

education and health levels. Progress on both these fronts has been painfully slow. Budget allocations on education and health have stagnated or decreased. Service delivery processes are ill-conceived with little accountability and emphasis on outcomes. The latest Human Development Index noted growing inequalities in attainment of basic education and access to health. If the status quo is maintained the country could face disastrous inequality and economic and social divisions. Inclusive development will go from a guiding to a token principle. The increasing young population coming into adulthood will face fear and hopelessness. In this light it may seem redundant to invoke any positive out of demographic composition.

Consider the severity of resource constraints caused by the large population. Urban areas face alarming seasonal shortages of water and power; space, sanitation and clean air have become pervasive constraints. Rural areas suffer many times more with their relative lack of wealth and alternative options. We can expect demand and consumption to rise out of a large working population but what of exhaustible resources? We could bank on advances in technology, political will and a conscionable State to counter this crisis; none of these is a sure bet. However we citizens can help salvage the situation to some extent. Every year hundreds of thousands of children are abandoned; the official figure quoted is far lesser. Meanwhile, adoption rates have been in decline for the past five years. One can argue for improving this number on several grounds, I present a couple of these. First, adoption offers the child access to health, education, familial care and opportunity he/ she is otherwise likely to be deprived of; these are also the basic ingredients to develop able youth who will be joining the workforce. Second, adopting may contribute to removing the economic burden of the State and place human capital - that is the child - in an altogether hospitable environment. No amount of conscience can allow the State to rear an abandoned/ orphaned child in a manner that bests the involved self-interests in parenting. Third, adopting a child can alleviate the growing resource constraints placed on society. Taking in a child represents a wholly rational duty which all who are inclined to parenthood must adopt.

> -Rongmon Deka M.Sc. Economics (Part-II)

WHISTLEBLOWER'S SYMPHONY

Not enough were these five years To have inevitable tryst with the reality In which ally with alacrity The graft and the despair Do they let my faculties to get impaired Instinctively, I did as much as I could to hear Just hear and hear

That cringe of the clutches, these rusted bars This dinky cell, sooted window atop None I know was friends with the pomp Only did they help the council bar In my decreed fling off the radar

Just to have knowledge of as to why? Yes, I did utter a word, a maxim

There were walls, dark as dead Ageing, opaque yet transparent Against which I had endlessly leapt The walls that bore What I had written with sore The to-be constitutionally mandated truths without dread

Had they become my constant companion Did they give me a virtual passage? Into the world never will come of the age I heard the lethal insects making sounds in the next unlocked cell I sensed what they crawled on in the next unlocked cell The lies, fabricated arguments that Were put forth by those insects in unison

Very often do my eyes smart Owing to the prickle that comes through This nation, so exemplar has rotten though By the people For the people To the people I say much more than I think them worse than tart

That image of the victim Whom I sought to protect forms In my head riddled with worms He says, "you did try to do That backfired with much ado You did try to lend justice to me, the victim You did try to bring punishment to the culprit" If I am only left here to sigh and suffer, then God forbid The one who stands on pulpit

> -*Mrigansh Jain* M.Sc. Economics (Part-I)

CALCUTTA KISS

I walked along the remains of the dilapidated old film studio; old shacks inhabited by the workers at the new one. Kolkata's studio para remains and probably will remain an example of the city's ability to skew an outsiders perspective into that of confusion and almost always, an involuntary obsession. If the philosophy of being suspended in time indeed needs an example, we have a metaphorical and a literal embodiment of the same in the form of this frayed yet stoic city.

Through curious examination, thinkers and practitioners have often been astounded by the stagnant yet flowing nervous system of the city. Aspirations flow and dreams are made only to be lost in the ensuing cacophony. Then again, some bear witness to the song of the mythological golden deer and follow it till they feel their feet crumble over the heap of coins encroaching the boundaries of the lake. The duality arisen, is this city's charm, is this city's curse.

The Bottle:

I stood across the first house down the lane, which was a few minutes from the aforementioned studio. A bottle filled with a purple fluid hung from the front gates of the house. Ignoring, I continued walking further. Half an hour later I had to open my phone and Google "the curious case of purple bottles in Kolkata". I had counted at least twenty bottles in those thirty minutes. "Why in god's name are these bottles hanging all across Kolkata's façade?" I asked myself. Apparently, dogs don't poop when they see those bottles. I filled one bottle with Ujala and hung it across my dog's face. Curiously enough, he barked and ran away.

"Why are these random purple bottles so important to me?" I asked myself again. I think that it becomes very hard to imagine such a scene in other Indian cities. Either both such surprising inquisitiveness and blind faith in one's neighbour is a rarity or the average Kolkatabashi wants to chug along the perpetual strangeness emanated by this city, redeemed intermittently through time. I will assume that it is the former rather than the latter.

The Undying Love:

In the month of June 2015, the very mention of 3 Robinson Street sent an average citizen's face swirling, culminating into a head shake associated with signifying that particular individual's apparent sympathy for the house owners. The said house was the standard attraction for the people of Kolkata in those summer evenings and afternoons. They all wanted to see the house where a man slept with the corpses of his dead dogs and also his dead sister.

For some particular reason, this macabre incident had swayed the imagination of the citizens and peculiarly embroiled them into appreciating their sanity. #HorrorHouseSelfie trended on Facebook. Office goers on the adjacent Esplanade and Park Street areas, flocked in numbers during their lunch hours. Macabre was the word of the month.

I love you Kolkata, I really do. I don't blame you. After all, the addas required something other than politics, didn't they?

Maa:

The word is evocative, isn't it? Something about "Maa" calms you down. It makes peace with your mind. "Maa aami ashchi", three words translating into "Maa, I am coming"; is an average Bengali son's/daughter's call to their mother, to let her know that maybe they are late, but they are coming home. The phrase is universal but the Bengali version of it is slightly more endearing than when spoken in other languages. The average chele/meye (boy/girl).

Maa, is also embodied by the goddess Durga, whose statue reached new heights this year. Eighty-Eight feet to be exact. "Oh! She is huge!", said Romen Da while bending down and praying towards the largest statue of Maa Durga in this whole wide world. After he was done praying, both his hands were fractured and his left foot had four fingers. All he could see was people; an unending number of devotees, some were crushing him and some lied in the dusts alongside his flaky old body. Maa had brought forth her wrath.

This time I have to go against you. It was you Kolkata! You! Your fault! You wanted her bigger! Of course your children would want to see her. Of course.

Shesh ta (The End)

Dear Calcutta,

You are indeed like an old car. I love you. I don't want to let you go. You are getting older and worn out. I should let you go. I really should.

But wait, one day, you may be old enough to shine again! You always manage to do so! You will do it again for me, won't you? Love.

-Indradip Sinha M.Sc. Agribusiness Economics (Part-II)

SINGARA CHENNAI

Nov 30th, 2015, the day began as usual. The city was calm, roads were busy, and people were waiting for the festive season to begin. Carnatic Music concerts being organized, Christmas trees and lights being sold and New Year parties being arranged, the city was all in readiness to celebrate. Slowly as the day passed, the clouds grew darker, lightning and thunder struck, the city went gloomy, the skies opened up and people rejoiced as drops of rain fell down from the sky. Little did they know that it was the beginning of a disaster.

Skies opened up like never before, and kept pouring for hours and hours together. The calm city was caught unaware. Roads started to fill up, people were stuck, trains stopped, and the rains never gave any respite.

The next day, the city was an island. 120 people had died. The Government ignored us. The media ignored us. The Whole of India ignored us.

When we had lost all hope, people started standing up for each other. People opened their homes and hearts for strangers to stay. Reel life heroes became Real life heroes. Youth of the city got down to business. And when more help was required, there came India's best. In any weather, anytime, anywhere, when you are in need, they arrive: The Indian Army.

Rescue operations continued in full swing, Rains gave respite. People worked harder, and the city slowly limped back to normalcy. Help started pouring in from all corners, the media, the government and the Rest of India followed.

But when help was really needed and when it mattered the most, only one thing brought us out: HUMANITY

In life whatever the question may be, Humanity is always the answer.

Prahaladh V Hariharan M.Sc Financial Economics (Part-I)



ECONOMIQUE: NICHOLAS KALDOR

Nicholas Kaldor was a Hungarian Economist who excelled in the field of Political Economics. A student, Assistant Professor and eventually a Professor at Cambridge, Kaldor is a prominent Post-Keynesian Economist who fully deserved a Nobel Prize but did not receive one. This predominantly sparked the argument that the Nobel Prize was awarded to free market advocating economists.

Kaldor's greatest contribution to Economics was the Business Cycle Model. He greatly developed on the Business Cycle Theory proposed by Keynes in the General Theory by using non-linear dynamics. It was the first time that someone had introduced capital stock as a significant determinant in the trade cycle. The non-linear dynamics backbone to his theory showed how non-linear IS functions have shifting equilibrium points, thus creating boom and bust phenomena. He also derived the cobweb model, where he explains why prices might be subject to periodical fluctuations in market demand and supply, thus making them cyclical, where the amount produced must be chosen before the prices are fixed.

Kaldor also stated the Kaldor's facts and the Kaldor's growth laws, stating summaries of his findings over National Income, Income, Investments and ICOR. This lead to coining of the term 'stylized facts.'

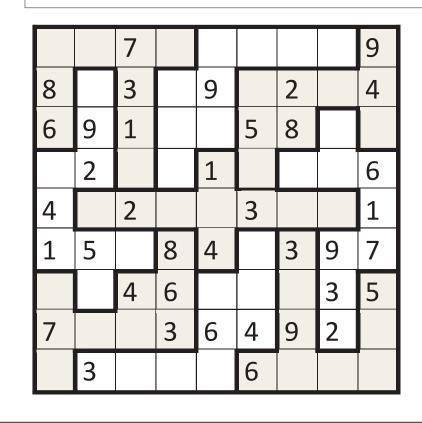
Kaldor was among the first critics of monetarism, stating that money supply is an endogenous variable, not an exogenous variable that can influence output. His voice against Monetarism can be found in his various papers, namely –Origins of the New Monetarism (1981), The Scourge of Monetarism (1982), The Economic Consequences of Mrs Thatcher (1983), and How Monetarism Failed (1985). Kaldor firmly believed against the idea of single market equilibrium, citing ceterus paribus and such other assumptions as unrealistic.

Kaldor was invited by Jawaharlal Nehru in 1950s to design an expenditure tax system for India. Kaldor at Cambridge has influenced Dr. Manmohan Singh, laying roots of his teachings in India. He also visited the Centre for Development Studies, to deliver the first Joan Robinson Memorial lecture, where his kin also donated 362 books from his personal collection to the CDS Library. -Harsh Doshi

M.Sc Economics (Part-I)

NONOMINO

Numbers 1 to 9 should appear only once in each column and row. Along with this, they should appear only once in each jigsaw piece.



NOT SO DISMAL!

Three econometricians went out hunting, and came across a large deer. The first econometrician fired, but missed, by a meter to the left. The second econometrician fired, but also missed, by a meter to the right. The third econometrician didn't fire, but shouted in triumph, "We got it! We got it!"

