

ECON AFTER HOURS

Fest Issue, January 2013



Editorial Somya Barpanda

Welcome back to college after a Christmassy vacation! This new year of 2013 is more special than any other because our planet earth has shown yet again that it is still to hit its 'capacity constraints' (albeit it may be inching closer to it). After Malthus', the human race has managed to pooh-pooh the Mayans' dismal prognosis about the end of its existence. What better way to celebrate the longevity of our lives here on this planet than by reveling in the campus-fest-season that is soon to kick off! And amidst this milieu of our College's multiple-fests, **ECOSOC** brings you **THE NATIONAL ECONOMICS FESTIVAL (2013)**. Keeping in mind the principle of diminishing marginal returns (which is as much applicable to 'goods' as to 'the action of attending fests'), we have scheduled the Eco Fest for you quite early on in this month: the 18<sup>th</sup> & the 19<sup>th</sup>. And as we know that for *Homo economicus*, the consumption bundle of (participation, Prize(s) won) is strictly preferred to (participation, no prize won), we assure you that the myriad of events & competitions in the Fest, with their prizes galore, will leave a good enough scope for every participant to compete and attain his/her satiation point. Like all past years, this time too, Eco Fest promises an environment of perfect competition for the efficient allocation of all prizes and positions by ensuring:

- Perfect information availability to everyone regarding all competitions via this fest edition of Econ After Hours and via our rigorous publicity-efforts.
- Heavy participation from colleges across the nation so that all competitors are 'rule-takers' and none has any unfair 'market influence'.

We welcome all students from all courses to be a part of this grand celebration of the wonderful subject of Economics; the opportunity costs of not doing so (in terms of foregoing pure participation-fun and also the heavy odds in favour of winning prizes etc) will be steep!

Now, a word on the write ups in this issue: The present Econ follows the 'Simple is Sweet' spirit. It mainly features articles that make for a light read, highlight the fun component inherent in Eco-concepts and at the same time, effectively reflect the omnipresence of economics in daily life. Do mail us your feedback, contributions and suggestions to towardsequilibrium@gmail.com.

# **Do People Play Nash Equilibria?**

#### Devika Handa (Economics – III<sup>rd</sup> Year)

The literature on game theory is in complete awe and adoration of the concept of Nash Equilibria. The literature is rife with examples of this solution concept. A Nash Equilibrium is justifiable on grounds of being a stable point, a position of rest. It is proposed that the Nash Equilibria concept is the most accepted because it involves ex-post satisfaction of all players involved, for, given what action every player chooses, there is no incentive for any player to deviate from the strategy chosen in the Nash profile. In this respect, Nash Equilibria are believed to arise as the outcome of games because they are "self-enforcing"; they do not leave any player dissatisfied and hence, appear as 'equilibria' for games.

Several game theorists have argued that the concept of Nash Equilibria may not provide a water tight argument on how we can arrive at them or about their likelihood, but the fact that any other action profile that is not Nash, certainly cannot be an equilibrium profile (as some player would have an incentive to deviate) makes Nash the "best" possible concept. As a result, despite all the fallouts it encompasses, Nash Equilibria concept has found wide range of acceptance, not by truly being the 'best', but perhaps, merely better than others; it just so happens that others are worse, by virtue of which it becomes the best possible concept known till date. However, are Nash Equilibria really 'self – enforcing'? That is, do they automatically occur as natural solutions because they don't leave any player dissatisfied?

While I was always sceptical about the occurrence of Nash Profiles in daily life, a very conspicuous and common example struck me-

Has it ever happened to you that you are trying to call a person and you find the number engaged because that person is also trying to call you?

Let's see what game theory has to offer to us to solve this problem-

We model the game as a 2 player game.

Each player has 2 actions: Call (C) or not Call (NC)

Both players prefer 'being able to speak' over 'not being able to speak'. We thus, assign numbers to represent the payoffs associated with different action profiles. The players get a payoff of 1 if they are able to speak, and 0 otherwise (Fortunately missed calls aren't charged for, are they? So, we don't need to bring negative payoffs.)

- If both players choose 'C', they find the phone engaged and aren't able to talk. Thus, a payoff of 0
- If both choose 'NC', they are unable to speak, and again end up with 0 payoff.
- If only one chooses 'C', they are able to communicate and each gets a payoff of 1

This is expressed as the strategic game shown below:

	Call (C)	Not Call (NC)	As is evident, two Nash Equilibria occur: (call, not call) and
Call (C)	0,0	1,1	(not call, call)
Net Cell (NC)	1 1	0.0	

Not Call (NC) | 1,1 | 0,0 | This is a very obvious result as the two people would be able to talk only if exactly one calls. Thus, a game proposing such a result brings no element of surprise.

But, does this really happen? The answer, quite knowingly, is NO!

So where are we going wrong in applying our Nash knowledge in real life?

What is really happening is that both players (the callers), realize the very first time that the other player is also trying to call. There are thus, two directions from here in which the argument proceeds:

One: Nash equilibrium concept would suggest that once we know the other player is trying to call us, we should give up and not call. This would eventually lead us to the Nash profile (NC, C).

However, what happens in reality while "playing" this game is that the other player also applies the same logic; he thinks that since we are calling, perhaps he should give up. The result is that both do not call. After waiting for some time and not receiving the call, they both feel that the other has probably given up and hence, we should try calling. This cycle goes on and we keep fluctuating between (call, call) and (not call, not call).

Two: Another way the same loop is established is when the cycle starts from (call, call) rather than (not call, not call) as in the previous case. This happens when we reason- "The first time, even the other player was calling, so finding my phone engaged, he must've backed off, so I should continue calling". By symmetry of the entire game, the other person also reasons on the same lines and we both keep calling. Then realizing the problem, both simultaneously back off and so on. The cycle continues....

So, the question comes back to haunt us: Where are we going wrong? Are we being "irrational" (Game theorists, when unable to find consistency between reality and models always adopt this ploy of calling people as 'irrational'!)? Or is the revered Nash concept failing somewhere?

It has to be the latter- we are basing our decisions on purely possible actions of the other player, so how can we be 'irrational'?

#### The Economics Society, St. Stephen's College

#### SO THEN, DO PEOPLE PLAY NASH??

Nash equilibrium is certainly not self- enforcing in any sense- I fail to understand the Game Theorist's obsession with the Nash concept for it being a "one-size-fits-all" solution concept; if nothing works, use Nash Equilibrium concept as every game would have one such equilibrium (if not in pure strategies, then in mixed strategies)... Everything then neatly falls in place, we have equilibrium and we are done!

#### **Economics Shrouding The Rath Yatra** - Anshuman Kamila (Economics – II<sup>nd</sup> Year)

- Ansnuman Kamila (Economics – 11) year)

Lakhs throng the sleepy-coastal town of Puri (Odisha), the world-famous abode of Lord Jagannath (literally the Lord of the Universe) and his siblings during the widely-acclaimed Car festival or the Rath Yatra of the presiding deities. As a freshman, I could not help but apply the economics hue to this socio-cultural and staunchly mythological event.

#### Nitty-gritty of the market for accommodation

Quite without a second thought, the primary requirement of all those devotees is decent accommodation. A number of government-run and privately-operated hotels and guest houses cater to this need. Now, one thing is to be kept in mind: such infrastructure is limited! Save for the scale and grandeur of the Rath Yatra, Puri is otherwise not a wholesome tourist destination. The principal attraction of this city is the four-century old temple of the aforementioned deities – the 'Shree Mandir'. This is out of bounds for all non Hindus. Second in order of tourist preference is the Puri beach (and its allied handicraft-handloom bazaar), which over time has fallen prey to the ever-burgeoning Bay of Bengal (Google 'Global Warming' for more on this!) and the nastiness of the tourists and locals alike – the miles-long beach is now strewn with garbage and refuse, including city sewage discharge all over. So, it is hard to convince non-Hindus to include this non-expandable city in their itinerary. And hence, not many new hotels other than those which have existed here traditionally offer hospitality. Rath Yatra may fall during the monsoons, but it certainly is Spring for hoteliers! Room rents sky-rocket within days. Entrepreneurs mulling shutting down their hotels suddenly see a surge in number of bookings. This can be simply put – as demand shoots up, supply remaining the same; the equilibrium price of accommodation escalates.



Dd-Ss treatment of hotel accomodation

While government-owned guest houses cannot vary price for 'auction' of accommodation facility, several other rationing alternatives are resorted to. Favoritism to kin of ministers and who's who in the power corridors reigns supreme as a timetested and effective method of rationing then.

#### Rationing of the Gods' glimpses

One interesting aspect of the Rath Yatra is, despite the fact that Lord Jagannath is the Master of the Universe; non-Hindus can never catch a glimpse of His idol except during the Rath Yatra. This means, the crowds that pour into Puri during this time of the year consist of not only Hindus who come here

to revel in the glory and grace of the Almighty, but also non-Hindus who come to seek the sight of His idol. Since a sight of the Lord atop His chariot is believed to absolve a devotee of all his sins, closer access to the idols is considered a greater privilege. And hence this 'access' becomes a 'good' which shall now be dealt with under the microscope of economics. Let us note that this 'good' is on the shelf for as long as the chariots are idle – that is before the ritual preceding the pulling of the chariots begins. Basically, there is a limited supply of this good. People who can 'sell' this 'good' to enthusiasts – I mean, the salesmen, in this framework – are security personnel or the servitors of the Lords. Market theorists will preach, affix a price tag to it! Fair enough – but who's to discriminate in such a sea of humanity. Thus, with the reluctance of market theorists and out-of-the-air entrepreneurs (the servitors!), this good is rationed. Here, rationing in a queue is adopted as the best form of rationing under the circumstances. There are no charges to be part of this queue. Queuing up is based on first come-first served basis, and jumping the queue could prove detrimental to one's health. Its efficacy

remains much lower than rationing by price, but it functions as a great leveler – between people with deep pockets and those with torn pyjamas!

#### Vending the telecast airtime-a case of derived demand

There's, however, one 'good' that goes under the auctioneer's hammer. This is: the airtime during the telecast of the Rath Yatra by regional news channels and the DD National channel. The annual Rath Yatra is a socioreligious occasion that is amply exploited by the commercial TV channels. The economics is pretty simple – it is a competitive market, each airing the same event. The equipment and arrangement for live-streaming of the widely-cherished event is cheap – just a few cameras here and there, and accompanying technical staff. The airtime, that is the commercial breaks that punctuate this broadcast, is a scarce resource that is highly valued. These channels jack up prices of the airtime to satiate the growing demand for airtime, in view of the finite supply of this resource. One thing is worth noticing here: the airtime is not entirely finite. This is because by starting to air the happenings much before something happens (The telecast begins much before the servitors start attending to their duties), the supply can be altered, and this would mean greater inflow of money for airtime leasing. We portray this as: supply being almost inelastic, and the demand being extremely high.

Price

Further, the premium at which this airtime is sold depends on the viewership of the channel in context. Assuming that technology employed by each channel is the same (and this is a reasonable assumption), how many viewers sit glued to this specific channel depends on the quality of commentary that runs in the backdrop of the telecast of the Rath Yatra. This commentary, chiefly religious in nature, is the monopoly of scholars of Sanskrit and Jagannath culture. Such narration can be extremely insightful, and becomes gripping and engrossing if the speaker knows his onions well. So, an



# A sip of the divine refreshment!

During the concluding days of the ten-day Car Festival, there are certain rituals when some special kinds of Prasad (food offered to the God) are offered to the deities. One such distinctive Prasad is the "Adharapana",



Inelastic supply

High demand

Hours

a whipped version of a mixture of milk cream, cheese, sugar, nutmeg, black pepper and a dozen other fruits. Since the scriptures stipulate that this is specifically meant for the Lords and other supernatural beings stationed invisibly in the chariots, and NOT to be consumed by devotees, this immediately becomes a 'commodity' on 'sale'. Despite the mythological restrictions, the servitors smuggle some quantities out and offer it for sale – the highest bidder gets to taste what the Lord sips! Now you realize why I termed servitors as out-of-the-air entrepreneurs?

#### Big time for small timers!

Also, Rath Yatra is a gala time for small time craftsmen, eking out a living through selling handicrafts on the sands of Puri beach or the tiny booths dotting the sides of the road running through Pipili (a small village known for its appliqué works). While it will be realistic to assume that the supply of these do not shoot up substantially around this time, the demand certainly rockets upwards! This again would mean greater profits for retailers and for fairness to their conscience, the craftsmen too.

The Economics Society, St. Stephen's College

(To avoid unwanted repetition I avoid putting up dd-ss diagrams – figure it out, keeping supply constant, or varying it slightly, the demand increasing would mean greater prices and quantity traded and therefore greater profits)

There's even more Economics in the run-up to the Rath Yatra, and in making the maximum hay out of this sunshine. Here's a quick run-down, which does not need much elaboration:

- Shops dotting the Bada Danda (the pathway connecting the two temples between which the chariots shuttle) sell accoutrements and accessories, delicacies specific to the land etc. How much of each category is to be stacked, and how much artificial inflation is to be followed, such that all benefit as a cartel, involves engrossing Economics and Statistical theory (predicting a turnout basing on past year trends)
- 2. The police have an arduous time controlling vehicular traffic. There's, without an instance of exception, huge car pile-up on the Bhubaneswar-Puri road ahead of the Rath Yatra. Restrictions on their movement are inevitable. The kind of restrictions, placing of road blocks, positioning of personnel hinge crucially on a near-accurate estimation of number of vehicles entering, and the time of their entry. This, (yeah you guessed it right!) certainly involves developing a theory built on previous experience and observation.

You'll pardon me for having dissected a carnival of religious and folk origin into modules of economic theory playing out in practical life; and shall assure me of not mentioning the above before religious fundamentalists, lest they'll accuse me of blasphemy! Probably, the last thing I would like to mention here is to invite each of my readers to the grand spectacle at Puri, so that they see the cogwheels of economic theory churning to put up the entire show. After all, even in Economics, 'seeing is believing'!

### A Book Review

Malini Bose (Economics – Batch of 2012)



Harriss-White, Barbara: "India Working: Essays on Society and Economy"; 2004, Cambridge University Press.

#### Introduction

You and your friend are standing on the road when a stranger walks up and gives you thousand rupees in the form of ten hundred-rupee notes. He tells you that you can keep part of it but must give the rest to your friend in any divisible proportion. If your friend accepts your offer, you both keep the money in the proportion you have selected. If your friend refuses, neither of you gets the money. What would you offer? This question is the average Joe of thought experiments and is often

asked to groups of people – psychology majors, MBA students, bureaucrats at seminars or lectures. A majority of the congregation usually says, "I'd keep five hundred and give my friend five hundred".

The economist would beg to differ. He would say, "I'd keep nine hundred and give my friend a hundred. My friend would accept this offer because it'd be better for her to have hundred than to have nothing at all." Alas, our friend, the economist, has made a crucial mistake. He has assumed that his friend is infallibly rational. He has not considered this: what if his friend would rather teach him an Aesopian lesson called "The Selfish Never Prosper" than keep a measly hundred?

The real truth is that the economist's friend and human beings in general are not completely rational.

Enter Barbara Harriss-White, Professor of Development Studies at the University of Oxford and her book, "India Working: Essays on Society and Economy". She writes, "...economic rationality is only one of several social rationalities at work in the economy." India Working rests on the almost axiomatic premise that India is not a case out of the policy section of a development economics textbook.

*India Working* is an analysis of "The India of the 88 per cent" – the economy and society of the villages and small towns where 88 per cent of the Indian population lives. Harriss White sets out to prove that the structures of accumulation here are as much a product of social structures such as gender, religion, caste and physical space as they are of labour and capital.

In this review, I will first summarize the book. I will then expound what I believe are its strengths – the happy marriage of economics and sociology, the book's unique place in contemporary research, its value to both economists and non-economists and its objectivity. This will be followed by my humble graduate-level economist's view on the book's shortcomings – its assumption of an extensive prior knowledge, its narrow focus in certain sections and the major gap in its scope.

#### **Strengths**

The seamless weaving of economics and sociology is the book's greatest achievement. For instance, it effectively explains how capitalist landowners set a *socially* determined wage after factoring in caste, gender, age and household size. In the economic theory of many undergraduate textbooks, subjects like corruption and fraud are often treated like third cousins thrice removed when discussing the State. But Harriss-White empirically shows how they lead to State failure and links this to a retardation of capital accumulation. In the middle section of the book, she proves how even today markets cannot be disassociated from considerations of gender, religion and caste.

Though Harriss-White originally thought that the book was for "students of economics", many of the examples would be accessible to others as well. In the context of labour politics for instance, the Shiv Sena's mobilization of low-class workers into a xenophobic mob and the BJP's alienation of poor and lower castes are common parlance. Of course, economists would find the book doubly interesting because of the sheer amount there is to learn from it. For example, readers can gain a thorough understanding of the Jha-Kalecki theory of the intermediate classes and its relevance to the process of accumulation. From an academic perspective, studying this theory is important because of India's ever-expanding middle-class. Again, States creating black markets is not wildly inconceivable, the converse case of informal markets creating States (as in Karachi) would be an eye-opener to most.

Harriss-White's book reminds one of economist Dani Rodrik's famous paper *Growth Strategies* in style and intent. Just like Rodrik used the ersatz example of China to systematically show that the Washington Consensus reforms was not a panacea for all developing nations, Harriss-White explains why the World Bank conception of the modern State does not fit India snugly. Like Rodrik, she never takes the moral high ground as many Orientalist social scientists are wont to do. Her dispassionate account of the implications of caste for the local economy is particularly welcoming – she lays out all the forces, positive and negative, that she feels are at work when caste associations dictate terms to the local economy. She analyzes the logic behind *Hindutva* objectively – the presence of the 'big religion' might counter the growth-inhibiting tendencies of the tessellated, sectarian economy; however, the oppression of minorities by the 'big religion' might lead to communal violence which in turn could retard trade, investment and production.

#### **Shortcomings**

To rookie social scientists (myself included), some of Harriss-White's arguments might seem a little hollow, perhaps because the implicit assumptions are not self-evident to the inadequately informed. When she proclaims deregulated industry "more rather than less unruly" than regulated markets, she does not substantiate with examples, making the proclamation a little hard to digest. Her argument that the persistence of subsidies is an indication of the Iron Hand of the intermediate classes implies without proof that these subsidies benefit the poor less than the social cost of it feeding state capitalism. Sometimes, her assertions are too bleak and under-qualified. That women have no role in public culture and collective life seems like an overstatement given the increasing involvement of women in self-help groups and civil society movements and her argument that patriarchal control over capital is allocatively inefficient is not given enough analytical backing. In the introduction, Harriss-White promises to address the question of 'liberalization' and the answer she provides by the end of the book – that liberalization is not unequivocally 'good' or 'bad' – *is* fairly intuitive. Yet, some of the links in these arguments are not easy to grasp. There is no wholesome explanation of, for example, why liberalization should intensify the class struggle.

A majority of Harriss-White's arguments are buttressed by case studies taken from her extensive fieldwork. The anecdotal nature of the case studies makes for an interesting read but the reader can only see the complete picture if these are supplemented with all-India data. Sometimes, by not casting her net wider than Arni (her region of focus for many case studies), she leaves too many questions unanswered. For instance, she has

mentioned that caste organization is not as structured in the north as it is in the south so a lingering question is – how different a role *does* caste play in capital accumulation in the north?

Harriss-White's reasons for choosing to work on "the India of the 88 per cent" are made clear enough, but the book would have been more complete had she explored its relationship with the corporate, metropolitan economy which comprises the remaining 12 per cent. This renders her attempt to interpret spatial structures of accumulation in industrial clusters without taking into account metropolitan cities a little remiss given the influence of metropolitan India on the local economy.

#### Conclusion

In the first chapter of *India Working: Essays on Society and Economy*, author Barbara Harriss-White sets down her aims – to examine the social and economic structures of the 'India of the 88 per cent' and to contribute to the study of contemporary Indian capitalism. In my view, she has succeeded on both fronts by providing detailed, well-structured and almost always substantiated analysis.

In her preface, Harriss-White mentions that a colleague "insisted that it (the book) was readable and accessible to a wider audience than I (she) had originally planned". I wholeheartedly agree with her colleague. Anyone would find the book compelling because of the force of its arguments, the breadth of its scope and the depth of its insights.

# Some Free Riding Fun

#### - Somya Barpanda (Economics – III<sup>rd</sup> Year)

'Free Riding' is perhaps one of the most amazing concepts of Economics in general and of Public Economics in particular. I find it fascinating that human nature can be modelled so elegantly using some simple game theory tools. There are endless examples of this ubiquitous phenomenon, the general one being of people trying to free ride on the public goods that they don't intend to pay for. Here's another one by Hal Varian- Roommates hope to free ride on the room-cleaning-up efforts of each other to effortlessly enjoy a neat and tidy abode (but as both anticipate doing the same, the mess keeps piling up!). As our textbooks teach us, the window to free ride opens up when a good or service is non-excludable in nature. A previously dirty room, once cleaned up, can't be out of bounds to the fellow-dweller who didn't put in the effort to do the mundane cleaning. In the quest of more unconventional and interesting free riding instances, I asked some of my classmates to think about them. Here's the conversation that unfolded:

(Scene: Public Economics Class in Room XC. Mr. A. Roy has conveyed that he's busy with something and will come 10 minutes post the scheduled time.)

**Ms. Politik**\*(*The politics buff that Politik is, she says vehemently*): "Stephanians free ride big time. We are never a part of the DUTA/DUSU protests against the University diktats. Yet when some of these agitations bear fruit, we benefit from them nonetheless."

**Pankhuri**: "Don't drag politics into this at least! There, that's our free rider (*she says, emphatically pointing to the dog -a regular visitor to our classes- snoozing at a 'safe' distance from us*). He barges into our air conditioned classrooms in summers much to my displeasure!"

(Well, the dog doesn't free ride in the pure Economics sense as he doesn't do it consciously. He is not expected to pay for his AC-uses. In fact, the cool AC air is 'non-rival' i.e. his presence doesn't reduce our own benefit from the AC. As the marginal cost of AC-use by the dog is zero-Pankhuri would disagree given her 'displeasure'- there's no efficiency loss in letting the dog have his way. Anyway, sorry for the interruption! Let's continue...)

**Juni** (*says ruefully*): "Spare the innocent dog Pankhuri... You need not go looking for free riders from the canineworld when they can be spotted closer home. I mean look at the back benchers in class room lectures; they free ride on 'the attention paid to the teacher' by front benchers like me!"

(She's right! All of us 'ought to' listen carefully in class and be ready to answer the occasional questions that the lecturer keeps throwing at the audience. But trouble is at bay till some studious class chums can tackle those and we can revel in our day dreams/discreet samosas/smart phone apps...)

**Sagar**: "There at least exists an open opportunity to free ride in lectures. But over time, I have realised that the same is not true for tutorials. We are expected to come read and prepared with our doubts but I am always tempted to skip this arduous task in the hope that others in my tutorial group will do their bit and thus my under preparedness will go unnoticed in the group getting me 'easy' attendance. But most of the times, all members of the group reason the same way and eventually none of us have doubts to earn the prized attendance from the miffed teacher."

For the last example, we make the reasonably realistic assumption that tut-attendance is group-centric (read 'non-excludable') i.e. if a few good questions are raised by some students, then the whole group gets marked 'present'. This situation is quite analogous to the classic case where the temptation to free ride never lets the public good (here 'attendance for the group') materialize thus eliminating the actual chance of free riding. Actually, our lessons in Public Economics tell us that in small groups (like the ones in tutorials) it is strategic for people not to free ride and engage in a bargaining arrangement i.e. the Voluntary Exchange Model. As per this, we can bargain with each other to determine our contributions (i.e. our share of individual-tutorial-efforts) and make the public good (the group-attendance) come up.

The problem of Free Riding, like that of Moral Hazard, stems from the human tendency to act 'rational' by responding to immediate incentives in a way that personal purposes are served in the best possible manner. But by choosing the personal best strategy, individuals lead to a collective outcome which is not in the best interest of the society as a whole. **V. Raghunathan** in his book 'Games Indians Play' aptly says that this kind of 'rationality' often makes all of us end up acting "privately smart" but "publicly foolish". Hence, he concludes that a dose of irrationality, which can make it possible to achieve the socially optimal outcome, will, to a great extent, aid in making this world a better place.

\*Name changed, on request, to protect the identity of the person.

# National Economics Festival

# 18-19 January

The **National Economics Festival** has always received zealous and avid participation from a large number of colleges from across the nation. This year, we bring to you an array of events ranging from the Paper Presentation, the Quiz and the all time favorite **Young Managers** to the more practical and complicated simulation games like **The Underground Economy** and **Utilite**. To broaden the understanding of the subject we bring in the **Mock National Development Council** and the **Guest Debate**. Games like the **Economist's trail** and **Helping Tito** are bound to challenge your eco-knowledge. Each event pushes your boundaries of thinking so that a refreshed mind emerges in the end- one that can see the economic aspects in an entirely different light.

#### 18th January

Inaugural Lecture Quiz Prelims Young Managers Prelims Economist's Trail Prelims Helping Tito Prelims Young Mangers Finals Quiz Finals Filler Events

#### 19<sup>th</sup> January

Follow us at -

Paper Presentation Underground Economy Utilite Mock NDC Helping Tito Finals Young Managers Finals Filler events Guest Debate



For further details contact Pranav (+91-8860003500) Atul (+91-9818082914)

http://www.facebook.com/events/551912364823030/?fref=ts