

Einsteinian economics



TICKER

MIHIR SHARMA

A recent statement by the Union minister for commerce (and railways) Piyush Goyal gave rise to a small storm of commentary — some gently amused, and some ill-natured. Goyal — after a meeting of the Board of Trade, and in the context of a target of \$1 trillion for Indian exports — suggested that we should not be interested in discussions about the composition of such targets, as seen in the media, which he paraphrased as follows: “If you’re looking at a five trillion dollar economy, the country will have to grow at 12%. Today it’s growing at 6%.” Doing these calculations was a waste of time, he said: “Don’t get into those maths. Those maths have never helped Einstein discover gravity... If you’d only gone by structured formulae and what was past knowledge, I don’t think there would have been any innovation in this world.”

Now, of course, it was Isaac Newton who “discovered” gravity. This sort of minor slip is exactly the kind of thing guaranteed to keep Twitter amused, and the names of both scientists shot to the top India’s trending topics. (Imagine how disappointing for some Indian physicist who happened to click on these trends, excited that we were finally developing a scientific temper, only to discover that we are actually sticking to what we know best, mocking politicians.)

This was a minor error, frankly, and it’s unfair to go after it. Maybe he meant to say Newton, maybe he meant to say relativity. The BJP might have transformed such minor errors from Rahul Gandhi in the past into an election-winning image of him as a buffoon, but such slips should be shrugged off by a mature polity.

The problem, however, doesn’t end there. Worryingly, Goyal issued two clarifications through the medium of the government-friendly agency ANI. They were increasingly combative, rather than dismissive, which was odd. Further, Goyal repeated the factual error in his clarifications: “While maths helped Einstein discover gravity, it’s because he had an open mind and the ability to think big that he could use maths to discover gravity.” Once is an error, twice is puzzling, three times is a problem. Because it means that either nobody told the minister he made a mistake; or that, knowing there was a factual error, he nevertheless persisted with it in order to emphasise his larger point. Neither reflects well on how communication is being managed in New Delhi these days. If you can’t accept even a minor factual error, how will you reverse or modify bigger errors?

But the real problem is the message Goyal was trying to send out. His purpose, he clarified, was to “make the people confident, give them a spirit of positivity”; “if we live in the past”, he added, linking “structured formulae” of growth economics to this past thinking, then we won’t achieve our targets.

If this is how the government is thinking, then we are in real trouble. For if this can be called thinking, then it is the magical kind. However much the government might wish us to close our eyes and just believe, the economy is not a fairy story. We can’t set aside the hard choices of economics — expressed in those “structural formulae” — and wish our way to success. For a Union minister to mock the basic maths behind criticism of the government’s targets is a bad signal indeed; disdain for expertise seems to now be the ruling ideology in New Delhi.

The government must realise what people mean when they discuss the “structural formulae” behind the slow-down in growth and the stagnation in exports. Those producers, exporters and economists are not “living in the past”; they are seeking to change our future. They are making the point that business as usual will prevent India from achieving the targets the government has set. They are advocating for the reforms or administrative changes that, according to these “structural formulae”, will in fact ensure India achieves these targets. In the case of exports, that means a massive reduction in red tape, an increase in trade facilitation, better linkages to ports, a reduction in tariffs, and so on. If the government’s only answer to these pleas is to demand that we suspend our disbelief and “go beyond the structured way of thinking”, then we are doomed. Not only will we not make these ambitious targets, but such anti-intellectualism at the highest level means that even regular growth might be difficult to achieve.

A final word on Einstein and mathematics: whatever Whatsapp University might tell the credulous, he was never poor at maths. Naturally he wasn’t. And when he worked on the general theory of relativity, he needed to draw on the most up-to-date developments in mathematics: non-Euclidean geometries in particular. He had a wide correspondence with mathematicians, and a crucial insight was provided by his friend Marcel Grossmann. Even Einstein needed to consult experts. Unless the current government is even smarter than Einstein, so do they.

Why we need a man like John Bercow

The British House of Commons Speaker has cut down to size a monarchical Prime Minister who makes a cult of flamboyant populism



WHERE MONEY TALKS

SUNANDA K DATTA-RAY

Indian democracy needs a man like John Bercow, the House of Commons Speaker who has announced he would stand down on October 31, or at the next general election, whichever comes first. Bercow has restored the centrality of Parliament to British public life. No less important — some would say even more important — he has cut down to size a monarchical Prime Minister who makes a cult of flamboyant populism. Above all, he has introduced future generations into the principles and practice of parliamentary politics.

No public figure is ever blameless. In his

10 years as Speaker, Bercow has been accused of bullying Westminster staff, refurbishing his grace and favour apartment with parliamentary funds, and misusing the Speaker’s office to canvass money for his re-election campaign. Nigel Farage, the egregious Brexit Party leader, calls him the “worst Speaker in memory”. Donald Trump probably mutters far worse imprecations. For Bercow told the Commons on February 6, 2017, that he was “strongly opposed” to Trump addressing Parliament during his planned state visit to Britain, adding that “opposition to racism and sexism” were “hugely important considerations”.

In the event, the state visit didn’t take place. When Trump did visit as Queen Elizabeth’s guest, Bercow, the taxi driver’s son whose ancestors were Jewish immigrants called Berkowitz, was conspicuous by his absence from the glittering Buckingham Palace banquet that meant so much to the American President and his First Lady. Bercow, who has modernised his job sartorially too, abandoning the Speaker’s full-bottomed wig, knee-length breeches and gaiters for a sober business suit and his own short-cropped but unruly white hair, would probably have felt out of place in that gorgeous assembly sparkling with diamonds.

Last Monday’s tumultuous scenes in the Commons were a fitting epitaph to the vigour and energy he has injected into parliamentary proceedings. The previous style was slack. Contemporary issues were often ignored and few backbenchers could put questions to the Prime Minister. Bercow changed all that. With his sardonic lopsided grin and a twinkle in his eye, he made sure the Prime Minister spent hours standing at the Despatch Box answering question after question from backbench MPs. Ministers were furious at this intrusion in their time in the limelight but it must be admitted Theresa May diligently did her duty. It’s only Boris Johnson who tried to bluff his way out of parliamentary debates with invective instead of argument and more style than substance until he silenced Parliament altogether. He must envy Narendra Modi who avoids facing the Lok Sabha and much prefers public gatherings of adoring crowds hanging on his every word.

Apart from livening up the Commons, Bercow is credited with dragging it into the 21st century. The Palace of Westminster is a World Heritage site and a major tourist attraction. Thanks to Bercow, it has also become the nursery of legislative politics. Come November and members of the Youth Parliament will sit in the House of Commons

for the 11th time. It began on October 30, 2009, when the Youth Parliament became the first and only group of non-MPs ever to debate in the chamber. Since then members aged between 11 and 18 have participated in an annual debate in the Commons, chaired by Bercow himself. Among the issues — chosen by a ballot of young people from across the UK and then voted on to decide which two issues should become the Youth Parliament’s priority campaigns for the year ahead — have been racism, Islamophobia, ending knife-crime, mental health, “equal pay, for equal work”, homelessness and “votes at 16”.

Not only are these young people drawn from all over the country, they also represent the changing face of modern Britain more accurately than the Commons. While only 29 per cent of MPs are women, the Youth Parliament boasts a 52 per cent female membership. Further, 32 per cent of Youth Parliament members are from black and minority ethnic backgrounds as against 7.9 per cent of the British population and 8 per cent of MPs. The group has included differently-abled young orators in wheel chairs. Adult listeners have also been known to single out teenage speakers as future prime ministers.

The Prime Minister must be furious he can’t have Bercow opposed at the hustings and defeated: the man has announced he won’t stand again. Reportedly, Johnson hopes to inflict some kind of punishment by denying him the peerage customarily bestowed on former Speakers when they resign. Bercow couldn’t care less. His service to posterity is preparing young Britons for a parliamentary future.

LUNCH WITH BS ▶ ADITYA GHOSH | CEO, SOUTH ASIA | OYO

Flying high, feet on the ground

Ghosh tells Arindam Majumder and Nivedita Mookerji how Oyo and IndiGo are similar in more ways than one and why calling him arrogant would be completely off the mark

Aditya Ghosh, known for IndiGo’s ‘on-time arrival’, reaches a few minutes late for the lunch at Comorin, which can be best described as a millennial restaurant serving fusion dishes. Ghosh makes up for the slightly delayed start and settles down for a multi-layered meal and long conversation, keeping his handset away to focus fully on the menu and on us. This Gurugram restaurant set up by Manish Mehrotra of Indian Accent fame at the Two Horizon Centre, which houses several multinational offices, was our guest’s choice. The reason, we assumed was that it’s a close drive from the Oyo office, his current workplace. But during the course of the afternoon, we realise Ghosh has tried almost every item, including the dessert and beverages (he tells us he does not consume alcohol) available here, and rates everything five on five.

That makes our task simpler, and we happily let the man, who had led IndiGo for a decade and is now scripting an ambitious expansion plan at Oyo along with founder Ritesh Agarwal, place the order. Ghosh enjoys the exercise — he not only orders with a fair degree of familiarity and knowledge, he also serves us and himself with an air of perfection. We shift from the loud part of the restaurant to a quieter corner to talk in peace over a mocktail of coconut water and white tea. Taking off from his latest Twitter message, we ask him about his trip to Kolkata during the weekend to meet Oyo’s hotel partners in the city. “I’m sleeping less but it’s exciting to be back to those days of 2004 when we were building IndiGo.”

As the starters arrive, the conversation moves to how IndiGo and Oyo are similar in more ways than one. Till two years ago, Ghosh led one of the largest low-cost airlines in the world and now he heads the fastest growing low-cost hotel chain in the world. Under Ghosh, IndiGo was adding one aircraft per week; now as CEO of Oyo, Ghosh presides over a hotel chain that is adding more than 20,000 rooms every month. “At a fundamental level both are trying to commoditise a product that was extremely highly priced for a consistent service or it was very fragmented. Both the companies are trying to make the service more affordable but convenient also,” Ghosh says.

There’s dahi batata puri with a dollop of curd

and wasabi that melts into the mouth, along with some well-made green chilli prawns and haleem. “I stay literally across the street which has made me a resident expert here,” Ghosh points out with a smile.

We get on to his shift from IndiGo to Oyo, a subject he hasn’t spoken about much. Why does Oyo need a new leader? More importantly, why would Ghosh get excited about Oyo? “During the break I took after IndiGo, I emptied out my mind. There were just two rules — I am not going back to an airline and I wanted to work for a company that has a big presence in India as I wanted to be close to the decision making.” It was around that time that Agarwal, who counts IndiGo promoter Rahul Bhatia as his mentor, got in touch with Ghosh.

It had been more than three months since he had stepped down from IndiGo. The two met at The Quorum, an upmarket members-only club in Gurugram. The first meeting started at seven in the evening and stretched beyond 1 am. Ghosh invited Agarwal to his home for the rest of the discussion which went on till 4 am. “We just discussed various ways of scaling up the business.” He’s clearly enjoying the dahi batata he’s having for the nth time here, while recalling his post-IndiGo days when he was able to tick some of the boxes on his bucket list — hiking alone, completing reading a book in a week and watching a movie on Monday morning.

Used to having older people report to him at IndiGo, tables have turned for Ghosh at 43. Agarwal, the boss at Oyo, is still in his 20s. A joke that Agarwal often cracks is that he himself was born middle-aged while Ghosh was born a millennial and remains one. On a more serious note, he says, “I don’t think of Ritesh as a 25-year-old and I hope he doesn’t think of me as a 43-year-old. There’s a comfort level with him.” Returning to the Oyo-IndiGo similarity, he says both are made-in-India international brands. But isn’t Oyo being driven by foreign investors such as SoftBank and is it any different from the days when he had a free hand at IndiGo? “The free hand concept is overstated. The secret lies in mutual respect for what a person brings to the table. Whether it is with Rahul (Bhatia) or Rakesh (Gangwal) or with Ritesh (Agarwal), I feel I have that.”

Does he miss IndiGo? “I miss the people at IndiGo, and I still get messages everyday from



ILLUSTRATION BY BINAY SINHA

people there.” In his communication with IndiGo employees, Ghosh made it a point to add a line, “You people make me look so good and successful.” At Oyo too, he’s equally accessible, Ghosh claims.

It was hard not to ask him how he viewed the ongoing promoters’ war at IndiGo from the outside. “I have to be dispassionate about it... Can’t talk about it, it won’t be appropriate,” he says, withdrawing from the topic on which he surely has enough to write a book on.

It’s time for the main course and Ghosh takes charge again. Almost apologetically he orders *dal tadka*. “Dal may sound ordinary but here it’s something worth trying out,” he says. He isn’t wrong. Chef Gaurav Yadav has expertly

created a range of fusion food by mixing casual food experience with the most authentic flavours of every dish. Besides *dal*, there’s Kashmiri *palak kofta* (they call it *rista* instead of *kofta*) with steamed rice and Champaran meat with *parantha*.

Back to Oyo, Ghosh claims he has stayed in those rooms (from Townhall to Collections), often across cities, exactly like he would fly IndiGo and still does. His favourite hotel remains The Oberoi for its eye for detail even as he maintains that the growth story of Oyo is unparalleled. While there are several brands under the Oyo umbrella — “one-brand-fit-all formula doesn’t work in hospitality” — Ghosh quips, “it’s still boringly consistent like IndiGo”. For both aviation and hotels, if the product can be made available at the right price, the possibility for that to sell grows exponentially, he tells us.

We talk a bit about his life. He’s into fiction quite a bit, but likes to read other genres too. He surprises us by saying that he prefers reading newspapers to consuming news online. Quite unlike a millennial that he’s equated with! Five hours of sleep is good enough for him, he says, adding that he’s not a late night person at all. “My friends joke ‘he’s slept in everyone’s bed’, as I can’t stay awake beyond midnight.” Waking up at 4.30 am every day to be able to drop his two kids — 11 and 12 years old — are his biggest constants and he seems to like that.

One of the traits that he has sometimes been criticised for during his IndiGo stint is arrogance. He denies he’s arrogant. “I’m a stickler for what I believe in, but I don’t think I’m arrogant. I will admit that I have found it difficult to cope with unreasonable demands or brandishing political influence...”

We have been into the lunch for 90 minutes, and we agree there’s no question of foregoing the dessert. For the first time during the lunch, Ghosh looks at his phone and says he would reschedule his meetings to spend some more time with us. From Alwar milk cake ice-cream to banoffee pie and *dodha* tart, we try out the popular desserts carefully chosen by Ghosh. With about 15 more minutes to go, we quiz him on some burning issues — like Air India divestment. Will it get bidders this time? “Everything will depend on the terms of the auction.”

As we experiment with the imaginative fusion mix of Indian sweets and western pies, we want to know whether it’s tougher to manoeuvre in the sky or on land. His reply is simple: “From the low-margin business that I have come from, I’m not scared of anything... All I know is there’s no such thing as a calm day.”

With that thought, we return to work and he to his rescheduled meetings.

The stories of ‘non’-citizens



PEOPLE LIKE THEM

GEETANJALI KRISHNA

Last week, I attended a two-day people’s tribunal on the issue of contested citizenship in Assam. Presentations by activists and lawyers on the issue of the National Register of Citizens (NRC) were heard by a jury of eminent judges and academics. But what grabbed my attention were the testimonies of people excluded from the NRC.

Initially, when Masuma Begum of Lakhimpur found her name missing from the register, she wasn’t worried. She reasoned her parents’ names were there and her family had lived in Assam for generations. The only issue was that she was working in Guwahati, 400 km from her village, and her father had to make

several trips to furnish her legacy documents, school certificates etc. When even the second list didn’t include her name, she became worried. “I wondered what I’d do if I were declared a foreigner in my own country,” she said. A post-graduate and B.Ed, she could find herself homeless, jobless and separated from her family. Worse, she could spend years to prove an identity she’d taken for granted. Finally, her name appeared on an amended list released this month, leaving her unsettled.

She’s comparatively better off than Shahjahan Ali Ahmed (35) from Baksa district in Assam, whose name hasn’t appeared even on the latest NRC list. “My brother’s and my name was on the first list, then were mysteriously removed from the second,” he told me. “This despite that we’d submitted a legacy document that proved that our grandfather’s name was on the National Register of Citizens, 1951.”

Today, only three out of his 33 family members’ names are on the list. Ahmed now has no option but to reapply for citizenship but has lost faith in a system that he believes is inefficient, overworked and worse. “I’m so angry at the system that has turned Indians into foreigners,” he said. “It’s as if the years of discrimination against Muslims in Assam has

now found a legal sanction.”

The notes of disaffection and disappointment in Ahmed’s voice were echoed in the voices of others at the tribunal. They worried me more than the arguments, which the activists and lawyers made to the jury. For the testimonies of Begum, Ahmed and others represent the grave human cost incurred when ill-conceived government policies are poorly implemented. “I’m well educated and was able to furnish all the necessary documents to get my name back on the NRC,” said Begum. “But what about others whose names have been excluded and who are illiterate or simply don’t have the paperwork,” she adds.

As the jury later emphasised, citizenship or the right to have rights, is one of the most basic human rights in modern societies. But the embittered lines on Ahmed’s face tell another story — citizenship and nationality are as much matters of politics as they are of the heart and the soul. It is likely that some of the 1.9 million odd people identified as ‘non’ citizens by the NRC, are actually illegal immigrants or displaced people. However, the flawed implementation of the NRC has ensured that those excluded from it might now question what it means to be Indian in their hearts. And that’s one place no law can reach.

Organic ‘stench’



PEOPLE LIKE US

KISHORE SINGH

My wife’s new heroes are the ladies of various kitchen garden associations who go around collecting wet garbage from disposal centres, defying the very logic for which they were created. Thursday morning, as I drove to the airport, an overpowering whiff of pineapples emanated from the car, forcing me to throw open the windows. The chauffeur explained that the offensive smell came from a carton of pineapple peels my wife had insisted a roadside vendor give her instead of throwing away, to be turned into compost. Left to rot overnight in the boot, it was merely an

example of our new normal and cost me a shampooing trip for the car to the service station.

According to the dictionary, compost is a verb and means “a mixture of dead plants, old food etc that is added to soil to help plants grow”. It consists of “decayed organic matter”, or “vegetable waste”, and is apparently rich in nutrients. What no one tells you is that it also has an odour ripe enough to make you throw up, looks exactly like it smells, and the task of composting isn’t for the faint of heart. My wife, luckily for her, has a stout heart and a stouter will. The rest of us aren’t as fortunate, which is why composting has become the new battleground at home.

A war of words erupts because vegetable peels and shavings are collected — gutted apple cores, seeds, peels and other waste — and stored in recyclable bags. The kitchen staff protest about the extra work; the cleaning lady won’t touch rotting waste; the *maali* refuses to cart sacks full of the stuff up and down the stairs; the neighbours won’t allow it to stand in front of the gate for even a moment. Collected at home, the intended destination for the refuse is the farm. My wife’s intention of ferrying it every other day sometimes stretches to a week, or longer, during which the

stench grows stronger, particularly when it rains and sack loads of waste have been left to rot on the roof in the downpour or under the sun.

The roof reeks, the area under the kitchen sink smells, there’s a pong in the car that causes the children to complain (I’m too well trained to raise any objections any more). “Shush,” their mother admonishes them, “I’ve cleaned your backsides when you were young.” “I cleaned their backsides too,” I can’t help butt in even though I know it’s the wrong thing to say. “You think I enjoy this?” my wife puts on her martyr’s mask. “I toil for all of you, I farm in the sun, I compost so you can eat organically grown vegetables...” “Yeah, well,” says my son, “you can simply buy organic fertiliser, mom.”

This is the sequence of events that unfolds thereafter: (a) my wife bursts into tears; (b) my son looks on hopelessly; (c) my wife tells the cook to throw out the wet garbage; (d) he refuses; (e) my daughter gives her brother a dirty look; (f) my daughter-in-law gives her husband a dirty look; (g) my son volunteers the use of his car for ferrying decaying, dead and other organic material from home to farm no matter the stink. For a while, there is peace at home.

The lady has a point

Nirmala Sitharaman may have become the butt of jokes, but she has a point about app-based taxi services affecting car demand. Ola and Uber are reported to handle 2 million rides a day across the country. That could translate into anywhere up to half a million people finding a way to get by without owning cars — cumulatively, not suddenly. Add the reality of expanding metro systems (Delhi's metro has 2.5 million riders daily), and people finally have real alternatives to car ownership. City bus systems (4 million riders in Delhi) were not an alternative, being often slow and usually sweaty.

Everyone can't afford to tap into an app and summon a taxi. Most commuters in India's cities are poor, and (Mumbai being the exception) walk to work, or get there on a bicycle. As you start up the income ladder, you get to afford a bus ticket. Metro rail and auto-rickshaws are meant strictly for the middle-class, as are motorbikes. Ola and Uber, though cheaper than tired yellow tops and "private" taxis, are still expensive. In other words, the users of app-based taxis would ordinarily be potential car buyers. But with the income and career uncertainties of the gig economy, many "millennials" prefer to avoid the financial commitment of car ownership. That is what the finance minister said.

It goes without saying that the slump in car demand is not just because of app-based taxis. Other factors are at work — the general economic slowdown, the financial sector's travails, which have affected car finance, the choice of many potential buyers to wait for cars compliant with stricter emission norms that kick in next April, and so on. The industry has added to its problems by pushing dealers to stock more and more vehicles. This clogged pipeline will have to be cleared before dealers can place fresh orders. In the interim, it exaggerates the drop in sales to dealers — which is what the industry reports. Some of these factors are specific to the sector and temporary, which is why no other product category has seen a comparable demand slump. It does not help that people also expect a cut in the tax on cars; why buy a car today if it might be cheaper next week?

App-based taxis come with their own issues. They don't mean less traffic, or less air pollution; if anything the opposite, because these cars are on the road all day. That would explain why cities in the west are thinking of capping the number of such taxis. On the other hand, think of Gurugram, which, like many smaller cities in India, has virtually no public transport other than one-and-a-half metro lines. App-based taxis save the day for large numbers of people who might otherwise have had to buy their own cars, including second cars in the family.

But the issue goes beyond taxis. For far too long India has celebrated its auto industry and car ownership while neglecting public transport, not to mention pavements for walkers and lanes for cyclists — all of which any civilised city should have. The country needs to democratise its road spaces, and invest in public buses that are cheaper than metros.

One sympathises with car manufacturers struggling in a difficult market, but it is also obvious that they are milking the situation to try and wrest tax concessions from a harried government that already faces a tax revenue shortfall. To see why this is a questionable exercise, look at Maruti Suzuki's finances. The company last year had a handsome pre-tax profit margin on sales of 12.6 per cent, with a mammoth ₹36,500 crore parked as investments. The dividend pay-out has more than doubled over two years. The profit margins elsewhere in the industry are in some cases (e.g. Bajaj Auto and Eicher Motors) even better than Maruti Suzuki's, while some like Mahindra & Mahindra and Ashok Leyland come in somewhat lower — but still better than the average for the manufacturing sector. If the industry's stalwarts think car costs are too high for customers, why don't they lower prices — which a good number of companies in the business can obviously afford to do?

ILLUSTRATION BY BINAY SINHA



Trump hits the panic button

Why is he calling for emergency monetary stimulus? Politics

Donald Trump marked the anniversary of 9/11 by repeating several lies about his own actions on that day. But that wasn't his only concern. He also spent part of the day writing a series of tweets excoriating Federal Reserve officials as "Boneheads" and demanding that they immediately put into effect emergency measures to stimulate the economy — emergency measures that are normally only implemented in the face of a severe crisis.

Trump's diatribe was revealing in two ways. First, it's now clear that he's in full-blown panic over the failure of his economic policies to deliver the promised results. Second, he's clueless about why his policies aren't working, or about anything else involving economic policy.

Before I get to the economics, let's talk about one indicator of Trump's cluelessness: his remarks about federal debt.

In addition to demanding that the Fed cut interest rates below zero, Trump declared that "we should then start to refinance our debt," because "the USA should always be paying the lowest rate." Observers were left scratching their heads, wondering what he was talking about.

Actually, however, it's fairly obvious. Trump thinks that federal debt is like a business loan, which you can pay down early to take advantage of lower interest rates. He's clearly unaware that federal debt actually consists of bonds, which can't be

prepaid (which is one reason interest rates on federal debt are always lower than, say, rates on home mortgages). That is, he imagines that the government's finances can be managed as if the US were a casino or a golf course, and it never occurred to him to ask anyone at Treasury whether that's how it works.

But back to the economy. Why is Trump panicking?

After all, while the economy is slowing, we're not in a recession, and it's by no means clear that a recession is even on the horizon. There's nothing in the data that would justify radical monetary stimulus — stimulus, by the way, that Republicans, including Trump, denounced during the Obama years, when the economy really needed it.

Furthermore, despite Trump's claims that the Fed has somehow done something crazy, monetary policy has actually been looser than Trump's own economic team expected when making their rosy forecasts.

In the summer of 2018 the White House's economic projections envisioned that this year three-month interest rates would average 2.7 per cent, while 10-year rates would be 3.2 per cent. The actual rates as I write this are 1.9 and 1.7 per cent, respectively.

But while there's no economic emergency, Trump apparently feels that he's facing a political emergency. He expected a booming economy to be



PAUL KRUGMAN

The world of permanent interests



VIEWPOINT

DEVANGSHU DATTA

back on the board and used by the player who has captured it. This indicates the pragmatism that lay at the foundations of the highfalutin Japanese philosophy of *bushido* — the way of the Samurai.

In the realpolitik of medieval Japan, people changed sides all the time, often in the battlefield. This was, of course, also true for most other mediaeval cultures. It is hard for instance, for historians to keep track of the bewildering complexity of Rajput factions.

At any given instant over a period of centuries, several Rajput kingdoms would be at war with each other. The alliances between them kept shifting. Those Rajput clans also intermarried on a regular basis. Similar things happened in Europe where the royals married each other, even as they sent their armies off to kill each other.

This phenomenon of shifting allegiances is common even in the 21st century. Indeed, the axiom that nations have no permanent allies, only permanent interests, underlines the realism

of *shogi*. Brexit is an interesting example of ideological, and literal, floor-crossing.

We've seen British MPs switch sides so many times that it is now nearly impossible to understand (A) Who wants Brexit, or wishes to "Remain" in the European Union (B) On what terms the "leavers" want Brexit and (C) How ideologically committed any UK politician actually is, to the concept of either leaving the EU, or remaining in it.

The lack of ideological consistency, or the willingness to abandon consistency, when it impacts self-interest, seems to be hard-wired into human DNA. It's visible at many socio-political levels and at multiple scales.

Think of a tree. It has branches. The branches themselves have sub-systems of smaller branches. This is an example of

a fractal — an object, which remains complex, even when the scale of observation changes.

The human propensity to change sides is similarly fractal. Children in the same family, or in the kindergarten classroom, form shifting cliques. Large nations sign treaties and tie up alliances. Those childish cliques change. Those national alliances break up. Similar events also play out in boardrooms and political parties.

It happens so often, and at so many levels, that one must assume that this trait confers some sort of evolutionary advantage. Most people seek to find rationalisations for switching sides, rather than simply saying that they have active self-interest.

Politicians are especially hypocritical about this. Winston Churchill, the arch-conservative

British bulldog, switched political parties and abandoned his monarch (Edward, Duke of Windsor) when it suited him.

In another less famous instance I recall, a prominent politician from Bengal gave a rousing speech where he claimed the sun would rise in the West, before he switched political parties. A week later, he was on the other side of the fence and claiming with equal fervour that he would never switch again! Of course, he did. If rumour is to be believed, he was paid a large "signing fee" on each occasion.

We often see variations on this theme. It is not a phenomenon restricted to India. Italy and Israel, for example, have more complicated versions of the same floor-crossing games. Of course, the trait is not universal. Some people remain consistent to their principles and rarely switch. But they are outliers.

The entire concept of democracy is based on an understanding that large number of people do change their views and hence, vote-share shifts. Which brings us back to *shogi*. How do you capture the hearts and minds of voters? It's considerably more complicated than capturing tiles in *shogi*.

He was succeeded by Viral Acharya. His specialisation was, in my view, more suited to the Securities and Exchange Board of India.

Now the RBI has to recruit his successor and I would suggest it look inwards into its own research department, just the way it used to until S S Tarapore's retirement in 1996.

What's to be done?

I think the government should set up a cadre, which is a fast-tracked one, to which economists in the age group 40-50 are recruited. Economists from the Indian Economic Service should also be eligible to apply, as should the ones from the RBI. No one else should be eligible, least of all from the IAS, IFS, etc.

Once this cadre has been set up, the CEA and the deputy governor should be selected from it and nowhere else because if you don't know whom you are working for — the sovereign, not yourself — you are bound to be, as one former CEA recently said, of little use other than as editor of the Economic Survey.

And even that requires different skills.

Errors in medical diagnosis

EYE CULTURE

ATANU BISWAS

There was shocking news from Himachal Pradesh in late August. A woman died because of severe mental distress after a private clinic "wrongly" diagnosed her as HIV positive. However, such a wrong diagnosis is not uncommon and we know this from our personal and social experiences. In fact, in today's world, the overuse of diagnostic testing has been partially attributed to the fear of missing something important and intolerance of diagnostic uncertainty.

In his 1989 article in *New England Journal of Medicine*, J P Kassirer wrote: "Absolute certainty in diagnosis is unattainable, no matter how much information we gather, how many observations we make, or how many tests we perform." The present discussion is towards understanding the nature and quantum of clinical diagnostic errors.

Let's first examine the severity of the situation. A British National Health System survey in 2009 reported that 15 per cent of its patients were misdiagnosed. According to a study published in the journal *BMJ Quality & Safety* in 2014, each year in the US, approximately 12 million adults who went for outpatient medical care were misdiagnosed in hospital settings. This figure amounts to 5 per cent of the total adult patients and, according to researchers, misdiagnosis has the potential to result in severe harm in about half of those cases.

A diagnostic error may be defined as "any mistake or failure in the diagnostic process leading to a misdiagnosis, a missed diagnosis, or a delayed diagnosis." While delayed diagnosis is certainly an important concern, 'misdiagnosis' and 'missed diagnosis' (which is simply missing the presence of a disease) is also worrying. And it is apparent from numerous articles in different medical journals that both of these errors are prevalent. In fact, medicine in practice today is mostly statistical. In statistical language, these two types of errors are called "type I error" and "type II error". The complement (i.e. one minus the error rate) is important in medical statistics. The likelihood of a positive finding when the disease is present is referred to as "sensitivity". On the other hand, the likelihood of a negative finding when a disease is absent is referred to as "specificity". It is well-known that, nearly all signs, symptoms, or test results are neither 100 per cent sensitive or specific.

In fact, the two types of errors are

natural in any statistical testing procedure. In any testing procedure, the validity/correctness of some hypothesis of prior belief is to be judged on the basis of data. This prior belief is called the "null hypothesis", and is considered to be true unless and until there is strong data-based reason to think otherwise. A "type I error" is rejecting the null hypothesis incorrectly, and a "type II error" is failing to reject a null hypothesis. One is seeing an effect when there isn't one (e.g., diagnosis of a serious disease when it is not there), and the other is missing an effect (e.g., missing to diagnosing a disease when it is present). Both are serious. However, it is delicate to decide which one is more serious. In many cases, type II errors are considered to be more serious than type I errors. The objective of a clinical experiment, or any statistical testing in general, is to minimise these errors. However, unfortunately, it is impossible to minimise both the errors simultaneously. For example, if one intends to reduce type II error, the testing procedure should be made sensitive to tiny indicators of the onset of disease. And that, in effect, would invariably enhance the type I error. On the other hand, in order to reduce the type I error, one needs to ignore minor indications of the onset of disease — only strong indication of disease would be considered, and that will automatically lead to missing some genuine cases of disease onset, resulting in the increase of type II error. Usually, most of the testing procedures are such that there are some pre-assigned type I error rate (say 5 per cent), and also some prefixed type II error rate (say 5 per cent, or 10 per cent, or 20 per cent), depending on the situation. But, remember that a 5 per cent type I error implies that 1 in 20 individuals without a disease would be diagnosed to be having a disease, and a 10 per cent type II error indicates that the procedure would miss finding the disease of 1 in 10 patients having the disease. That's a huge margin.

What is the takeaway then? Will such errors in medical diagnosis continue? Certainly, both type I and type II errors can be minimised to some extent with the uses of high-quality equipment and chemicals associated with the diagnosis. Also, the art of medicine needs refinement. And, we might see further improvements in terms of reducing both types of errors with the advancement of medical and technological research. At least, the quest of science is in this direction.

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Horses for courses



LINE AND LENGTH

T C A SRINIVASA RAGHAVAN

at the RBI.

These guys are paid to worry about certain things. But what if they worry about the wrong things?

In newspapers, for example, we don't let the editing staff worry about news and the news gatherers worry about editing. Any member of the editing staff who questions the news gathering staff will soon be told off. And vice versa.

In the advisory positions in government, however, this basic rule doesn't apply. It's almost as if the IAS — it's a bird, it's a plane, no it's the IAS! — has taken over. Specialisation doesn't seem to matter as long as the CV is a mile long.

I have no idea what Arvind Virmani's specialisation — Harvard PhD notwithstanding — was but he had at least worked in government for a very long time. His predecessor, Ashok Lahiri, was an econometrician by training.

The Economists

Kaushik Basu was basically a the-

orist. Moreover, he had been living abroad since 1993. Nor had he ever worked in government. He thus suffered from two handicaps.

Raghuram Rajan was an engineer who wandered into economics. His specialisation was finance.

Arvind Subramanian was a trade economist. His approach to the government and India's economic problems were also rather unsuited to the job.

After nearly a decade of these guys, especially the last three, we are entitled to ask: What did they contribute? Their CVs gained but what did the government get in return?

Indeed, how could they contribute anything useful when they were ships that pass through the ocean that is government policy? All three now have gone back to the US to their jobs in various universities and the latest fashions in academic economics.

Even if we grant them their intellects, is it any wonder that the IAS guys didn't take them seriously and even, on occasion, treated them as a nuisance?

Even the current CEA is a finance man. Eventually he too

will return to academia, with a nice add-on to his CV.

I have a suggestion to make therefore: In order to qualify to even apply for the job of CEA, the applicant should have worked for at least 10 years in government. That's more or less how it used to be till about 2004.

Even if it's not 10 years it should be some meaningful minimum. In any event, this parachuting must stop. The current system is a total waste of taxpayers' money.

The RBI, like the government, also employs a lot of economists. In government, the CEA is their head. In the RBI it's economist deputy governor who heads the economists.

Since 2009, only the late Subir Gokarn had proper Indian experience. But he, too, was not a money or finance man, which is what the job requires. He would have been more suited as CEA.

After him came Urjit Patel, whose specialisation was not quite monetary economics. He had worked at the RBI as a consultant, though, in the 1990s. Nor, despite his intellect, was he cut out to head the research department of the RBI.