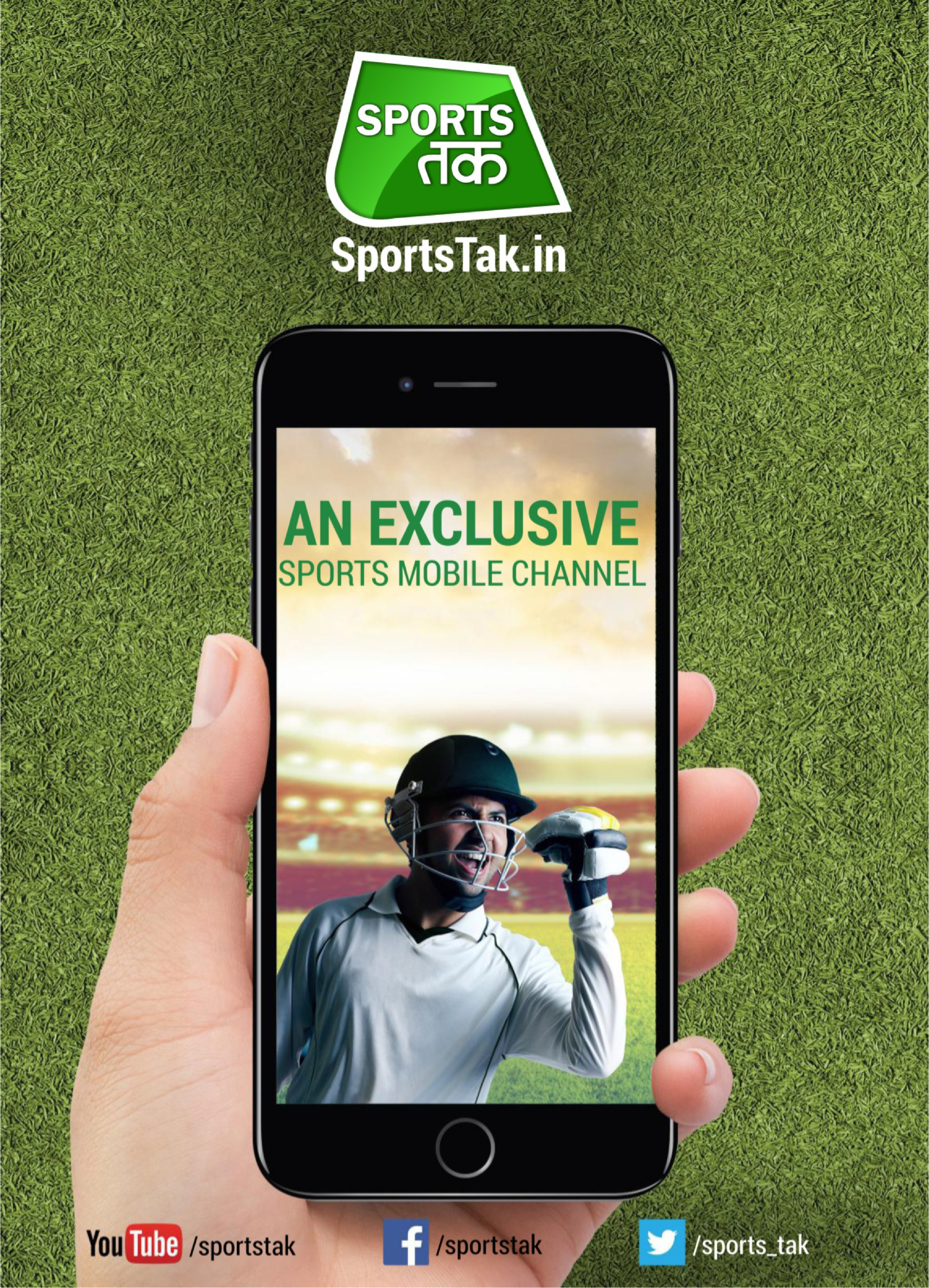
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Business Today

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Sector Report
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INDIA TODAY GROUP

JET AIRWAYS
THAT SINKING FEELING
CAN INDIA'S PREMIER AIRLINE BE RESCUED?

The Jet Imbroglio

The banks have been spared the blushes, at least temporarily, in the case of Jet Airways. After extending the deadline for submission of Expression of Interest (EoI), they have managed to attract several potential suitors. This reportedly includes several private equity firms as well as Abu Dhabi-based Etihad Airways, which had 24 per cent stake but refused overtures from banks earlier to put in additional money. Naresh Goyal, the founder of the airline, who had been ejected last week by the lenders as a condition for lending emergency funds to the airline, submitted his last minute EoI for the stake on sale. Whether it is with a partner or on his own is not clear.

The government, too, must be heaving a big sigh of relief. It did not want one of India's most prominent airlines to go bankrupt under its watch, especially after it had made so much political capital over the banks' mishandling of Kingfisher Airlines loans during the UPA era.

Of course, EoIs do not mean anything much – and whether Jet will finally find a buyer is an open question. Now the interested parties will do due diligence, negotiate with banks to see if the lenders are willing to take a haircut, and make an offer that makes sense. The banks cannot hope to attract a buyer unless they are willing to make concessions. And even then, potential buyers will have to weigh what they are actually getting and what they will have to put in to make Jet fly again properly.

Jet has some attractive assets – these are its slots in Mumbai, Delhi and other Indian airports as well as its bilateral rights in international airports. All those are things that many airlines will find appealing. Against that, though, the potential buyer will also have to take into account the troubles it is taking on. Most of Jet's planes have been taken away by lessors and it has just over a dozen planes left. Lenders who gave money to buy those planes are threatening to take even those away. It has a high fixed cost structure compared to other airlines in India. (Possibly, only Air India has a worse cost structure.) It has disgruntled employees who are owed dues. And it has operational creditors who have threatened to cut off supplies and other services if they are not paid for past bills.

Apart from that, it has a debt of over ₹8,500 crore plus. And it has a founder who is fuming and still trying to gain control of the airline. So, expect multiple legal challenges.

There is no easy solution. And I don't expect this story to end well for most stakeholders.

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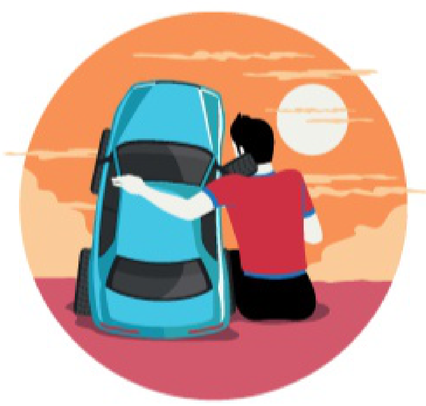

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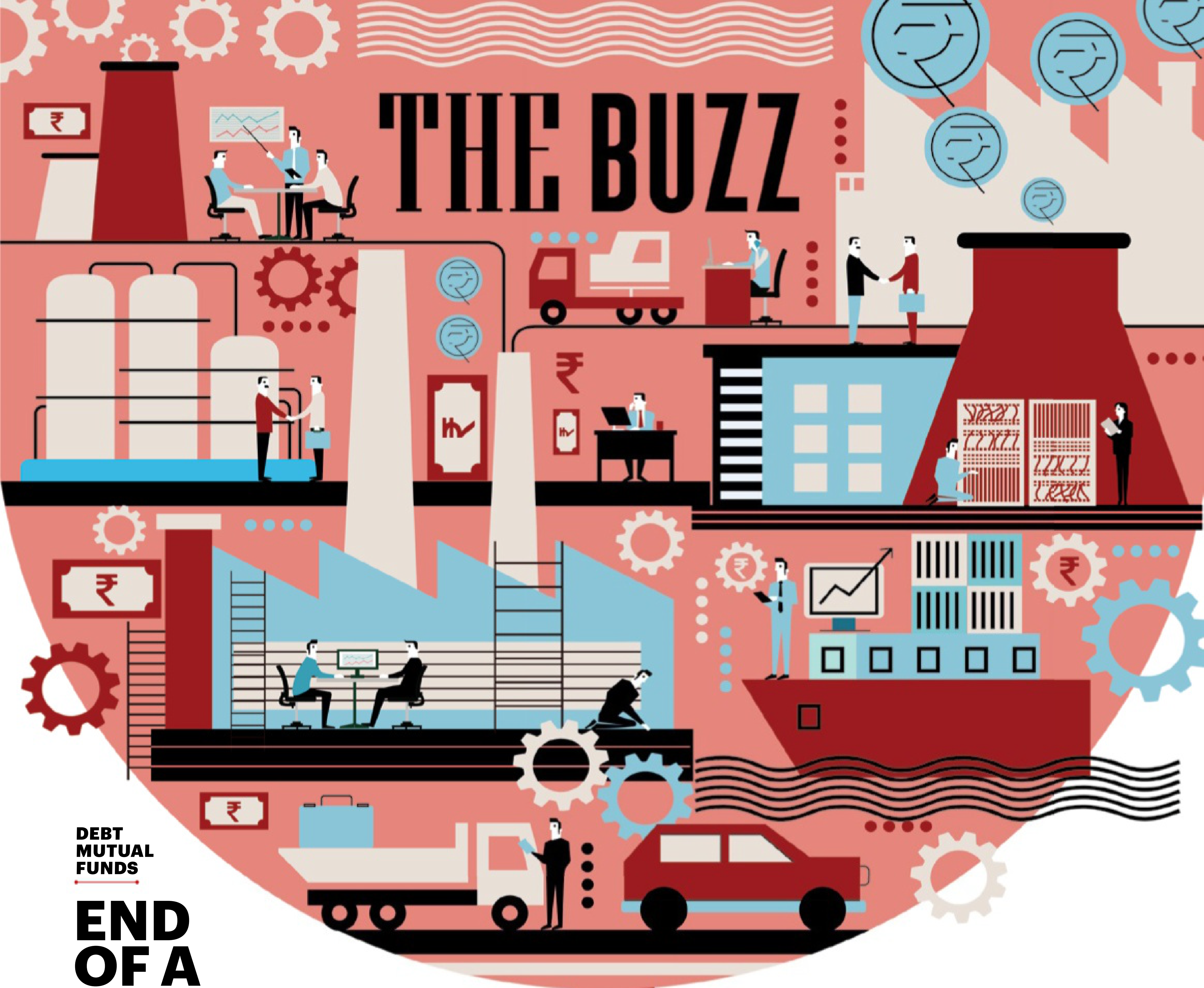

DEBT MUTUAL FUNDS

END OF A SAFE HAVEN

STRESS IN INDEBTED COMPANIES IS SPILLING TO DEBT MUTUAL FUNDS

By RASHMI PRATAP
ILLUSTRATION by RAJ VERMA

DEBT MUTUAL FUNDS have traditionally been a safe haven for risk-averse investors, but that seems to be changing now. In April, Kotak Mahindra Asset Management delayed the redemption of six of its fixed maturity plans (FMPs) while HDFC Mutual Fund also announced rolling over one of its FMPs because of exposure to the highly leveraged Essel group. With this, the financial stress in debt-laden companies seems to be spilling over to debt mutual funds. Just like Essel, which owns Zee, there could be other instances brewing as many promoters, starved of bank credit, have pledged their shareholding with mutual funds to raise money.

With corporate profits contracting at an annualised rate of 1.8 per cent between FY14 and FY18, the leverage levels in companies have gone up. In case of default, lenders sell pledged shares and the scrip value nosedives. For Zee, promoter Subhash Chandra has given a personal guarantee to repay debt by September 2019. As a result, fund managers have postponed redemption as well. While investors will get back money with interest at a later date, the case has more than dented investor confidence in debt funds. It's time investors took a closer look at specific funds to decide the ones that balance their risk appetite with returns, or consider equity investments, which are riskier but also more rewarding. BT

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ILLUSTRAION BY RAJ VERMA

STRESSED ASSETS

RBI Power Stays

THE SUPREME Court has given relief to stressed companies, including those in power and infrastructure, by blocking the Reserve Bank of India's (RBI's) controversial circular of February 12 last year. The circular, issued under Section 35AA, had asked banks to follow a six-month deadline to resolve a stressed company where there has been even a single day default. But the RBI's power under the said Section stays in respect of specific defaults by specific debtors. The earlier circular was a blanket rule for all companies with over ₹2,000 crore exposure. The RBI will now likely issue a new circular or direction that can be used to restructure a loan. Banks need to be careful and act on time in case they see stress in a company.

So, what happens to cases that were being taken up under the RBI's circular? Bankers say defaulters have little choice but to fall in line. They have enough powers to take the cases to logical conclusion. Jet Airways is a classic case moving forward despite the February circular becoming irrelevant. The bankruptcy code also offers lenders enough power to restructure a stressed company or take it to liquidation.

-Anand Adhikari

HIKING TARIFFS

Time to Rethink US Trade

ON MARCH 29, the government postponed, for the third time, implementation of higher tariffs on goods like automobiles and some agriculture products imported from the United States to May 2. The tariff hike was proposed as a retaliatory measure against the US after it announced protectionist measures to discourage steel and aluminum exports to the US. India's hesitation to act may be a conciliatory attempt to improve trade relations with the US by negotiating a trade package. However, there is no evidence to suggest that the plan is working, as the US is withdrawing trade concessions granted to India under the Generalised System of Preferences. The just released 2019 National Trade Estimate Report on foreign trade barriers of the US Trade Representative has a long list of demands, making such concessions from the Indian side too costly. It's time to be more decisive.

Joe C. Mathew

ELECTION ADVERTISING

GOING OVERBOARD

A BIOPIC ON Prime Minister Narendra Modi, a digital series on him on Eros Now to characters of leading television shows talking about the various initiatives taken by the current government, the BJP has used all means to promote their leader. The Election Commission did stop the release of the biopic till the end of the elections. But, is this blatant publicity in accordance with the Election Commission's moral code of conduct? The BJP would have surely found a grey area. But the bigger question is whether it will help the current government come back to power. One reason why the Vajpayee government's India Shinning campaign failed was because it was overdone. TV, print and radio platforms were blasted with 52 different ads boasting about the then PM Atal Bihari Vajpayee's achievenents. At the end of it, the campaign succumbed to fatigue. This time the party has found subtler ways of connecting with voters but too much of messaging could prove to be counter-productive.

Ajita Shashidhar

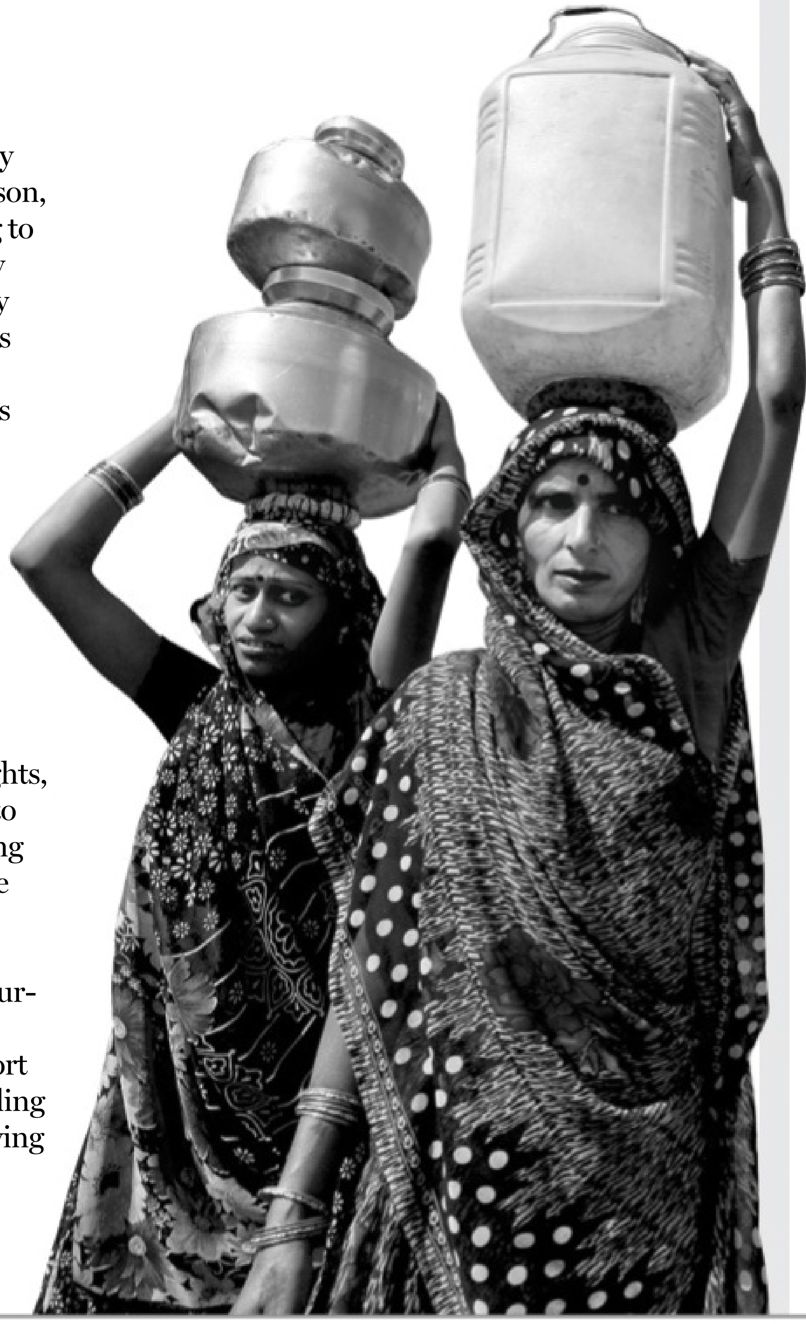
Water Crisis

NOT A DROP TO DRINK

WITH ANNUAL water availability below 1,700 cubic metres per person, India is water-stressed, according to the UN, and by 2050, the country could well reach the water scarcity level of 1,000 cubic metres. This is due to over-exploitation of rivers and ground water sources, besides lack of rain water harvesting and other conservation efforts.

According to the Niti Aayog, 600 million people face high-to-extreme water stress in the country, while 75 per cent households do not have access to drinking water on premises. With rising temperatures and frequent droughts, it will be difficult for the country to ensure sufficient water for drinking and irrigation. Water being a state subject, governments must focus on right pricing of urban water to encourage efficient use, while ensuring equity through consumption slabs. Alongside, they must support entrepreneurs in piloting and scaling up newer technologies for improving water quality in rural India.

-Rashmi Pratap



PHOTOGRAPH BY SHEKHAR GHOSH

Monsoon

TIME TO RELOOK AT SPENDING ON PMKSY

SEVERAL PARTS of India are facing a drought-like situation. Private weather forecaster Skymet says the country is likely to witness a below normal monsoon this year. With over 50 per cent of India's sown area almost completely dependent on rains for irrigation, any variation in rainfall – timing, quantum, spread – can severely impact the rural economy.. The Modi government recognised the importance of micro-irrigation when it pledged to increase allocation for the Pradhan Mantri Krishi Sinchai Yojana (PMKSY) but actual expenditure on irrigation has been lower than budgetary projections. In 2017/18, the Centre budgeted ₹3,400 crore for the PMKSY, revised it to ₹3,000 crore the next year, while actually spending ₹2,819 crore. The main reason for squeeze in public investment in agriculture is huge increase in input subsidies, including recent direct income support. It is time to have a re-look at this policy.

Joe C. Mathew

Electric Vehicles

Another Layer of Confusion

STRINGENT STIPULATIONS such as minimum top speed and range, acceleration, energy consumption and localisation in the delayed but ambitious subsidy scheme for electric vehicles in India has put the domestic industry in a bind. In its second stint, the outlay for the Faster Adoption and Manufacturing of Electric and Hybrid Vehicles (FAME II) Scheme has been increased over 10 fold to ₹10,000 crore till fiscal 2022 but strict conditions to qualify for the benefits exclude almost 95 per cent existing electric scooters in the country. Caught unawares, the industry now says it will need time to adjust, which will result in a 50 per cent decline in volumes in the short term and a ₹10,000-20,000 increase in the cost of vehicles. FAME II has simply added another layer of confusion to the electric vehicle story in India.

Sumant Banerji

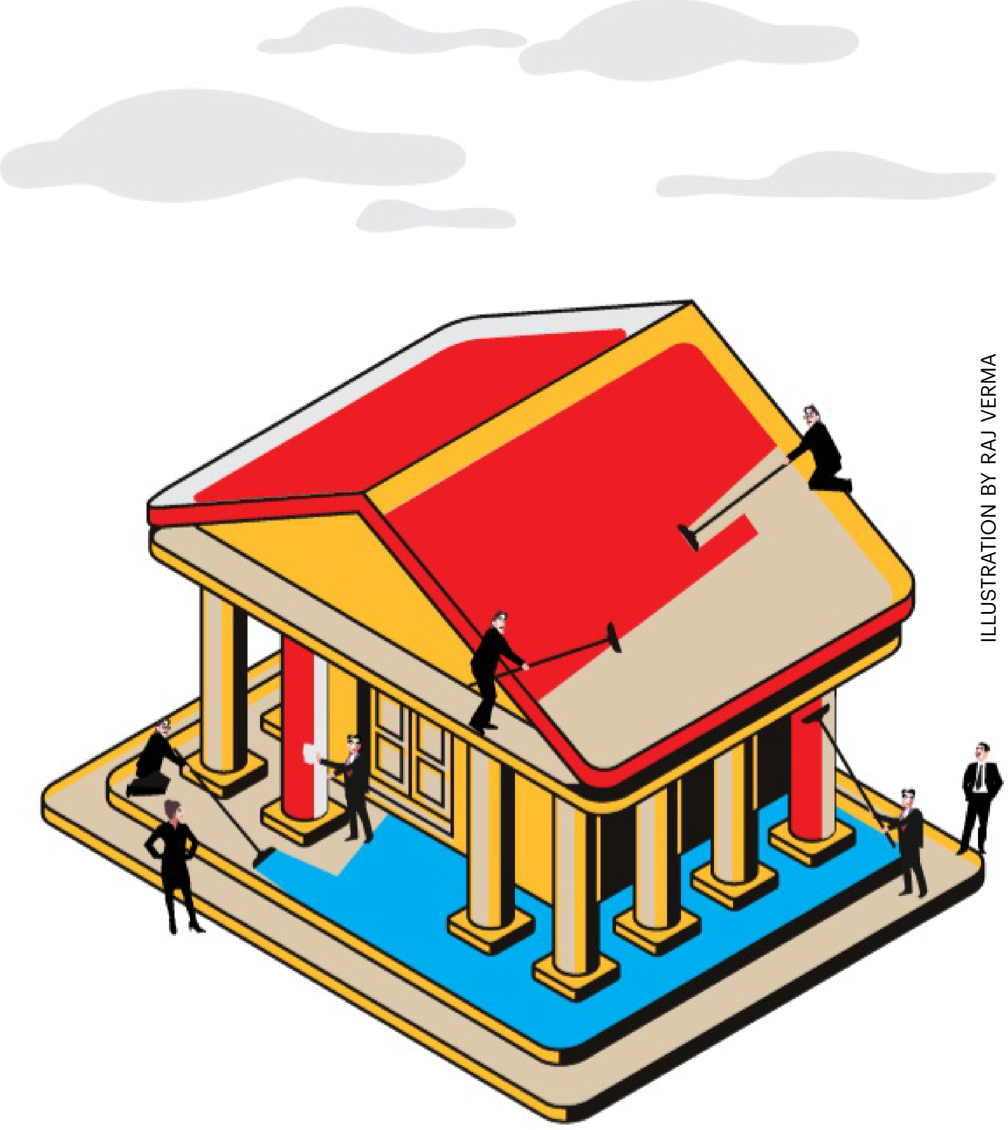


ILLUSTRATION BY RAJ VERMA

Finance

OLD PRIVATE BANKS GET A MAKEOVER

A DECADE AGO, Dhanlaxmi Bank was probably the first old private sector bank to see the entry of an outside professional to manage it. But results were not encouraging. Around the same time, RBL Bank (earlier Ratnakar Bank), which had undergone a big turnaround in operations, saw the entry of a professional from Bank of America. More recently, Catholic Syrian Bank saw global investor Prem Watsa making an entry with a war chest of funds. The latest to get hitched is Laxmi Vilas Bank, and housing finance company India Bulls. The merger was announced last week. While the merger has to get RBI's nod, the message is clear – merge or professionalise management to stay afloat.

The entry of a dozen small finance banks is changing the lending landscape with technology and innovative products. As digital banking expands, big banks are also expanding deeper into geographies. So, we may see more mergers going forward.

-Anand Adhikari

RIL

ON AN ACQUISITION SPREE

MUKESH AMBANI, who has traditionally been keen on building greenfield assets, is on a takeover spree. He has acquired stakes in about 20 start-ups and half-a-dozen small firms over the past 24 months. According to company insiders, the acquisitions have become a necessity, especially after Reliance Jio was launched. Ambani targets to create a bouquet of digital products of global standard which can counter the likes of Google, Amazon, Netflix and Microsoft. At a time when the digital world is going through disruption, buying assets and technologies to stay ahead of the curve is considered positive. But can Reliance keep alive the urge to innovate in these start-ups? These entities need to be nurtured for sometime before they are pushed for profitability.-Nevin John

Stock Market

Value Hunt

RIGHTS ISSUES have once again become the flavour of the stockmarket to raise additional funds. Vodafone Idea's ₹25,000 crore issue that closes on April 24 is among the five rights issues that have hit the Street so far this year. A similar issue by rival Bharti Airtel is expected soon. Experts have advised investors to read into the objective behind raising the funds, discounts available and whether the funds mobilised can improve the companies' revenues and profits in the long run. The fund-raising will help Vodafone Idea and Bharti Airtel cut debt and meet short-term capital requirements. Unlike Bharti, whose balance sheet will get deleveraged significantly, Vodafone will see limited deleveraging. Both issues are available at a steep discount but may lead to substantial value dilution for existing investors who don't participate. Investors need to consider whether such a dilution could be offset by healthy growth in the long term. Analysts have mixed views. -Aprajita Sharma

Graphic By **Nilanjan Das**

Research by **Niti Kiran**

GRAPHITI

POLL TOLL

THE COST OF DEMOCRACY IN INDIA INCREASES BY LEAPS AND BOUNDS EVERY TIME. WITH THE LAST ELECTION BEING THE MOST EXPENSIVE, IT REMAINS TO BE SEEN HOW MUCH THE 2019 POLLS WILL COST.

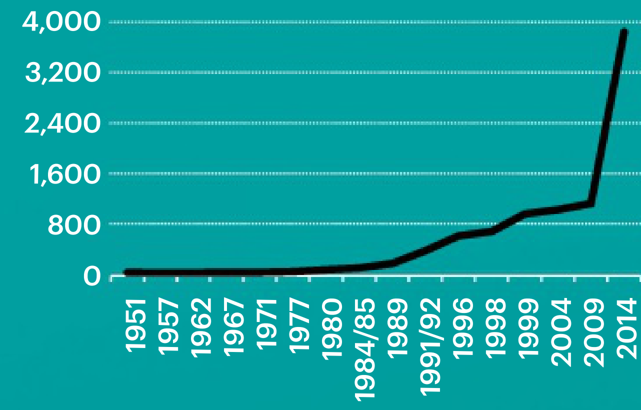
900
MILLION
Estimated number of voters in the 2019 elections, compared to 834 million in 2014

₹46.4
The highest ever average expenditure per voter, and this was during the 2014 general elections

₹2.04
The average expenditure per voter was around ₹2 in 1984/85 elections, translating into an equivalent inflation adjusted present value of approximately ₹16

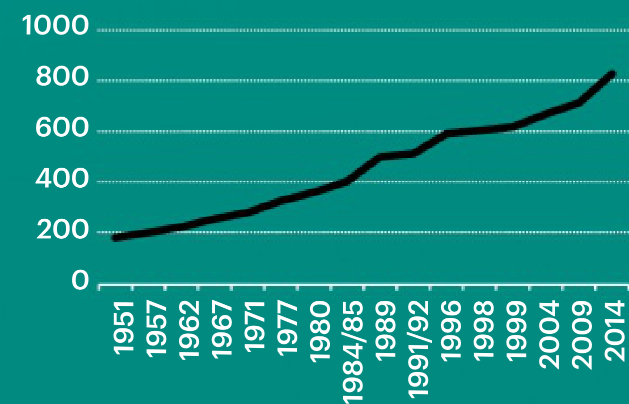
0.76
TIMES
Total cost of 2014 elections was higher than the total expenditure incurred on all the previous general elections

STEEP RISE
Expenditure incurred (in ₹crore)



INCREASING COST
Average expenditure per voter (in ₹)

GROWING VOTER BASE
No. of registered voters (in mn)



Source: Election Commission of India

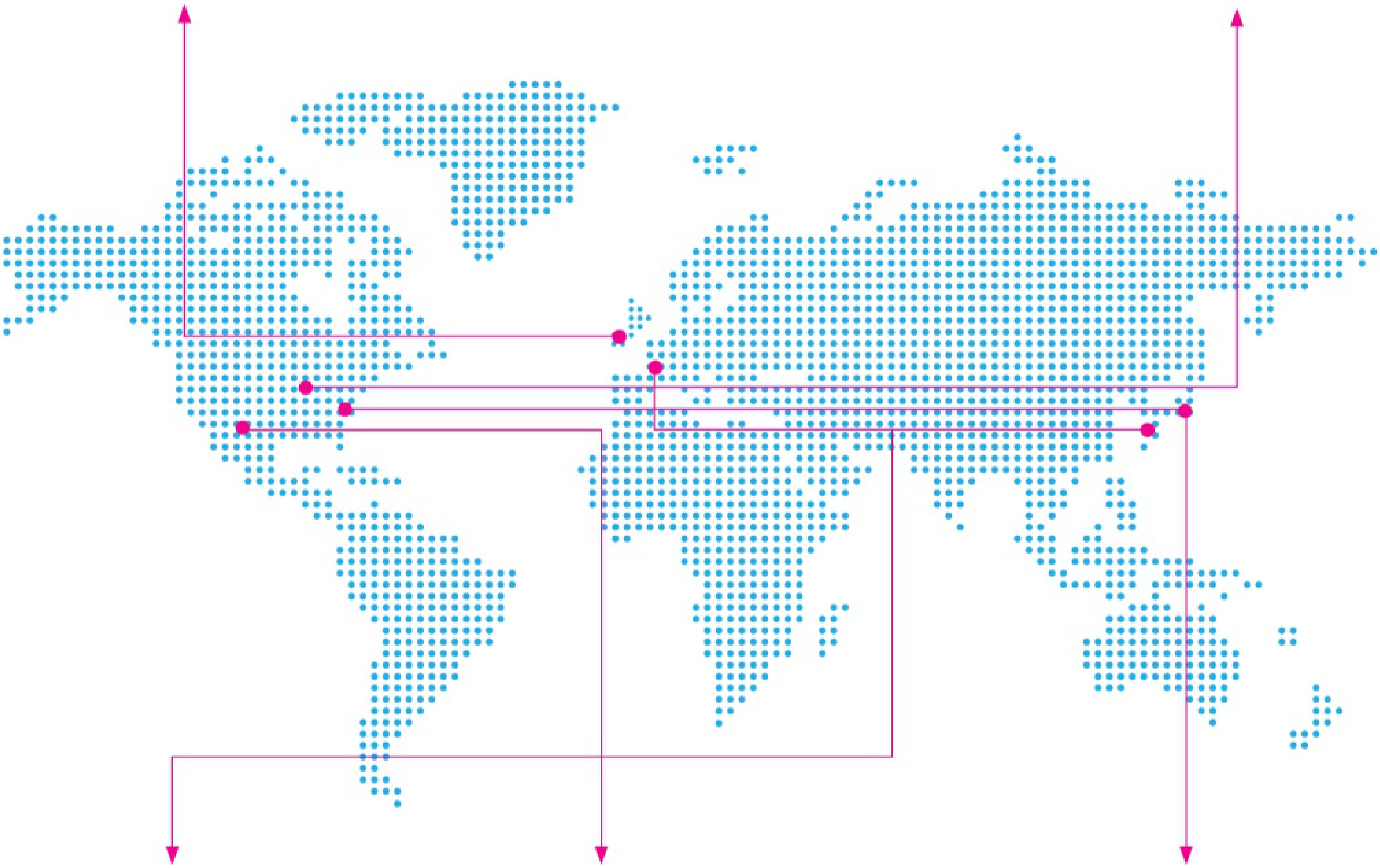
GLOBAL BUSINESS

UK GETS BREXIT BREATHER

The UK has finally escaped a disastrous no-deal Brexit as EU leaders agreed to an extension on Article 50 until October 31, which Prime Minister Theresa May accepted. According to European Council President Donald Tusk, the country has several options until the deadline. It can ratify the withdrawal agreement and leave. Or it can change strategy or decide to revoke Article 50 and cancel Brexit. However, the withdrawal agreement cannot be renegotiated. The situation will be reviewed on June 30. The new deadline also means the UK may have to hold European Parliament elections. While Labour Leader Jeremy Corbyn termed the latest delay as a diplomatic failure, May promised Parliament an orderly Brexit at the earliest. The original deadline was March 29, but after MPs repeatedly rejected May's Brexit deal, it was rescheduled to April 12.

US SHOWS STRONG JOB GROWTH

The US added 1,96,000 jobs in March, according to the Labor Department, underlining robust growth. The lacklustre February data was also revised from 20,000 to upwards of 33,000. Although unemployment remained at 3.8 per cent in March, wage gains continued, ensuring salary would grow faster than inflation. The economy has produced over 21 million new jobs since the country's unemployment rate hit a peak of 10 per cent in October 2009. Meanwhile, the US Fed said it would not raise headline interest rates in 2019 as it could hinder investments and economic growth. In December, the Fed said two interest rate hikes were on the cards this year but decided to change course because of slowing growth.



CARLOS GHOSN IN JAIL, AGAIN

Former Renault-Nissan head Carlos Ghosn has been detained in prison until at least April 14 after being arrested in Japan for the fourth time. A Japanese court said that Ghosn should be imprisoned without the possibility of bail. Ghosn was on bail and awaiting trial over allegations of financial misconduct when he was rearrested on fresh suspicions of such misconduct. Renault has accused him of "questionable and concealed practices" and will stop the ex-auto titan's pension, worth around $860,000 a year.

UBER READY FOR BLOCKBUSTER IPO

Ride-hailing giant Uber has filed a prospectus for a blockbuster IPO but downgraded its price targets after the lacklustre public offering of its key rival Lyft. Despite lowered expectations, the IPO could still be one of the biggest, with a valuation of $90-100 billion. The company expects to sell $10 billion worth of stock. It, however, expects "operating expenses to increase significantly in the foreseeable future" and warns that it may never achieve profitability. As per Reuters, Uber will soon make its IPO documentation public.

PANASONIC HALTS TESLA INVESTMENTS

Panasonic, Tesla's battery partner, has reportedly halted its investments in the latter's gigafactories. The company has scrapped plans to boost battery production by 50 per cent at the Nevada plant due to demand shortfall in Tesla's electric cars. Panasonic, which lost $180 million last year through its joint venture with Tesla, says it will not invest in Tesla's Shanghai factory, according to Nikkei. Of late, Tesla has been hit by a slowdown in sales and logistics bottleneck, delivering 31 per cent fewer cars in the last quarter compared to the previous one.

SALES SAVVY

WHAT: **Sales Leadership India Summit**

WHEN: **May 14-15, Mumbai**

WHAT TO LOOK FOR: The two-day conference will bring together senior sales leaders, field sales managers and salespeople on one platform. They will impart modern sales expertise to attendees to accelerate business growth.

BRAINSTORM

WHAT: **Microfinance and NBFCs Exhibition and Conference**

WHEN: **May 15, Chennai**

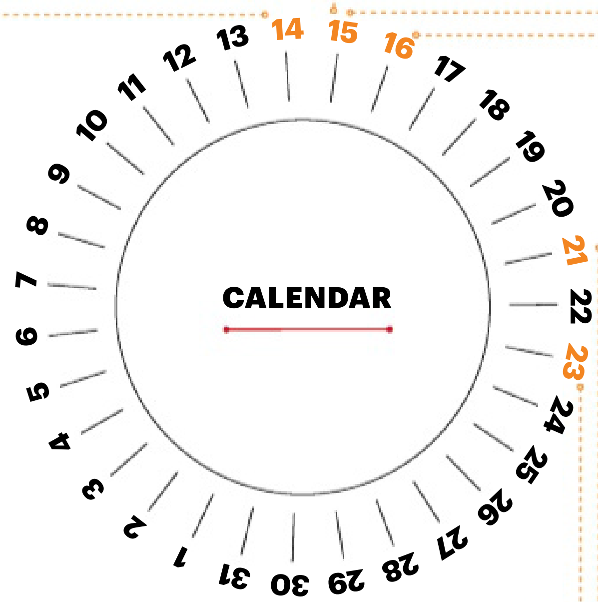
WHAT TO LOOK FOR: The MiNE India will host officials from RBI/NABARD/SIDBI along with leaders and influencers from the BFSI industry on a unique platform to reflect and discuss ongoing trends and key measures to shape the future of MFIs and NBFCs.

POOL OF DATA

WHAT: **Data Lake Day**

WHEN: **May 15, Pune**

WHAT TO LOOK FOR: The event will help IT data architects, business users and IT developers collaborate and build the Logical Data Lake to manage the growing pool of data.



SOLAR POWER

WHAT: **Solar Rooftop Summit**

WHEN: **May 23, Delhi**

WHAT TO LOOK FOR: The full-day conference will take stock of the solar rooftop sector. Speakers will discuss policy and regulations, key technology trends, solar panel installation charges, its management and quality and potential of off-grid solar applications.

DATA SECURITY

WHAT: **Fraud and Breach Summit**

WHEN: **May 21, Bengaluru**

WHAT TO LOOK FOR: The event focusses on fraud and breach prevention in verticals such as finance, government, retail, energy and healthcare. Participants learn from influencers and earn CPE (Continuing Professional Education) credits.

TECH TALK

WHAT: **Artificial Intelligence and Machine Learning Summit**

WHEN: **May 16, Pune**

WHAT TO LOOK FOR: As most firms are increasingly adopting AI and ML to drive their businesses, cutting through the hype becomes important. The event will help business and technology executives learn how intelligent technologies can be successfully deployed to explore new business opportunities at low cost.

SOCIAL UNIVERSE

WILL VOICE BE HEARD?

Forget written text and emojis; audio-based social networks may soon become mainstream.

By Sonal Khetarpal
Illustration by Raj Verma

FIRST, IT WAS ENGLISH. Then came regional languages. And now, audio messages may gain traction on social media. Instagram has added a voice messaging feature to its direct messages. Facebook is testing an 'add voice clip' feature, which allows users to record short audio clips and post them as status updates, reflecting how they are feeling. Professional networking platform LinkedIn has also launched an option to record and send audio clips along with text messages.

P.G. Aditiya, Executive Creative Director of Dentsu Webchutney, says that the voice component will impact developing markets a lot more than the developed world as it solves the problem of 'written illiteracy'.

"Voice is a very pertinent innovation for a country like ours where none of us speaks the same language or type in the same way," he adds.

Moreover, voice enhances user experience, says Aditiya, which is another plus. As a medium of communication, it is more efficient as the speed of information sharing is much faster than typing and posting text messages. It also ensures that one's phone works as a single-hand device (when you listen to messages or respond to them without typing), making it more convenient to use. It is not surprising, therefore, that a whole bunch of voice-only social media platforms such as HearMeOut, Listen, Voiz and Riffr have come up recently.

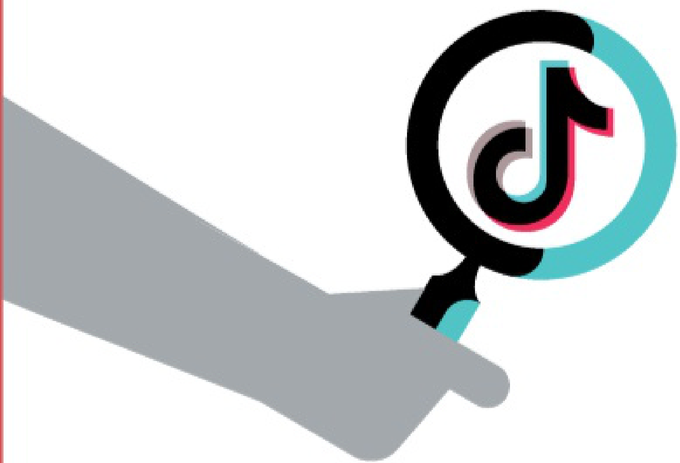
Voice is also personal as it conveys emotions and nuances a lot more effectively than text. But it is for these very reasons that it will take this medium some time to disrupt social media, says Siddharth Deshmukh, Adjunct Faculty and Senior Advisor at MICA (formerly, Mudra Institute of Communications, Ahmedabad). The reason is not technology but the first principle of biology.

"For digital natives, voice is unnatural, and text is natural," explains Deshmukh. Right from the beginning, they have typed – an activity that uses prefrontal cortex, an area of the brain associated with rationalising, moderating social behaviour, reflection and so on. Unlike previous generations, they are not very comfortable with voice simply because it activates the brain's cerebellum area that regulates and releases emotions.

"Moving back to voice from text as a medium of expression is like moving back from prefrontal cortex to cerebellum," says Deshmukh. Also, businesses must ensure the same level of curation, editing and special effects for audio as they do for text to build their brands if the voice-only format has to disrupt current social media platforms, he adds. BT

@sonalkhetarpal7

SC to Review TikTok Ban



The Supreme Court has agreed to look into the interim ban on TikTok after a special leave petition by Bytedance (India) Technology, the company that owns the mobile application. On April 3, the Madras High Court had issued an interim direction to the Centre to ban the popular Chinese video app saying it was encouraging pornographic and inappropriate content. Bangladesh and Indonesia have banned the app for similar reasons.

WHATSAPP'S BIG PRIVACY FEATURE

WHATSAPP WILL INTRODUCE A NEW PRIVACY FEATURE WHEREIN CONSENT WILL BE TAKEN FROM USERS BEFORE THEY ARE ADDED TO CHAT GROUPS ON THE MESSAGING PLATFORM. THIS NEW SETTING IS IMPORTANT AS SOCIAL MEDIA PLATFORMS ARE EXPECTED TO PLAY A CRUCIAL ROLE IN SWINGING THE ELECTORATE DURING THE ONGOING LOK SABHA ELECTIONS. THIS FEATURE WILL BE FIRST INTRODUCED IN INDIA AND LATER IN OTHER PARTS OF THE WORLD.

UK FOR TOUGH INTERNET LAWS

Amid growing concerns over harmful content being posted across social media platforms, the UK has proposed stringent online safety laws which will penalise social media companies if they cannot contain damaging content. The government intends to impose fines, block site access and make senior executives liable if they fail to sanitise their platforms. Australia has passed a similar law and will fine up to 10 per cent of a social media firm's annual profit if it does not remove violent content; it may also jail its employees. The move comes in the wake of live-streaming of the recent New Zealand mosque terror attacks on Facebook and YouTube. Fifty people were killed in the shootings in two mosques in March this year.

2 HOURS

TIME FRAME FOR SOCIAL MEDIA COMPANIES TO REMOVE 'INDECENT' AND 'VIOLENT' CONTENT POSTED DURING THE 48-HOUR SILENT PERIOD BEFORE POLLS, ACCORDING TO A SUBMISSION BY THE INTERNET AND MOBILE ASSOCIATION OF INDIA TO THE ELECTION COMMISSION. EARLIER, THE TIME LIMIT WAS THREE HOURS. BT

START-UP

SLANG LABS

GIVING VOICE TO APPS

THE BENGALURU-BASED B2B COMPANY OFFERS A MULTILINGUAL VOICE INTERFACE SO THAT DEVELOPERS CAN SYNC IT WITH ANY MOBILE APP.

By Devika Singh
Photograph by Lantern Camera

Co-founders (from left): Satish Chandra Gupta, Kumar Rangarajan and Giridhar Murthy

1) The Founders
Kumar Rangarajan, Giridhar Murthy and Satish Chandra Gupta.

2) The Concept
When Rangarajan was working in Silicon Valley, he observed how effortlessly his children interacted with Amazon's virtual assistant Alexa. They got so used to it that when the car music volume went up during a drive, their instant reaction was: Hey car, turn down the volume. Murthy, who had earlier teamed up with him to launch Little Eye Labs (the start-up was sold to Facebook), had a similar experience when his parents visited him in the US. The ease of using voice interfaces got them thinking about helping people who do not speak English and are not tech-savvy. The duo finally moved back to India and teamed up with Satish Chandra Gupta, an IIT-Kanpur alumnus, to build Slang Labs, a SaaS-based multilingual platform that would help developers add a voice-augmented experience (VAX) on top of any touch-based mobile application. This is especially useful in India as new Internet and mobile users beyond Tier-1 cities often require voice-UI for convenience and speed. The company was mentored by Google's Launchpad Accelerator Program in 2018.

KEY NUMBERS

FOUNDED IN
Sept 2017

TEAM MEMBERS
14

FUNDING
$1.24 MILLION
in seed funding from Endiya Partners

PARTICIPANTS
200
developers use Slang Lab's services

3) How It Works
Developers can integrate Slang Labs' configurations and software development kits, or SDKs, to add voice capabilities to their apps. As of now, there are three language options – Indian English, U.S. English and Hindi. The team is also working on Bengali and a South Indian language. The solution is currently being beta-tested for government sectors, banking apps, news and OTT content, grocery, foodtech and gaming. Developers have to pay a monthly fee based on the number of voice interactions facilitated by the platform.

4) The Way Ahead
The company is making the platform more user-friendly and building intelligent capabilities for better flexibility when people use voice commands. It is also developing an iOS solution as the platform now caters to Android app developers. BT

COVER STORY / ***JET AIRWAYS***

THAT SINKING FEELING

Can INDIA'S PREMIER AIRLINE be rescued?

BY **MANU KAUSHIK AND ANAND ADHIKARI**
PHOTOGRAPH BY **REUBEN SINGH**

CAN JET BE SAVED? A few days ago, it seemed the final chapter in the airline's saga had been written. The banks, after seizing control of the airline, could not find anyone interested in taking it off their hands. Every day, more planes were being grounded or seized and flights cancelled. Fuel suppliers were refusing to give any more aviation fuel to even let the remaining planes take to the air. And it seemed only a matter of days before operations of what was once India's premier airline ceased altogether.

Then suddenly, there seemed to be a ray of hope. A number of potential buyers have submitted their respective Expression of Interest (EoI). These apparently include two private equity-led bids, a sovereign investment fund, and even Etihad, the Abu Dhabi-based airline that has a 24 per cent stake in Jet but had only a few weeks earlier wanted the banks to buy its shares. What's more, even Naresh Goyal, the airline's founder who took it to lofty heights before crash landing it, has thrown his hat in the ring. Goyal's EoI will be closely scrutinised legally as he had earlier refused to bring money. Investors willing to back him will also go through scrutiny. Whether the banks would like to talk to him after ejecting him forcibly late-March is open to question, of course.

But a ray of hope is all that these EoIs are for the beleaguered lenders who are collectively owed over ₹8,500 crore. (This does not include what Jet owes other creditors – fuel suppliers, lessors of planes, maintenance agencies, ground handling agencies, employees, etc.)

The issue is that an EoI is not really much. It will be weeks, if not months, before any of these potential buyers submit any binding offers – assuming any of them do so at all after examining Jet's assets and liabilities and the terms being offered by the bankers. Even then, there could be lawsuits. And finally, there would be other problems associated with getting an almost grounded airline back in the air and getting customers who have been scared away by the recent events at Jet. Most of all, it will require a lot of cash... about ₹7,000 crore, if not more, to get most of its fleet back in the air.

The time is limited for lenders as well as potential buyers. The most valuable assets of Jet are its slots and bilateral rights – and that will all go away if it remains grounded for 90 days. By then, the airline would be completely useless for any buyer.

After being called for an urgent meeting at the PMO to assess Jet's situation, Aviation Secretary Pradeep Singh Kharola said on April 12 that the airline doesn't have money to operate beyond April 15 and banks will have to take a call on how many planes the airline can fly after that date. Jet has already ceased international operations due to lack of funds to operate the planes. If the banks are hopeful of finding a buyer, they will have to release the remaining part of the ₹1,500 crore they had promised to give to Jet in return for Goyal's exit. This is a crucial moment for bankers, who would be assessing the seriousness of those who have expressed an interest in ac-

THE UNFOLDING OF A DISASTER

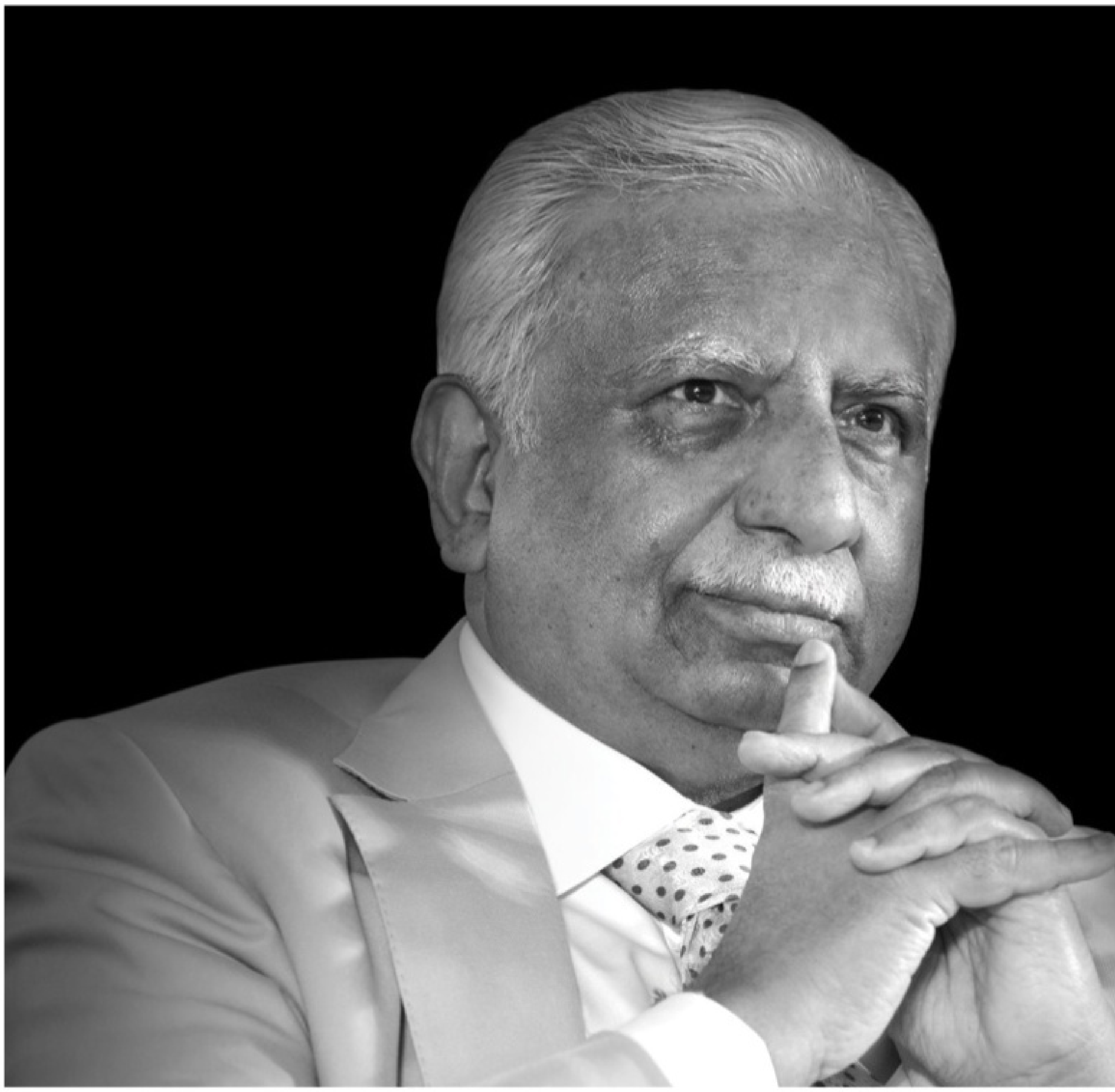
In May 2018, Jet posted quarterly loss after 12 quarters of net profits, and said that it has a negative net worth. In August, it postponed its quarterly results amidst rising fuel oil prices and rupee depreciation affecting its financial performance. Goyal said he felt **"guilty and embarrassed"** as a lot of shareholders had lost their money

Net loss of **₹732 crore in the third quarter of 2018/19.** The cost cutting programme outlined savings of ₹2,000 crore in two years

The **tax department conducted a survey** at Jet's premises in September 2018

SBI asked EY to carry out **a forensic audit of Jet's accounts** for 2014-18 period

Jet defaulted on debt payments at the beginning of 2019



PHOTOGRAPH BY RACHIT GOSWAMI

quiring the ailing airline.

If all these things don't work out, the bankers will be looking at a bigger loss than even the hit they took in Kingfisher Airlines. During that fiasco, the banks at least had the comfort of having some personal guarantees, some shares in United Spirits and United Breweries, and even some real estate. In the case of Jet, even these are missing, and the debt is higher.

Pandora's Box

For potential buyers, there are numerous challenges even before they can formalise a bid. The first is how to put a value to a near shut airline. Given that Jet is in a cash-loss kind of a situation, there is no standard matrix to value it.

Jet is sitting on a debt of
₹8,500 crore
but its liabilities are much bigger as it has not paid employees, fuel companies, airport operators and other vendors

Lenders estimate a funding gap of ₹8,500 crore.

Assets include 16 owned aircraft (valued at $400 million), and intangible items like airport slots, customers, frequent flier programme, market share and brand

Tata Group **withdrew its interest in acquiring Jet Airways** after its board flagged concerns about Jet's funding

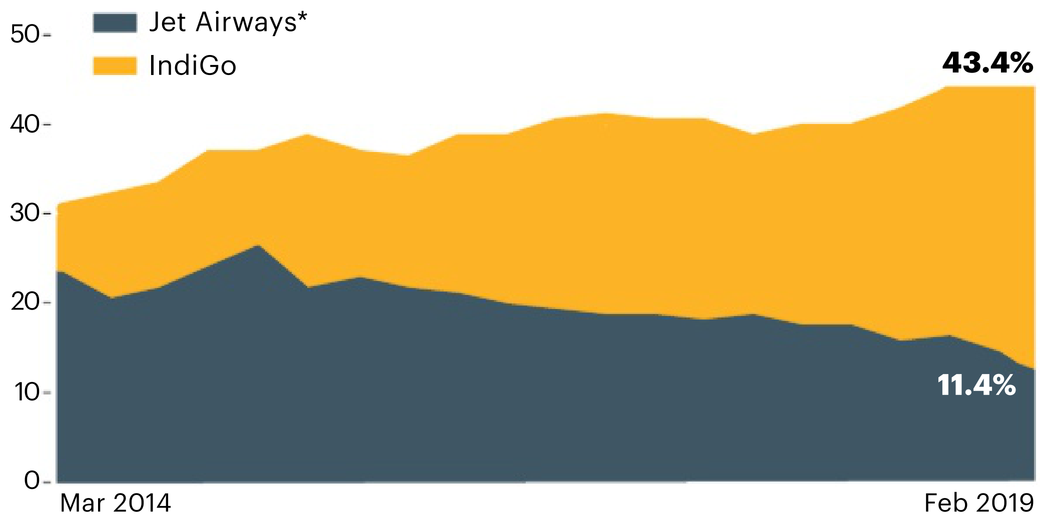
Lenders announced **a resolution plan that would give them control over the airline** with an increase in their stake to over 50 per cent

SBI Capital Markets, a subsidiary of the bank, floated **an expression of interest to invite bids for selling stake** between 31.2 per cent and 75 per cent in the troubled airline

Lenders may have to take **a substantial haircut to sell the airline,** just as it happened in SpiceJet's case

ON A SLIDE

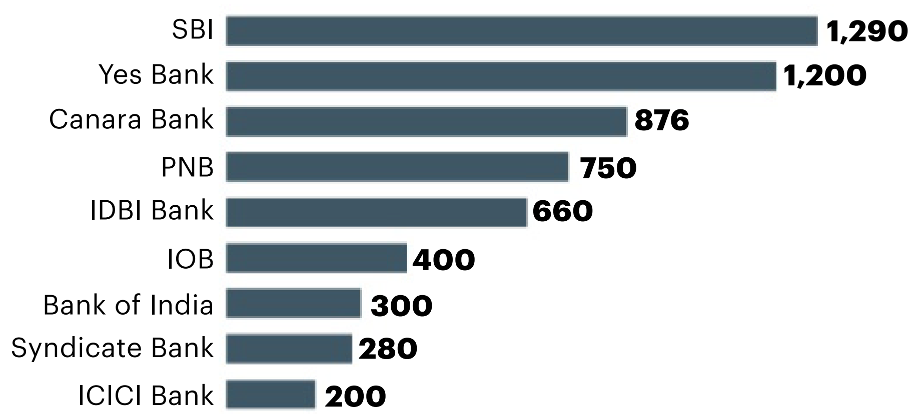
Jet has been rapidly losing market share to IndiGo and others



*Includes JetLite Domestic traffic data Source: DGCA

WHAT THE BANKS ARE LEFT WITH

Security includes aircraft, simulators, receivables, deposits, etc



Loan exposure is sanctioned amounts, excluding non fund

Source: Banks

The lenders, led by the State Bank of India, have gone in for an EoI rather than a fully priced deal, meaning the deal would involve debt restructuring.

The resolution plan prepared by SBI in February estimated a funding gap of ₹8,500 crore. "Does the new buyer want to fly all 115 (aircraft) or does it want to operate with a limited fleet of 40 or 50?" asked the banker. Given Jet's slots and bilaterals, running it with a limited fleet does not make sense either. The bigger question, however, is: will Jet fly under its own brand or, in case the buyer is another airline, will it simply be merged with the operations of its buyers, the way Jet itself had merged Air Sahara and made it JetLite? Any business plan by a new buyer would also influence the valuation.

One way to fix the valuation could be to look at the other airlines in India. For example, the government was earlier asking for a higher valuation for Air India because of the better access it has to international airports, its bigger market share and premium slots. Jet used to be among the top three airlines, apart from Air India and IndiGo, to enjoy a large market share. "The battle is between the three big boys. You will value the airline from that perspective," says a consultant. Abhishek Pandey, Managing Director at Duff & Phelps, says if a local strategic player has plans to fly abroad in the near future, Jet offers a ready market with license, premium slots and customers. But these would be attractive only to a buyer which has ambitious international plans or for whom the airline's current rights in international airports and routes fill a gap.

Experts suggest that new bidders will take into account the scaled down operations, a conservative estimate of the market share, the global slowdown, and the future direction of oil prices, which is critical. "There is already excess domestic capacity. Without Etihad, the Gulf play is also challenging. Given that the current market is tilting towards IndiGo, the bidders will certainly beat down the prices," says an expert.

The second challenge is the immediate cash required just to keep the remaining Jet planes flying. The banks were supposed to pump in ₹1,500 crore capital for normal operations to run. But that money didn't come. Bankers say they have provided about ₹250 crore, but no one is willing to commit more. The banks with Jet exposure include SBI, Indian Overseas Bank, Canara Bank, Syndicate Bank, Yes Bank, ICICI Bank, Punjab National Bank, Bank of India, and IDBI Bank. "Some of these are facing challenges of their own," says an investment banker.

In the meantime, the way the planes are getting grounded every day, the airline is clearly heading towards shutting operations, which will destroy its value.

Then there are the legal complications. The lending banks are doing the current stake sale under the existing equity structure post the Supreme Court putting the Reserve Bank of India's (RBI's) February 12 circular in abeyance. The circular asked banks to follow a six months deadline to resolve a stressed company where there was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even a single day's default. So far, Goyal hasn't challenged the stake sale process, and it seems that the bankers are ready to accommodate him in the current sale process since he has expressed his interest in regaining control of the airline. According to the EoI document, lenders have put on block Goyal's entire stake and Etihad's shares, which in total amount to a minimum of 31.2 per cent to about 75 per cent. People in the know reveal that the entire block of shares could be sold at a negotiated price to a new buyer. The stake sale will also attract open offer guidelines. Umesh Mehta, Head of Research at SAMCO Securities, says the current interest in the Jet stock is only because of the possibility of an open offer. "(Otherwise) Jet's value of equity is zero today," he adds. With Etihad also entering the fray, there are issues like open offer guidelines, where the Securities and Exchange Board of India has refused to provide any exemption. Also, Etihad cannot go beyond 49 per cent, which is the maximum FDI limit.

Looking for Value

Aviation analysts suggest that it would not be easy for banks to take a large haircut. The current stake sale is taking place outside the court driven Insolvency and Bankruptcy Code (IBC), which protects bankers. But the protection that RBI's circular would have given is not available. "The banks are acting on their own, without any protection from future investigations," says a consultant. In the past, Central Vigilance Commission and Central Bureau of Investigation have investigated bankers for

CRUCIAL EVENTS

1992: Jet Airways incorporated; commences operations as **air taxi operator in 1993** with a fleet of four Boeing 737 aircraft

1994: Frequent flier programme **JetPrivilege** introduced

1997: Naresh Goyal acquires **40 per cent equity** from initial investors — Gulf Air and Kuwait Airways — to become **100 per cent owner** of foreign entity Tail Winds, which owned 99.99 per cent of Jet. Gets delivery of first purchased aircraft

2004: Starts international operations with Chennai to Colombo flight. Becomes first airline to launch **e-ticketing** on its website

2005: Launches IPO to fund international expansion; IPO is subscribed 16 times. **Starts inter-continental flight** linking Mumbai with London on a widebody Airbus A340

2007: Acquires loss-making Air Sahara for **$340 million;** renames it **JetLite**, a low-cost carrier

2008: Fires 1,900 employees and then takes them back

2013: Places order for **75 Boeing 737 MAX** aircraft to modernise fleet. Announces strategic partnership with Etihad, which acquired 24 per cent in the airline. **CEO Nikos Kardassis** resigns

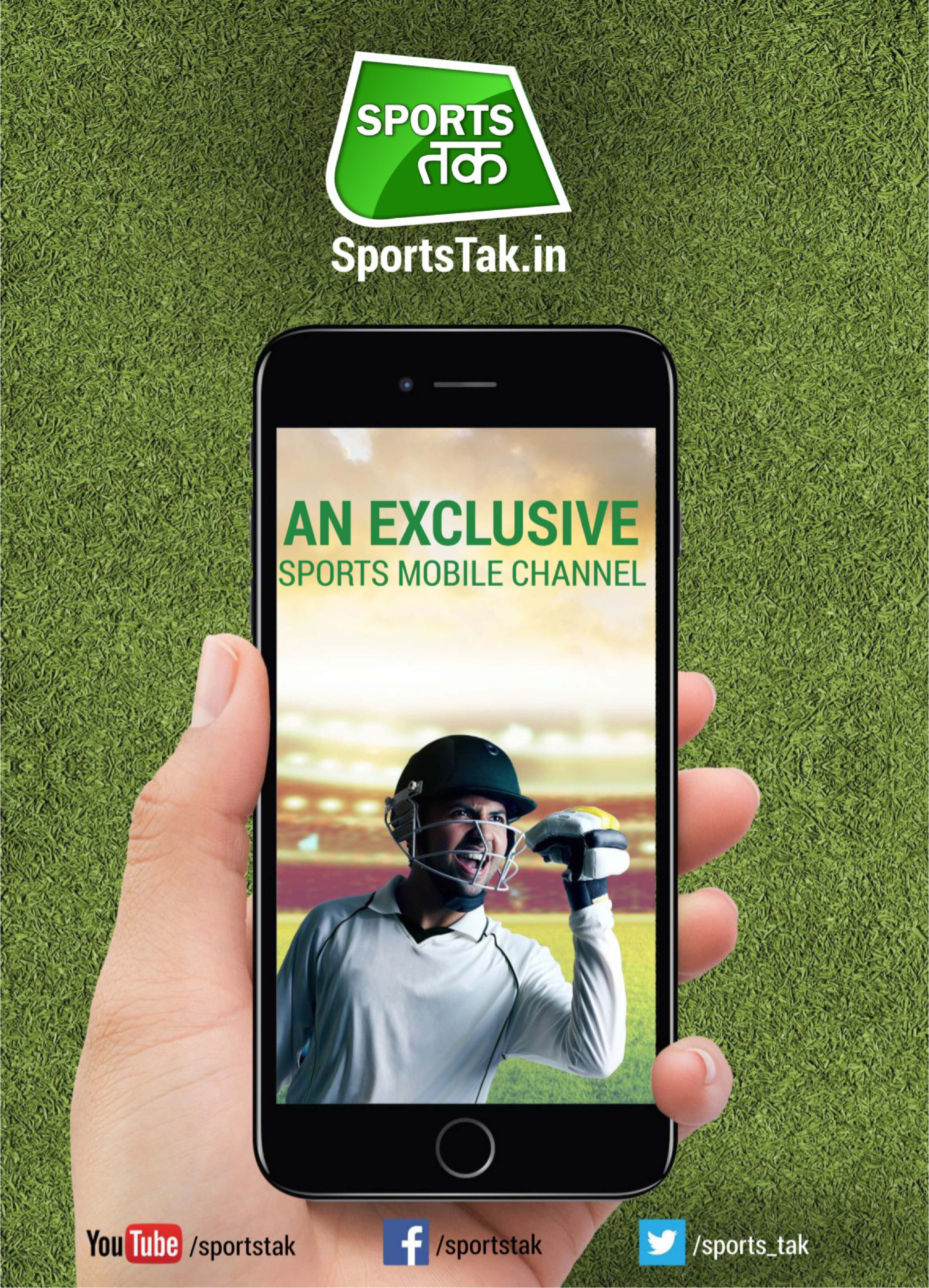
2014: Merges Jet Konnect as part of plans to re-position itself as a uniform full-service operator. CEO **Gary Toomey** resigns within months of joining

2017: Signs enhanced cooperation agreement with Air France and KLM Royal Dutch Airlines. Appoints new CEO, **Vinay Dube**

2018: Signs a new order for **75 additional Boeing 737 MAX,** taking the total order to 150

2019: Defaults on its debt obligations to a consortium of Indian banks led by SBI. Ratings agency ICRA downgrades it. Lenders prepare a resolution plan to revive the airline

ILLUSTRATIONS BY AJAY THAKURI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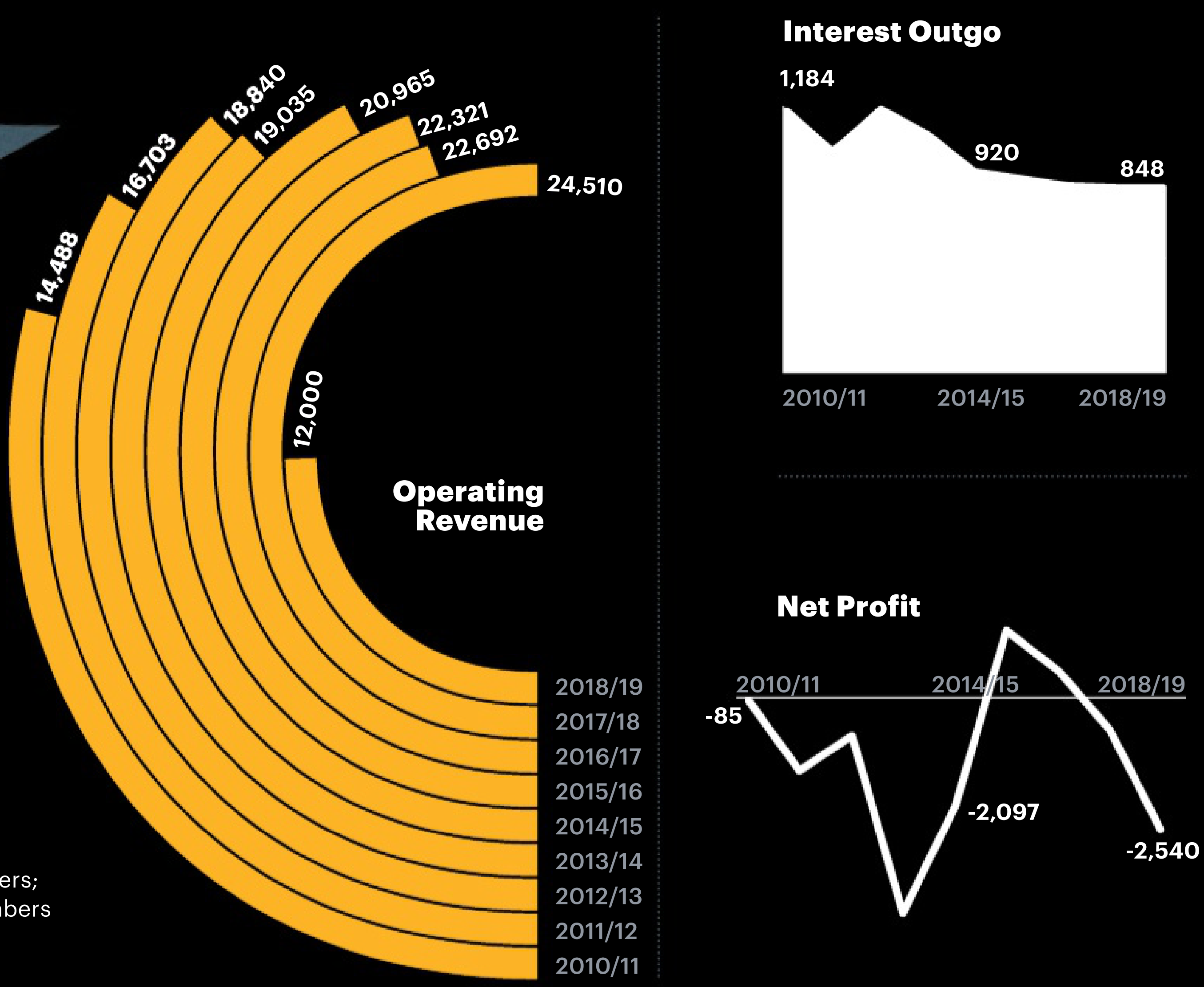
NOSE DIVE

Jet Airways' revenue and profit have fallen sharply, while the debt burden has not decreased much



Data in ₹ crore; consolidated 2018/19 data is for three quarters; 2018/19 debt and interest numbers are estimates
Source: Annual Reports

many failed restructuring cases.

If the current sale doesn't go through, the bankers will have the opportunity to explore a resolution under the new revised circular that the RBI is expected to issue shortly. However, if Jet goes to IBC, there will be more challenges. Goyal has entered the race; under IBC, he is eligible to bid for Jet assets as he passes the test of section 23A, which prohibits a defaulting promoter with non-performing assets (NPAs) of more than a year to bid for their own assets (Goyal's NPA is less than a year old). After April 30, the field will also open for operational creditors to take the airline to IBC, where banks will have little control as the resolution mechanism gets triggered. The financial creditors will also have to take care of the interest of operational creditors before working out a resolution. Mehta of SAMCO Securities says bankers may have to settle for a 50-60 per cent haircut.

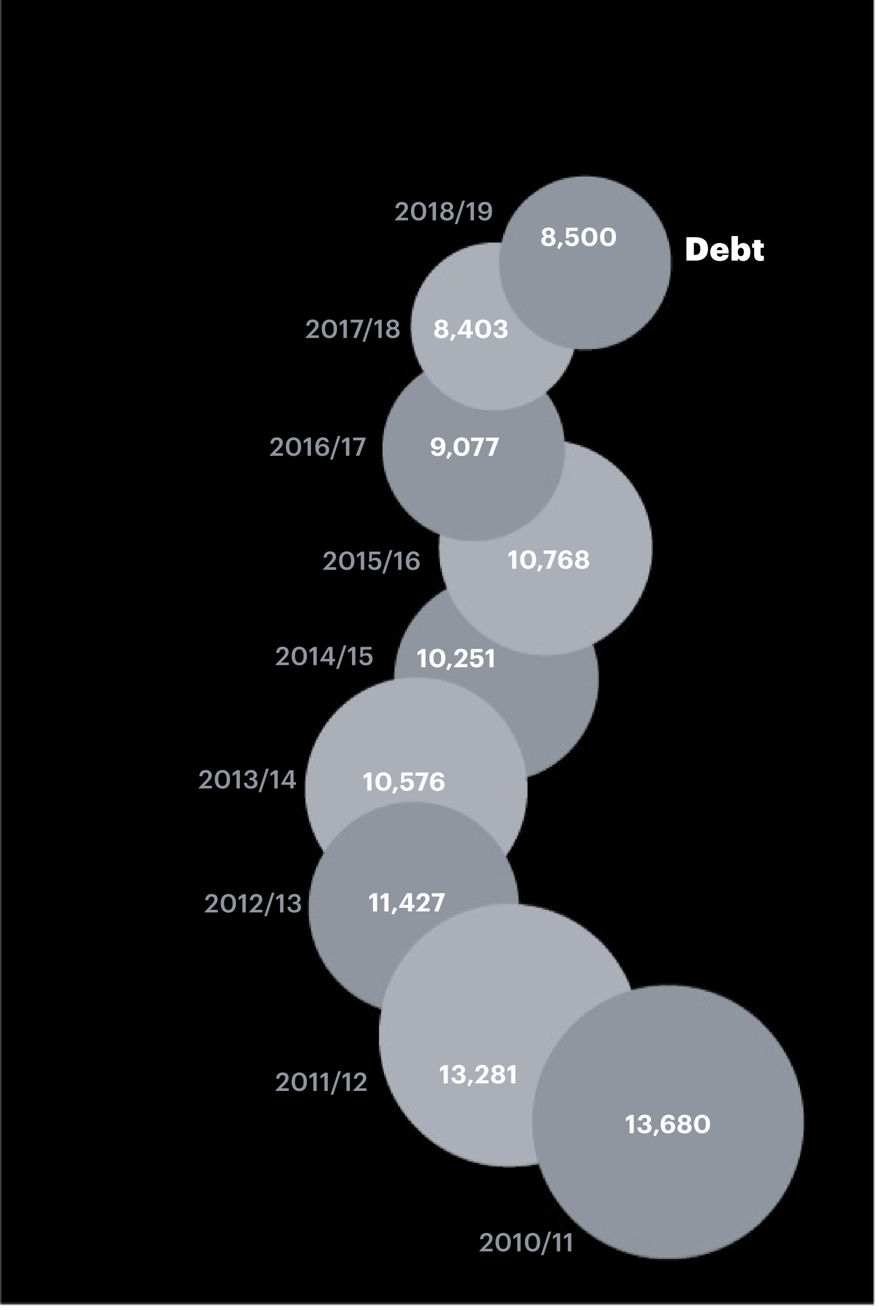
"IT'S A COST LEADERSHIP GAME. **A FULL-SERVICE CARRIER NEEDS TO HAVE LOW COSTS**, ESPECIALLY WHEN IT'S COMPETING WITH LCCs (LOW-COST CARRIERS)."

AMIT SINHA
Partner, Bain & Co

Though the bankers are loath to do business with him again, Goyal is already attempting a comeback using various legal loopholes. He has always fought and managed to exert total control of the airline that he built from scratch until he was ejected by the lenders as a condition to giving out the emergency cash that Jet needed to prevent a complete shutdown. Goyal agreed, but made his unhappiness clear.

Until his forced exit, Goyal, the airline's former Chairman, could have claimed to have nine lives. Soon after he started the airline in 1993, he survived the first big meltdown in the aviation sector that took the lives of other ambitious private carriers such as ModiLuft, Damania Airways, East-West Airlines, and Skyline NEPC. Not only did he survive various other disasters – the Asian financial crisis, 9/11, the 2008 economic downturn, and the crude oil shock – he managed to take the airline to new heights, and ruled the skies for nearly a decade before low-cost carriers (LCCs) got the better of him.

Goyal, who built his empire on the back of strong political connections, astute business sense, and deal-making skills, has run out of luck, and Jet is facing an existential crisis. Jet's problems are plentiful but at the core is shortage of funds, without which the airline has no future.



Money Burden

Jet is caught in a downward spiral where the fewer planes it operates, the more severe its cash crunch because some of its fixed costs (employees, administration, legal) remain.

The problem with Jet began about a year ago when it posted a quarterly loss (of ₹1,036 crore in May) on account of rising aviation turbine fuel (ATF) prices and sharp rupee depreciation against the US dollar. This was Jet's first quarterly loss after 12 quarters. It's not that the airline was in good health prior to that, but this was a major trigger point for the collapse that the airline is witnessing now. Goyal tried to bring the airline back into shape but the situation only went from bad to worse under him. While he continued to call the shots despite severe headwinds, in January 2019, the airline defaulted on its debt obligations to a consortium of banks.

That has given an access to the lenders to gain de-facto control of the airline. Goyal still has the largest shareholding but has lost his bargaining chip with lenders who have lost trust in his abilities.

In its EoI document, SBI Capital Markets, an investment banking subsidiary of SBI, hasn't given details of the sale process. This means there would be several rounds of parleys and hard negotiations to arrive at a valuation suitable for both parties. Interestingly, Goyal has recently pledged 26.01 per cent of his holding to PNB for existing and new borrowings.

The need of the hour is for Jet to get a domestic investor with deep pockets and a big appetite for risk. Jet, however, has only a few physical assets – just 16 aircraft, which have been bought through bank loans and can be seized by other lenders. "Jet doesn't have fixed assets. Most of the planes are leased. It has some equipment that has limited value. The biggest value in this business is slots. The airline is valuable but its marketability is low. And if they don't use the slots for 90 days, others can bid for those," says an aviation consultant.

In Mumbai, Jet has the highest number of slots (106) among all carriers, and significant bilateral rights in Singapore, Dubai and London. If the airline collapses, these slots and bilateral rights would be redistributed among other carriers.

"Unlike a manufacturing unit, which has land and plant, an airline's value lies in the number of flights, and the market share. Here, the need is to infuse funds and keep it (Jet) going. The airline has a value as long as it's flying," says Jitender Bhargava, former Executive Director, Air India.

The other scenario could be that lenders reduce interest rates, extend the payment period or give a moratorium on interest to the new buyer. "In any acquisition, liabilities in a target company may not be desirable, but it can give the buyer a leverage to drive the price lower. Jet's financial woes should be beneficial to a potential buyer... who would fancy a better deal in negotiating with creditors rather than with the promoters," says Neeraj Dubey, Partner, Lakshmikumaran & Sridharan, a law firm that specialises in corporate law.

"There will be a haircut. I was also involved in the SpiceJet transaction in 2015 where the new owner Ajay Singh came in and offered about ₹100 crore settlement when the airline's liabilities were about ₹1,400 crore. Some lenders got more than others and the matter was settled. Finally, Singh got the airline for ₹2," says Amit Sinha, Partner at consultancy Bain & Co.

Some argue that letting Goyal step away from the board

IMMEDIATE PRIORITIES FOR NEW BUYER

The challenge would be to run the airline as a going concern

Refocus on network and fleet

Restore normal operations with a limited or trimmed down fleet

Rationalise loss-making ATR network

Trim down the large workforce, clear salary dues

Renegotiate with lessors; have a phase wise approach to take back aircraft for full-scale operations

Improve operational efficiencies by controlling costs

THE ETIHAD-JET SAGA

Even as its investment in Jet has turned sour, Etihad Airways seems to be making a last-ditch attempt to recover the money that it had invested in the Mumbai-based airline in 2013. Some reports suggest that Etihad has shown interest in buying out Jet. Cramer Ball, the former CEO of Jet, is believed to be spearheading the negotiation from Etihad's side. Without Jet flying, the value of Etihad's stake would be nothing, but if it acquires more, or sells its stake to a new buyer, there's still hope of recovering the investment.

Etihad had bought stake in Jet Airways when the airline was not in a good shape. Naresh Goyal needed money to keep the carrier afloat. The Indian government sweetened the deal for Etihad by expanding the number of weekly seats available on flights between India and the UAE almost fourfold to 50,000 seats. Soon after, Jet appointed former chief executive of Air Seychelles (another partner airline of Etihad) Ball – a man who led the successful restructuring of Air Seychelles and turned Jet around in about three years.

For Etihad, the 24 per cent stake in Jet and 50.1 per cent stake in the JetPrivilege programme cost around $529 million. The move to buy a stake in Jet was driven by two factors. First was the need to establish dominance among West Asian carriers like Emirates and Qatar Airways. Second, the airline's investments in Jet had come at a time when the Abu Dhabi-based carrier was expanding its global network by acquiring stakes in different airlines. Many of these investments have not paid off.

Also, it is believed that Etihad used Jet as a feeder airline for its international operations via Abu Dhabi, a perception that Jet has strongly refuted.

makes for a good optics but doesn't help the airline at this juncture. "If Goyal has failed to get money, how are bankers so confident of getting investors? He is sitting pretty in London. Who will pay the debt? Who will give the salaries to the employees? One month later, Goyal can turn around, and blame the bankers for killing the airline, and refuse to pay ₹8,000 crore (of debt). Banks have allowed themselves to be taken for a ride," says Bhargava.

It's believed that the intervention of banks is an indirect attempt of the government to rescue the airline until the general elections are over. "In an election season, no government can afford to let a large airline like Jet shut down, and render over 16,000 employees jobless – even if it's not the government's official responsibility," says Mark Martin, CEO, Martin Consulting.

The Beginning of the End

As the saying goes, life comes full circle. Back in 2005, sitting across the table with his colleagues at Bain & Co, Sinha told Wolfgang Prock-Schauer, the then CEO of Jet, and his senior colleagues in the airline, that Jet must change its business model in order to survive the onslaught of low-cost newcomers like Air Deccan and IndiGo. Prock-Schauer, an industry veteran who is currently the COO of IndiGo, laughed at him.

"As a full-service carrier (FSC), it's difficult to survive unless the cost structure is nimble. We were trying to present a business proposal to them, but they didn't buy our services," says Sinha, who is now advising a couple of potential buyers on EoI. "We have realised that due diligence will take several weeks. It's like the Air India story; someone has to be really bold to participate in this," he says.

A few years after meeting Sinha, Jet found its own way of competing with LCCs by acquiring the loss-making FSC Air Sahara – an acquisition that marked the start of its downfall – and converted it into the low-cost JetLite. There were more dissimilarities than commonalities between these airlines. Through acquisition, Jet got about 2,300 Sahara employees along with its poorly managed fleet. Both had different work cultures.

"Both Jet and Kingfisher Airlines were fiercely bidding for Air Sahara because of which its valuation turned unreasonable. Finally, Kingfisher settled for Air Deccan. These mergers proved to be Waterloo for both the airlines," says Harsh Vardhan, Chairman, Starair Consulting. Jet acquired Air Sahara for $340 million.

The other issue was with the rebranding of Air Sahara into JetLite, and the subsequent launch of a new brand Jet Konnect, the low-cost arm of the mainline that would serve tier-II markets. The whole low-cost offering didn't work well because the airline often struggled with fleet management and product differentiation that resulted in confusion among customers and drained its management resources.

Despite its struggles, Jet continued to lead the domestic market till 2012 when IndiGo took over. Experts say that Jet's model was inherently flawed and ever since IndiGo and SpiceJet have dominated the market, Jet has continued to lose money.

"It's a cost leadership game. A full-service carrier needs to have low cost, especially when it's competing with LCCs," says Sinha.

The problem with Jet is that its cost structure is 30-40 per cent higher than LCCs whereas its revenues are just 15 per cent higher. So, if IndiGo is charging ₹5,000, a Jet customer would pay a maximum of ₹5,750 for extra food and frequent flier programme. Jet's ability to increase fares beyond this level is limited and therefore, its RASK (revenue per available seat kilometre) can only be 15 per cent higher.

On the other hand, the costs of providing full services are high because the airline has to spend a lot more on meals, and maintaining more crew members. Loading and unloading of food and cleaning up the aircraft takes time, and so the aircraft utilisation is lesser. The density of seats is also lesser in FSCs than LCCs, which means the latter can carry more passengers per flight. To make matters worse, Jet had four types and 14 sub-types of planes in its fleet, which added to the operational and financial complexities.

Time's Up

A man with humble beginnings, Goyal's achievement in no small measure was made possible by the sheer influence of corporate India on policymaking. His success was not necessarily based on a solid business model but on the skills of political maneuvering and being able to raise finances and do deals that helped him escape tight situations. Also, he was a hands-on man who couldn't find a stable CEO to run the business because of his constant interference.

"IF GOYAL HAS FAILED TO GET MONEY, HOW ARE BANKERS SO CONFIDENT OF GETTING INVESTORS? **BANKS HAVE ALLOWED THEMSELVES TO BE TAKEN FOR A RIDE.**"

JITENDER BHARGAVA
Former Executive Director
Air India

"BOTH JET AND KINGFISHER AIRLINES WERE FIERCELY BIDDING FOR AIR SAHARA BECAUSE OF WHICH ITS VALUATION TURNED UNREASONABLE. FINALLY, KINGFISHER SETTLED FOR AIR DECCAN. **BOTH THESE MERGERS PROVED TO BE WATERLOO** FOR THE AIRLINES."

HARSH VARDHAN
Chairman
Starair Consulting

Soon after its launch, Jet became the gold standard of aviation. In the initial days, Jet's network was not much different from Air India, and it could attract Air India's customers with a better product. When the going was good, nobody could counter him but people now have legitimate reasons to question his management style. "Not only were Air India's profitable routes given to Jet, he (Goyal) was also given better slots," says an industry veteran.

When the private airlines were given permission to start international operations, Jet lobbied for 5/20 rule which mandated a domestic carrier to be five years old and have a fleet of 20 aircraft to fly overseas. Then, just before its IPO, Jet was given permission to fly international. "In 2012, Goyal opposed the FDI but after Kingfisher's collapse, he immediately supported it and got Etihad on board," says Bhargava. Of late, the scenario has changed with airline promoters losing influence over Rajiv Gandhi Bhawan, the headquarters of the civil aviation ministry. Email queries sent to Jet and SBI remained unanswered.

More Jets in Tow?

The demise of Jet is taking place at a time when air passenger growth is robust. For the most part of last year, the passenger growth stood at around 20 per cent. Experts argue that it's a false idea that India is the fastest growing market. The market is being stimulated by low fares across the board.

"In a mad scramble to garner market share, airlines are losing sight of profitability. I could have understood if this happened in 2010 when the airlines were immature. Ajay Singh and Rahul Bhatia (of IndiGo) have said that fares must go up; but who will bell the cat," says Bhargava.

If airlines know that they are on a treacherous path, why are they not taking corrective measures? "That's because they have ordered 900 aircraft to be inducted in the next few years. If the stimulus goes away, the growth rate falls to 5 per cent; they will not be able to fill up new capacity," he says.

In India, nearly 60 per cent of the air traffic is price-sensitive, and fares

PHOTOGRAPH BY SHEKHAR GHOSH

"YOU BUILD A CAREER IN JET"

For potential buyers of Jet seeking to control costs, one of the bigger problems would be to tackle employee costs and strong unions. Parikshit Joshi is a second generation pilot. He had joined Jet Airways 12 years ago, and flies the narrowbody Boeing 737. Over the past few days, Joshi has been disturbed by reports of pilots struggling financially. So, he finds it ironic that Jet's attrition is still lower than rival IndiGo's.

Between January 2018 and March 2019, just 240 pilots have resigned, whereas in IndiGo, about 260 people are on the notice period.

IndiGo, SpiceJet and GoAir are reportedly paying ₹20 lakh as joining bonus but still pilots are not joining them. Why? "In the airline industry, only three airlines offer career – Air India, Vistara and Jet Airways," says Joshi. Jet's pilot union, which has about 1,100 pilots, has restricted landings for Boeing 737 pilots at four per day. DGCA permits six. IndiGo pilots often do four-six landings per day.

Joshi says that if the pilots want to leave, they should leave gracefully, join the other airlines, and take the bonus. "The only people I empathise with are the new first officers who joined Jet about one-and-a-half years ago. Jet takes ₹32 lakh as training fees. Most of them had taken loans to pay this. They don't have experience, so no one will take them," says Joshi.

On 28 March, 78 pilots were supposed to sign up with IndiGo. Twelve showed up; and only nine have joined. "Despite the truncated schedule, the airline (Jet) staff has been operating at the highest standards," says Mark Martin, Founder and CEO of Martin Consulting.

cannot be increased beyond a threshold. If the airlines cross that level, either the people cancel their travel plans or shift to a cheaper mode of transport. The corporate bookings are already heavily discounted, and the moment fares are increased, the volumes go down. Price sensitivity of the aviation market and a high cost platform make for a dangerous cocktail.

Countries like China and Singapore have a base price model where fares are kept at a minimum level so that costs are covered. Airlines, even the new ones, follow the model strictly. That ensures healthy growth of the airlines and the sector.

"It's the toxic environment created by the government. On one hand, the ministry boasts of India becoming the fifth largest aviation market in the world. On the other hand, we don't have a coherent policy. India has one of the worst aviation sectors. Everybody is making profits in the sector except the airlines. The fuel is taxed heavily, navigation charges are high and the major airports behave like a monopoly," says Devesh Agarwal, an aviation blogger.

The domestic aviation industry has witnessed 12 major failures in the past 21 years. Jet should have tweaked its business model long ago, and brought in a professional management – just like Margaret Thatcher did to British Airways in the 1980s. The comeback stories are far and few between in the aviation sector, and for Jet, the situation is messy. Lenders pinning hope on finding a buyer might just fall flat and a forced shutdown could be the only viable option for the 25-year-old airline in the coming days. BT

"IN AN **ELECTION SEASON, NO GOVERNMENT CAN AFFORD** TO LET A LARGE AIRLINE LIKE JET SHUT DOWN, AND RENDER OVER 16,000 OF ITS EMPLOYEES JOBLESS – EVEN IF IT'S NOT THE GOVERNMENT'S OFFICIAL RESPONSIBILITY"

MARK MARTIN
Founder and CEO
Martin Consulting

@manukaushik; @anandadhikari

THE HUB

BCI

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ELECTION BLUES

Business confidence takes a dip in the quarter before general elections as business leaders remain sceptical about fresh investments and job creation, finds the latest Business Today-C fore Business Confidence Survey.

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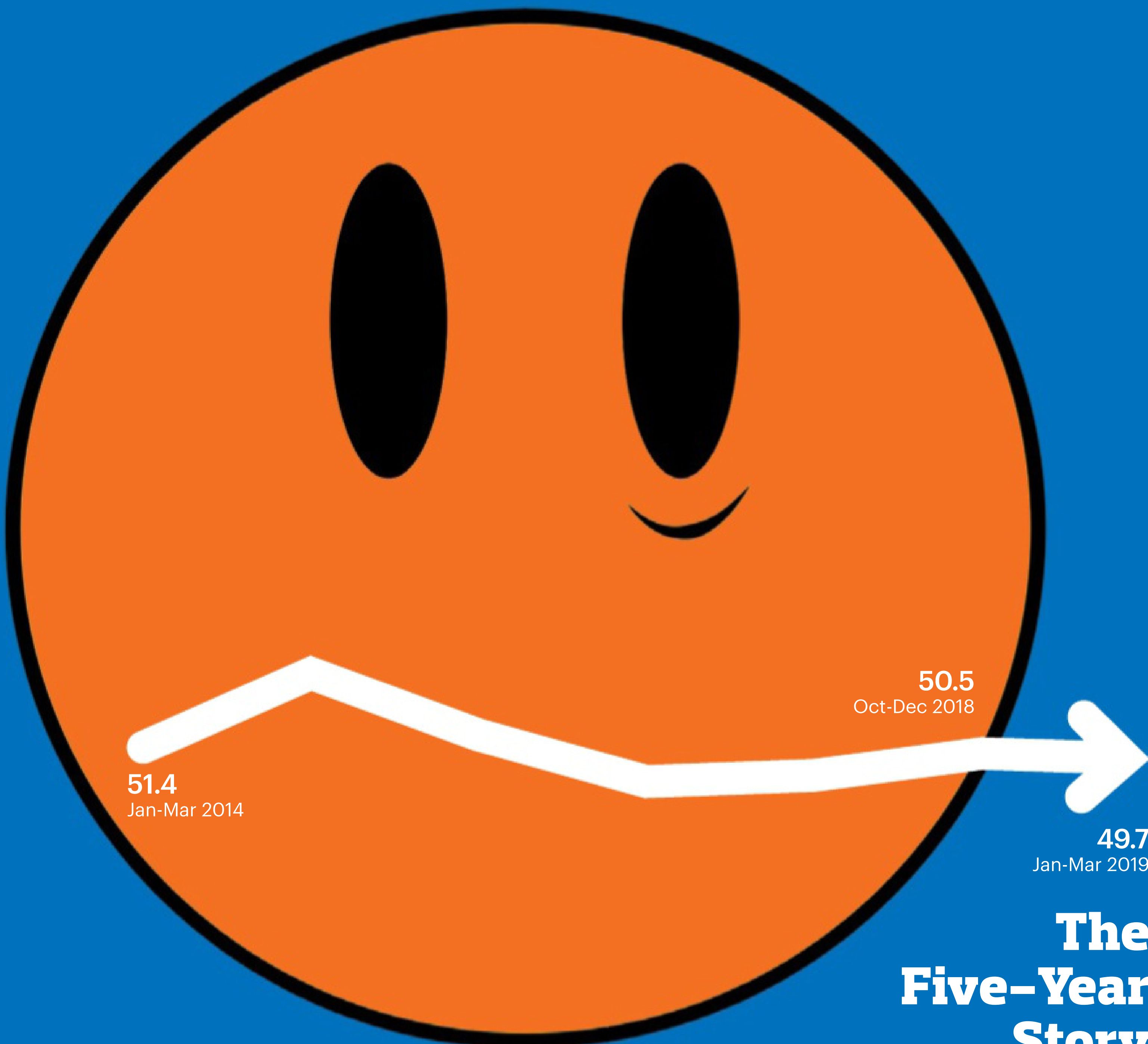
Election Blues

Business confidence takes a dip in the quarter before general elections as business leaders remain sceptical about fresh investments and job creation, finds the latest *Business Today-C fore* Business Confidence Survey.

By MANU KAUSHIK
Illustration by AJAY THAKURI

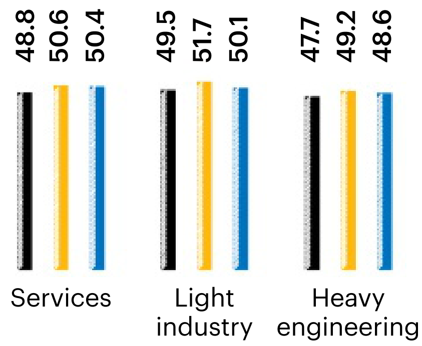


The Five-Year Story

Business sentiment index is lower than it was before the 2014 elections

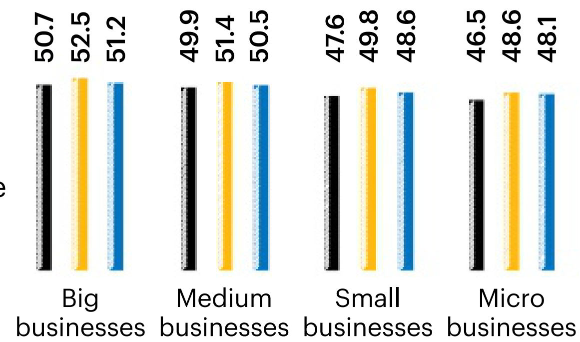
BCI by Sector

Services are most upbeat



BCI by Size*

Big and medium businesses are more positive than others



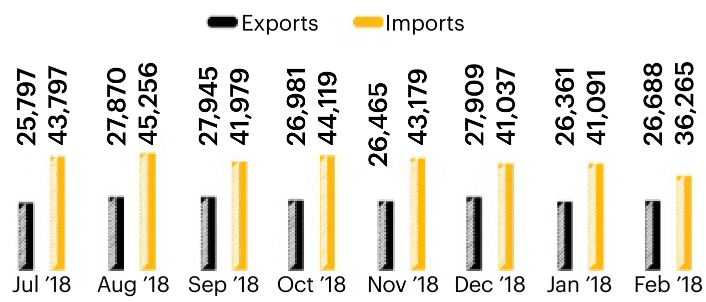
*Big businesses: Turnover > ₹500 crore; Medium businesses: Turnover ₹100-500 crore; Small businesses: Turnover ₹5-100 crore; Micro businesses: Turnover < ₹5 crore

Jul-Sep 2018 | Oct-Dec 2018 | Jan-Mar 2019

Tepid Macros

Inflation is the only bright spot among major economic parameters

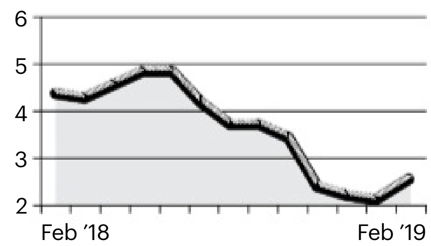
Exports start declining from December 2018 onwards



Figures in $ million

Inflation Under Control

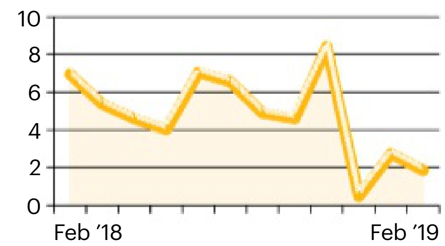
CPI Inflation (%)



Consumer Price Index; (Y-o-Y change) Base year 2012

Industry Blues

IIP growth (%)



(Y-o-Y change); Base Year 2011/12

If economic growth is a yardstick, the current government is ending its term on a stronger wicket than its predecessor. Estimates released by the Central Statistics Office (CSO) in January pegged 2018/19 gross domestic product (GDP) growth at 7.2 per cent, higher than the 6.9 per cent rise in the last year (2013/14) of the previous government. Yet, the micro indicators seem weak. Industrial growth has plunged to low single digits, the unemployment rate is reportedly at a 45-year high and slowing of the economy has forced the Reserve Bank of India (RBI) to cut the repo rate twice in recent months.

However, despite lower GDP growth, business confidence was higher prior to the general elections in 2014. The index number was 51.4 then as compared to 49.7 now. The sentiment was more upbeat across sectors – services, heavy engineering and light industries – in the January-March 2014 survey as compared to the latest results. The development agenda of the current government moved up the sentiment for about a year, taking BCI to the third-highest peak of 62.2 in the second quarter of 2014/15 since the survey started in 2011, before it started going down from the first quarter of 2015/16. Since then, the BCI has been moving sideways for nearly four years.

So, while latest headline GDP numbers look robust, they have not helped the government build a favourable perception in corporate India. In the latest Business Confidence Index (BCI) survey conducted for the January-March quarter, 52 per cent respondents rated the economic performance of the current government as bad. Just 36 per cent called it good while 12 per cent couldn't form an opinion. It can be argued that the 500 CEOs and CFOs surveyed don't represent the entire electorate, but these corporate leaders run organisations that employ thousands and opinions of powers-that-be trickle down to the rank and file. That should worry Prime Minister Narendra Modi-led NDA government.

The BCI for the March quarter took a hit as business leaders held back on investment and hiring plans. The BCI – on a scale of 100 – slipped to 49.7, compared to 50.5 in the previous quarter and 48.7 in the quarter before that. Market research agency C *fore* quizzed 500 CEOs and CFOs in 12 cities for the survey.

"We don't expect GDP growth in the March quarter to be dramatically different from the December number. Elections and focus on political outcome will remain dominant themes. This period is never conducive for thinking about new projects. It's not surprising that people are taking a cautious stance," says Siddhartha Sanyal, Chief India Economist, Barclays Bank.

"Corporate sentiments have dipped due to depressed domestic and global growth outlook. GDP growth has come down in recent quarters. Constraints on fiscal deficit have limited the scope for an expansionary fiscal policy. World GDP growth is predicted to slow down. Plus, US-China tariff wars have not been resolved yet," says D.K. Srivastava, Chief Economic Advisor at audit and consultancy firm EY India.

The current survey shows that sentiment has fallen on several parameters such as overall economic situation, overall business situation, financial situation, availability of finance, order book, production level, raw material costs, utilisation of capacity, sales and profits. For instance, 31 per cent respondents expect the overall economic situation to worsen in the April-June period as compared to 21 per cent in the previous survey.

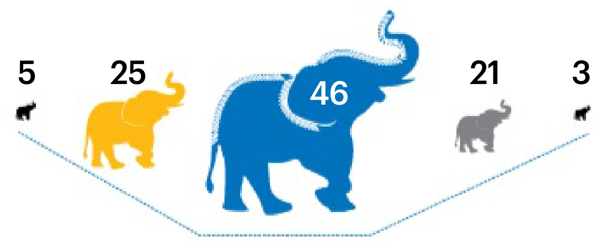
The survey points out that 41 per cent respondents don't plan to make fresh investments in 2019/20. Experts say there are a number of sectors with unutilised capacity. Also, investment plans have been postponed as investors wait for the election outcome. As per the RBI data, capacity utilisation stood at 75.9 per cent in the third quarter of 2018/19, higher than the 74.1 per cent in the same quarter last year. "I can imagine that at this moment, there's no clear plan, and it's fair for them to think about any investment after the political uncertainly is behind them," says Barclays Bank's Sanyal.

The survey shows that 52 per cent respondents don't plan to hire more in the current quarter. The hiring outlook is unlikely to improve unless the growth picks up. Growth indicators are expected to improve only gradually, and in the

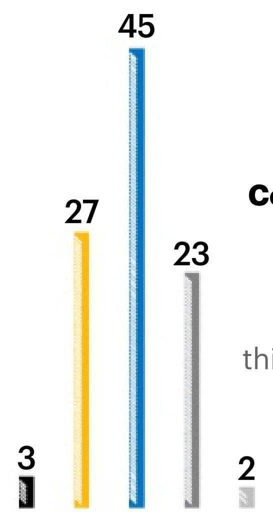
The Dip

The first quarter has been tepid for most businesses

Overall Economic Conditions
30% say the situation turned for the worse

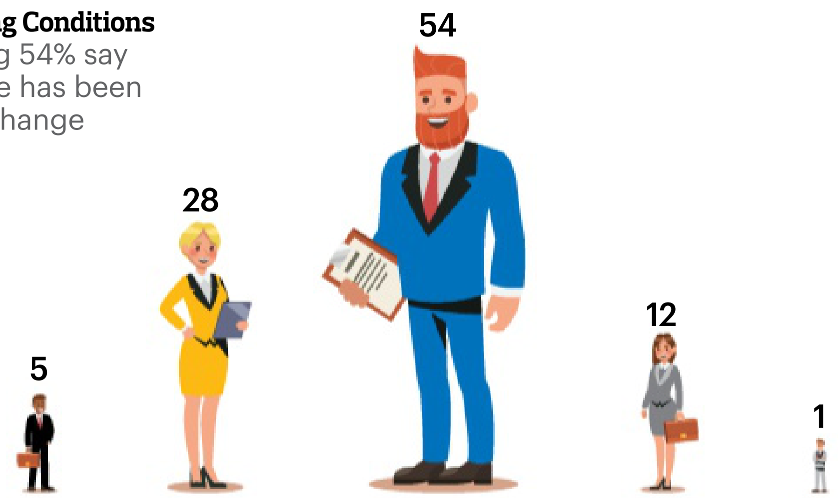


Availability of Business Finance
More than half say there has been no change

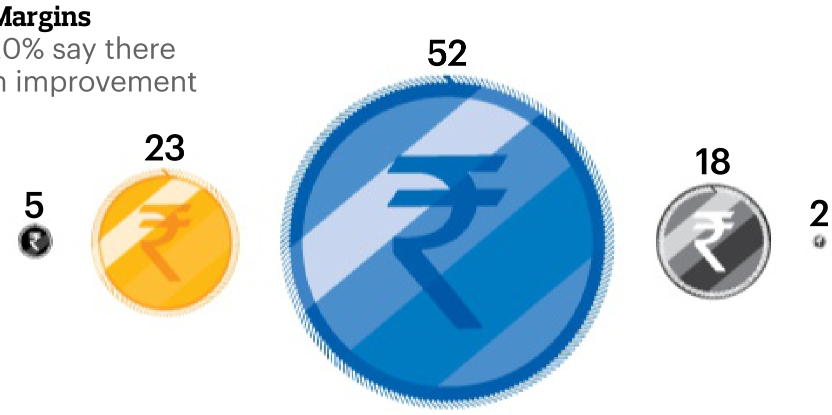


Demand Conditions
30% say things became worse in this quarter

Hiring Conditions
A big 54% say there has been no change

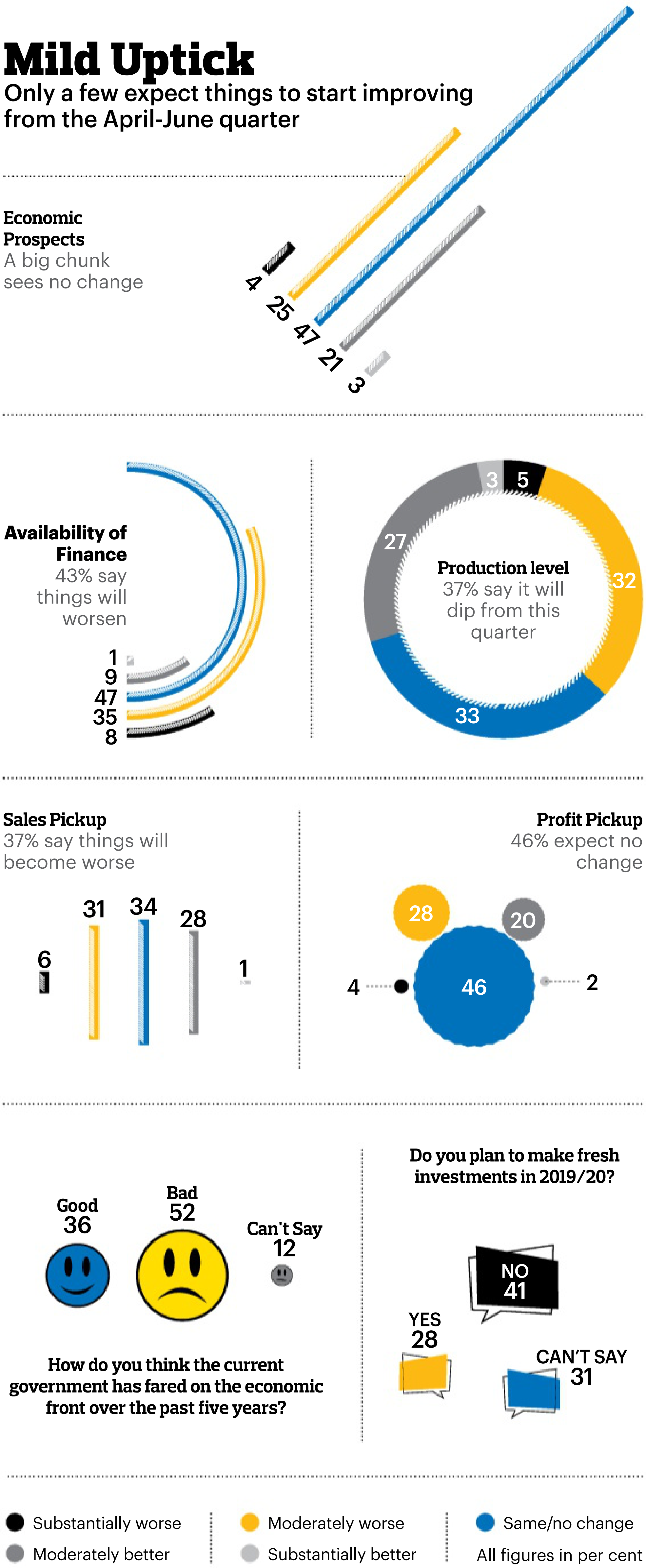


Profit Margins
Only 20% say there was an improvement



Mild Uptick

Only a few expect things to start improving from the April-June quarter



absence of long-term investments from corporates, the job market will remain sluggish.

Respondents are hoping for an improvement in some areas, including cost of external finance and imports. For example, 49 per cent believe that the cost of external finance will rise in the current quarter as compared with 64 per cent expecting so in the previous survey and 58 per cent in the survey before that.

The rate cuts, along with liquidity injection by the apex bank, are aimed at giving confidence to industry, which is facing headwinds on account of slowdown in global economic activity. "In terms of monetary policy, we are sensing more support [from the RBI] on the growth front as compared to 2018. Our forecast is that they will probably cut once more later this quarter. We don't rule out the possibility of more cuts in the subsequent quarters. They have stepped up liquidity infusion as well," says Sanyal.

As a supplement to the BCI survey, we carry out an assessment of other indicators of economic growth. These include macroeconomic conditions such as exports/imports, IIP (Index of Industrial Production) and Consumer Price Index (CPI). The CPI inflation climbed up marginally to 2.6 per cent in February after touching a 19-month low in January 2019. The retail inflation, still within the RBI's comfort zone, has plummeted 571 basis points under the current government. The IIP is weak due to slowdown in the manufacturing sector.

As per the survey, respondents believe that economic growth (51 per cent) should be the top priority for the next government followed by job creation (23 per cent), infrastructure (14 per cent) and tackling rural distress (12 per cent). Economists say GDP growth, which averaged around 7 per cent in the past five years, could have been better, and the country wasn't able to benefit from benign global crude oil prices. The task for the next government is not going to be easy as lingering effects of demonetisation and GST continue to affect businesses even if the GDP numbers appear to be healthy. BT

@manukaushik


MANIFESTO

THE HUB **POLICY**

PROMISED LAND

Party manifestos are promising the moon. Will the costs work out?

By **JOE C. MATHEW**
Illustration by **SIDDHANT JUMDE**

"I am placing my signature below all that has been told by the leaders who spoke before me." This is how Prime Minister Narendra Modi started his speech at the Sankalp Patra release function organised by the Bharatiya Janata Party (BJP) at its headquarters in New Delhi on April 8. Modi was endorsing the broad contours of the BJP's vision statement unveiled by top party leaders Amit Shah, Rajnath Singh, Arun Jaitley and Sushma Swaraj before him. "No need to repeat the same," he said. If repetition was strictly avoided, the Sankalp Patra would have looked much thinner, as several promises in the BJP's vision document are quite familiar to the Indian public. Doubling of farmers' income is one. Swachh Bharat is another.

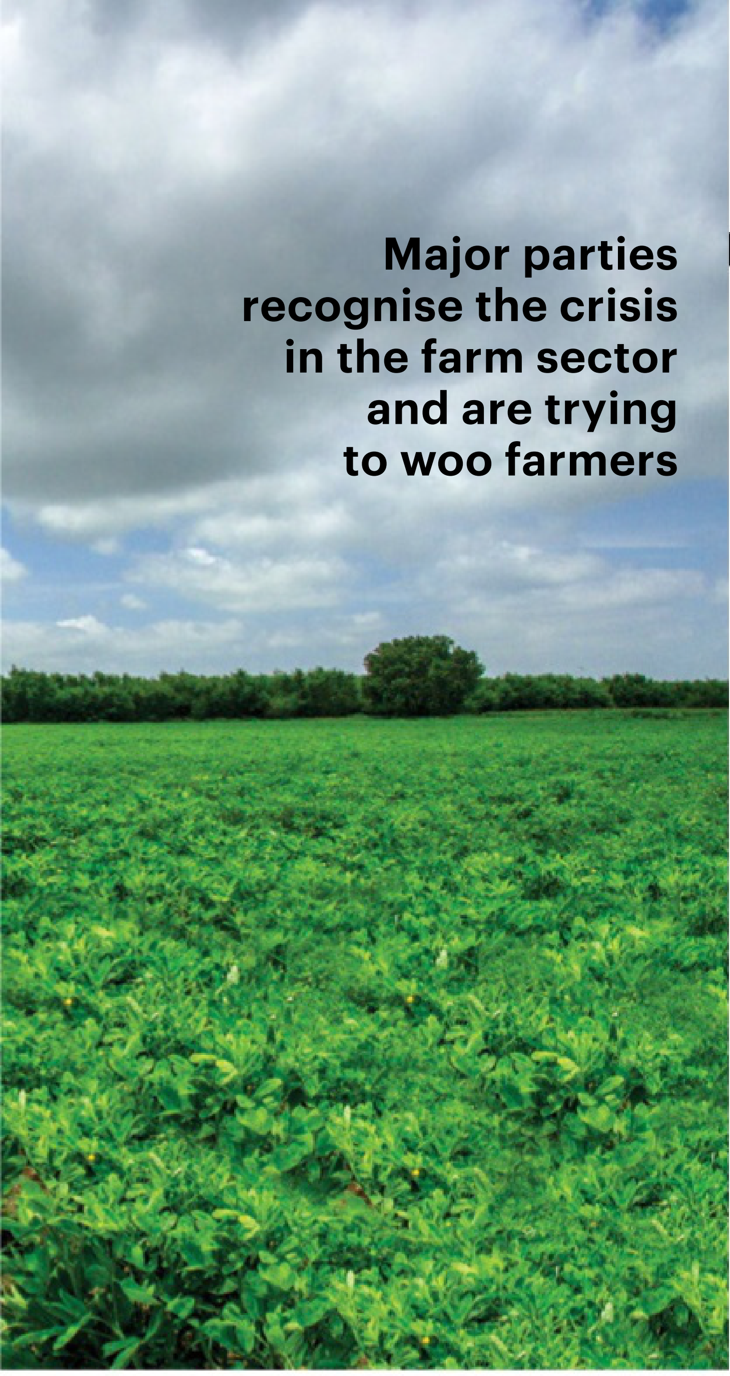
India's main opposition party, the Indian National Congress (INC), is not far behind in visionary statements. The party's election manifesto, named Congress Will Deliver, sets the goal of eliminating abject poverty by 2030. It assures ₹72,000 annual income to 20 per cent poorest 50 million families through a minimum income support programme called the Nyuntam Aay Yojana or NYAY.

Political parties are not known to keep all promises but their manifestos certainly give a hint of their likely policies if they are voted to power. But what if this time, for a change, they implement some of their major announcements? What will be the cost on the exchequer? While Congress' NYAY will cost ₹3.6 lakh crore (₹72,000 X 50 million), the party's plan to double spending on education from 1.4 per cent of gross domestic product, or GDP, to 3 per cent could cost an additional ₹3.4 lakh crore (based on 2019/20 estimated GDP). It also plans to increase expenditure on education from nearly 3 per cent to 6 per cent of GDP. This means an additional spend of ₹7 lakh crore. These three promises alone will cost the exchequer around ₹14 lakh crore if rolled out in one year only. However, the Congress has said that the targeted increase in healthcare and education expenditure will be achieved by 2023/24. Even NYAY could be rolled out in phases. According to the manifesto, the scheme will have a design phase (three months), followed by a pilot and testing phase (six–nine months), before it is rolled out. This means rollout from 2020/21.

The BJP's biggest announcement is expansion of the Pradhan Mantri Kisan Samman Nidhi Yojana to all. At present, the scheme promises ₹6,000 a year to each farmer with land holding of up to two hectares. According to Abhijit Sen, former member of the Planning Commission, if the scheme is expanded to landless farmers and those with land holdings of more than two hectares, it may cost the exchequer as much as the Congress' NYAY. The BJP hasn't made any other announcement involving a large additional expenditure.

There is no dearth of tall promises in manifestos of other parties too. The Communist Party of India (Marxist), or CPI(M), has promised to increase public expenditure on health from less than 2 per cent of GDP to at least 3.5 per cent in the short term and 5 per cent in the long term. All India Trinamool Congress President Mamata Banerjee has resolved to take expenditure on education from around 3 per cent of GDP to 6 per cent of GDP. Odisha's Biju Janata Dal has made a sweeping statement that it will ensure health security, food security and education security for everybody in the state. The Telugu Desam Party of Andhra Pradesh has promised creation of 2.5 lakh jobs in the IT sector and three lakh in the electronics manufacturing sector in the state without elaborating how, or by when.

Election manifestos of Indian political parties are always a mix of aspirations and promises. That is why financial implications of such promises are not clear. But the trend is hard to miss. Irrespective of the specifics, the overall commitment in terms of additional allocations for social or infrastructure sectors remains more or less the same for all political parties. Sen says manifestos, across parties, are committing themselves to spending an extra 1-2 per cent of GDP on social sector projects. This is 5 per cent of GDP if infrastructure is added, but in infrastructure, the public exchequer is not the



PHOTOGRAPH BY A. PRABHAKAR RAO

only contributor.

"As far as the Congress manifesto is concerned, its main promise is NYAY. It's a bit up in the air. The numbers coming out are 1.5-2 per cent of GDP. Some others (CPI-M) are talking about increasing public health spending —states and Centre taken together — from less than 2 per cent to 3.5 per cent of GDP, so that's again a 1.5 per cent (of GDP) increase," says Sen. He says the BJP promise to expand the PM-KISAN Scheme is not new as it was there in the Budget too. There is a cut-off (farmers with less than two hectares land are eligible for direct income transfer of ₹6,000 a year), but even after removing it, the increase will be relatively small as a large chunk of farmers will already be covered. "The real problem will be including landless labourers, which they have not committed. Then the number will go up dramatically. At the moment, you have put ₹75,000 crore, and if you consider landless labourers, it will be double of that, and that will bring the number up to something like the NYAY. So, you are in the same range," says Sen.

Avik Saha, National Convener of the Jai Kisan Andolan of Swaraj Abhiyan, however, says the BJP has repeated the promises of its 2014 manifesto and not given account of earlier promises and work done. "The BJP is silent on two of our key demands, remunerative prices and freedom from debt," he says. "It merely mentions that the government will attempt to ensure that the markets offer farmers a fair price."

Siraj Hussain, former Agriculture Secretary, says the most farmer-friendly promise in the BJP's manifesto is commitment to invest ₹25 lakh crore to improve farm productivity. The Congress promise to replace the Essential Commodities Act 1955 with a more contemporary law, repeal the Agricultural Produce Marketing Commodities Act and plan to set up a National Commission on Agricultural Development and Planning is a positive, he says.

All parties have talked about healthcare but the CPI(M) has promised free healthcare as a right, vowed to end private insurance-led healthcare and increase public expenditure on health to 5 per cent of GDP. "All of them are talking about health. The BJP is reiterating its Ayushman Bharat scheme on which its government has spent very little so far and which in any case is an insurance programme. The other extreme is to say we will spend 5 per cent of GDP. But even if they take it to 2-2.5 per cent, it will be a useful increase. So, parties have committed to an increase of 1 per cent of GDP, whichever way you look at it, on social sector schemes," says Sen.

The Swadeshi Jagaran Manch (SJM), an affiliate of the BJP's ideological mentor, the RSS, endorses the party's decision to not focus too much on doles. "The government is already giving more than ₹5 lakh crore as direct benefit transfer under various social sector schemes. Any extra means reduction in these payments or increase in fiscal deficit. This has been a convenient method of Congress governments. Fiscal deficit, approaching 2.5 per cent of GDP during Atal Bihari Vajpayee's regime, started going above 6 per cent during the UPA government. If that is the approach, on the one hand

AGRICULTURE

CONGRESS–Waiver of outstanding farm loans; separate budget for farmers; commissions to help marginal farmers and agricultural labourers

BJP–₹6,000 a year for all farmers as direct income support; pension for small and marginal farmers; **₹25 lakh crore investment** in agri-rural sector

INFRASTRUCTURE

CONGRESS–Modernisation of outdated railway infrastructure; to re-view, re-formulate and implement the policy on spectrum and exploration and extraction of natural resources; investment in off-grid renewable power generation

BJP–Construction **of 60,000 km** National Highways in the next five years; 101 additional functional airports in five years; capital investment of **₹100 lakh crore** in the infrastructure sector

SOCIAL SECURITY

CONGRESS–Nyuntam Aay Yojana (NYAY) under which the poorest 20 per cent families will get **₹72,000 a year**; increase in guaranteed days of employment to 150 days in cases where 100 days have been achieved in a block/ district; support to micro and small enterprises that collectivise unorganised sector workers, including waste pickers and scrap collectors

BJP–Promise to ensure pucca houses for families either living in kuchha houses or without access to housing by 2022; **pension for small shopkeepers;** one medical college or post-graduate medical college in every district, through public or private participation, by 2024

REGIONAL PROMISES

BJD, Odisha
Every household in the state to have **a pucca house**

BPL will not be the only criteria for food security benefits. Other indicators that reflect economic status will be added to make the scheme inclusive and holistic

A **"Chief Minister Employment Generation Scheme"** under which a minimum of 150 youth from each gram panchayat will be given skill upgradation training, and loan and subsidy linkage

TDP, Andhra Pradesh
175 MSME parks to be developed

₹75,000 to be distributed to farmers under the Annadata Sukheebhava programme in the coming five years

All vacancies in the government sector to be filled by March 2020. Recruitment calendar to be published every year

2,50,000 jobs to be provided in the IT sector and 3,00,000 in the electronics manufacturing sector

TMC (West Bengal)
Will build **a National Petroleum Reserve** targeting at least 45 days. The reserves will be partly used to stabilise petroleum prices for the common consumer

Transparent and time-bound monitoring of all central government projects focussed on measurable outcomes

Will ensure **'Health for All'** and raise health expenditure to 4.5% of GDP from the current 1.38%

Expenditure on education to be increased from **3.24% to 6% of GDP**

CPI(M)
Statutory minimum wage of not less than **₹18,000 per month;** wages to be linked to the Consumer Price Index

Universal public distribution system with provision of **35 kilograms of foodgrains per family,** or 7 kg per individual, at a maximum price of **₹2 per kg every month**

Old age pension with minimum monthly pension not less than half the minimum wage, or ₹6,000 per month, whichever is higher, for all citizens

Scrapping of the Fiscal Responsibility and Budget Management Act and setting **a floor for social sector spending** as a binding constraint in fiscal exercise for both central and state governments

you will be giving money to the poor, on the other hand you will be taking away that through inflation. The government should try to increase productivity. In that sense, I find the BJP's approach towards doubling of farmers' income better than the doles through NYAY," says Ashwini Mahajan, National Co-Convener, SJM. According to him, the BJP's promise of ₹100 lakh crore investment in infrastructure is the best example of development without upsetting fiscal balance. "During Atalji's regime, we spent ₹1,10,000 crore on roads and infrastructure but the government's contribution was only ₹10,000 crore. The rest ₹1,00,000 crore was domestic private investment. We have enough private money available domestically. The only problem is rate of interest. Once you bring prices under control, the rate of interest will come down, and funds will be available at a lower cost. The BJP's plan is to encourage private investment in infrastructure. And that is possible," says Mahajan.

Abhijit Sen says the BJP's plan to spend ₹100 lakh crore on infrastructure, the biggest of all promises, is doable. "The point is that ₹100 lakh crore is roughly 10 per cent of GDP. During 11th and 12th Plans, we had targeted 7 per cent of GDP. We spent around 6 per cent during UPA 1 and UPA II years. So, the BJP is targeting a 3-4 per cent increase. That is the kind of money some are talking about for health and education. The difference is that in infrastructure, it need not be public spending, because a lot of projects happen through the public private partnership (PPP) model," he says, adding the question is whether this is possible under the current scenario or not. "PPPs are not happening to that extent and investment vehicles like IL&FS are dead. Much of what could have been done through private investment may not happen."

While opposition parties can offer the moon, the BJP, which is considered as having a strong chance to retain power, is more careful in its promises. It has, hence, downplayed several promises in its manifesto five years ago. There is no mention of the 100 new smart cities promised in 2014. The 'Make In India' programme has also become low key. National interest and grand vision which Union minister Piyush Goel spoke about during the presentation of the interim Budget early this year is what has been carried over into the vision document. Manifestos and vision documents are for the moment just grand ideas for a better India, nothing more. BT

With inputs from Dipak Mondal

@joecmathew

With precarious economies and erratic market trends, it is no surprise that companies want to employ only the most intuitive and competent business graduates. There is a growing need for young minds, who are trained to apply knowledge beyond the theories of a textbook and to develop effective solutions which guarantee commercial success. With this need of the hour in mind, The Lexicon Group of Institutes is offering the most competitive and rigorous programs for Business Management. At Lexicon MILE, the primary goal is to expose students to inspiration, innovation and discovery.

Lexicon MILE offers various management programs to its students, designed to provide holistic development through a multidisciplinary, tailor-made courses, which instill in them not only the knowledge of business, management, and commerce, but also corporate responsibility, greater confidence and self-esteem, and real world work experience. While Lexicon MILE students are consistently successful in the classroom, they have also proven their caliber by being placed year after year in world-renowned companies. Lexicon MILE graduates have received pay packages as high as Rupees 18 Lakhs per year and are highly sought after by more than 100 regular recruiters visiting the campus every year.

Dr. Neeraj Sharma
Vice-Chairman of The Lexicon Group of Institutes

Dr. Neeraj Sharma, Vice-Chairman of The Lexicon Group of Institutes, expresses that, “Today, our students are graduating to become citizens of the world, where digitalization has connected us to the remotest parts of the globe. It is imperative that we expose them to the academics, cultures and traditions of the world, to ensure that they are independent and confident leaders of tomorrow!” With this vision of nurturing global citizens and effective corporate members, Lexicon MILE has launched the Global MBA program this year in collaboration with the University of South Wales (UK).

This Global MBA will be a dual specialization program, where students will receive a Certificate in Business Management from Lexicon MILE and a Global MBA degree from the University of South Wales. Students will be consistently exposed to real world international industrial experience, which will allow them to develop skills of leadership and critical thinking. To successfully receive the MBA, students will be required to spend 11 months in UK at the University of South Wales, where they will be trained by an expert faculty.

Over the last nine years, Lexicon MILE has achieved several awards and accolades to be recognized as one of the most premier Business Schools of the nation. Lexicon MILE has received acknowledgment from bodies such as the BBC with the award of the ‘Institute with Best Academic and Industry Interface’ at the global level, and has also been recognized as the ‘World’s Greatest Brands & Leaders’ at the international AsiaOne Awards in Singapore.

Lexicon MILE is a journey where students enroll with the dream of achieving a reputable Masters qualification; however, they walk out with more than just a degree. Mr. Pankaj Sharma, President of The Lexicon Group of Institutes, notes that, “Lexicon MILE students graduate with the confidence to overcome challenges and take charge as leaders; they graduate with the expertise derived from their textbooks and an innovatively designed curriculum; and they graduate with the experience and zeal to excel in the global and international industries”.


THE RISK FAC

Attempts to increase yields are making fund managers shift towards riskier securities.

By DEEPIKA ASTHANA

It is a truism of investment that high returns go hand in hand with high risk. When the economy is doing well, most investors focus on returns alone, not paying sufficient heed to risk. Mutual funds, which have taken a hit due to defaults by two Essel Group companies, are no different. The Essel Group companies, to which mutual funds have lent a combined ₹7,000 crore against debt securities, are now unable to honour some of their immediate term obligations. There has been deferment of payout, rollover and haircuts in arguably the safest product in fixed income. Kotak Mahindra AMC has reportedly informed its investors that it may not be

NARESH GOYAL, Chairman, Jet Airways

"Rating agencies may differ in their assessment and treatment of the parameters used to evaluate"

SANTOSH KAMATH, MD and CIO, India Fixed Income, Franklin Templeton

able to immediately redeem the entire amounts in multiple schemes, while HDFC AMC, India's largest asset manager, has extended the maturity of one of its fixed maturity plans maturing on April 15 to April 29. Last year, too, after Infrastructure Leasing and Financial Services (IL&FS) defaulted on inter-corporate deposits and bond repayments, funds were caught on the wrong foot. The 33 bonds and hybrid funds that had cumulatively invested ₹2,900 crore in the company suffered losses when credit agencies lowered IL&FS ratings to junk.

Unfortunately, these are not isolated events. Managers of lakhs of crores of debt mutual fund money – in search of extra returns in a market that has been subdued for years due to a tight interest rate regime – have been chasing riskier/high-yielding debt securities, though staying within regulatory limits. To make things worse, after the IL&FS meltdown, non-banking finance companies (NBFCs) and housing finance companies (HFCs) have been further widening their credit spreads, leading to some degree of concern, given how heavily fixed income funds are invested in them.

"Going down the credit ladder adds to portfolio yield, but it comes with increased risk of default and illiquidity," says Pankaj Pathak, Fund Manager (Fixed Income), Quantum Mutual Fund. The total money invested in income- or debt-oriented schemes is ₹12,87,388 crore, which is 52 per cent of the total assets under management (AUM) of the mutual fund industry. Debt funds' investment in A and below and unrated securities has risen from 4.48 per cent of their total assets in the June 2017 quarter to 6.53 per cent in the December 2018 quarter. Correspondingly, their investment in AA and equivalent securities has fallen from 13.61 per cent of the total to 11.42 per cent during the period.

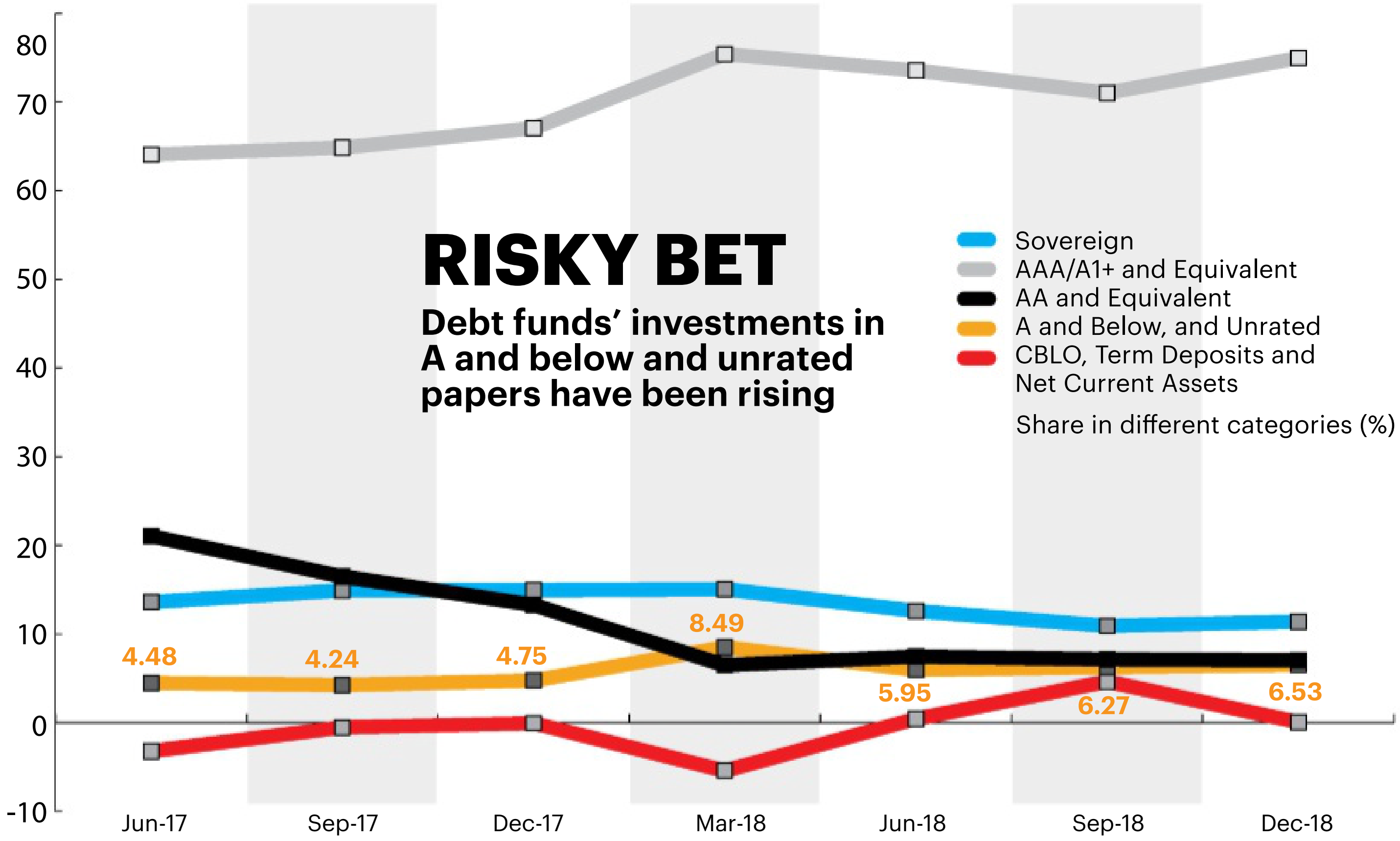
This move towards riskier securities may give funds higher yields but has got experts worried. "If an instrument offers a significant spread over the ones that are AAA-rated, the fund manager should identify the source of the yield advantage," says R. Sivakumar, Head (Fixed Income), Axis Mutual Fund. "He should only invest in companies with strong underlying fundamentals."

Liquid funds – those with no lock-in period – are prone to sacrificing safety for higher yields. Most recent cases of default have been by liquid funds. It has been found that liquid funds today invest around 60 per cent of their assets in private sector companies, and only the remaining in government securities, and a sizeable chunk of those companies are not AAA-rated. Moreover, a third of their private sector investments is in instruments issued by NBFCs. "Sometimes, the liquidity and credit quality of these instruments are not commensurate with the liquidity and safety objectives of a liquid fund," says Pathak of Quantum.

Concerns for Investors

An important aspect to consider while evaluating a fund is how concentrated its investments are. Concentrated risk can be detrimental to a portfolio's performance, as it can magnify the fallout from a negative credit event and skew portfolio returns. "A fund with credit risk but not concentrated in a limited number of instruments may be less affected than a fund with less credit risk but high concentration in a few instruments," says Vidya Bala, Head – Mutual Fund Research, FundsIndia.com. "This is where risk mitigation, and the structures funds have in place to reduce the risk arising from credit and liquidity issues, matter more than the credit holding per se." Sivakumar maintains that Axis Mutual Fund is careful to avoid concentrating its funds. "Typically, we do not invest more than 10 per cent in a single group of companies," he says. "We also ensure we do not allocate more than 3-5 per cent of our funds in AA-rated securities, and even less, say, 2-3 per cent, in A-rated ones."

Another vital factor is the fund's liquidity. If an unexpectedly large number of investors suddenly want their money back, can the fund handle it? Experienced fund managers keep conducting stress tests on their portfolios to check for liquidity. "A certain proportion of the fund could be invested in highly liquid instruments," says



CBLO: Collateralised Borrowing and Lending Obligation Source: Icraonline

"A certain proportion of the fund could be invested in highly liquid instruments"

R. SIVAKUMAR
Head (Fixed Income), Axis Mutual Fund

Sivakumar. "By investing a certain percentage in 18-36-month maturity instruments, for example, we ensure that every year we have a part of our portfolio maturing, providing ample liquidity to the fund."

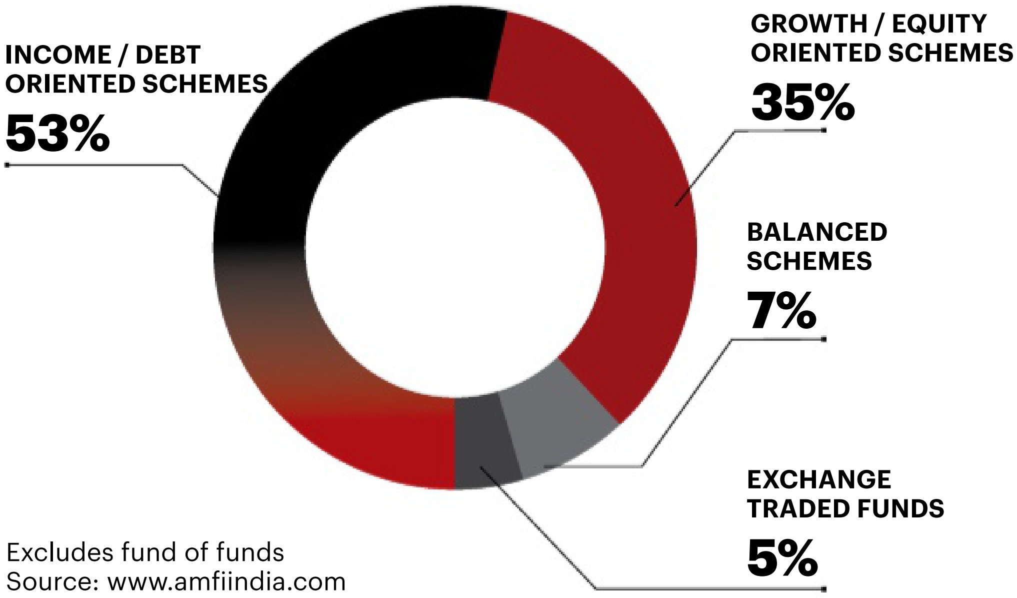
There are other safety nets, too. The Securities and Exchange Board of India (Sebi) allows mutual funds to borrow 20 per cent of their AUM to meet short-term liquidity needs. In December last year, it also permitted "side pocketing" – moving stressed assets into a segregated portfolio – so that liquidity demands don't choke the remaining AUM, and redemption continues on the more liquid assets.

But there are still chances of liquidity being hit if fund managers aren't careful. "A mismatch in preferred investment tenure and market segmentation among mutual funds, banks and insurance companies is inherent," says Dhawal Dalal, CIO (Fixed Income), Edelweiss Asset Management. "A 10-year AAA bond of a public sector enterprise will enjoy better liquidity in the secondary market than its two-year bond which may also be rated AAA," he says.

Ultimately, no investment is without risk. In particular, the perception that debt funds – unlike equity funds – are impervious to risk is misplaced. Debt mutual funds invest in debt instruments that lie at different levels on the risk spectrum. Sovereign funds, underwritten by governments, have the least credit risk, though even these carry interest risk and to some extent, liquidity risk. Corporate debt funds face higher risk. "The nature of the fund denotes the quantum of each of these risks," says Lakshmi Iyer, CIO (Debt) and Head (Products), Kotak Mutual Fund. "In the case of liquid funds, for instance, the investments are usually in short maturity, high grade instruments, which are consequently high on liquidity. The risks are on the lower side. A credit risk fund, in contrast, tends to invest in corporate bonds across the rating spectrum, placing it a tad higher on credit risk, but lower on interest risk as the investments are made in low to moderate maturity assets."

DEBT DOMINATES

Debt funds account for more than half of mutual fund industry assets

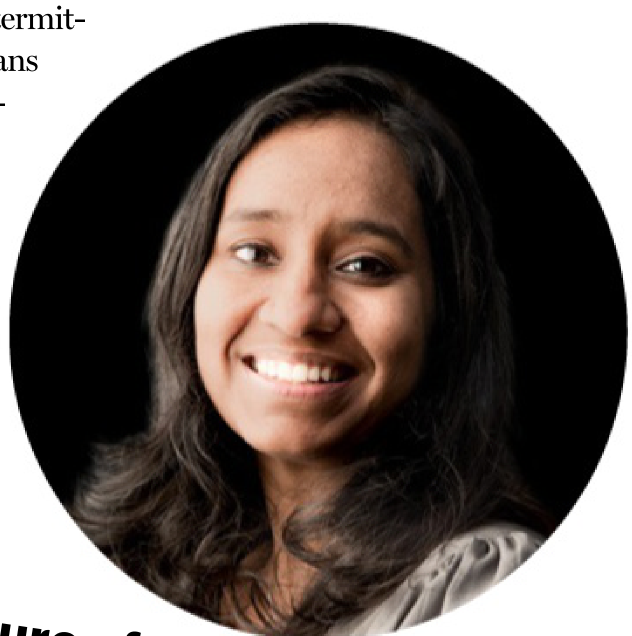


Excludes fund of funds
Source: www.amfiindia.com

Ratings Conundrum

Should rating agencies be blamed for not seeing the warning signals at IL&FS earlier? "Ratings may not exactly reflect the credit position of a company at all points of time," says Santosh Kamath, Managing Director and CIO, India Fixed Income, Franklin Templeton.

"Typically, the rating cycle is one year. Thus, ratings move with a bit of a lag, and may not immediately respond to marginal news flows in the intermittent period." This simply means that however high the credibility of the rating agency may be, the ratings cannot be trusted blindly as these are ultimately based on an external analysis. They should be considered a reference point while the fund manager conducts his own analysis.



"The nature of the fund denotes the quantum of each of these risks"

LAKSHMI IYER
CIO (Debt) and Head (Products), Kotak Mutual Fund

"While credit fund investments and market pricing are based on credit ratings, the rating agencies' revenue models along with their ability to closely track issuer financials and change their ratings in time has been questioned repeatedly," says Rajesh Cheruvu, CIO, WGC Wealth.

Kamath of Franklin Templeton feels that analyses can differ: "Rating agencies may differ in their assessment and treatment of the various parameters used for evaluating a financial instrument or a company. Some rating agencies may be slightly more aggressive than others on a case-by-case basis. They have been doing a good job so far, but ratings cannot be looked at in isolation. Fund managers need to understand when a rating was given, the market environment and news flows at the time, and most importantly, whether the analyst bias was aggressive or conservative."

The cost of refinancing – and the company's access to it – should also be considered. "Many large borrowers don't generate sufficient cash from operations to repay debt," says Dalal of Edelweiss.

Fund houses have internal rating systems as well, but use them only up to a point. "Most managers claim that they have internal rating mechanisms to assess risks with issuers, but allocations are still largely done on the basis of ratings assigned by rating agencies," says Cheruvu of WGC Wealth.

In an increasingly competitive field, however, it is the funds whose managers have the judgement and expertise to see beyond the rating that will win. "Fund managers seek to identify companies where they think the rating should be higher than what they currently have," says Kamath. "Investing in such companies gives the fund the primary advantage of a higher yield. And if the company gets upgraded in due course, there are capital gains to reap as well." No doubt there are also companies with higher ratings than what they deserve.

If debt funds manage their risks well, investors are on safe ground. But if the chase for higher yields leads to unmanageable danger, there will be a breach of trust and investors will pay a heavy price. The recent events in the credit markets point to a larger malaise, one which needs to be addressed by the industry. BT

The author is a Mumbai-based freelance writer

THE HUB **CORPORATE**

DISTRESS CALL

State-run BSNL and MTNL, credited with laying the country's telecommunication infrastructure, are battling for survival, owing to mismanagement and mounting losses. Can the government rescue them?

By SHWWETA PUNJ

Close to Connaught Place, in the heart of New Delhi's business district, stands Eastern Court, the colonial building designed by Robert Tor Russell. Once a picture of elegance – a creamy white facade, arcades, huge verandahs and a massive lawn – the sprawling complex is today crumbling with decay and neglect. Much like the state-run telecom company it houses: Mahanagar Telephone Nigam Ltd (MTNL). The Bharat Sanchar Nigam Ltd (BSNL) office, a stone's throw away, appears swankier, but walk into either of the offices and you find files piled up on desks, the backrest of chairs lined with towels, broken hot cases and too many hands to do each task. A notice at the MTNL reception instructs visitors not to pay bribes and to lodge a complaint if an official asks for one. It's a vintage *sarkari* set piece, reflecting the archaic ways in which the telecom behemoths carry out their business.

Scores of state-run enterprises in India continue to retain their image as havens of 'safe employment', what if that comes at the cost of professionalism and performance. At BSNL and MTNL, for instance, a driver to a joint secretary-level officer with about two decades of experience earns around ₹70,000 a month, excluding perks. Until recently, it came with a priceless tag called job guarantee. Not anymore.

MTNL, saddled with a debt of about ₹20,000 crore, has been delaying salaries since October 2018. January salaries were credited on February 21 while the February salary was paid on March 14. The company is paying ₹150 crore as monthly interest on its loans while revenue from the lucrative Delhi and Mumbai circles – where it

operates – is about ₹100 crore.

BSNL, India's fourth-largest telco, failed to pay its 176,000 employees their February salaries until mid-March. It was on March 15 that Chairman and Managing Director Anupam Shrivastava informed the media that the salaries had been disbursed. While BSNL's employee expenses as a percentage of total income have more than doubled in the past decade – from 26.4 per cent in FY09 to 53.8 per cent of the total income in FY18 – its market share and revenue have steadily declined. BSNL last posted an operating profit in 2009. Since then, the company has piled up a cumulative loss of ₹57,113 crore, from fiscal 2010 to 2018. From a net cash position of ₹37,163 crore in FY08, it slipped to a net debt position of ₹16,093 crore at the end of fiscal 2018.

Cross Connection

How did the two state-run telcos, which laid India's communication network and still remain the backbone of its telecom infrastructure, fall on such days? One, BSNL and MTNL are seen as examples of 'maximum government', an albatross the Narendra Modi government had promised to rid the country of. Mahesh Uppal, founder of ComFirst India, a consulting firm specialising in technology and telecom policies, explains: "BSNL never could and is still not able to compete commercially because it lacks commercial flexibility and capacity. In the normal course of things, a commercial player would take action, whether it's hiring-firing or adjusting business decisions. But BSNL is government-controlled."

Poor customer service didn't help either, especially when private players were making aggressive efforts to increase their customer base.

Another key reason behind the decline of BSNL and MTNL has been their inability to take on private players, such as Reliance Jio and Bharti Airtel. BSNL has failed to take timely commercial decisions, such as when and what spectrum to bid for. In 2009, the then UPA government pressured the company to go for WiMAX or Worldwide Interoperability for Microwave Access-based services. The WiMAX lobby was strong at that time and had pitched it as a superior technology that could serve the rural areas – an aspect that greatly appealed to BSNL. But, as industry insiders say, WiMAX was an inferior technology and telcos across the world had rejected it for superior options. BSNL became the only Indian telco with WiMAX technology for its broadband wireless access (BWA) spectrum, used for offering 4G services, while private players invested in long-term evolution (LTE).

In August 2008, BSNL and MTNL had been provided spectrum ahead of the 3G spectrum auction for private players in 2010. While spectrum was alloted to them two years ahead, both had to pay a price equal to the highest bid in the respective service areas. They paid exorbitant amounts for spectrum they did not get to choose. MTNL paid about ₹11,198 crore (₹6,574 crore for 3G and ₹4,534 crore for BWA spectrum) while BSNL paid about ₹18,500 crore (₹10,186 crore for 3G and ₹8,314 crore for BWA spectrum). In 2013, then BSNL Chairman and Managing Director Kuldeep Goyal lamented in a media interview that the company did not get the option of selecting circles for 3G or BWA and that the high spectrum prices had impacted its business model. By then, BSNL was already in the red, having reported losses for the first time in its history in 2009/10.

Both BSNL and MTNL failed to capitalise on their first-mover advantage because the spectrum offered to them in the 2.5 GHz band was of poor quality. Whereas, in 2010, private players successfully negotiated with the government for spectrum in the 2.3 GHz band – considered more efficient. Eventually, BSNL and MTNL surrendered 17 of their 22 circles and sought a refund to the tune of ₹11,258 crore. The Union Cabinet approved the refund in 2014 on the condition that the money would be transferred over a period of time as part of a 'revival' package.

Ironically, BSNL and MTNL had decided to surrender BWA spectrum at a time the telecom industry was gearing up for data-driven 4G services. "BSNL at one time was one of the best operators in the country. But without 4G spectrum, you don't have subscribers. Who will pay for a redundant service?" asks an industry professional.

Policy interventions, too, hurt the telcos. For instance, the 2017 move by the Telecom Regulatory Authority of India (Trai) to reduce the interconnection usage charge (IUC) by more than half, from 14 paise a minute to six paise, and scrap it by 2020. IUC is the fee a mobile service provider pays another to link calls to the latter's network. While the move was seen as benefitting new entrant Reliance Jio, it came as a big blow to the incumbent operators who had been battling against the cut.

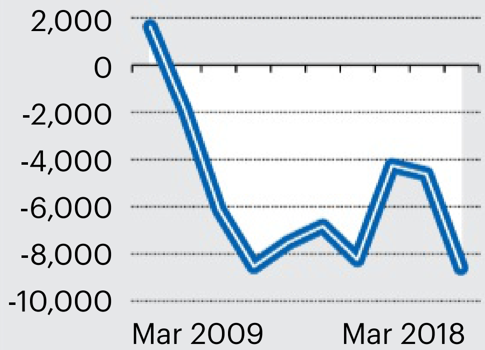
The ₹1.5 lakh crore Indian telecom market, with 1.16 billion mobile phone subscribers, is in the throes of a churn like never before. The entry of Reliance Jio in 2016, with its opening offer of free calls and rock-bottom rates for data, severely jolted the sector. Within two years, Jio bagged over 250 million subscribers even as several players, such as Telenor and Tata Teleservices, sold off their businesses while Anil Ambani's Reliance Communications sank under debt. In the past two years, the number of telecom players has come down from nine to four, including BSNL. Vodafone

LIFE AFTER DEBT?

Why telecom behemoth BSNL is deep in the red

The company last posted an operating profit in 2009

Profits before interest and taxes (in ₹ crore)

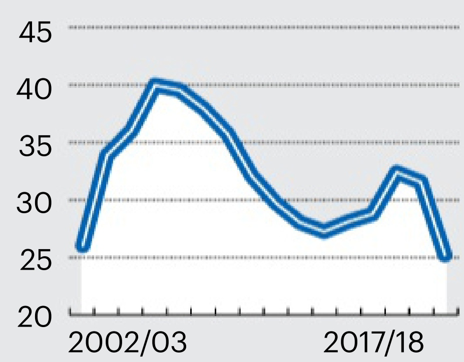


Wages/ salaries as a percentage of BSNL's total income have more than doubled since 2002

Employee expenses (in %)

BSNL's revenue fell 38% between FY06 and FY18, from a peak of ₹40,176.6 crore to ₹25,070.6 crore

Total income (in ₹ thousand crore)



Source: Ace Equity

India, once number two, posted losses of $4 billion and merged with Idea Cellular in 2018 to create Vodafone Idea – now the largest operator with 422 million subscribers, followed by Jio and Bharti Airtel.

Dialling For Help

What really are the options for BSNL and MTNL? A senior bureaucrat in MTNL says banks have stopped extending credit to the telco since its net worth is negative to the tune of over ₹6,000 crore. Monetisation of assets is not an option because 90 per cent of these are under the name of the urban development ministry. While a committee was set up in 2000 with the mandate to transfer such assets to BSNL and MTNL by 2005, the process is far from complete.

As of November 30, 2018, BSNL and MTNL had a market share of just 10.1 per cent among wireless subscribers. But BSNL claims its net percentage of subscriber additions in 2017/18 was the highest at 11.5 per cent. Compare this with Airtel (9.5 per cent), Vodafone (3.8 per cent) and Idea (3.2 per cent). BSNL's wireless subscriber base as of March 2018 was 111.7 million.

Set up in 2000, with a large number of employees shifted from the Department of Telecom, the mounting wage bill has been pricking BSNL all the more because of pension and staff benefits. Unlike its mammoth workforce, private telcos have contained their numbers at 30,000-40,000 by outsourcing a lot of operational work. Both BSNL and MTNL are now considering a voluntary retirement scheme for employees over 50 years of age, but no proposal has been approved yet by the Centre and the employee unions.

Adding to the uncertainty is BSNL's wait for a full-scale launch of 4G services even as private operators gear up to roll out 5G. Things came to such a pass last month that the company had to issue a press release on February 15, clarifying that it is not shutting down. But it certainly needs to get its act together before it is too late. BT

@shwetapunj

SHAKEN AND STIRRED

If the ₹1 lakh crore organised dairy industry is growing at a robust 10 per cent year-on-year, and consumption too is growing, why are many dairy companies losing flavour?

By AJITA SHASHIDHAR

Illustration by AJAY THAKURI

When Godrej Industries subsidiary Godrej Agrovet picked up a 25 per cent stake (increasing it to 52 per cent in 2018) in the Andhra Pradesh headquartered Creamline Dairy in 2015, the intent was to be a significant stakeholder in the then ₹80,000 crore organised dairy industry, which was estimated to grow at 15-16 per cent year on year on the back of value-added products. Segments such as milkshakes, yogurts, cheese and paneer, after all, offer high margins, while in liquid milk, margins are wafer thin.

The dairy industry, over the past few years, witnessed the entry of a host of private companies such as ITC and French dairy major Lactalis. French yogurt maker, Danone, was also bullish about India consumption and set up a milk procurement and processing centre in Punjab. Homegrown food company Britannia Industries went back to the drawing board to rethink its dairy strategy while ITC preferred to play a slow and steady game. All these companies had national ambitions and were set to outwit cooperatives such as Amul, Mother Dairy and Nandhini, which had been ruling the Indian dairy market for decades.

Four years later, Balram Yadav, MD, Godrej Agrovet, is thankful that he did not take his dairy business beyond the five southern states. The dairy arm of Danone exited the Indian market in early 2018. And while Lactalis has made a few big-ticket acquisitions (having acquired Indore-based dairy company Anik for ₹452 crore and Prabhat Dairy for ₹1,700 crore), it has restricted itself to a few regions.

The organised dairy market is a ₹1,00,000 crore market (the overall market is ₹5,67,000 crore), growing at 10 per cent, but profitability has been low and the value-added growth story hasn't panned out as expected. "We have been shaken. We have never lost money but have lost profits. Profitability in the last two years has come down to 2.5 per cent from 4 per cent, which is a big hit," says Yadav of Godrej Agrovet. Creamline Dairy made a profit of just ₹9.29 crore on a revenue of ₹1,157 crore in FY18. The ₹1,554 crore Prabhat Dairy made a profit of ₹47.28 crore while the ₹1,918 crore Parag Milk Foods made a profit of ₹74.48 crore.

"The dairy growth story, especially that of value-added dairy products, hasn't played out expected," agrees Rajesh Srivastava, Chairman and Managing Director, Rabo Private Equity, which had invested in Prabhat Dairy.

While Danone's failure was due to the fact that it bet heavily on a single niche category (yogurt), for the others huge margins and profits in a short term did not come through. "We have realised that dairy is a difficult category. It is very commoditised, particularly in liquid milk, and government dairies call the shots. Their decision making is determined by the government, so sometimes they will increase prices at the farmer level to support the farmers, which is good, but not increase the prices at the consumer level. They compress margins so that inflation doesn't go up. The private sector suffers because it too has to then pay more and get less from the consumer. The margins vanish," says Godrej Agrovet's Yadav.

The overall dairy industry is valued at ₹5.67 lakh crore. It is expected to maintain the growth rate of 10-11 per cent till 2020, while growth in most mature markets is stagnant

ALL ABOUT PANEER & CHEESE

The contribution of value-added products (VAP) such as cheese, paneer, curd and milkshakes is set to surpass that of milk by 2021. Health consciousness and changing lifestyles are driving the demand for these products

AT A GLANCE

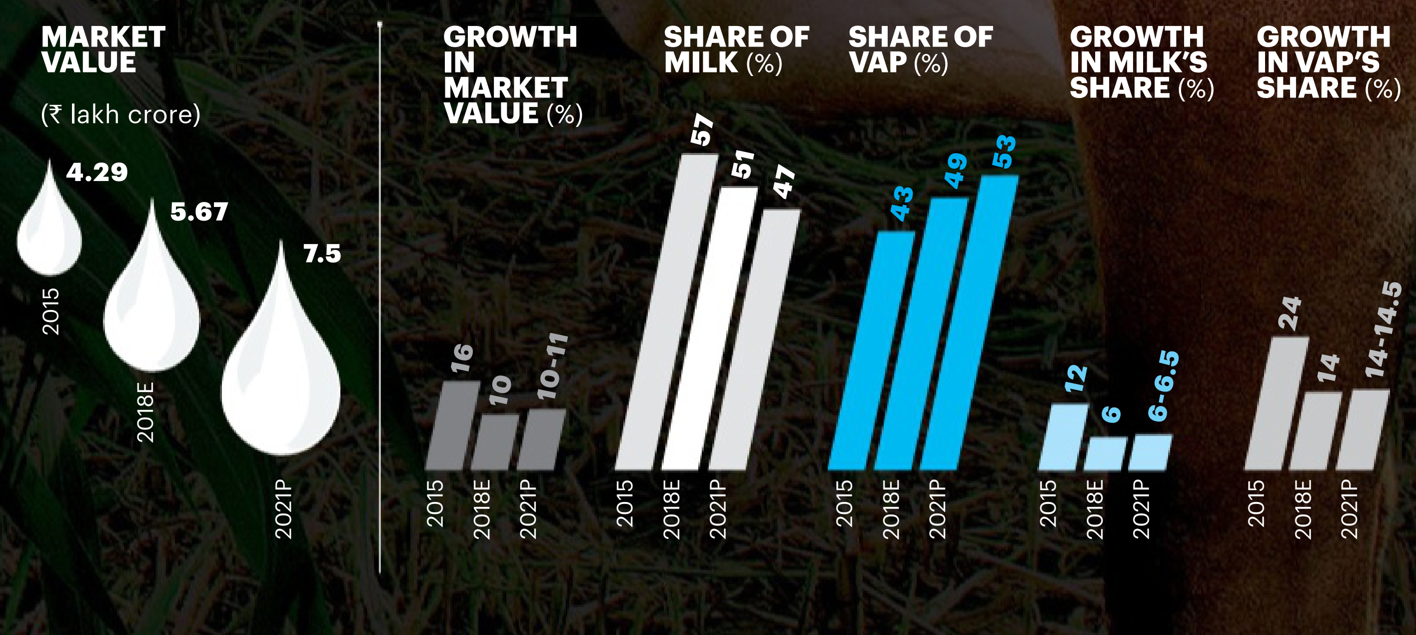
Milk production in India reached **176.3 million** tonnes in 2017/18. Per capita availability of milk is 375 grams per day

India is the No.1 milk producer in the world, contributing **21 per cent** of overall production

Indian milk production has grown **5.9 per cent** CAGR in past five years

Cooperatives pay farmers about **₹30 per litre** of milk

PHOTOGRAPH BY REUBEN SINGH



E: estimated
P: projected
Growth rates are three-year CAGR
Source: Crisil Research

In fact, several private dairy companies have been complaining about local cooperatives not allowing them to procure milk. Cooperatives say the private companies are unwilling to remunerate farmers and so the farmers stay away. If a cooperative pays a farmer ₹30 per litre of milk, private players pay only around ₹21, says an industry insider. "The moment the procurement crosses 1,00,000-2,00,000 litres a day, you are seen as someone who is taking away all their (cooperative's) milk and there will be conflict," points out a Mumbai-based dairy entrepreneur.

India's dairy business model is different from other countries', says R.S. Sodhi, Managing Director Amul. "The world over, farmers, processors and marketers or retailers get one-third each. In India, farmers get 80 per cent of the revenue. That's why most private players, especially the global companies, fail. Most of them are not interested in supporting the farmers; they want profits. There are profits in this business, provided they are in the volume game. However, the appetite for profit shouldn't be too large either."

In this business, the margins are 6-7 per cent in the best of times, and while value-added products offer upwards of 15 per cent, India is still a predominantly liquid milk consumption country. Offering only value-added products to a retailer will not work. If the company has liquid milk as well, then retailers are more willing. "If you are a new player, providing many value-adds may hinder scale and affect the supply chain and logistics. To get some degree of stability in the supply chain, it is important to focus on pure diary business. It may take time to generate returns but it will help stabilise the business," points out Harsha Razdan, Partner and Head (Consumer Markets), KPMG.

Liquid milk remains pre-dominant. "Fresh liquid milk comprises two-thirds of the Indian dairy market. Given this scale, it will continue to be a significant driver of market growth, and an important part of the portfolio for most dairies. In parallel, building an array of longer-shelf life products is beneficial, as apart from providing potentially higher margins, they allow you to balance the vagaries of raw milk supply across flush and lean seasons," explains Dhyanesh Shah, Principal, Eight Roads Ventures India, which has invested in Bhubaneswar-headquartered Milk Mantra.

Production Factors

The dairy industry has been witnessing a milk glut due to 1,60,000 tonnes of surplus skimmed milk powder generated by dairy cooperatives which they couldn't export due to a global dairy slowdown. This has led to a drop in milk procurement as cooperatives sell the excess powder to private dairy players, many of whom prefer buying skimmed milk powder at a much cheaper rate from cooperatives than procure milk from farmers. This has led to a close to 50 per cent dip in milk prices. "Milk procurement has come down by 5-7 per cent and many of the traditional farmers want to exit the milk business," says Samrath Setia, CEO and Co-Founder, Mr Milkman, a milk distribution start-up.

In the short run, private dairy companies have benefitted as the fall in milk prices has reduced their procurement costs. "Discounting in dairy products has increased. In cheese, milk or ghee, all brands are offering heavy discounts," says Amul's Sodhi.

But the situation has changed. Powder prices have increased from ₹140 (earlier they were ₹250 per kg) to ₹175 per kg. "All the players who have come into this business seeing hefty gross margins will not find the business lucrative when milk prices go up and the MRP does not increase in the same proportion," says Sodhi, who expects more private players to exit the business once milk prices stabilise in the next one year.

In fiscal 2020, milk prices are expected to increase. According to a Crisil report, there has been a sharp decrease in skimmed milk powder

WHAT AILS THE INDUSTRY

While global dairy majors such as Fonterra and Lactalis have entered India, others such as Danone have exited. Private dairy companies have also realised that dairy is a difficult business. There are several reasons for this:

While having one's own milk procurement set-up is a given, the business is commoditised and state-run cooperatives call the shots in milk pricing. Cooperatives increase procurement prices to help farmers but don't increase prices of end products, which impacts profit margins of private players

Procurement and manufacturing close to the market is critical but having nation-wide procurement is economically unviable for most

Apart from traditional categories such as ghee, paneer, cheese and curd, the value added story hasn't really taken off. To achieve scale, liquid milk has to be in the portfolio. Companies that make only value-added products are struggling

Most global companies aspire for margins above 25 per cent but dairy is a low-margin business in India. A long gestation period is another hurdle. It took Amul over 50 years to achieve scale

[redacted]

inventory in the past few months which could lead to an increase of ₹1-2 a litre in domestic prices over the next few quarters. This is expected to improve the sector's operating profitability by 30-40 basis points.

Since January 2019, prices have increased globally by about 20 per cent, from an average of $2,000 per tonne. This is expected to continue for two-three quarters, which will allow Indian dairies to liquidate their skimmed milk powder inventory. According to Crisil, the inventory is likely to reduce 25 per cent by March 2020. It expects domestic milk production to grow at 3-4 per cent in fiscal 2020 compared with a compound annual growth rate of 6.5 per cent in three fiscals through 2018. "That's largely because of lower investments by farmers in cattle due to rising maintenance costs and no correction in farm gate prices (price at the farm, excluding transport and other costs). This has constrained returns and led to lower cattle availability," says Anuj Sethi, Senior Director, Crisil Ratings.

Serious players understand that dairy in India is a long gestation business and have devised strategies accordingly.

"MARKETING, BRANDING AND PRODUCT BUILDING WILL BE THE NEW DRIVERS. WE'D LIKE TO PROCURE MILK AND CONVERT IT INTO QUALITY PRODUCTS RATHER THAN SELL BULK MILK"

BALRAM YADAV
MD, Godrej Agrovet

[redacted]

PHOTOGRAPH BY RACHIT GOSWAMI

Regional Play

Having spent 22 years in Amul, Lactalis India Managing Director Rahul Kumar is well versed with the nuances of the Indian dairy business. "About 75 per cent of the milk we produce is consumed as milk. The core product in India is still liquid milk sold in pouches," he says. Kumar also understands that collecting milk across the country is unviable. Out of the 300 million litres of milk that the country's largest dairy company, Amul, collects every day, only 15 per cent is procured from outside Gujarat. This makes the dairy business by and large regional in nature. That is why Lactalis has opted to acquire only regional dairy businesses, be it Tirumala in South, Anik in Madhya Pradesh or Prabhat Dairy in Maharashtra.

Milk, according to Kumar of Lactalis, is the starting point. Efficient procurement along with building brand equity is crucial. Trust has to be first built with a milk pouch, he says.

ITC, which announced its dairy foray close to five years ago, too, has restricted its dairy products sale to southern and eastern states. Its maiden dairy product, Aashirvaad Svosti Ghee, for instance, is available only in the southern states, whereas its fresh dairy products, Aashirvaad Svosti pouch milk, curd and paneer are sold in Bihar, where it has a procurement and processing facility, and in the adjoining West Bengal. The focus has been to first get the products right in the smaller markets it is operating in. "Aashirvaad Svosti pouch milk is pasteurised using a 'taste-up' process that makes the milk consistently richer, thicker and tastier. Our ghee, for instance, is prepared using a process called 'slocook' which enhances its natural aroma," says Hemant Malik, Divisional Chief Executive (Foods Division), ITC Foods.

"It will be a region-focussed play in a measured manner. To expand and gain regional presence, strategic acquisitions may be required," says Razdan of KPMG.

Mumbai-headquartered Parag Foods has taken its brand Go national in three years. The ₹1,500 crore-dairy company gets 80 per cent of its revenue from value-added dairy products. The 25-year-old company used to be a regional player. Plus, it ensured that its milk procurement was in place before it started with value-added products.

Devendra Shah, Chairman, Parag Milk Foods, says that even when a brand goes national, it has to have a regional strategy. "The 29 states have different operational issues; they have different distribution systems. In the South, you have to give a regional touch in terms of flavours; in Bengal, one has to market the hardest during Durga Puja. One needs to have a separate strategy for every region," he says. While products such as ghee and milk powder do well in the East, it is dairy whiteners and cheese in Kerala and flavoured milk in Jammu and Kashmir. "You need to find out in which market which type of product needs to be targeted. You can't carpet bomb the entire country with just two-three products," says Shah.

Kumar says Lactalis, even globally, believes in cashing in on local consumption trends. "In India, value-added products begin with products like curd and ghee. Most markets won't even understand what

"YOU NEED TO FIND OUT IN WHICH MARKET WHICH TYPE OF PRODUCT NEEDS TO BE TARGETED. YOU CAN'T CARPET BOMB THE ENTIRE COUNTRY WITH JUST TWO-THREE PRODUCTS"

DEVENDRA SHAH
Chairman, Parag Milk Foods

"WE REACH A WIDE UNIVERSE OF OUTLETS DIRECTLY. THAT GIVES US HUGE TRACTION AT THE ENTRY POINT. THE STRATEGY WOULD BE TO MORE EFFICIENTLY LEVERAGE OUR SALES SYSTEM"

VENKAT SHANKAR
Head (Dairy), Britannia Industries

ghee is. We decided to acquire Anik, which is known for its ghee. Similarly, the market for paneer is much bigger than for cheese. We are investing heavily in paneer and ghee plants along with liquid milk."

Britannia Industries is another big player set to aggressively grow its ₹400-crore dairy business to ₹1,500 crore in the next couple of years. It has set up a milk procurement facility in Ranjangaon near Pune from where it collects around 30,000 litres of milk per day. "Since we are late to the party, our advantage is that we get to do business from a clean sheet base. We are actually focusing on the first principles of dairy farming, by making sure that the farmer is doing dairy farming in the right way. That is giving us good yields," says Venkat Shankar, Head (Dairy), Britannia Industries. The company has identified four segments – cheese, milk-based beverages, yogurt and fresh dairy and dairy whiteners. However, unlike peers, Britannia's strategy would be to procure and produce at one place and distribute across the country. "Britannia brings huge advantage in the front-end selling system. We reach a wide universe of outlets directly and that gives me huge traction at the entry point. The strategy would be to more efficiently leverage our sales system," says Shankar. He is confident that with its distribution muscle and R&D capabilities, the company will be able to pull off a successful long-shelf life dairy products business. In fact, selling liquid milk is not on Britannia's radar as that requires a different distribution system.

Creating Value

The ₹25,000 crore value-added dairy products industry is set to outpace liquid milk sales by 2021, as per a Crisil report. Every dairy company aspires to be a key stakeholder in this.

When Lactalis acquired Tirumala in 2014, only 2 per cent of its revenue came from value-added products; that has now become 10 per cent of the ₹4,000 crore revenue. The goal, however, is to take it to 30 per cent.

Similarly, Godrej Agrovet has invested ₹80 crore in setting up an ultra-high temperature (UHT) line in Hyderabad where it manufactures flavoured milk, milk shakes and yogurts. Value-added products contribute around 28 per cent to the ₹1,300-odd crore business and the plan is to take it to 50 per cent in the next couple of years. "Once that happens, it will bring stability, because the drivers of the business will change dramatically. Marketing, branding and product building will be the new drivers; we would like to procure milk and convert it into excellent quality products rather than sell bulk quantities of milk," says Yadav.

If value-added products continue to have immense potential, why are there murmurs about the segment not growing as per potential? Nestle, for instance, launched Greek yogurt a couple of years ago. It didn't catch on as this is a niche category and didn't have a sizeable market. The same goes for categories such as probiotic products, smoothies, gourmet cheese, etc., which are too niche. Companies which invested in them burnt their fingers.

The categories that have done well are the traditional Indian products such as paneer, ghee, curd and cheese. The biggest learning for most value-added product manufacturers has been to invest in products that can be scaled up. While milkshakes is just a ₹500 crore-market, flavoured milk is a ₹2,000-crore category. Similarly, ghee is a ₹30,000 crore catego-

REGIONAL MILK WARRIORS

As the deep-pocketed private dairy companies struggle to make their presence felt in the Indian dairy industry, a number of regional milk entrepreneurs are quietly charting an impressive growth journey. They are not just going by the dairy rule book of procuring milk from farmers but are also investing in brand building. They are beginning to give stiff competition to local cooperatives as well as the private companies. Milk Mantra, based out of Bhubaneswar, collects 1,20,000 litres of milk daily from a farmer network of 5,500. Despite selling its milk brand, Milky Moo, for ₹1 more than what the local cooperative charges, it has been able to build a consumer base on the back of quality. "There is a clear opportunity for well differentiated products," says the Milk Mantra Founder, Srikumar Mishra. The ₹200 crore regional brand gets 25 per cent of its revenue from value-added products. It has recently forayed into dairy desserts with paneer-based Odiya sweet, *Chhena Poda*. "Our desserts are going to be long-shelf life products, hence we are planning to launch them in the metro markets too," says Mishra.

In Erode, T. Sathish Kumar, Founder of Milky Mist, has defied the rule of having a base in liquid milk. Kumar collects 350,000 litres of milk everyday and converts all of it into products such as paneer, ghee and curd. "Value-added products and milk need completely different distribution networks. I have always wanted to create differentiated products and value-added products enable me to innovate," says Sathish. He has invested in a ₹450 crore fully-automated factory in Erode for long shelf-life paneer. Kumar recently entered Pune with his products, and would be shortly expanding to Mumbai.

"MUMBAI ALONE CONSUMES 20,000 LITRES OF PREMIUM MILK PER DAY"

RAJESH SINGH, Founder, BlissFresh

In Mumbai, Rajesh Singh, Founder of BlissFresh, has been operating a farm-to-home liquid milk business for the last five years. With a revenue of ₹1,918 crore, BlissFresh turned profitable last year. But Singh realises that to achieve scale, he needs to be in mass milk. With the pouch milk segment, Singh is looking at selling 25,000 litres of milk per day from the current 6,000 litres. He is also looking at acquiring a local value-added products company.

ry, while cheese is a ₹3,500 crore-category. Paneer is worth ₹10,000 crore, and growing robustly. "It is very important how we define value addition. If we introduce western dairy products into the market, we are looking at a much smaller scale. But if it is value-added products that an Indian consumer opts for, such as curd and paneer, then there are large volumes," says Sunil Reddy, Managing Director of the Hyderabad-headquartered Dodla Dairy. Dodla forayed into curd four years ago and that already contributes about 20 per cent to the company's total sales volume.

In India, value addition is also happening in liquid milk. While the bottom of the pyramid consumers are getting used to loose milk packed in a pouch, at the upper end, farm-to-home milk is gaining traction. This is milk sourced from a single farm and is priced anywhere between ₹60 and ₹90 per litre. Brands such as Pride of Cows, Sarda Farms and BlissFresh are prominent in this category. Even this kind of milk has scope for further value addition.

"I am shortly going to launch A2 milk or Gir milk, which contains more fat and protein. By not having that product we have lost (the sale of) 300-400 litres of milk," points out Rajesh Singh, Founder, BlissFresh. Singh claims that Mumbai alone consumes 20,000 litres of premium milk per day.

Shah of Parag Foods says Indian consumers are willing to pay a premium for good products but nothing much is being done in terms of creating new categories to grow the market. "We have always juxtaposed what is available in the western markets and it hasn't worked. If we had cheese which had *jeera* or chillies or more familiar flavours, it could have worked," points out Alpana Parida, Managing Director of design-led brand consultancy, DY Works. If masala *chhaachh* is doing so well, Parida wonders why no one has thought about masala *dahi*, which has salt, chilli, black pepper and *jeera*, which one could put in a *raita*. "When we look at probiotic curd, we wonder if we should spend that kind of money on it, even though *dahi* is a ubiquitous solution in India for an upset stomach. So, rather than calling it probiotic, why not call it 'super digestive dahi'? It could have a far higher acceptance," she says.

The Indian dairy companies have been too busy fixing business models and innovation and market development have taken a backseat. However, the dairy business is a long gestation business and patience is the rule of the game. "Indians would be drinking milk even after 100 years," says Yadav of Godrej Agrovet.

The private dairies, with their marketing and brand-building acumen, have a better chance to succeed when it comes to value-added dairy products. But the bigger question is how many private players will win the game of patience. BT

With inputs from E. Kumar Sharma

@AjitaShashidhar

THE HUB **GREENTECH**

CLEAN, GREEN AND SMART

Powered by cutting-edge technologies, a clutch of Indian start-ups has developed out-of-the-box solutions to reduce pollution and generate clean energy.

BY **K.T.P. RADHIKA**
ILLUSTRATION BY **AJAY THAKURI**

Green is gaining power. Not just in Europe, where the European Commission is planning to put together a war chest of €10 billion to develop and market eco-friendly low-carbon technologies, but also in China, which is determined to deal with serious pollution issues and is working aggressively towards green energy, clean air and electric vehicle expansion. Closer home, our green efforts need to improve drastically. For instance, 14 of the top 15 most polluted cities in the world are in India, according to a recent ranking released by the World Health Organization (WHO). The index measured the presence of fine particulate matter known as PM2.5 and also took into account PM10, underlining the dangerously deteriorating air quality and its toll on the economy. Government think-tank NITI (National Institution for Transforming India) Aayog has already warned that India is hurtling towards the worst water crisis in its history. As for clean energy, India's ambitious National Solar

Mission aims to add 100 GW of solar power capacity by 2022, but the country's current capacity stands at a meagre 21.65 GW. Understandably, the government is focussing more on cleantech and green infrastructure, as are several tech start-ups across the country, offering solutions for a more sustainable future. Here are five green-tech companies leading the charge.

Oizom: The Air Tracker

As per the WHO report mentioned above, globally, nine out of 10 people breathe the polluted air and seven million people die annually due to outdoor and household air pollution. Therefore, studying toxic air and monitoring pollution is critical, says Ankit Vyas, one of the four co-founders of Ahmedabad-based Oizom Instruments. The cleantech start-up offers a host of low-cost and scalable solutions powered by Internet of Things (IoT) to monitor, analyse and identify key sources of air pollution in a given area, in real time. Oizom uses a hardware-software platform to track air quality. The hardware, called Polludrone, consists of solar-powered sensors which can track particulate matter, gases, heat, noise and radiation and can be retrofitted to all existing infrastructure. It can even be mounted on a utility pole. "This is a low-cost, IoT-based monitor that requires minimal workforce. On the other hand, most of the available systems are bulky, expensive, consume high energy and need constant monitoring," says Vyas, CEO of Oizom.

The data from Polludrone's sensors is fed to the Oizom terminal, a cloud-based analytics software platform, which generates air quality reports, issues predictions and alerts, does real-time pollution mapping and historical trend analysis, and also finds the sources of pollution. "These insights empower authorities, communities and industry segments to make data-driven decisions and implement policy-level changes," says Vyas. The Oizom mobile app also displays area-specific air pollution levels and offers data-driven suggestions to users. "The system ensures over 85 per cent data accuracy, one of the highest parameters in pollution monitoring," claims Vyas.

Oizom has partnered with municipal corporations and installed more than 150 devices across nine major cities in India, France, Saudi Arabia, the UK, Japan, Chile, Spain and South Korea. "In India, we are collaborating with smart city programmes and have our solutions installed in Delhi, Ahmedabad, Kakinada (Andhra Pradesh) and Mumbai," says Vyas. The Kakinada

PHOTOGRAPH BY LANTERN CAMERA

Varun Sridharan
Founder, Greenvironment

"For sustainable water management... water treatment plants should be efficient and effective. Greenvironment India looks at this opportunity"

LAUNCH YEAR:
2013

KEY FUNCTION:
Monitors the efficiency of water treatment plants

OPERATES IN:
Chennai, Bengaluru and Pune; did pilot projects in Dubai and Doha

PHOTOGRAPH BY NANDAN DAVE

and 21 Indian cities will run out of groundwater by 2020. The report also mentions that wastewater recycling could address the country's severe water shortage. However, 70 per cent of the sewage generated in urban India is not treated, thus polluting three-fourths water bodies. Founded by Varun Sridharan, Chennai-based Greenvironment is a key player in this space, tapping the growing need for water management, wastewater treatment and monitoring. "For sustainable water management in large residential communities and commercial buildings like IT parks, malls, hotels or other institutions, water treatment plants should be efficient and effective. Greenvironment India looks at this opportunity," says Sridharan.

The company operates in Chennai, Bengaluru and Pune and has done pilot projects in Dubai and Doha. The company's IoT-enabled smart sensors are connected to wastewater treatment plants to capture data on the amount of water treated, plant efficiency, pH value and other water quality parameters. The data is sent to a cloud-based platform, which monitors plant activities in real time, predicts faults and provides troubleshooting insights. "If the efficiency of the plant is more than 85 per cent, the system is working very well," explains Sridharan. "This is critical as 55 per cent water requirement of a residential/commercial building could be met through efficient wastewater recycling. But currently, only 10-20 per cent of the total requirement is being met through recycled water." Greenvironment has a subscription-based revenue model; charges start from ₹15,000 a month."Our customers can reduce water footprint by 55 per cent and save 30 per cent on water cost," the founder claims.

The cleantech firm won last year's Grand Challenge-Karnataka Call One and received ₹60 lakh from the state government. "We are now scaling up and are looking for fresh funding, but there are challenges on that front," says Sridharan. "Water is an essential commodity. So, it should be a separate investment category. As of now, wastewater treatment falls under cleantech and the energy sector gets the priority in this segment."

Ankit Vyas
Co-founder and CEO, Oizom

"The hardware-software platform ensures over 85 per cent data accuracy, one of the highest in pollution monitoring"

LAUNCH YEAR: **2015**
KEY FUNCTION: **Monitors air quality and tracks key sources of air pollution in real time**

OPERATES IN: **India, France, Saudi Arabia, the UK, Japan, Chile, Spain and South Korea**

Municipal Corporation was, in fact, able to save nearly 50 per cent of its air monitoring expenses by using Oizom's solution, the company says.

The start-up raised $40,000 from South Korea's SparkLabs IoT Accelerator in 2016 and $67,000 from French Tech Ticket in 2017. Last year, it raised another $150,000 from Norway-based Katapult Accelerator and an undisclosed amount in seed funding from Centre for Innovation, Incubation & Entrepreneurship, a unit of IIM-Ahmedabad. Oizom is now in a growth mode and trying to tap more markets for its hardware and data as a source (DaaS) platform. "We are tying up with smart cities and looking to tap West Asia," says Vyas, adding that the company has been profitable for the last two years.

Greenvironment: Betting Big on Wastewater

According to NITI Aayog's Composite Water Management Index report, about 2,00,000 people die every year due to inadequate access to safe water

Saahas for Zero Waste

The trash we throw mostly ends up in landfills or waterbodies. But with better waste segregation and management, about 90 per cent of the garbage can be recycled and put to good use. A study by ReportBuyer estimates the global waste management industry at $435 billion by 2023. Technology companies are innovating fast for growth and profit. However, Saahas Zero Waste, a social enterprise from Bengaluru, is on a mission of sorts. Set up by Wilma Rodrigues, a former journalist, Saahas partners with bulk waste generators (those who generate more than 10 kg of waste per day), including large residential societies, IT parks, manufacturers, commercial ventures, reverse logistics players and municipal bodies, to ensure zero-waste to landfills.

"In India, we dump all kinds of waste together instead of separating wet and the dry trash and the reject. This lack of segregation makes it impossible to recover useful materials and everything ends up in landfills. In contrast, Saahas offers an end-to-end waste management solution, and the waste is segregated at client sites," explains Rodrigues. Post-pick-up, wet waste is made into compost or sent to biogas plants, while dry waste is sent to the company's material recovery facility for recycling. The 'dry' unit can handle about 16 tonnes of dry waste every day. "We also use an IoT-based application that records how much waste is collected from clients and generates reports on types of waste and area-specific details. The data helps us recommend solutions for reducing waste generation," says Rodrigues. "One of our core values is to leverage technology to ensure maximum resource recovery from the waste managed by us."

The company currently processes 35 tonnes of waste a day and plans to scale it up to 300 tonnes by 2021. "As of now, we have more than 80 clients across Bengaluru, Chennai and Goa, but we plan to achieve our aggressive growth targets by expanding operations pan-India," says Rodrigues. Saahas has raised an undisclosed amount from Indian Angel Network (IAN) and venture capital firms Asha Impact, Artha India Ventures and Upaya Social Ventures. It charges service fees, and posted ₹10 crore revenue in FY2017/18. The biggest challenge, according to Rodrigues, is people's mindset towards waste management. To start with, most housing societies and commercial units do not segregate waste. In addition, many organisations are reluctant to invest in a waste management infrastructure or pay the price for effective services.

Roli Gupta
Co-founder, Oorjan

"IoT has made a big difference in the way we operate. It ensures a higher degree of customer satisfaction and leads to more business"

LAUNCH YEAR:
2014

KEY FUNCTION:
Develops roof-top solar platforms

OPERATES IN:
Bengaluru, Chennai, Pune, Hyderabad and Mumbai

PHOTOGRAPH BY RACHIT GOSWAMI

Oorjan Offers Rooftop Solar

India is home to the world's largest solar parks, but the growth of rooftop solar projects across residential and MSME clusters is lagging due to lack of awareness and limited access to finance. Mumbai-based cleantech start-up Oorjan has tapped this opportunity and brought IoT-supported rooftop solar systems to residences and businesses. Founded by IIT-Bombay alumni Roli Gupta and Gautam Das, Oorjan has done more than 100 projects across five cities, including Mumbai, Pune, Bengaluru, Chennai and Hyderabad, and is looking to expand. Its customers include residential complexes, individual households and companies, and implementation cost varies between ₹2 lakh and ₹5 lakh, depending on the panel size. The company has tied up with banks to help people with easy financing options. It also runs residential expos where the company instals the panels and users pay for the energy consumed instead of paying for the entire set-up. There is a solar SME platform as well, a business-to-business service to help solar entrepreneurs. "We provide technology, design panels and arrange finance, helping solar power reach end users for a small fee," says Gupta.

Besides installation, Oorjan collects data from customer sites using IoT and analyses panel efficiency. The output is then transferred to its data monitoring app and users get alerts and notifications on troubleshooting. For example, if a particular system continues to underperform, both Oorjan and the user will receive notifications, leading to quick resolution. "IoT has made a big difference in the way we operate. It ensures a higher degree of customer satisfaction and leads to more business," says Gupta.

After leaving her alma mater, Gupta had worked in Silicon Valley for 10 years. "That experience taught me that one could solve any big problem with the help of a small but hard-working team," she says. Back then,

PHOTOGRAPH BY A. R. SUMANTH KUMAR

Visakh Sasikumar
Co-founder, PiBeams

"We are also in talks with e-commerce players like Flipkart and Amazon for **facilitating their last-mile deliveries**"

LAUNCH YEAR:
2013

KEY FUNCTION:
Builds multifunctional smart trikes for moving loads, vending merchandise and passenger commute

SPECIALISES IN:
Electric and solar trikes

solar was not a profit-making business, but things have changed since. "It is because solar is the most robust energy source (among renewables) and ensures a greener way of living."

The company has raised ₹3.5 crore through loans, angel funding and crowdfunding, and is looking for another $1 million this year.

PiBeams: Multimode Mobility

Within a decade, more than 60 per cent of the world's population will live in urban areas, choking the traditional ground transportation. Consequently, electric scooters and other micro-mobility solutions are emerging fast for ease and convenience. Incubated at IIT-Madras, micro-mobility firm PiBeams Labs builds smart utility trikes (tricycles) for moving loads or vending merchandise. These battery-operated vehicles run on solar power or electricity, but manual pedalling is also an option. A different model can be used as a passenger vehicle. PiBeams is now adding IoT sensors to the trikes so that drivers will know the nature of goods they are carrying.

In March this year, the company raised an undisclosed amount in pre-series A funding from Eagle10 Ventures, Blue Hills Capital and several high net-worth individuals. It also raised around ₹2.1 crore from various bodies such as the IAN and Keiretsu Forum.

Co-founder Visakh Sashikumar claims that the trikes cost less than e-rickshaws and are more efficient than traditional trikes used for carrying small loads. Factories and IT parks are currently PiBeams' customers. "We are also in talks with e-commerce players like Flipkart and Amazon for facilitating last-mile deliveries," he says. BT

The writer is a freelance journalist based in Chennai

Delhi Airport Best in India & Central Asia

This March brought in double delight to Delhi Airport!

GMR led Delhi Airport emerges as the best airport in India and Central Asia as per the latest ratings by Skytrax, the international air transport rating organization. Amid much fanfare and enthusiasm Delhi International Airport Ltd (DIAL), the operator of Indira Gandhi International Airport, recently has been honored with this feat at Globally reputed Skytrax World Airport Awards 2019 in London. This significant milestone achieved by DIAL well before the airport community could come out of the hangover of being adjudged as the best airport (by size and region over 40 Million Passengers Per Annum) in Asia Pacific by Airports Council International (ACI) in the Airport Service Quality Program for 2018. It is indeed a matter of pride for DIAL in particular and the country as a whole. What adds to the cheer is that Delhi Airport has also been rated as the global 4 star airport by Skytrax. The award was received by Mr Videh Kumar Jaipuriar, CEO – DIAL.

"The collaboration of various agencies working at the Airport has enabled Delhi Airport achieve this unique feat. Being recognized as a Global 4-Star Airport by Skytrax validates that Delhi Airport's quality of services are of global repute. In the last one year, we have undertaken series of initiatives including retail refresh at T1 and T3, commencement of T2 as full-fledged terminal, more Immigration counters and various technological interventions. The recent ramp up of GMR Aerocity at full scale also takes passenger experience to a new height. We are now set to expand our capabilities both at Terminal and Airside."

— Mr Videh Kumar Jaipuriar, CEO – DIAL

To receive this global 4-Star Airport Rating is a truly fabulous achievement for Indira Gandhi International Airport (IGIA), and is a mark of recognition for the many improvements that the airport has achieved in recent years. Customers look for comfort, convenience and consistency in their airport experience, and following the in-depth audit of IGIA, we found that these items are being well delivered and their standards meeting the 4-star Airport Rating requirements."

— Mr Edward Plaisted, CEO of Skytrax

The Skytrax Airport Ratings are based on a comprehensive analysis of over 500 product and service items across the airport customer experience. The criteria includes key items of process efficiency, terminal comfort and cleanliness, passenger facilities and staff service. Product assessment includes features such as seating, power options, Wi-Fi, washrooms, food and beverages and all front-line facilities. Service ratings cover both official staff (e.g. immigration, police, security and customs) as well as more general airport staff (shops, restaurants and cafes, help counters etc.). The World Airport Star Rating program is a global Quality-Evaluation-System for the Airport industry. It uses a direct and professional analysis of Airport's Product and Service Quality Standards. The World Airport Awards began in 1999, when Skytrax launched its first global, Airport customer satisfaction survey. The survey evaluates traveller experiences across different airport service and product key performance indicators - from check-in, arrivals, transfers, shopping, security and immigration to departure at the gate.

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Many congratulations on becoming a 4-star airport at SKYTRAX!

#YouMadeItHappen

THE HUB **INTERVIEW**

"ABB INDIA WILL BE A KEY BUILDING BLOCK OF THE NEW ABB"

In December 2018, ABB announced a $11-billion deal to sell its power grid business to Hitachi. In his first interview after the announcement, **Ulrich Spiesshofer,** President and Chief Executive Officer of ABB Group, talks to *Business Today*'s Rukmini Rao about the company's new bets in India. Edited excerpts:

Photographs by Rachit Goswami

YOU

recently announced the sale of ABB's power grid business to Hitachi. What will be the focus of the new ABB entity?

A: The new ABB will be a leader in technology, focussed entirely on digital industries. At present, we provide a range of offerings for digital needs of industries. One is our industrial automation solutions for process industries which drive competitiveness of our customers. We also provide technology solutions through our robot and discrete manufacturing business. We also have a big presence in the motion business, focussing on motors, drives, mechanical power transmission, etc. So, the new ABB is poised to be the partner of choice, helping customers in different industrial segments tap the opportunities of industrial digitalisation.

So, what has changed in terms of focus? How will the realignment of the businesses help?

In power grids, we are selling the last remaining large project in infrastructure. In the future, we will be entirely focussed on digital industries. The new ABB will be much more clearly aligned with needs of customers through its four new businesses. We have also changed our business model. We will fully empower our four businesses to serve customers with less internal interface, more agility, and more speed.

The power business has been an important component of ABB India. What will the Hitachi deal mean for it? How are you positioning the company to tap the infrastructure sector?

When you look at what is leaving ABB, it is essentially long distance transmission capabilities, the part of the electricity value chain between the power generation and the sub-station. What stays with the company is the electrification chain after the sub-station to the point of consumption. So, when you look at the local distribution of power, capabilities around local integration of renewables into medium and low voltage offerings, that will remain with us in the future as well.

If we were to look at it like a large facility, a building, anything that's outside the fence of this building will go away. But anything that's inside the fence – whether it's electrification, automation, robotisation or digitalisation – stays with us.

What is your long-term outlook on the mobility space in India?

There are two aspects of mobility. If you look at the rail sector, ABB is already very active there. Today, all metro lines in India have ABB equipment. Even electrification of railroads planned in the next couple of years, and the ones under way, is being supported by us. Prime Minister Narendra Modi has ambitious plans for large electric mobility presence on roads by 2030. Even when we look at our automotive customers in India, all of them are getting ready for major launches in electric vehicles (EVs). ABB is helping with EV movement in a couple of ways. Globally, we are the leading providers of EV charging infrastructure, and I think it's very important that we also do it here for both fast charging and home charging. To make the EV ecosystem work, you need charging infrastructure and grid reinforcement in renewables integration. In grid reinforcement, ABB has super strong offerings (both low and medium voltage) around the local distribution grid. I think India is starting to really gear up, and I think we will be surprised how fast this will scale up in the next couple of years. Because one thing is very clear, electric mobility is not only environmentally responsible, it's also economically attractive. The cost will come down in a significant way over time.

What would you consider as the sunshine segments of ABB India going forward?

All of them. If you look at what we have achieved in the last couple of years, we have transformed ABB India as we have transformed ABB globally. Today, we are leading in industrial digitalisation. The manufacturing base in India 20 years ago was not as much as it is today. Now, in India, we have world-class facilities from where we can ship not just within India but also export. So, for us, ABB India has basically four roles. It has to supply in India for Indian customers. It has to supply from India to the world. India also plays a key role for us in terms of business services. We have set up a significant global business services operations that serves half the ABB's world. And

ABB IS SELLING THE LAST REMAINING LARGE PROJECT IN INFRASTRUCTURE. WE WILL BE ENTIRELY FOCUSSED ON DIGITAL INDUSTRIES

four, India is a powerhouse in engineering and digitalisation. We have strongly invested in engineering and digitalisation capabilities. We are also driving robot and AI capabilities in India. And I think ABB India is playing a key role in transformation of India. If I look at the political programmes of what is coming in the next couple of years, with our capabilities, we are an ideal match, and we're really excited about supporting India in the future.

ABB India is still not a significant revenue base for you globally. By when do you see the capabilities that you spoke about translating into a significant revenue stream for you?

When I look at markets and countries, I don't look only at the numbers. India is a very significant market for us and there is a tremendous opportunity for us to grow here. As we shift the centre of gravity of ABB, moving away from conventional copper and iron products to software-enabled digital products, India will move much more into the centre of attention because it is a global powerhouse of software digitalisation. So, if you look at the core of the new ABB – a leader for the digital industry – India will play an even stronger role than it is has played historically. ABB India will be a key building block of the new ABB, not only as a key market and an important part of the value chain but also as a hub that can, in a really good time, help us provide customers – both local and global – high quality digital solutions.

India's infrastructure sector still looks patchy. How are you viewing the systemic problems in the sector? Where are the opportunities?

Look, if you take the urbanisation trend in India, the number of people who live in large cities has been increasing by 1 per cent every year, which is amazing. So, for large modern cities, you need city infrastructure, and ABB is and will be a key player in that segment, be it in smart buildings that self-optimise and are energy-efficient or local mobility, infrastructure and EV infrastructure that we are already setting up. When we look at a country like India, we look with a long-term perspective and a steady hand. This year we are celebrating the 70th anniversary of ABB in India. ABB is committed to India for a very long term. I look forward to the next 70 years in this country.

I think we will contribute to city infrastructure on the transport side, on data centres, which will be the key. We have just got a very significant new assignment to work for a large global customer operations in India to build data centres and I'm very optimistic on that .

What are the problems that need to be fixed to drive digital growth and realise the potential of companies?

I don't think we need fixing because that means something is broken. What we need is to take certain things to the next level.

It's very clear there is technology convergence with big leaps in classic hardware and classic software sectors. We are today a software company, we have an $8 billion software and services business, and more than 55 per cent of our offerings are software-based. I think what we need is an ecosystem of partnerships between traditional software and traditional hardware companies. The second point we need is basic hygiene for the digital industry. That means we need cyber security, cyber security regulations that people can trust. But the most important thing is that we need to take the people with us. We need to make sure that the education system in India is developed at the pace the digitalisation opportunities are changing. We need lifelong education and education for mid-life people working where jobs are changing because of digitalisation. The digital revolution in industry should go hand-in-hand with a self-driven revolution in the education system.

@rukminirao

India Needs Lighthouse Manufacturing

AS EARLY ADOPTERS OF 4IR TECHNOLOGIES, LIGHTHOUSE FACTORIES CAN CREATE VALUE-ADDED TASKS AND REAP GREAT BENEFITS.

BY NAVTEZ BAL

SOUMYADEEP GANGULY

SINCE 2014, India has sought to boost manufacturing and increase its contribution to national GDP from 15 to 25 per cent. But in spite of strong government support, the number has barely moved. A recent report by the World Economic Forum in collaboration with McKinsey suggests why. In Fourth Industrial Revolution (4IR): Beacons of Technology and Innovation in Manufacturing, researchers studied over 1,000 manufacturers across the globe and found only 16 'lighthouse' factories which are leading the way in adopting 4IR technologies such as advanced analytics (AA) and cloud computing. Europe boasts nine lighthouse factories; China takes the second spot with five; Saudi Arabia and the US have one each and India has nought.

India cannot afford to fall behind in 4IR adoption, says another McKinsey Global Institute study, as there could be a significant gap between leaders and laggards. Leaders stand to reap outsized benefits such as over 120 per cent rise in cash flow and a 50 per cent increase in productivity and energy efficiency besides 30-90 per cent reduction in time-to-market. Laggards will either see a much lower impact or face a sharp decline in competitiveness. To avoid being similarly disrupted, manufacturers in India must catch up with early adopters. Fortunately, the country's robust consumer base, increasing foreign investments and fast-growing MSMEs are formidable growth drivers that can provide the competitive edge India needs.

People Matter

India can learn from the 16 lighthouses, which share several traits. First, they embrace three technology megatrends – connectivity, intelligence and flexible automation. Digital connectivity helps increase visibility by linking discrete network nodes; data-enabled intelligence identifies and translates deviations so that operators can apply remedies quickly; finally, flexible automation enables response mechanism and remote movement. More importantly, lighthouse factories apply technology to augment, not replace, their employees, dispelling the myth that digital technologies will displace human capital. When integrated at scale, 4IR technologies become injectors of human capital, transforming traditional manufacturing.

For instance, a lighthouse located in the Netherland's Ijmuiden and owned by Tata Steel has an AA academy that trains data scientists, data engineers, digital translators (those who connect AA and business teams) and managers. It has helped create a workplace that focuses on value-added tasks.

India can accelerate these gains as the country is set for a demographic dividend over the next 20 years with 300 million people entering the workforce. They represent a new wave of digital natives well-suited to advanced industries powered by 4IR technologies. And thanks to the multiplier effect – every manufacturing job is estimated to generate two-three jobs in related activities – 4IR technologies could fuel a new wave of job creation.

What Makes It Happen

One of our global studies says companies are testing an average of eight solutions at any given time and India tops the chart with a reported average of 10.6 pilots. Given that, there should be dozens of lighthouses by now. But there are only 16. It is because most manufacturing innovations are stuck in the pilot purgatory – repetitive testing cycles which never reach scale due to inadequate co-ordination between business units, difficulties in integrating old and new systems and lack of talent. Pilots often stumble when leaders fail to plan for organisational and cultural changes required for wide-scale rollouts.

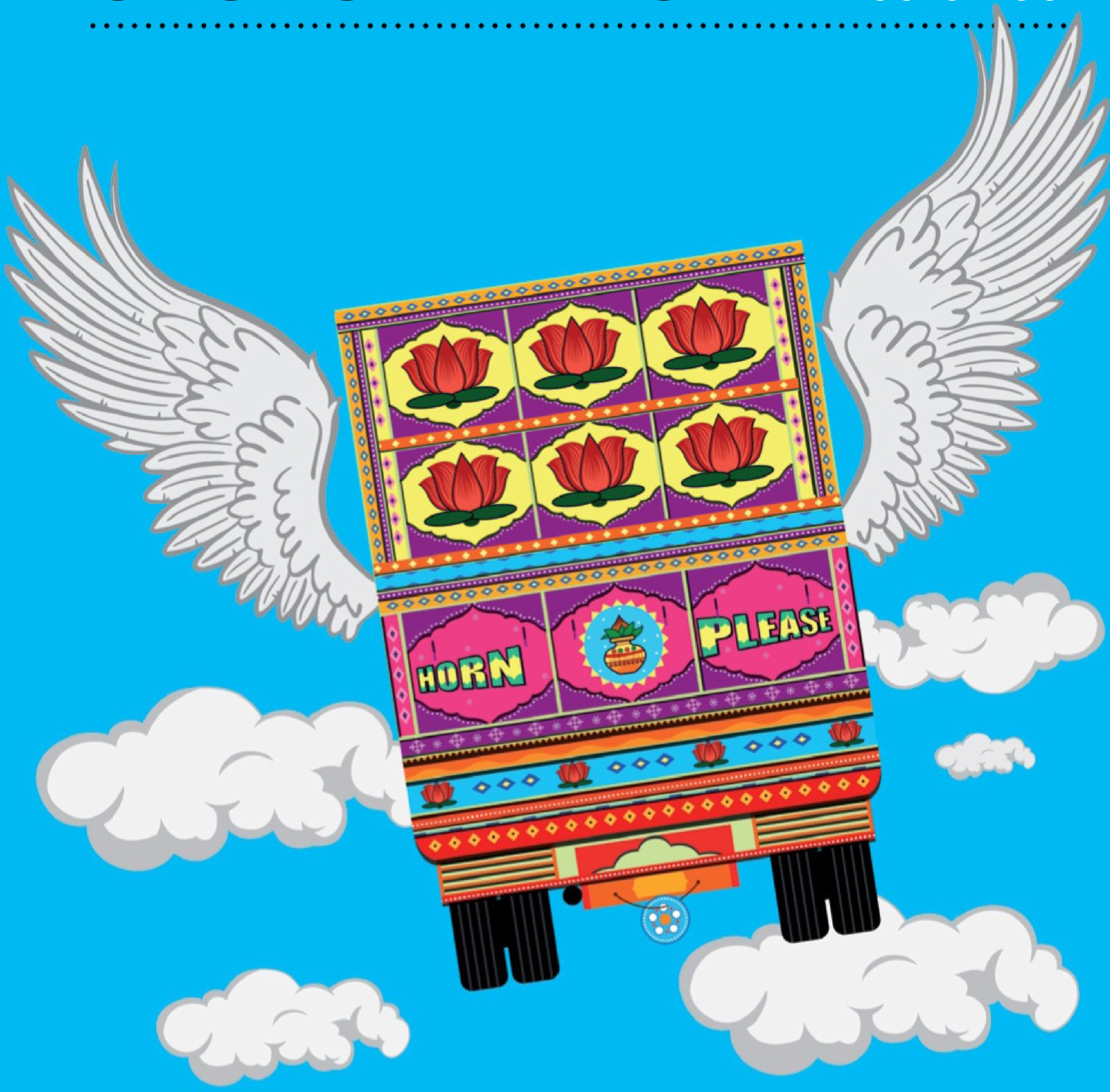
Again, one of the lighthouses shows the way out. Schneider Electric's site in Le Vaudreuil, France, has created a 3D digital replica of the entire plant that simulates how day-to-day operations will change. Managers can test new ideas with operators who can provide feedback and share best practices over the company's social network. This way, new technologies and processes are better supported on the ground, speeding up adoption.

Clear governance and commitment to pilots help form a solid foundation for adopting 4IR technologies at scale. Also, CEOs and CXOs must lead as role models, especially in India, where change must come from the top. Boldly investing in cutting-edge technologies, morphing organisational structures and questioning the time-tested fabric of conventional industrial excellence are the final prerequisites to drive change. There is still time for Indian manufacturers to overcome hurdles but only if we act now. BT

Navtez Bal is Senior Partner and Soumyadeep Ganguly is Expert Associate Partner at McKinsey & Company; inputs by Ruchin Kulkarni and Amrut Rajakarne

Business Today

SECTOR REPORT LOGISTICS



On the Move

India's logistics sector is slowly moving towards higher efficiency

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NEW INITIATIVES TO GIVE A HUGE BOOST TO SECTOR

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GST LEADS TO RISE IN DEMAND

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ON THE MOVE

THERE IS NO CORK-POPPING moment for India's logistics sector, yet. Particularly, when compared to other countries.

The World Bank's Logistics Performance Index (LPI), a benchmarking tool that allows for comparisons across 160 countries and one that is based on a survey of operators on the ground, tells of this bumpy ride. In 2007, India ranked 39 in this index, hovered in the mid-40s in 2010 and 2012, further slipped to 54 in 2014 and dramatically improved to 35 in 2016. This improvement was short lived – India's ranking in 2018 has slipped again to 44, just ahead of Turkey, Indonesia and Cyprus.

The NDA government, nevertheless, has realised the importance of the sector. Pirojshaw Sarkari, CEO of Mahindra Logistics, says that to make Make-In-India successful, Move-In-India has to be successful as well. Raw material has to move in efficiently to the manufacturing plant and finished goods have to move out and shipped to the end consumer in quick time. If these two legs are not competitive, India cannot be competitive in its manufacturing.

India's logistics sector is slowly moving towards higher efficiency

By **Goutam Das**

The last Economic Survey further put the strategic importance of logistics into perspective: "The Indian logistics industry, worth around $160 billion, has grown at a compound annual growth rate of 7.8 per cent during last five years. Improving logistics sector has huge implication on exports and it is estimated that a 10 per cent decrease in indirect logistics cost can increase 5-8 per cent of exports. With the implementation of Goods and Services Tax (GST), the Indian logistics market is expected to reach about $215 billion in 2020, growing at a CAGR of 10.5 per cent," the Survey states. A better performing logistics sector, it added, would also enable India to become an important part of the global supply chain.

The government made many interventions, GST being the biggest thus far. As many as 17 different central and state level taxes got consolidated into one nationwide tax, removing octroi or entry taxes. Same taxes country-wide means warehouses need not be in different locations for taking advantage of tax arbitrage, if any. Faster movement of goods has resulted in cost savings for the companies. According to a survey by real estate consulting firm Knight Frank, last year, removal of check posts led to an average cost saving of 3-7 per cent, which varies across several industries.

3-7%

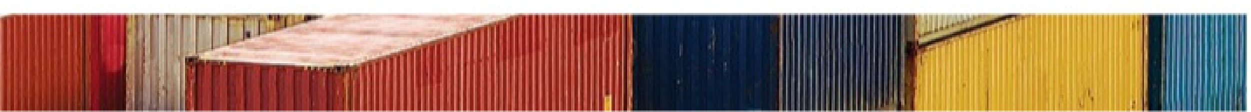
Average cost saving in logistics owing to removal of check posts

GST is also forcing a consolidation in the warehousing industry. Fast moving consumer goods companies, consumer durable and other manufacturing firms are getting rid of godowns in favour of larger warehouses. From managing single company warehouses, logistics companies are shifting to a multi-client, multi-product model. As companies consolidate operations in large warehouses, they can cut down on cost. Larger warehouses also lend to automation, which implies a quicker turnaround.

The next big revolution for the sector ought to be multi-modal transport – transport modes in India operate in an independent manner with heavy reliance on roads, which form roughly 60 per cent share of the transport mix today. The Indian coastline and river networks are under-utilised. The cost of coastal shipping, per tonne per kilometer, is far lower compared to either roads or railways. A Deloitte-Assocham report states that "addressing these anomalies alone provides a huge potential to lower logistics cost in the economy by ₹21,000-27,000 crore by 2025".

Potential is the word to be underlined. According to some experts, many infrastructure projects are at early stages (Sagarmala or port-led development, for instance) and could take years to fructify. A smooth ride isn't a pipe dream but it's got to wait. BT

@Goutam20



Value Chain

The logistics industry in India is likely to grow 9-10 per cent a year, but investments are not keeping pace.

Graphic by TANMOY CHAKRABORTY
Research by SHIVANI SHARMA

Road Ranger

Logistics in India continues to mean road and rail

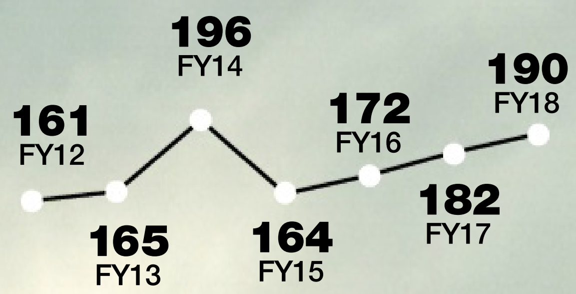
Source: Ministry of Road Transport and Highways; CARE Rating; CMIE; FCI

$215 BILLION

Estimated size of Indian logistics industry in FY20. In FY17, it was $160 billion

Little to Show

Revenues from warehousing are increasing but slowly



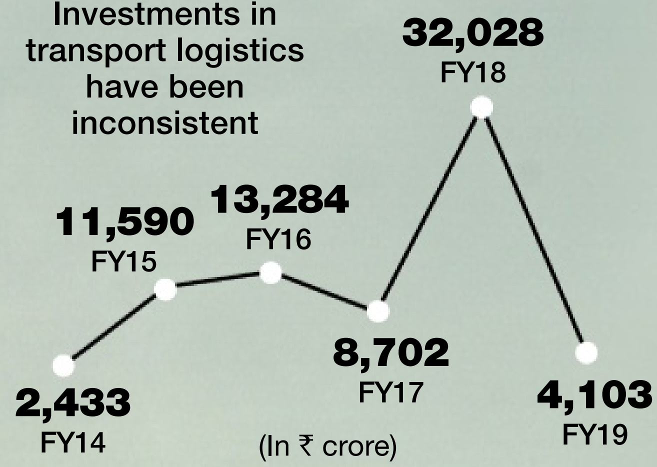
(in ₹ crore)

7,700

Number of cold storage warehouses with a capacity of over 36 million tonnes in India

Patchy Gains

Investments in transport logistics have been inconsistent



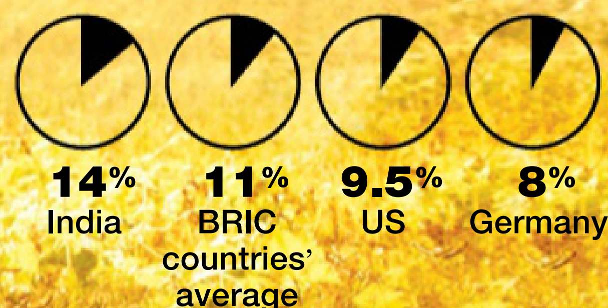
(In ₹ crore)

85%

Share of transportation in the overall logistics industry; 15% belongs to storage

Too High a Share

Logistics costs in India form a large part of the total cost of a product



A NEW

A national logistics policy, an integrated IT backbone, dedicated freight corridors, multimodal transport systems and a string of ports are poised to transform India's logistics sector.

By P.B. Jayakumar
Photograph by Bandeep Singh

START

INDIA'S RICHEST BUSINESSMAN, Mukesh Ambani, recently made a small acquisition. Reliance Industries bought a three-year-old logistics services technology start-up 'Grab' for ₹106 crore with a commitment to put in another ₹40 crore by 2021. The acquisition of the ₹28.3-crore revenue company is expected to help in RIL's anticipated e-commerce foray.

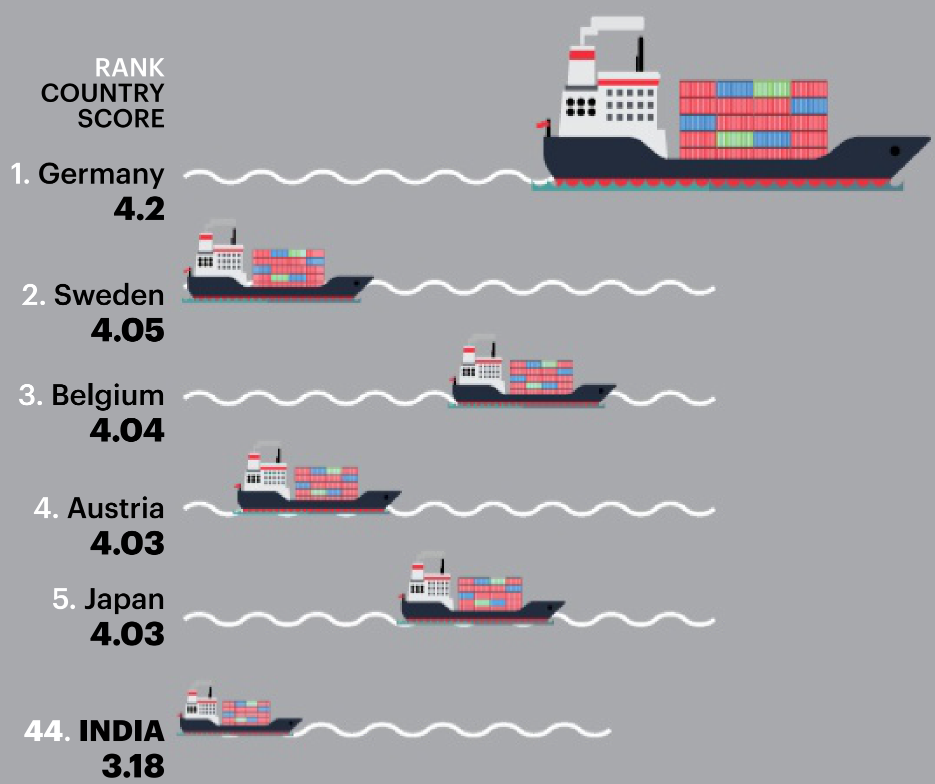
In another recent development, Logos, a joint venture between Macquarie-backed Logos Property Group and Singapore's Assetz Property Group, bought two logistics parks in Chennai for ₹700 crore. Further, developers such as IndoSpace, Ascendas-Singbridge and e-Shang Redwood are reportedly acquiring land parcels in Chennai to

$160 BILLION

Size of India's domestic logistics industry

WORLD BANK'S LOGISTICS PERFORMANCE INDEX

India has a lot of catching up to do with developed nations in logistics performance



THE SAGARMALA PROMISE

TOTAL NO. OF PROJECTS **235**,
PROJECT COST (₹ cr) **2,40,190**

Port Modernisation
NO. OF PROJECTS **107**
PROJECT COST (₹ cr) **38,040**

Port Connectivity
NO. OF PROJECTS **82**
PROJECT COST (₹ cr) **63,095**

Port-led Industrialisation
NO. OF PROJECTS **18**
PROJECT COST (₹ cr) **1,36,860**

Coastal Community Development
NO. OF PROJECTS **28**
PROJECT COST (₹ cr) **2,195**

(Till 2017/18)

Source: Sagarmala website

set up large logistics parks. A month ago, Morgan Stanley's real estate arm bought a majority stake in Pune's KSH Infra, which runs two warehousing and industrial logistics parks in Pune, for ₹350 crore.

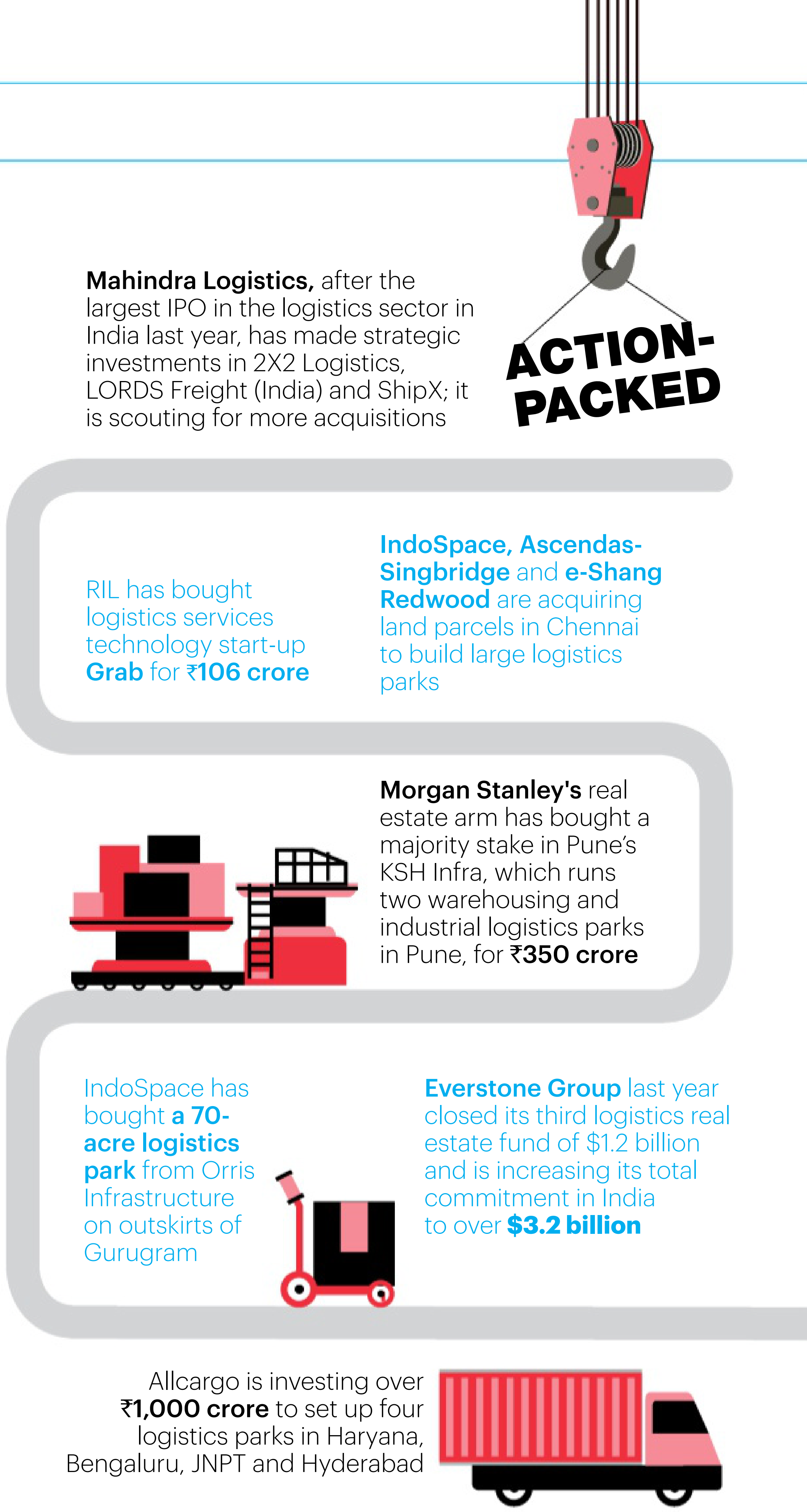
A few days ago, industrial realty and warehousing developer IndoSpace bought a 70-acre logistics park from Orris Infrastructure on the outskirts of Gurugram. The Mumbai-based company has the backing of private equity fund Everstone Group, which last year closed its third logistics real estate fund of $1.2 billion and is increasing its total commitment in India to $3.2 billion. Similarly, logistics major Allcargo is investing over ₹1,000 crore to set up four logistics parks in Haryana, Bengaluru, JNPT and Hyderabad. Mahindra Logistics, which launched the largest logistics sector IPO in India last year, has already made strategic investments in 2X2 Logistics – LORDS Freight (India) and ShipX – and is reportedly scouting for new acquisitions.

India's $160 billion logistics sector is brimming with action. The Economic Survey 2017/18 predicted that it will reach $215 billion (₹15 lakh crore) by 2020 by growing at a CAGR of 10.5 per cent. Ratings agency ICRA expects the Indian logistics sector to grow at 8-10 per cent a year over the medium term, bettering the 7.8 per cent rate of the last five years. Real estate consultancy CBRE predicts the Indian market for warehouse automation is estimated to grow by 10-12 per cent a year and touch $3.49 billion by 2020. It says leasing in the warehousing and logistics sector rose 45 per cent in the second half of 2018 to a record 24 million square feet, mainly due to the demand from e-commerce players. After the implementation of the goods and services tax (GST), 70 per cent of the leasing happened in Mumbai, Delhi-NCR, Bengaluru and Chennai. These four metros dominate the warehousing space demand with 50 per cent share; and mostly serve the new-age e-commerce companies.

50%

Share of Mumbai, Delhi-NCR, Bengaluru and Chennai in the demand for warehousing space

The sector, which employs 22 million, is expected to be among the largest job creators by 2022, employing a total of 40 million people. Sector analysts say private investments are primarily driven by growth of e-commerce. Benefits of GST, the proposed National Logistics Policy,



which envisages impetus to trade, export competitiveness and fall in logistics expenses, dedicated freight corridors and an IT-driven multimodal integrated transporting system in the making, are bound to catapult the logistics sector.

MILES TO TRAVEL

These investments have not come a day too soon. India slipped to the 44th position in the World Bank's 2018 Logistics Performance Index from the 35th rank in 2016. In 2014, it was at 54. The World Bank comes out with the index every two years based on six parameters. These are efficiency of the clearance process of border control agencies like customs, quality of trade and transport-related infrastructure like ports and railheads, ease of arranging competitively priced shipments, quality of logistics services, ability to track consignments and time taken for shipments to reach their destination. A Deloitte-Assocham study on the sector has found infrastructure-deficiency, lack of integration among stakeholders, lack of skilled manpower and slow adoption of technology as some of the reasons for the poor state of logistics in India.

Transport modes in India operate in isolation and rely heavily (about 65 per cent) on already congested roads; the railway's share is only 26 per cent. The coastal and river network are underutilised, even though water transport is energy-efficient, eco-friendly and cheap. The cost of coastal shipping is ₹0.15-0.20 per tonne per kilometre. For railways, it is ₹1.50, and for roads, it is ₹2.50. Despite this, inland waterways carry only 0.15 per cent of the total cargo. Deloitte says addressing these anomalies alone can lower logistics costs by ₹21,000-27,000 crore by 2025.

"Government logistics infrastructure projects like Sagarmala and Dedicated Freight Corridors (DFCs) have to take off from the blueprint stage and my assessment is that it will take another three-four years for this sector to blossom and attract private investments," says Sanjay Sethi, Managing Partner and CEO at Nestor Capital Consulting, a New Delhi-based infrastructure consultancy. Once the infrastructure is ready, the private sector will start investing heavily in this highly fragmented segment, he says.

The infrastructure is inadequate due to low-quality transport infrastructure, suboptimal modal mix, inefficient and ill-designed storage facilities for cargo and containers, inefficient operational and maintenance protocols and poor adoption of technology. This leads to high cargo transit time, inefficient use of resources and poor fleet management, says Deloitte. The World Economic Forum said in 2016 that digital transformation of the logistics sector could translate into $1.5 trillion value for players in the logistics sector and an additional $2.4 trillion worth of societal benefits by 2025.

Another issue is lack of skilled manpower. "There

should be a pool of personnel comprising truck drivers, seafarers, warehousing managers, quality inspection supervisors, among others," says the report. Similarly, the logistics sector is slow in adopting technology. "The logistics ecosystem is fraught with operational inefficiencies and poor asset utilisation. Lack of technology systems and insufficient technical knowledge add to the pain," say Deloitte analysts.

BABY STEPS

The government plans to come out with a National Logistics Policy which envisages lowering logistics costs to less than 10 per cent of GDP by 2022 (at present, it is 9.5 per cent in the US and 8 per cent in Germany and most other developed nations), creation of a logistics IT backbone with modern IT tools such as Artificial Intelligence and Internet of Things, increase in jobs in the logistics sector and reduction in the cargo release time. Until a couple of years ago, logistics was governed by many government departments – railways, road transport and highways, shipping, civil aviation, commerce and industry, finance and home affairs. In July 2017, a new logistics division was created under a special secretary-rank officer in the Ministry of Commerce and Industry to bring the sector under a single umbrella. Last year, the Ministry of Finance granted 'infrastructure' status to logistics, with a view to help companies in the sector access cheaper and longer-term loans.

The big infrastructure projects are limping. According to the Indian Railways, the first sections of the upcoming eastern dedicated freight corridor (DFC) – from Bhadan to Khurja (200 kms) and western DFC (Rewari to Madar, 200 kms) – have been completed. According to the plan, that has been in the work for many years, the 1,500-km western freight corridor from Dadri near Delhi will connect to the JNPT port in Mumbai and the 1,800-km eastern corridor from Ludhiana in Punjab will extend up to Dankuni in West Bengal. Another plan is to have a 1,100-km greenfield freight corridor on the east coast, connecting Kharagpur in West Bengal with Vijayawada in Andhra Pradesh.

The ambitious Sagarmala programme is progressing slowly. Approved by the Union Cabinet in March 2015, more than 604 projects at a cost of ₹8.8 lakh crore were identified for implementation during 2015-35 period under this programme. The areas identified included port modernisation and new port development, connectivity enhancement, port-linked industrialisation and coastal community development. The Sagarmala website says, as of September 30, 2018, a total of 522 projects costing around ₹4.32 lakh crore were under various stages of implementation, development and completion. Of these, only 93 have been completed at a cost of ₹14,997 crore, it adds. Another 161 projects costing ₹2,37,980 crore are under implementation.

Experts point out that as of now the private sector lacks interest in both mega logistics projects such as freight corridors and Sagarmala and balance sheets of government-run companies are not strong enough to fund such mega projects. But the National Logistics Policy and recent initiatives in the sector are sure to help the Indian logistics industry drive forward smoothly in the near future, they say. BT

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LOGISTICS SPECIAL > GST IMPACT

ON A FASTER LANE

GST has increased cost efficiency in the logistics sector by reducing transit time and driving consolidation of warehouses.

By Dipak Mondal
Illustration by Nilanjan Das

7.8%

Average annual growth in the logistics sector in past five years

THE 2018 ECONOMIC SURVEY had a small chapter on the logistics sector. Among other things, it predicted that with implementation of the Goods and Services Tax (GST), the Indian logistics market is expected to go from $16 billion in 2018 to $215 billion in 2020, growing at 10.5 per cent annually. The growth in the previous five years had been 7.8 per cent.

Even before the GST was implemented, one sector that looked to benefit most from the new indirect tax regime was logistics and transportation. It was supposed to reduce transit time of trucks, increase fleet

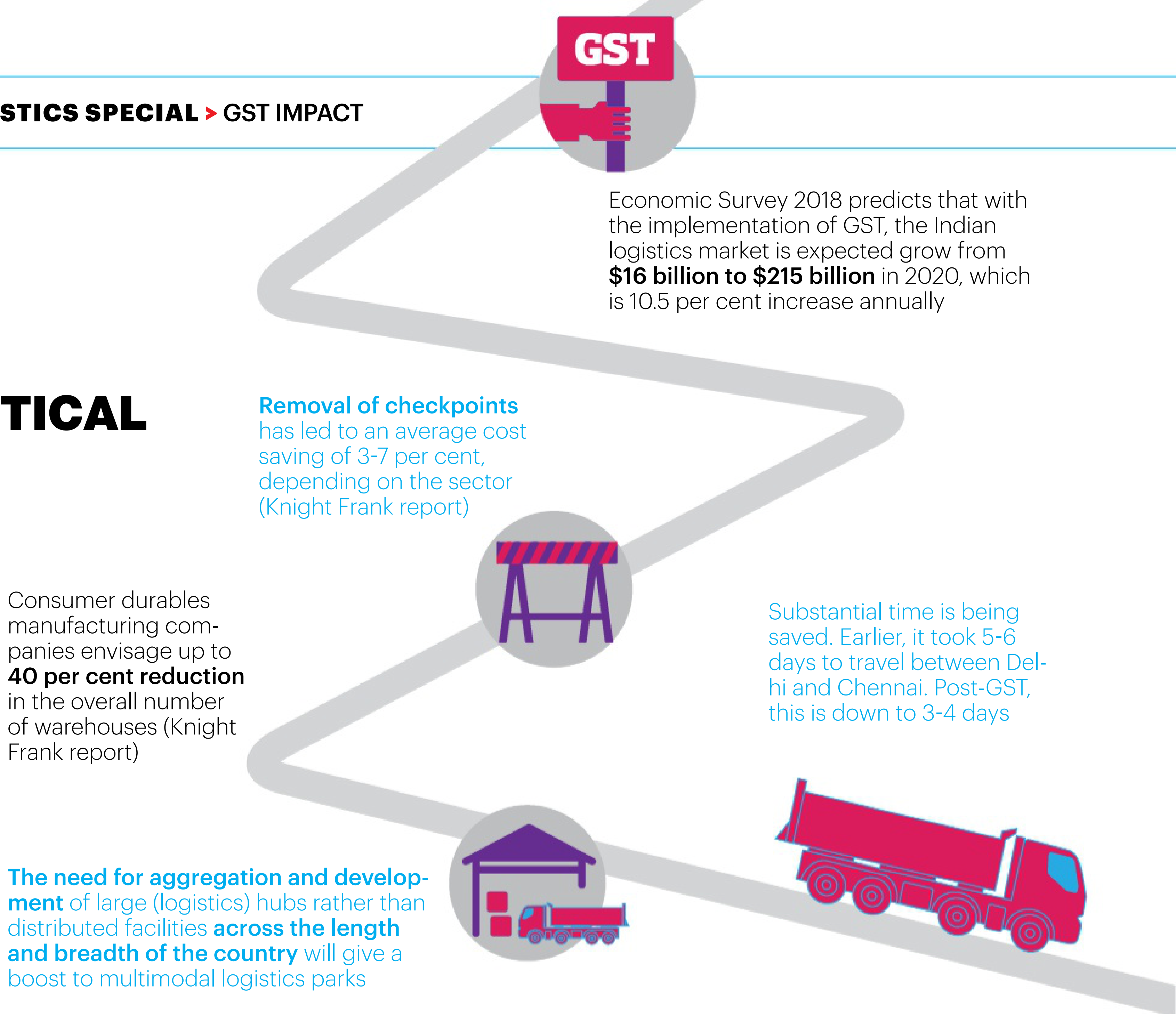
utilisation, drive formalisation in the transportation industry and trigger consolidation in the logistics sector. After all, GST has consolidated as many as 17 state and Central levies, including octroi/entry taxes, a reason for massive delays in truck movement. Also, the same countrywide tax on similar goods means companies do not have to open warehouses in different locations for tax arbitrage.

It has been almost two years since the GST was implemented. Most of the fine-tuning required has been done. Tax rates have been rationalised, rules clearly spelt out and clarified, and most missing links such as anti-evasion measures (e-way bills) put in place. Have the promised benefits materialised? Or is there still ground to be covered before we can become a seamless, frictionless market where goods are transported in the most efficient way possible?

TRANSIT TIME

Despite many complaints that truckers and motor transport associations have with the GST and the e-way bill – a mechanism for generating electronic challans for passage of vehicles across state borders – they also admit that after the GST implementation, the movement of trucks/consignments has become faster. Jai Praksah Singla, CEO,

LOGISTICAL EASE



All India Transporters Welfare Association (AITWA), says the time taken by trucks has come down by 10-15 per cent. He says there are still issues in complying with e-way bill norms, but once these are settled, the movement of goods can be expedited further.

Faster movement of goods has resulted in savings for companies. A survey by Knight Frank – a real estate consulting firm – last year found that removal of checkposts led to average savings of 3-7 per cent for transporters. A reduced turnaround time means transporters can manage with a smaller fleet, though after some initial restraint by state governments, checkposts are reappearing at some state borders.

B. Ramasubramaniam, Co-founder and COO, Strategic Initiatives, Balck-Buck, an online trucking company, says initially they witnessed a 20 per cent reduction in time taken to transport goods. However, he says, some states are coming up with new pretexts to keep trucks waiting at their borders. "These checkposts are appearing again. From Delhi to East, some of these check-posts are coming back. In some states, RTO (Regional Transport Office) check-posts are reappearing. The original plan was that RTOs would do random checks for e-way bill compliance, but that is not the case in some states. RTO checkposts have come up in these states," says Ramasubramaniam.

Certain e-way bill provisions are creating problems for transporters and the logistics industry

E-WAY BILL NIGGLE

Certain e-way bill provisions are creating problems for transporters and the logistics industry. "In case of a discrepancy, both goods and conveyance are seized. In a number of cases, goods as well as vehicles have been seized on smallest of discrepancies in e-way bills and even on suspicion of undervaluation," says Singla of AITWA.

In many cases, when a single truck is carrying many consignments, and there is a discrepancy in documents of a single consignment, it results in detention/seizure of the vehicle, delaying delivery of even consignments whose paperwork is in order. This results in undue costs and delays, necessitating extension of validity of e-way bills of other consignments. Small technical errors, even if not related to tax evasion, can lead to hefty fines. Transporters are demanding that taxes and penalties be levied only if the intention of tax evasion is proved.

The e-way bill was supposed to expedite fast-tagging (facility to pay toll online) at highway toll plazas, but has not made much headway. Ramasubramaniam of BlackBuck says while most toll plazas on national highways have the facility for online payments, state highways lag on this front. So, on state highways, truck drivers have to be given cash to pay toll charges. This deters adoption of RFID tags among truckers as they want only one solution (online or cash payment) and not both. He says only 8 per cent trucks are using RFID tags.

CONSOLIDATION OF WAREHOUSES

Consolidation of warehouses has been going on at a slower pace, unlike what was expected before the GST implementation. One reason could be frequent changes in GST. "It (consolidation) is still slower because, I think, there are customers who are still assessing the impact of GST as there have been changes. They were looking for stability to take a call. A lot of research has been done already as to where they want to set up their warehouses and those have started getting executed," Vineet Agarwal, Managing Director, Transport Corporation of India, said in an analyst call recently.

However, irrespective of the pace, the GST has forced companies to look at aggregation. Faster movement of goods has resulted in reduction of inventory and as a result fall in requirement of warehousing space. But this has not been uniform across sectors.

Knight Frank research says the level of consolidation will vary across industries. Its survey reveals that consumer durables manufacturing companies envisage up to 40 per cent reduction in number of warehouses in the near future. However, same level of consolidation won't take place in the FMCG sector. "They will continue operating warehouses close to the consumption cluster, but intermediate warehouses between factories and feeder hubs may be consolidated. As FMCG is a volume business and shortage of stock can lead to loss of sales and customers, the companies will continue to retain their key warehouses near consumption clusters," says the report.

Vikas Anand, Managing Director, DHL Supply Chain, says that after implementation of GST, India is attracting bigger players in the logistics industry, to establish larger, consolidated warehouses in the country's key strategic locations, while offering economies of scale at regional hubs. "We find customers have slowly begun consolidation which gives opportunities for larger warehousing to be introduced. Over the past few years, DHL Supply Chain has built over eight million square feet of warehousing space as the company has stepped up its foray into emerging markets." Each of its "big boxes" contains more than 200,000 square feet – more than 10 times the average size of warehouses in India.

Nonetheless, the GST has already given a boost to multimodal logistics parks (MMLPs). Peeyush Naidu, Partner, Deloitte India, says the industry has started responding to the need for aggregation and development of large hubs rather than spread out facilities across the length and breadth of the country. "We have seen the Ministry of Road Transport and Highways (MoRTH) encouraging such initiatives. The private sector is also taking keen interest in scaling up," he says.

According to Naidu, the MoRTH is planning MMLPs in 35 cities with the highest freight movement (covering more than 50 per cent road freight movement in India) to improve efficiency. Private sector players are also participating. Prakash Tulsiyani, CEO, CFS and ICD Verticals, Allcargo, said in a recent analyst call: "We continue to witness consumption-led growth which is driving demand for specialised logistics services. The company is taking steps to participate in MMLPs, including grade A warehouses, where demand is growing due to consolidation of inventory, specifically after GST."

The Economic Survey report last year pointed out that the logistics sector "is marred by high cost of logistics, impacting competitiveness in domestic and global markets, underdeveloped material handling infrastructure, fragmented warehousing, lack of seamless movement of goods across modes, lack of integrated IT infrastructure/modern technology." With GST bringing cost efficiencies by reducing transit time and pushing consolidation in warehousing, the sector can hope for better days ahead. BT

@dipak_journo

10%

This much decrease in the cost of indirect logistics can lead to a 5-8% increase in exports

35

Number of multi-modal logistics parks being planned by the Ministry of Road Transport and Highways

LOGISTICS SPECIAL > INTERVIEW

'FOR MAKE-IN-INDIA TO BE A SUCCESS, MOVE-IN-INDIA HAS TO BE SUCCESSFUL'

It is action time for the Indian logistics industry with regulatory changes making operations easier for organised players. Third-party logistics companies such as Mahindra Logistics are riding the wave — it has grown at a CAGR of 15 per cent over the last three years. ***Pirojshaw Sarkari,*** *CEO of the company, talks to* ***Goutam Das*** *on what is making the wheels of the industry move faster than before. Edited excerpts:*

Photograph by RACHIT GOSWAMI

Q. The logistics sector in India has witnessed many policy changes over the last two years. What have been the impactful ones?

A. There have been some unprecedented changes from the policy and regulatory perspective. The logistics industry in India, a year back, had no nodal agency it could go to. For anything to do with road transport, we had to go to the Ministry of Road Transport and Highways; anything to do with air cargo, we had to go to the Ministry of Civil Aviation; anything to do with service tax, we had to go to finance or commerce ministry. The industry wanted to be part of a single ministry. The government created a logistics division under the commerce ministry with a single agenda — lowering logistics costs. A senior IAS officer has been appointed in-charge. Second, the government has put the draft National Logistics Policy on a website for trade's opinion. This is one industry where we want regulation rather than de-regulation. This sounds weird but in an industry which is unorganised and fragmented — 85 per cent truck owners own less than five trucks — regulation is important to bring about standardisation. Without standardisation, the cost of logistics will be very high. Here is a simple example. We store goods and move goods on a pallet. There is no standard pallet size. As a logistics company, when I pick up company A's load, I want to optimise the load depending on the pallet size of A. However, while returning, I have to take the load of company B, and if the size is different, I cannot optimise the load. Standardisation is important not just for lowering costs but for safety as well.

How has the goods and services tax (GST) changed the industry?

The government gave infrastructure status to warehousing just after GST. It recognised that large warehouses will have to be built post-GST. Large warehouses need more money. Infrastructure status gets you loans with lower interest rate and longer repayment period. Then, the government came up with the e-way bill, which made movement of goods easier. Also, MoUs were signed for multi-modal hubs, and multi-modal is the cheapest way of moving goods. It depends on what kind of in-land waterways, rail systems and trucking systems the country has. In India, majority of goods move on trucks. Water-way movement is the cheapest. India has a beautiful coastline and in-land waterways and this is where the government has focussed on. I think the aim of all this focus on logistics is to ensure Make-In-India in a big way. If Make-In-India has to be successful, Move-In-India has to be successful as well. For any manufacturing, there are two components of logistics: raw material moving to the manufacturing plant and finished goods moving to the end consumer. If these two legs are not competitive, India cannot be competitive in its manufacturing.

Have logistics costs come down already?

Yes. Because of a combination of initiatives and not only due to GST. Because of GST, state-entry permits are no longer there. This means fewer halts for vehicles. When the wheels move faster, the cost goes down, as a truck doing three trips a month can now do four or more. Two, the permitted axle load has been increased by 20-25 per cent and, therefore, the cost per tonne will fall. Third is road infrastructure, the highways and the arterial roads. Indian industry was using nine-tonner trucks. This has now risen to 16 tonners and will move to 20 tonners going ahead. As the size of the asset rises, the cost per kilo reduces. We have seen a 5-8 per cent reduction in transport costs, industry wide, compared to the pre-GST era.

'WE HAVE SEEN A 5-8% REDUCTION IN TRANSPORT COSTS COMPARED TO THE PRE-GST ERA'

What are the points you agree with, or think need to change, in the Draft Logistics Policy?

The laws for asset-owning companies (those who own trucks) cannot apply to companies that don't own assets (like third-party logistics companies). For example, the Motor Vehicle Act asks companies to maintain logs of drivers. Third-party logistics companies also come under the Act but for us, giving details of driver log-ins is difficult, because we don't own those trucks. Apart from this, I think the policy will surely increase ease of doing business in logistics. BT

@goutam20

AC BRANDS TURNING UP THE COOL QUOTIENT

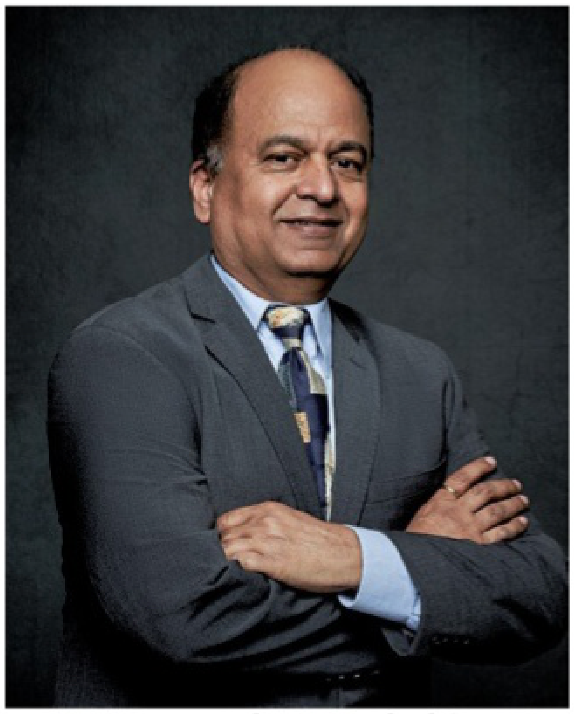
The alarm bells toll louder as environmentalists predict disastrous consequences due to man's inconsiderate ravaging of nature and a rapidly widening black hole in the ozone layer. Globally, it has been observed that seasons and the weather conditions are heading for a toss. Mercury levels have gone up and to counter the heat, the AC market said to have grown at CAGR of 18-20 per cent in the last decade, are pulling out all the stops in offering clean and green products to the consumer. This summer, will see newer technologies in play in air conditioners brought to you by major market players.

Climate shift registering high summer temperatures is propelling the growth of the AC market. Though an increase has been levied in the basic customs duty on ACs, refrigerators, consequently leading to hike in price, increasing disposable incomes continue to stoke the prosperity of the AC market. India's unprecedented economic growth offers tremendous scope for growth of this industry to expand in workplaces across industry sectors while on the home front there are millions of homes having no air conditioning. Add to this the sultry and humid summer climate in most parts of the country which will further bolster the sale of air conditioners and the steady growth prospects of the AC industry.

Hefty bills on power consumptions have made consumers conscious about energy efficient models such as 5 Star and Inverter ACs, the latter being the fastest growing market segment. Also, fuelling this growth is increased environmental awareness. In response to the growing sentiments to safeguard the environment, the Indian Seasonal Energy Efficiency Ratio (ISEER) and Bureau of Energy Efficiency (BEE), the two regulatory and energy labelling bodies, have adopted stringent norms and ensuring that AC companies adhere to the mandatory guidelines set by them.

In a bid to reduce carbon emission, BEE has made it mandatory that all air-conditioners are replaced by energy-saving and intelligent regulation of compressors in place of thermostat-triggered cut-offs. In the year 2010, the U.S. Environmental Protection Agency launched the global initiative to phase out R22 refrigerant, a measure towards plugging the depletion of the Earth's ozone layer. By 2020, production and import of R22 will be totally prohibited.

Voltas, India's undisputed market leader in cooling products, and the No. 1 AC brand, from the house of the Tata's, has further strengthened its



Mr. Pradeep Bakshi, Managing Director & CEO, Voltas Ltd.

leadership position in the Cooling Products space. By introducing, industry's first, Adjustable Inverter AC range, with the unique value proposition of Flexible Air Conditioning, the home brand has strengthened the product mix to over 100 SKU's.

At the launch of the new range of Air Conditioners, Mr. Pradeep Bakshi, Managing Director & CEO, Voltas Limited said, "Having already built a strong equity in the savings and comfort space, we want to take our product offerings to the next level of convenience. Our new range of Adjustable Inverter ACs, compliments the consumer's need for convenience, along with savings. With this launch, we have further enhanced the technology quotient in our products, to exceed customer expectations."

Strengthening its cooling portfolio further, brand Voltas launched 39 SKUs of Fresh Air Coolers, and 43 SKUs of Commercial Refrigerators. Through its new Home Appliances brand, Voltas Beko, a 50:50 Joint Venture Company between Voltas Limited and Arçelik, A.S.; the brand has launched more than 70 SKUs of Refrigerators, Washing Machines Dishwashers and Convection Microwaves.

Highlights of Voltas Adjustable Inverter ACs:

- ✔ Adjustable Mode: Intelligent switching from 1.5 ton usage to 1 ton usage, basis ambient heating and number of people in the room
- ✔ CO2 Reduction: Provides cleaner air by reducing levels of CO2
- ✔ PM 2.5 Filtration: Maintains indoor air quality by providing dust-free air
- ✔ Eco- friendly Refrigerant: Green refrigerant, which is environment friendly
- ✔ Stabilizer Free Operation: Protects the AC from wider range voltage fluctuations
- ✔ High Ambient Cooling: Keeps user comfortable even at 52 degree celsius

Voltas' new range of ACs unique & exciting offers:

- ✔ Lifetime Inverter Compressor Warranty1
- ✔ 5 Year Comprehensive Warranty
- ✔ Attractive Cashback through credit cards
- ✔ 0% Consumer Finance through NBFCs

Controlling & monitoring temperature, humidity and air movement in a defined area are the core functions of Air Conditioning. High initial costs of system & installation coupled with rising electric energy costs were the major deterrents to the growth of air conditioning systems. In addition, strict government regulations on energy consumption, global warming, and pollution are changing the way we all looked at air conditioning at may be a decade ago.

That is when the need of better performance & energy saving Inverter technology was realized to meet both the customer expectations of efficient cooling coupled with lower electricity bills & aligning with the Governments objective of a greener environment.

LG, one of the leading players in this segment, is putting continuous efforts to offer best of their products keeping in mind the need for energy efficiency and restoring health of consumers. In 2017 LG was the first brand to transform their entire line up of AC's to inverter range, offering energy efficient solutions to consumers. The move was followed by the industry & today inverter AC constitutes 66% of AC market. Introduction of inverter technology has been the catalyst for LG to be No.1 AC brand in India, with a market share of 22.5% LG's aim is to further consolidate their market leadership in the industry with a wider line up of 5 star ACs. This year they are offering 22 models of 5 star BEE rating as compared to 14 models last year.

Energy efficiency is the key focus of LG's AC range with a cooling score of 5 - LG's High Temperature Cooling Score is the measure for cooling performance of ACs at high temperature. Where conventional AC's performance deteriorate and score less than 5 at higher ambient temperature, LG DUALCOOL AC's performs far ahead and scores 5.

LG's High Temperature Cooling Score of 5 is due to our years of experience and continued innovation such as

Dual Inverter Technology
Hi- Grooved Copper Pipes
IPM (Intelligent Power Module)
Dual Row Condenser
BLDC fan motor

Mr. Vijay Babu,
Vice President Home Appliances & Air Conditioners, LG Electronics

Another energy efficient feature is LG's active energy control- Cooling a home can be expensive, particularly in hot summer months. LG Air Conditioners avoid these costs and save energy by taking advantage of its Active Energy Control feature. This efficiently limits power consumption from 40% to 80% of normal usage and saves up to 57% energy.

LG will be pushing forward the concept of Dual Inverter technology in air conditioners to comply with energy star rating by Bureau Energy Efficiency (BEE). At present, Inverter ACs command majority of air conditioning industry & this technology is expected to rise to approximately 80% by the year end. With a possible revision in BEE ratings of energy efficiency we may see products equipped with Inverter technology, occupying the business domain of residential air conditioners by the end of 2020.

With the onset of summers, with consumers looking out for Air Conditioners, energy efficiency remains one of the main criterion for purchase. As we proceed with more technology advancements for a future ready nation, Wi-Fi enabled ACs powered with Amazon's Alexa and Google Assistant, will provide more convenience and choice to consumers.

Today, the choice of multiple brands has confused the consumer on how to make the right choice from among the plethora of tempting offers. To educate the consumer, Godrej has come up with the initiative under Godrej Eco friendly Air Conditioners - Cools You And The Planet, with guidelines to ensure customers make the best choice for themselves and hopefully also for the planet.

'Smart tips to buy the right AC' by Mr. Santosh Salian

1.Space: Apart from the room size, the average number of people using the room at a time, electrical equipment & furniture in the room, exposure to direct sunlight and the placement of windows. Usually, living rooms tend to have more people at a time than a bedroom of the same size, hence may need a higher capacity AC. Likewise, higher the exposure to sunlight – the greater the load on the AC.

2.Fixed or Variable: For shorter duration usage

(approximately 3 hours a day, 4 to 5 months a year) opt for fixed speed compressor AC. For longer usage of AC, daily or throughout the year, invest in an inverter AC.

3.Do the Math: One can estimate the cooling wattage (capacity) ideal for a particular room size:
AC cooling wattage (capacity) ~ {(Length X Width X Height in feet)*3.5}/1000
Say, if a room is 10 feet in length; 8 feet wide & 10 feet high, then - (10 X 8 X 10)*3.5 / 1000 = 2.8 Kilo Watt. Hence recommended AC would be with cooling capacity close to 2.8 Kilo Watts. However, one should consider capacity increment of approximately 1.75 Kilo Watts, if the room has more than 2 windows or bigger windows and has ambient temperature > 38°C.

4.Energy Efficiency & Refrigerant: The ACs come with an energy label which display the efficiency of the AC in terms of ISEER. Do not just check the star rating of 3,4,5 etc. Higher the ISEER, greater is the efficiency and energy saving.

5.Make an eco-friendly choice: A key determinant for an AC being eco-friendly is the refrigerant used in it. Being halogen free, hydrocarbons refrigerants like R290 are the most eco-friendly refrigerants available as of now, with lowest global warming potential of just 3 and zero ozone depletion potential. With global warming on the rise, it is therefore our responsibility to choose ecofriendly ACs with refrigerants R290 or at least R32.

6.Tech Features: Technological advancements have made it possible for manufactures to offer much more than just cooling with ACs. So, one should evaluate ACs on the features like – Durability, Condenser with corrosion protective coating & higher warranty, Air Purification Filters, Uniform Cooling, Power Saving mode, Dehumidification (for smoother operation during monsoon), Sleep Mode (to automatically adjust room temperature to ensure comfortable sleep), Deodorizer (eliminating odors & deactivating other harmful gases) and Installation & Warranties (for worry-free product experience).

7.Service backup: It is equally important to take into consideration the service standard provided by the company.

Mr. Santosh Salian,
Product Group Head –
Air Conditioners, Godrej Appliances

Prominence to Dominance

Air conditioner maker Daikin India augments its growth trajectory with its third manufacturing facility, a new AC series, and aiming for an 18-20 % sales growth during 2019-20

Japanese air conditioner maker Daikin is bullish on its India business. Expecting revenue of around 4,200 crore in 2018-19, the company has been strengthening its Indian operations, with expanded manufacturing capacity. The aim is to address the needs of the growing middle class in the country and fuel exports to Sri Lanka, Bangladesh, Nepal and to select countries in Africa.

Going strong

Riding on the back of residential and commercial infrastructural development across India, Daikin India is in the final stages of opening its third manufacturing facility in the south. With air conditioning penetration inching towards double-digit figures, Daikin India is ready to piggyback on the Make in India wave to augment its production capabilities from its current capacity of 15 lakh room air conditioners, 50,000 VRV units, one lakh cassette units, 20,000 ductable units and 1,000 chillers.

"With India now gaining reliable manufacturing reputation across the globe, the third Daikin facility will serve the growing local consumption and exports to SAARC countries, East Africa and the Middle East," said Kanwaljeet Jawa, MD and CEO, Daikin India, member of the board, and regional general manager, air conditioner business, India and East Africa, Daikin Industries Ltd. **"The third factory will optimise our cost structure and make us more export- oriented and efficient. Countries with weather patterns like ours will be able to take advantage of the Indian production, price and reduced time delivery owing to reliable connectivity options,"** he added.

In June 2018, Daikin Industries Ltd had inducted Jawa as the first Indian on its Japan board. The move is part of Daikin Japan's strategy to focus on having representation from emerging markets and to promote ethnic and gender diversity on its board.

Growth strategy

Daikin India is expecting to touch target sales of approximately 6,400 crore (100 billion yen) in India for the year through March 2021, doubling its fiscal 2017 tally.

The company has adopted HFC 32 refrigerant and inverter technology and these have had a positive role in Daikin's ability to provide superior products to consumers.

The company has crafted a strategy to dominate the Indian market with locally tailored products. Daikin has divided the country broadly into five regions based on factors such as climate, air quality and reliability of power supply. It has developed units that can work in areas with heat surpassing 54 degrees Celsius, as well as models with heating functions for regions with snowfall.

With Daikin's expanded capacity and 6,400 sales outlets, the company aims to trounce local competitors as well as international ones.

"At the end of FY18-19, Daikin has clocked a growth rate of 20 per cent against the industry growth of 10 per cent, securing a turnover of 4,250 crore for FY 18-19," said Jawa.

New launches

Being a technology leader, Daikin has always tried to bring true value addition to its customers. And this was proven yet again with the addition of two state-of-the-art products — the Daikin WiFi enabled air conditioners and advanced anti-corrosion models.

The WiFi-enabled air conditioner comes with an application that lets you switch on or off, control various modes, swing and fan speeds from anywhere in the world. The new Daikin IoTenabled smart air conditioner is also compatible with Google Home and Amazon Alexa.

On the other hand, the advance anti-corrosion air conditioner series is built to last in harsh environments. Places closer to the sea coast, sewage and industrial areas that discharge fumes can corrode an air conditioner. That is where the advanced anti-corrosion models will prove their worth.

"We at Daikin are committed to offer products that provide complete customer satisfaction and superior user experience," said Jawa. "The new air conditioner series are tailor-made for Indian weather conditions. The advanced inverter technology controls the electric voltage, the current and frequency of their compressors. As a result, the temperature remains constant, making these air conditioners powerful, energy-efficient, comfortable and intelligent. The air conditioners also sense human movement and adjust the temperature accordingly."

Making a mark

Though air conditioner penetration in India is still lagging at six to seven per cent, the Indian HVAC (heating, ventilation and air conditioning) segment is fiercely competitive with home grown companies, and Korean, American, Chinese and Japanese firms fighting for the 20,000 crore market.

The Japan India Institute for Manufacturing (JIM) at the Daikin India-supported Institute, Neemrana, Rajasthan, is a result of the collaboration between the governments of Japan and India to create a pool of skilled manpower for manufacturing in India. By imparting skill education to the youth, Daikin India supports JIM and the Make in India and Skill India initiatives of the Indian government.

Kanwaljeet Jawa, MD and CEO, Daikin India, member of the board, and regional general manager, air conditioner business, India and East Africa, Daikin Industries Ltd.

Customer Calling

E-COMMERCE AND CUSTOMER DEMANDS HAVE FORCED THE LOGISTICS INDUSTRY TO ADAPT.

BY BALA AGHORAMURTHY

Technology adoption in the Indian logistics industry had not been at par with international standards until recently. That has changed dramatically in the last few years. Trends in logistics, coupled with explosion in e-commerce and needs of customers, has forced the industry to adapt.

The digital revolution of social, mobile, analytics, cloud and Internet of Things (IoT) has changed the landscape. Leaders in logistics will be those who not only have expertise but are also able to adopt newer technologies.

The digital space has multiple components, but mobile is one area that has brought in a quantum change. The apps provide not just dashboards, analytics and customised business information, but also last-mile delivery information, geofence, speed, among others.

Technology has further helped create new value-added product lines such as delivering a new shipment and picking up another item from the customer. Interlinked processes call for quality and quantity parameters being in line with the system processes, and product-wise check by the delivery person. Without mobile devices, this was earlier not possible. Technology has helped convert last-mile delivery to first-mile pick-up.

The e-commerce industry has habituated users to assume that every shipment in the country can be tracked through a scan. This was true only for courier and small shipments, and not for express parcel shipments. Now there is 100 per cent package level visibility using mobile technology. Corporate customers have derived exponential value through this service. With sensor costs falling, in the near future, each package could be tracked through sensors, eliminating the need for package level manual scans. This will lead to tremendous improvement in the way the logistics industry operates.

Another trend to have emerged from consumer demand is elastic logistics. Due to spikes in business, especially during festivals and sale promotions by e-tailers, volumes can jump up manifold, and shrink back quickly, requiring the entire organisation and technology platform to scale up and down on demand. With multiple service providers for pick-up, delivery, line haul, warehousing and other services, an integrated technology interface with multiple service providers will become the key to scaling up.

It is imperative to create an architecture that has a scalable environment tightly integrated with analytics, IoT, artificial intelligence, machine learning and security, to meet the demands of elastic logistics.

Another trend to emerge is fixed time pick-ups and deliveries, which is a solution customised not only for the customer, but also for the customer's customer.

Due to spikes in business, especially during festivals and e-tail promotions, volumes can jump up manifold, and shrink back quickly

Between the Lines

The amount and speed of data being generated – not only of the key transactions, but also of the thousands of vehicles, machine movements, customer interactions and supplier side activities across the country – creates huge information. Analytics has become the buzz, and there is tremendous value in each segment. In fact, the industry is moving towards predictive logistics.

While robots in warehouses have been put to use by a few large e-tailers, adoption across the industry is very low at this juncture. The adoption of backend Robotic Process Automation (RPA) has, however, begun. It is transforming customer service, and minimising customer support agent operations as it provides complete updates at each stage to customers and also the necessary internal process of action as per the rules defined. It can support customers in selecting the right products based on turnaround time and price, and finally they can place pick-up requests without human intervention. Using RPA readings and customer interactions can be automated for faster response.

We are at the tip of a revolution wherein technologies like blockchain, drones, autonomous vehicles, smart glasses and 3D printing are going to bring about huge advancements in the coming years. When will this happen in India, is anybody's guess. BT

The author is Deputy Managing Director, Gati

Money Today

RETIREMENT PLANNING

Reality Check

Look beyond provident fund while making plans to financially secure life after retirement

ILLUSTRATION BY RAJ VERMA

MANAGING TRAVEL BLUES: Tips to help you choose a travel cover. *Pg 110*

SPEEDY AND TRANSPARENT How external benchmarking of loans will help borrowers. *Pg 112*

MONEY MATTERS: **Q&A** *Pg 115*

GOING BEYOND EPF

Diversify the portfolio while making plans to financially secure life after retirement.

By RENU YADAV
Illustration by AJAY THAKURI

Ripudaman Singh, 41, a professional working in the e-commerce industry, plans to retire at the age of 60. Till about four years back, he was relying solely on his employees' provident fund (EPF) for retirement savings. Singh got a rude shock when his financial planner told him that he won't be able to afford his current lifestyle during the sunset years with only the EPF money.

There are many people like Ripudaman who rely only on their provident fund for retirement expenses. EPF is a tax-efficient, long-term investment product but contributions to it are limited — 12 per cent of the basic salary and matching employer contribution. Part of the employer's contribution (which is 8.3 per cent, generally subject to a maximum of ₹1,250) goes towards employees' pension scheme. Frequent withdrawal is also common, which brings down the corpus.

EPF is predominantly a debt instrument. It was allowed to invest in equity only recently, and the exposure is limited to 15 per cent. It is difficult for a debt-heavy instrument to generate inflation-beating returns.

Asset Allocation

Once you realise that EPF alone will not be enough to meet your retirement

needs, you need to start additional investments, whose returns will depend on the asset allocation (see: *Final Figure*). So, before exploring the instruments, decide on how much you need to invest in equity, debt or any other asset. "Asset allocation can be decided after considering expenses and goals after retirement, risk profile, liquidity, income needs, time to goal, taxation, etc," says Suresh Sadagopan, Founder, Ladder7 Financial Advisories. If you are not able to ascertain your asset allocation, take the help of an adviser.

Here are a few options you can use for retirement planning.

Voluntary Provident Fund: You can enhance your EPF contributions to over and above the mandatory 12 per cent. For this you can open a voluntary provident fund account. The employer is not obliged to contribute to this account. While this investment avenue is relatively stable, do bear in mind that returns are low, so you may need heavy additional investments.

Public Provident Fund (PPF): This is a favoured debt instrument as it offers guaranteed returns and is a route that non-salaried individuals, who don't contribute to EPF, can take. There is a lock-in of 15 years but you can continue the account after maturity by extending it in a block of five years indefinitely. This will help you accumulate more. For example, if you invest ₹1.5 lakh (maximum allowed in a year) per year for 15 years, you will be able to accumulate ₹44 lakh assuming an interest rate of 8 per cent. But if you increase the tenure to 10 more years and contribute regularly, you can accumulate ₹1.18 crore. PPF is known to give one of the highest post-tax returns among fixed income options. However, PPF too may not be sufficient to fulfil your retirement corpus needs.

FINAL FIGURE

EPF alone may not be enough for your retirement needs.

Figures in ₹ unless indicated otherwise; Assumption; Annual salary increment of 8%; EPF interest rate of 8%; Inflation at 6%; Life expectancy of 85 years; Retirement corpus calculated after factoring EPS income from monthly contribution of ₹1,250 for 30 years; Total salary is two times of basic, and expenses are 60% of total salary ; Retirement age 60 years

	Case 1	Case 2
Years to retirement	25	15
Basic salary	25,000	1,00,000
Existing EPF balance	5,00,000	35,00,000
Monthly expenses		
Current	30,000	1,20,000
On retirement	1,28,756	2,87,587
EPF corpus at retirement	1,41,20,083	2,38,34,304
Retirement corpus needed	3,02,57,377	6,86,79,339
Shortfall	1,61,37,294	4,48,45,035
Additional Monthly Investment Required		
At annual return 8%	17,753	1,32,832
At annual return 12%	9,570	95,120

Equity Booster

The average inflation over the past 15 years has been around 7.06 per cent, while average EPF returns over this period have been 8.75 per cent. At the same time, the S&P BSE Sensex delivered an annualised return of around 13 per cent till the end of 2018. Say, you are 35 years old with current spending of ₹30,000 per month. Assuming annual inflation of 6 per cent, this amount will become ₹1.29 lakh per month when you retire at 60. To meet expenses for 25 years after you retire, you will need a corpus of around ₹3 crore. If we assume EPF accumulation of ₹5 lakh from 10 years of service starting at the age of 25 and your current basic salary is ₹25,000, you will be able to accumulate ₹1.41 crore through EPF, which will clearly be insufficient.

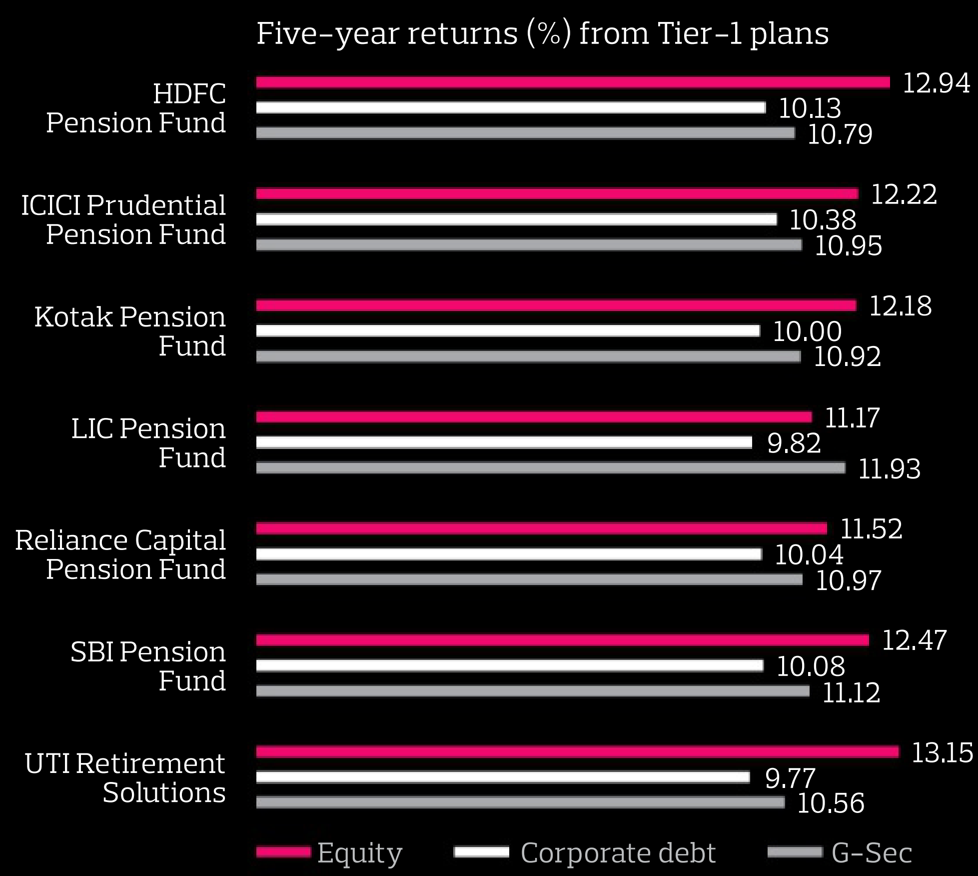
If you invest in a conservative option like EPF to bridge the gap, the amount will have to be a high as the rate of return is lower. In the example above, to meet the shortfall of ₹1.61 crore, you will have to invest ₹17,753 monthly in an option that gives 8 per cent returns, and ₹9,570 in an instrument that gives 12 per cent.

The point here is that to build a sufficiently large retirement corpus, investments need to earn high returns, and for that investing in equity is a must. Here are a few ways to do that.

National Pension System (NPS): This is a defined contribution long-term retirement scheme which was opened up for all citizens in 2009.

You can take exposure to four asset classes – equity, government bonds, corporate bonds and alternative investments. You can invest up to 75 per cent in equity and 5 per cent in alternative assets. You can choose from two investment strategies: active and auto. Under active choice, the investor takes the call on how

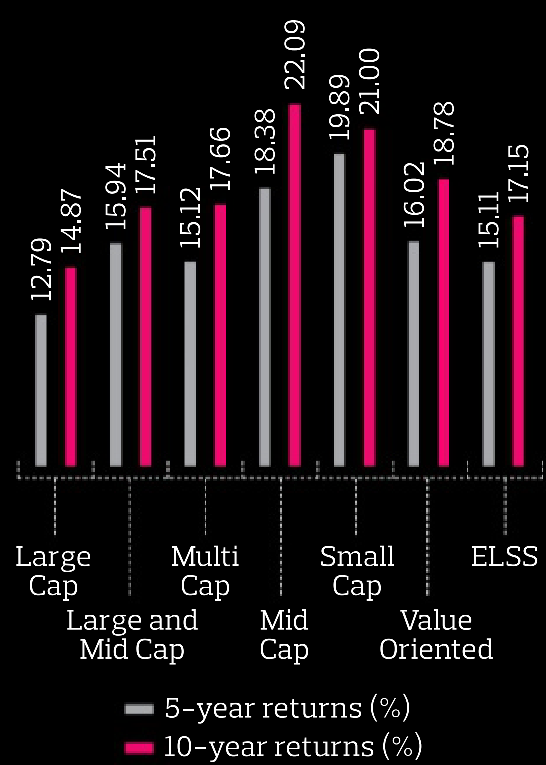
CHOOSING AN NPS FUND



Returns as on April 3, 2019; Birla Sun Life Pension Fund is yet to complete five years; Source: Value Research

EQUITY KITTY

Equity mutual funds have the potential to deliver higher returns over the long term, so they should be considered for retirement planning



much allocation goes to different asset classes subject to the maximum limits. Under the auto choice, there are three Life Cycle Funds with predefined equity allocations as per the subscriber's age. Under the aggressive option, equity allocation can go up to 75 per cent; this is 50 per cent under the moderate option and 25 per cent under the conservative option.

NPS is a low-cost option. With both active and auto options, NPS holds appeal for both those who want to actively manage their asset allocation as well as for those who want to leave it to the fund manager.

NPS recently became more tax efficient as it has been given exempt, exempt and exempt status on a par with EPF. There is an additional tax break (over and above what's allowed under section 80C) of ₹50,000 (under section 80CCD(1B)).

5

YEARS

Period of indefinite extensions available on PPF accounts after maturity

₹2

LAKH

Total tax benefit available on investments in NPS – ₹1.5 lakh available under Section 80C, and ₹50,000 under Section 80CCD(1B)

Once you retire, 40 per cent of the retirement corpus has to be compulsorily invested in an annuity product. "Annuity options available in India are not yet in line with privileges enjoyed by those in developed nations, especially in case of private sector employees and the self-employed," says B. Gopkumar, ED and CEO, Reliance Securities.

The choices are limited as one can choose only from the empanelled annuity providers. "In India, returns on annuity products are not tax-free, making them look less attractive as compared to other retirement solutions such as EPF or PPF," says Aalok Bhan, Director and Chief Marketing Officer, Max Life Insurance.

"To get a reasonably good income on retirement, proper allocation be-

WHICH AVENUE TO TAKE?

Various instruments can be used to plan for retirement. Here are some of the popular options

PPF

Anyone can open a PPF acoount with a bank or post office
Maximum investment is ₹1.5 lakh a year; minimum is₹500
Invested amounts and returns earned are both tax-free
Lock-in of 15 years
After 15 years, extensions possible in blocks of five years
Partial withdrawal possible from 7th year; conditions apply
Current interest rate is 8%
Interest rate set quartely based on g-secs yields

EPF

You can invest only through your employer
12% of basic salary and matching contribution from employer
8.3% of employer's contribution, maximum ₹1,250, goes to EPS
Invested amounts and returns earned are both tax-free
Lock-in till retirement; some partial withdrawals possible
75% withdrawal if one remians unemployed for less than a month
Interest rate set by Central Board of Trustees, cleared by FinMin
Generally, rates are higher than FD rates. For FY19, it was 8.65%
Equity exposure under EPF limited to 15%

NPS

Anyone in the 18-60 years age group can open an NPS account
Minimum investment: ₹1,000 a year
Lock-in till retirement
Tax break of ₹50,000 in addition to ₹1.5 lakh under Section 80C
Investments across assets such as equity, g-secs, corporate bonds
Allocation to equity is limited to 75%; 5% in alternative assets
In active choice, equity allocation can go up to 75% till 50 years of age
Under auto choice, there are three life cycle funds with equity exposure of 75%, 50% and 25% till 35 years of age
Auto rebalancing of equity and debt allocaton as per age allowed
On maturity, you can withdraw 60%; 40% goes into buying annuity
Return depends on fund chosen as well as market performance

Mutual Funds

Choice of large, mid and small cap funds depending on risk appetite
Large-cap funds are relatively less volatile; have given 15% returns over past 10 years as on April 3, 2019
Higher return potential depending on risk appetite
Most have no lock-in period, so needs disciplined investing
Minimum investment ₹500-1,000, no upper limit
Retirement fund saving options available with lock-in of 3, 5 years

tween annuity and other higher return yielding assets has to be done," says Lovaii Navlakhi, MD and CEO, International Money Matters.

NPS is a long-term product; withdrawals before maturity are possible only under certain circumstances. It does not give 100 per cent equity exposure, so if you want higher exposure, you have to supplement it with other instruments.

Mutual funds: Investing in equities through mutual funds is a good option. "As retirement is a long-term goal, equities fit perfectly into the groove," says Rajesh Cheruvu, CIO, WGC Wealth. Equity mutual funds offer the benefit of diversification and help you invest systematically. There are special mutual fund options designed for retirement saving. Unlike normal mutual funds, these funds have a lock-in of three-five years and higher exit loads, to restrict withdrawals. These are generally hybrid funds with different allocation to equity and debt under different plans. They also offer the flexibility to switch between plans after the lock-in period is over.

However, investing for the short term in equity mutual funds is risky as markets are volatile. Therefore, these are suitable only for investors who can stomach that kind of volatility and have the discipline of staying invested for the long term.

Power of Compounding

As retirement is a long-term goal, most people tend to delay it. "Retirement planning in India has not picked up at the speed it should, with only one in four Indians actually thinking about retirement, and this is happening later in their life's journey. People lose out on time," says Dipika Jaikishan, Vice President, MyWay Wealth.

Higher life expectancy rates mean you might live longer, for which a larger retirement corpus is needed. To achieve that, use the power of compounding – start early; save regularly. If you invest ₹5,000 per month for 30 years at the rate of 10 per cent, you will be able to build a corpus of ₹1.14 crore. If you delay by 10 years but increase the investment amount to ₹10,000 per month, you will still be able to accumulate only ₹77 lakh. So, start early, even if the amount is small. BT

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MANAGING TRAVEL BLUES

Buy insurance to ensure a stress-free vacation. Here are some tips to help you choose a travel cover.

By NAVEEN KUMAR
Illustration by RAJ VERMA

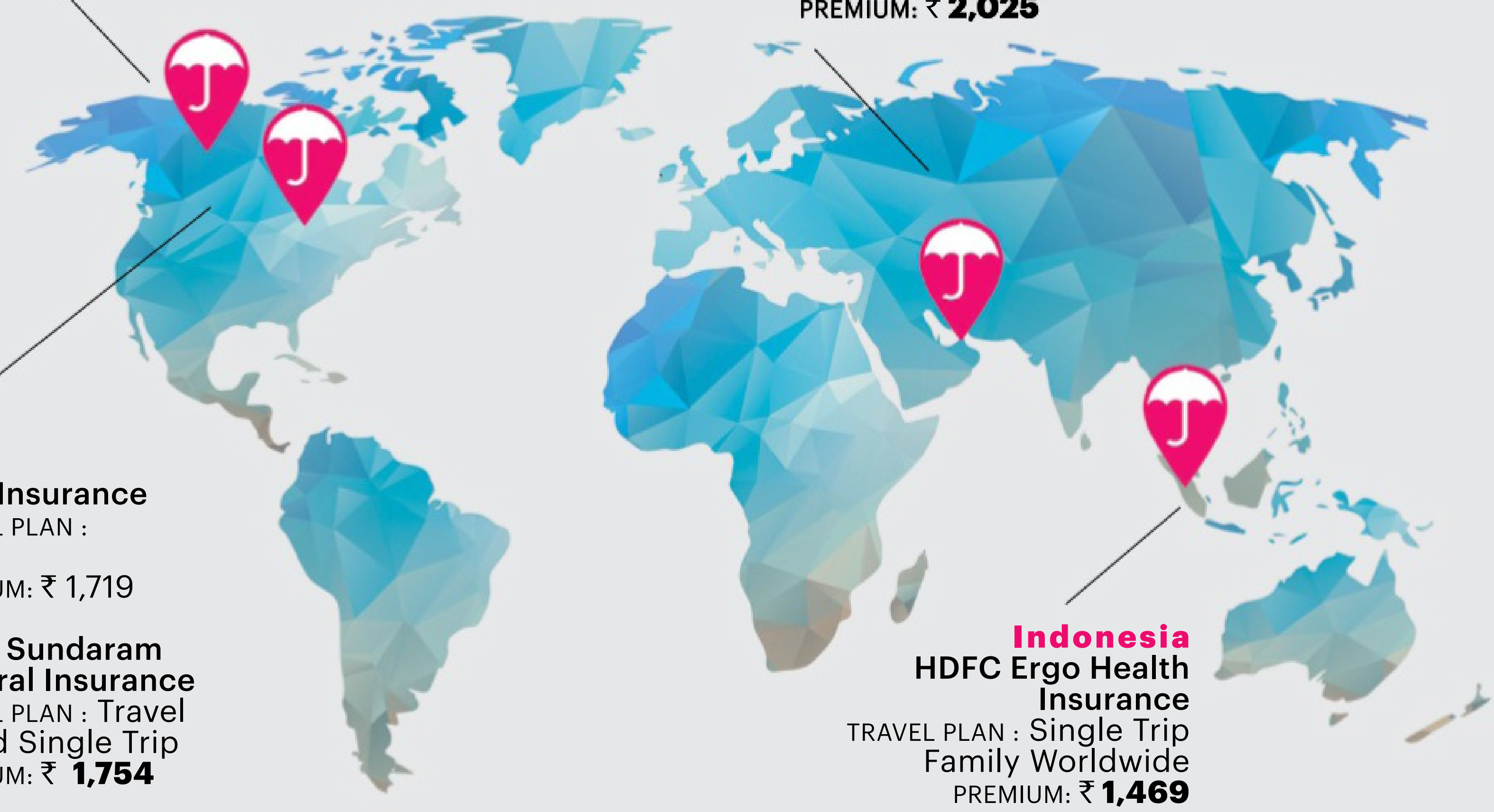
The World Tourism Organization says 23 million Indians travelled abroad in 2017. The figure is likely to rise to 50 million in 2019. Overseas vacation is becoming one of the most sought after aspirations of middle class Indians. Most people do elaborate planning before travelling abroad but ignore one crucial aspect — travel insurance. Bad fortune often strikes when it is least expected and, in a foreign land, dealing with any emergency can be a nightmare. Travel insurance can take care of the financial impact of such mishaps.

If you are travelling to a European country or USA or Canada, having travel insurance is a must. However, there are many countries which offer Indians visa on arrival and have not made purchase of travel insurance mandatory. People going to these locations generally try to avoid the extra cost of travel insurance. However, a travel insurance policy can make your vacation a stress-free experience. The premium, too, is not huge compared with the big relief it offers.

Medical Benefits: If your family or group member faces a medical emergency, the cost could be heavy and often unbearable, especially in a foreign country. "A treatment which costs ₹40,000 in India will cost more than 5 to 10 times at many overseas locations," says Tarun Mathur, Chief Business Officer and Co-founder, Policybazaar.com. "Protection against medical emergency should be one of the most compelling reasons for people to buy travel insurance when they are going abroad" says Mathur.

To get assistance for a medical emergency, keep the toll free number handy. "The policy holder has to call the toll free number. Assistance is provided immediately. We have overseas claim settlement agents who provide help in getting the person admitted to

KNOW HOW MUCH IT COSTS TO TRAVEL SAFE



Premium for a traveller couple (35 years old male and 33 years old female), Total sum insured - $1,00,000; Duration of the trip - 15 days. The premiums are subject to change w.r.t. change in dates of travel and age of the travellers.
Source: www.policybazaar.com

the nearest hospital and also organise shifting of the patient to the hospital," says R. Kannan, Executive Director (Claims), IFFCO Tokio General Insurance. "In a network hospital, this is cashless. However, in a non-network hospital, the insured person will have to file a claim to get reimbursed for the expenses. This claim can be made even after returning," he adds.

Losses And Delays: In case of loss of passport, you have to call up the toll-free number provided by your insurer. It will inform you about the procedure and help you get a temporary passport which will allow you to complete your stay. The cost incurred in doing so will be reimbursed by the insurer. "The insured has to intimate his/her loss to the registered assistance service provider (ASP). In the next step, documents shall be forwarded to the ASP, including copy of the FIR for passport/baggage loss or confirmation report from the common carrier authority (property irregularity report) in case baggage was checked in," says Sanjay Datta, Chief — Claims, Underwriting and Reinsurance, ICICI Lombard General Insurance. In case of long flight delay, the insurer pays all food and accommodation related expenses.

Trip Cancellation: If you have to cancel the trip due to an unavoidable reason, you will incur a loss due to hotel and flight cancellation charges. A travel insurance plan can offer you relief in such a case. "Trip cancellation due to reasons like death, accident or illness is covered. When the insured person cancels the trip, he has to incur cancellation charges on travel and hotel bookings, so we reimburse cancellation charges on actual basis" says R. Kannan.

Student Travel: The number of students going abroad is rising each year and their need is quite different from other travellers. They need protection during travel and also during their long stay. "Student travel products are designed after considering the requirements of overseas universities. Covers for things like study interruption, sponsor protection make student travel insurance unique from other travel insurance products," says Datta of ICICI Lombard General Insurance. The cover typically comes with annual validity.

You should check the exclusions while buying the policy as there are restrictions on the numbers of hours when it comes to flight delay coverage. Also, processing of the baggage delay claim may start only after three days. A travel plan can only be bought before the travel begins, so it's better not to wait till the last minute to buy one. BT

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SPEEDY AND TRANSPARENT

External benchmarking will not only expedite transmission but will also help borrowers compare future interest rates across banks.

By NAVEEN KUMAR
Illustration by AJAY THAKURI

Banks are quick to raise interest rates whenever the Reserve Bank of India (RBI) increases the repurchase (repo) rate. However, they act slowly in passing on the benefit of a rate cut to borrowers. The RBI has taken several measures – linking loans with internal benchmarks such as base rate and marginal-cost-based lending rate (MCLR) – to make the way banks fix interest rates more transparent. But the results have not been encouraging. Banks continue to charge borrowers arbitrarily, using internal benchmarks and spreads.

Enter external benchmarking. Under the new mechanism proposed by the RBI, banks will have to price their loans on the basis of external benchmarks such as the repo rate, the 91-day treasury bill yield, the 182-day T-bill yield or any other benchmark market interest rate produced by the Financial Benchmarks India instead of the internal benchmark MCLR. The new system was supposed to come into effect from April 1 but the RBI has postponed it till further consultations with stakeholders.

Issues in Internal Benchmarking

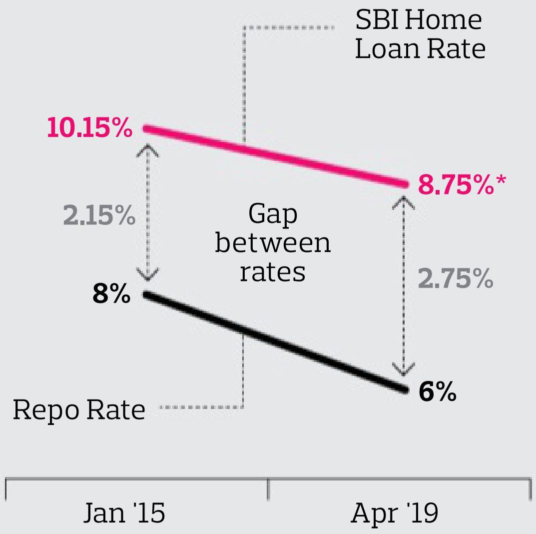
The RBI cut rates multiple times in 2015. "In a span of a little over a year, it slashed the repo rate by 125 basis points. By comparison, banks reduced lending rates by only 60-70 basis points during that period. This prompted the RBI to introduce the MCLR to bring in optimum transmission of rates to borrowers in response to changes made in the repo rate by the central bank. However, it didn't pan out that way," says Rishi Mehra, CEO, Wishfin.com

The repo rate, which stood at 8 per cent until January 2015, declined to 6 per cent by April 2019, a reduction of 2 percentage points. Ideally, home loan borrowers with floating interest rates should have received the advantage but that did not happen. State Bank of India (SBI) offered home loans at 10.15 per cent in January 2015 as compared to 8.75 per cent now for male borrowers with loan amount of Rs 20-30 lakh. Its home loan rate should have come down to 8.15 per cent, but the borrowers got the transmission benefit of only 1.40 percentage points instead of 2 percentage points.

Arbitrary Practices

Besides the opacity in internal benchmarking, another issue involves the spread that banks charge over and above the MCLR or base rate. They usually find a way to offset the reduction in rates for existing borrowers by raising a part of the spread. "A large reduction in MCLR is partly offset by some banks by a simultaneous increase in the spread in the form of business strategy premium, ostensibly to reduce

THE GROWING DIFFERENCE



*On SBI MaxGain for male borrowers with loan amount of ₹20-30 lakh the pass-through to lending rates," says a report by an RBI Study Group.

Ideally, the spread should remain constant throughout the loan tenure for borrowers with similar risk profiles. "The spreads are mostly changed arbitrarily for similar quality borrowers. While the spread over the MCLR is expected to play a small role in determining the lending rates, it turns out to be a key element in deciding the overall lending rates. This has made the entire process opaque. It impedes the monetary transmission," says the RBI study.

Banks also manipulate the system to attract new borrowers, who receive attractive rates, while old borrowers are the last to get the reduction benefit. Most borrowers are unaware of changes unless their equated monthly instalments (EMIs) change. As a home loan transfer involves processing fees and a lot of documentation, most borrowers hesitate in transferring loans. This works in the banks' favour.

The New System

With external benchmark, you need not wait for banks to inform you about the change in interest rates. You can monitor it yourself. Banks will not be able to change the spread either to offset the fall in the benchmark rate. Although they will have complete discretion in fixing the spread, once decided, it will remain unchanged throughout the loan tenure. The spread will change only if the borrower's credit assessment undergoes a substantial change. Besides, banks can't fix different benchmarks for different loans under the same loan category once they fix it.

Advantage Borrowers

Although borrowers could compare interest rates across lenders at the time of taking the loan, they could not estimate the future move because of the opaque internal benchmarking. That will change now. "Customers will simply compare spreads across banks and choose the bank based on lower spreads as benchmark rates would remain the same," says C.S. Sudheer, Founder and CEO, IndianMoney.com.

External Benchmark Options for Lenders

- RBI policy repo rate
- 91 days Treasury Bill yield *
- 182 days Treasury Bill yield *
- Any other benchmark market interest rate *

* produced by the Financial Benchmarks India

More Transparent Borrowing

Loan rates linked to external benchmarks will benefit borrowers

- All floating loan rates will be affected
- Borrowers will know the benchmark
- They will know the spread over the benchmark
- Spread will remain fixed during loan tenure
- Borrowers will be able to track their interest rates without help
- Easier to compare rates across banks
- More information about future rates in loan transfers

6%

The repo rate in April 2019, two percentage points lower than that in January 2015

Banks can charge risk premium based on the risk profile of individual borrowers. A disciplined borrower will have more bargaining power. "If borrowers have a good credit score, they can negotiate for a fair deal under the external benchmarking system. Existing borrowers can opt for balance transfer (home loan refinance) and enjoy lower rates under the new system," adds Sudheer.

Moreover, the new benchmarking will not remain limited to home loans. "All floating loan rates will get impacted by the external benchmarking. It can even impact personal loans if provided on a floating basis," says Mehra.

Early Mover

SBI has already gone ahead with linking interest rates on savings account deposits above ₹1 lakh with the repo rate and short-term credit of one-year tenor such as overdraft and cash credit. The bank had priced the deposit rate at 3.5 per cent, which was 2.75 per cent below the then repo rate of 6.25 per cent. Now, the RBI has reduced the repo rate to 6 per cent, so the deposit rate will come down to 3.25 per cent. Similarly, the bank had priced the credit rate at 8.5 per cent, 2.25 per cent above the repo rate of 6.25 per cent. It will go down to 8.25 per cent.

NBFC Customers

Will external benchmarking apply to non-banking finance companies (NBFCs)? The RBI is yet to give clarity on this. But even if it doesn't apply on NBFCs, they will have to tweak rates to stay competitive. "If banks move to the external benchmarking regime, borrowers prefer banks over NBFCs. As banks start passing on reduced funding cost to customers during falling interest rate regime, NBFCs will have to do the same," explains Sudheer.

While the final RBI guideline on implementing external benchmarking is yet to come out, when it does, it will potentially be one of the most borrower-friendly reforms in lending. BT

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MONEY MATTERS

Managing your money can be tricky. Send your queries, and personal finance experts will help you resolve any issue.

Income Tax

***Dheeraj Kumar:* I work for a public sector undertaking and invest in mutual funds. In the previous financial year, I sold off some units in three MFs and made a profit of about ₹12,000. So, which ITR form should I submit and what kind of information should be given regarding MF investments?**

Sandeep Sehgal, *Director (Tax & Regulatory) at Ashok Maheshwary & Associates, replies:*
While salary and interest incomes are taxed as per applicable rates, you need to pay capital gains tax on MF redemption. Submit ITR-2 to declare these incomes, classify whether these are short-term or long-term gains and mention the same in Schedule CG.

Investment

***Mohan Arumugam:* I am working in Singapore for the past four years and my monthly salary is ₹1,53,000. Out of that, I have to pay ₹65,790 a month for my credit card, home loan and personal loan. How should I invest the remaining amount while settling my debt, especially my credit card dues and the personal loan, which cost me ₹20,000 per month?**

Jason Monteiro, *AVP (Mutual Fund Research and Content) at Prabhudas Lilladher, replies:*
Ideally, you should be paying off high-interest debts first as high credit costs should not eat into your wealth. Banks/financial institutions usually charge 15 per cent or more (per annum) for credit cards and personal loans as these are unsecured debts. If you have a significant amount of outstanding debt on your credit card, it is best to increase your monthly payments towards the card.

After setting aside the money for debt repayments and necessary expenses, invest the rest in equity and fixed income assets based on your risk profile and investment horizon. For example, if you have high risk tolerance with an investment horizon of five years or more, you may invest 80 per cent in equity and the balance 20 per cent in debt assets. For a shorter period, say, for three years, you may invest 50 per cent in fixed income assets and the rest in equity. To begin with, mutual funds should be an ideal route as you get exposure across asset classes and the convenience of investing via SIP. You can also opt for hybrid mutual funds for tax-efficient returns.

Health Insurance

***Rajat Bhaseen:* I am planning to buy a family floater plan which will cover my wife and daughter. What should be the ideal amount?**

Roopam Asthana, *CEO and Whole Time Director at Liberty General Insurance, replies:*
Buying a health insurance cover for the entire family is essential. When a member of the family falls ill and hospitalisation is required, it will cost you a lot. However, a family floater plan will help reduce the financial burden and conserve your savings. Also, with medical expenses rising year on year, your concern regarding the right amount is entirely valid. First, evaluate all other benefits a policy offers (both inclusions and exclusions) along with the limits. Next, consider a situation where more than one member of your family may require hospitalisation in the same year. I recommend a family floater plan of ₹10 lakh or more, depending on your location, medical history and current health conditions of the family, their lifestyle, stress levels and other pertinent factors. You may also purchase a basic family floater plan of ₹10 lakh and then buy a top-up/super top-up plan to increase the sum insured, but the premium will be less. BT

Please send your queries to moneytoday@intoday.com

PLAN AHEAD TO SECURE YOUR FUTURE

The Gupta family should move away from gold and high-interest loans, and invest more in equity mutual funds, says Mumbai-based Financial Planner **Pankaaj Maalde**.

Photograph By NILADRI DAS

Aishwarya Gupta, a 30-year-old marketing professional, lives in Noida with wife Garima Singh (29), a teacher, and his dependent mother, Ekta. The couple does not have kids but will be planning for a baby in the next three years. Together, they bring a net monthly salary of ₹80,000 and expect it to rise 15 per cent annually. Their assets include ₹1.10 lakh in EPF balance, fixed deposits of ₹50,000, an investment of ₹57,000 in equity and balanced mutual funds, ₹5 lakh in gold, a bank balance of ₹1 lakh and Gupta's ancestral property worth ₹1 crore, which might be sold to purchase a property in Delhi-NCR. They have also taken a car loan and pay an EMI of ₹11,334. Gupta has purchased a term plan of ₹1 crore for which he pays an annual premium of ₹11,880. The couple wants to build an education fund and a marriage fund of ₹20 lakh each for the child. Both plan to retire at 60 and need to build a retirement corpus of ₹5.65 crore. Their short-term goal is to put together ₹5 lakh to go on a dream vacation within three years.

While developing a financial plan, we assume that dual income will continue until retirement and the rise in expenses after the baby's birth will be met from salary hike. The plan requires regular reviews to ensure that returns are in sync with future goals.

Plan It Now

Contingency: The duo should keep a contingency fund that will cover their expenses for six months. Their savings bank balance of ₹1 lakh, an amount of ₹1.50 lakh from gold investment and fixed deposits of ₹50,000 have been allocated for this purpose. The amount should be invested in ultra short-term funds for ready availability.

Life insurance: As mentioned before, Gupta has bought a term plan of ₹1 crore and the existing cover should be continued. As per need-based theory, his spouse also requires an insurance cover of ₹50 lakh and she should buy an online term plan for 30 years, which will cost around ₹6,000 a year.

Health and disability cover: Gupta's company provides a health cover of ₹2 lakh for both spouses. They should purchase a separate health plan without any delay as it is often difficult to get a new policy when one is older or it may not cover their existing medical conditions or may cover those after a long waiting period. A family floater plan for ₹10 lakh sum assured should be ideal in this case and will cost around ₹14,000 a year. Besides, they should buy a health cover of ₹3 lakh for Gupta's mother and the annual

premium will be around ₹12,000. The duo should also get accident disability covers of ₹25 lakh each and the cost will be around ₹7,000 per annum. These will further ensure tax benefits.

Auto loan: Car loan at a high interest rate should be closed at the earliest. An amount of ₹3.50 lakh can be realised for the same by selling the rest of the gold investment. It will also free up the EMI amount, which can be used to build the desired corpus for future goals.

Get Future Ready

Retirement: The couple will require a corpus of ₹5.65 crore to fund their household expenses after retirement, assuming monthly cost at ₹30,000 in current value and factoring in 7 per cent inflation. Their current equity mutual fund balance of ₹57,000 and EPF balance of ₹1.10 lakh have been allocated towards this goal. Moreover, they should increase their monthly investment from ₹5,500 to ₹14,000 and put it in diversified equity mutual funds via SIP to build the desired corpus. They can also consider investing in ELSS for tax planning if required (see table *Retirement Funding*).

Funding for the Child: The couple will have to start a monthly SIP of ₹9,000 in a diversified equity scheme to amass ₹20 lakh in today's value (future value will be ₹67.50 lakh) for their child's graduation. A marriage fund of ₹20 lakh in today's value (future value will be Rs 1.08 crore) will be required when the son/daughter turns 25. For this, they have to start another monthly SIP of ₹6,000. They should begin this after a salary hike in future.

Dream vacation: As there is no surplus available to fund this goal, they should start investing after salary hike. BT

As told to Renu Yadav

If you need help on how to manage your money and want expert advice, write to moneytoday@intoday.com.

@renuyadav08

MONTHLY INFLOW/ OUTFLOW

	Current	Recommended
Net take-home salary	80,000	80,000
Total Inflows	80,000	80,000
Household expenses	41,667	41,667
Contribution to dependants	10,000	10,000
Car loan EMI	11,334	0
Life insurance premium	990	*2,073
Health insurance premium	0	2,167
Total Outflows	63,991	55,907
Savings	16,009	24,093
Actual investments	5,500	23,000
Surplus	10,509	1,093

in ₹; *including disability insurance

Recommended investments: ₹9,000 for child's education and ₹14,000 for retirement

RETIREMENT FUNDING

Investment Assets Utilised	Current Value (in ₹)	Term (in years)	Assumed Rates of Return	Future Value (in ₹)
Equity MF	57,000	30	12%	17,08,000
EPF	1,10,000	30	7%	64,22,000
Total				81,30,000

Retirement age for self and spouse: 60; life expectancy for self and spouse: 80; inflation rate: 7%; ultra short-term returns: 6%; debt/EPF returns: 7%; equity fund returns: 12%

THE WINNERS

Large-cap funds have taken the lead over mid-cap and small-cap funds in the recent market rally

Fund Name	Assets (In ₹Cr)	% Assets in Top 10 Holdings	No. of Holdings	Net Expense Ratio (2016/17)	Returns (In %)			
					6 mths	1 Year	3 Years	5 Years
Large-Cap								
Reliance Large Cap	11,694	52.41	49	2.49	9.04	14.27	17.68	17.01
SBI Bluechip	20,395	43.10	55	2.42	6.96	5.34	12.72	15.52
HDFC Top 100	15,163	62.49	49	2.26	9.70	17.16	18.55	14.73
Axis Bluechip Fund	4,221	58.45	34	2.11	6.59	14.53	16.49	14.38
ICICI Pru Bluechip	20,101	44.05	65	2.30	4.15	9.19	16.17	14.35
Mid-Cap								
Kotak Emerging Equity	3,535	30.56	68	2.39	9.31	-0.23	16.60	22.76
L&T Midcap	3,733	23.22	82	2.69	4.66	-2.53	18.73	22.50
DSP Midcap	5,635	33.50	53	2.50	9.02	0.56	16.60	20.62
Tata Mid Cap owth	609	42.22	41	2.70	13.93	4.84	14.91	20.38
Edelweiss Mid Cap	811	32.42	67	2.63	4.38	-6.20	14.42	20.37
Small-Cap								
SBI Small Cap Fund	1,604	34.43	47	2.64	3.79	-5.39	18.98	28.13
Reliance Small Cap	7,245	20.09	123	2.49	2.37	-7.01	19.00	24.88
DSP Small Cap	4,672	30.56	79	2.40	7.07	-10.25	11.86	23.20
Franklin India Smaller Companies	6,777	23.95	77	2.42	5.41	-6.51	13.77	20.61
Sundaram Small Cap	1,039	34.37	52	2.55	8.71	-14.29	10.56	19.89
Multi-Cap								
Kotak Standard Multicap	21,682	46.61	62	2.01	8.43	11.51	17.91	18.80
SBI Magnum Multicap	6,455	38.52	68	2.50	7.62	5.91	15.19	18.68
Mirae Asset India Equity	10,560	44.00	63	2.17	7.74	14.18	18.94	18.38
Aditya BSL Equity	10,027	45.37	76	2.37	7.75	6.14	17.08	17.99
Invesco India Multicap	728	41.47	43	2.75	2.95	-1.68	13.51	17.41
ELSS (Tax Savings)								
Aditya BSL Tax Relief 96	7,561	55.32	49	2.42	3.18	4.16	15.63	18.56
Axis Long Term Equity	17,426	63.13	35	2.49	4.66	8.53	15.08	18.09
DSP Tax Saver	4,740	41.56	70	2.47	9.96	8.42	16.53	17.74
Invesco India Tax Plan	712	50.56	42	2.71	4.84	9.10	15.90	17.55
Kotak Taxsaver	791	47.65	56	2.73	8.14	10.18	15.82	17.08

Returns as of March-end 2019
Equity funds are ranked on the basis of five-year performance
AUM filter of minimum ₹500 Cr is applied on equity funds
Returns of six months and one year are absolute, while returns of time periods of more than one year are annualised
All portfolio related data as of February 2019-end; Source: Morningstar

IT'S A DEAL

The most competitive loan and deposit rates in the market

SMALL SAVINGS SCHEMES

Instruments	Interest rate (%)*
Savings Deposit	4.00
1 year Time Deposit	7.00
2 year Time Deposit	7.00
3 year Time Deposit	7.00
5 year Time Deposit	7.80
5 year Recurring Deposit	7.30
5 year Senior Citizens Savings Scheme	8.70
5 year Monthly Income Account Scheme	7.70
5 year National Savings Certificate	8.00
Public Provident Fund Scheme	8.00
Kisan Vikas Patra	7.70
Sukanya Samriddhi Account Scheme	8.50

*For quarter ended December 2018; Source: CMIE; for loan rates, Wishfin

HOME LOAN:
Floating Rate;
Interest Tenure – Up to 20 years
for Salaried Person

Bank	₹50 lakh
SBI	8.70%-9.05%
HDFC Ltd.	8.80%-9.50%
Axis Bank	8.85%-9.00%
LIC Housing Finance	8.95%
ICICI Bank	9.05%-9.15%

FIXED DEPOSIT
For amount less than ₹1 crore (regular)

Bank	1 year
RBL Bank	8.00%
IndusInd Bank	8.00
Lakshmi Vilas Bank	7.60%
DBS Bank	7.50%
Karnataka Bank	7.50%

Bank	2 years
RBL Bank	8.05%
IDFC Bank	7.75%
Lakshmi Vilas Bank	7.60%
IndusInd Bank	7.50%
Karnataka Bank	7.50%

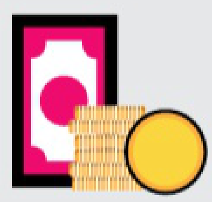
Bank	5 years
Lakshmi Vilas Bank	7.75%
RBL Bank	7.60%
IDFC Bank	7.50%
IndusInd Bank	7.50%
Bandhan Bank	7.50%

CAR LOAN:
For New Cars, Tenure– 7 years

Bank	Interest Rates
PNB	9.05%-9.50%
Axis Bank	9.25%-11.50%
SBI	9.30%-9.80%
ICICI Bank	9.30%-12.85%
HDFC	9.75%-10.60%

EDUCATION LOAN:
Loan Amount – Up to ₹7.5 lakh
Tenure – 15 years

Bank	Interest Rates
PNB	8.55%-10.45%
SBI	8.75%-10.55%
Canara Bank	8.85%-10.70%
Central Bank of India	9.10%-10.60%
IDBI Bank	9.40%



PERSONAL LOAN:
Tenure – Up to 5 years
Loan Amount – Up to ₹15,00,000

Bank	Interest Rates
Bajaj Finserv	10.99%-16%
ICICI Bank	10.99%-18.49%
Kotak Mahindra Bank	10.99%-20.99%
SBI	11.05%-15.45%
HDFC Bank	11.25%-21.50%

THE BREAKOUT ZONE

P.122 MUSIC STREAMING SERVICES CATCHING ON

P.130 LEADERSPEAK: MOTOFUMI SHITARA

EMOTION SENSING

YOUR CAR KNOWS IT ALL

With all that tech packed into your smart vehicle, you will not be able to hide your anger.

Illustration By Raj Verma

IF YOU OWN A HIGH-END CAR, it may already have the ability to know a few things about how you are feeling. With sensors and cameras everywhere, some vehicles can detect when the driver is feeling sleepy. Then the steering wheel buzzes to wake her up; the vehicle can even change course to make it to the nearest coffee shop.

But drowsy drivers are not the only threat to safe driving. Road rage is a more common problem and companies are exploring how to equip cars with the ability to detect anger before it does any damage. More than a year ago, experiments were held on combining facial recognition technology with biometric sensors which could measure heart rate, breathing pattern and sweating to measure stress levels. These sensors were meant to look at conditions inside the vehicle rather than focussing on the outside, and respond better to in-vehicle conditions to make driving safer. When a driver's stress level peaked, several lights on the body of the Ford car (tested for this purpose) came on to warn others. An Irish company called Sensum outfitted the car with sensors to pick up on what it called the 'buzz' moments and give the driver feedback.

Emotion-sensing technology for cars is still under development, and great care should be taken not to disturb or distract drivers when it is activated. A company aptly called Affectiva and incepted at the MIT (Massachusetts Institute of Technology) Media Lab is pioneering affective computing and exploring solutions around drivers' emotion tracking. The new field is known as automotive artificial intelligence (AI) and addresses next-generation safety features, including advanced monitoring of a driver's state of mind, in-vehicle child presence detection, and more. The company has deployed its empathic AI solutions across industry segments and many of these are used to measure consumers' emotional responses to digital content such as ads and TV programmes.

Affectiva's automotive AI unobtrusively measures complex and nuanced emotional and cognitive states from facial expressions and voice data. Copious amounts of data is collected from sensors and fed into a neural network to monitor the driver's anger so that interventions and route alternatives can be enabled to avoid road rage. A virtual assistant guides the driver to take a deep breath, the person's preferred playlist for soothing music gets turned on and the GPS suggests a stop along the way. In brief, the next generation in-cabin software is driven by customised deep learning

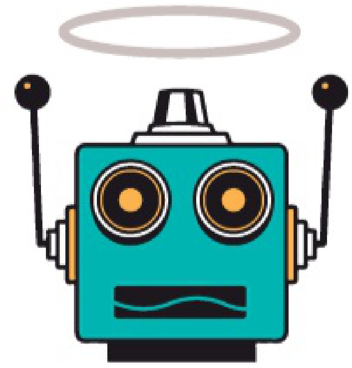
EMOTION-SENSING TECHNOLOGY FOR CARS IS STILL UNDER DEVELOPMENT, AND GREAT CARE SHOULD BE TAKEN NOT TO DISTURB OR DISTRACT DRIVERS WHEN IT IS ACTIVATED

architectures, computer vision, speech processing and massive amounts of real-world data. This will enable intervention, including taking control of the car and handing it back.

Given how automotive AI is developing, Affectiva thinks consumers will now pay as much attention to in-cabin experience as they do to vehicle hardware. And they will be keen to find out which car can keep them most safe, entertained and relaxed. Original equipment manufacturers should also have a good understanding of drivers' emotions and their reactions to vehicle systems and driving experience. BT

ROBOTICS

THE BIBLE BOT IS HERE



A ROBOT THAT READS *The Bible* should not surprise us overmuch. Our smartphones can do the job if you download an app or an e-book. But SanTO is different. It is a little statue-like robot that looks like a figurine of a saint and can recognise the kind of mood you are in and what you need to hear, reports *The Wall Street Journal*.

Equipped with a computer, a microphone, and facial recognition technology, SanTO can listen to people, scan their faces for signs of specific emotions and put that to good use as it rapidly scans through the text and reads out what it thinks fit. Fortunately, the robot does not take it into its head to go around offering interpretations and discourses – it only recites the text. In 2017, Germany's Protestant Church also created BlessU-2, a robot that can "bless" humans in five languages.

Developed by Gabriele Trovato, a robotics expert at Waseda University in Tokyo, SanTO has been used to read scriptures to older people in a nursing home. It also demonstrates that in the absence of humans to show such kindness, a robot might do very well as an alternative. BT

PERSONAL TECH

TUNING UP

LOCAL AND GLOBAL PLAYERS ARE WOOING INDIAN CONSUMERS WITH MUSIC STREAMING SERVICES. DIFFERENTIATION WILL DECIDE WHO WINS AND WHO LOSES.

By Nidhi Singal

Illustration By Nilanjan Das

MUSIC LOVERS in India never had it so good. Now there is no need to visit a music store or purchase it online or download it clandestinely (yes, we call it piracy) as nearly a dozen music streaming services, both homegrown and global, are operating in the country. YouTube Music is the latest to join the league that has global leader Spotify, Apple Music, Amazon Prime Music (part of the Prime offering in India) and a bunch of heavily funded Indian players such as JioSaavn, Gaana and Wynk in the fray. All of them offer millions of songs across genres, provide curated playlists and feature Internet radio shows. Add to that the growing number of smartphone users, cheaper data and improved bandwidths (3G and 4G coverage), and one can easily understand why online music streaming and downloads are growing.

According to a recent report by the Indian Music Industry (IMI)-Deloitte on the audio OTT (over-the-top) economy, the number of smartphone users is expected to grow to 829 million in 2022 from 404 million in 2017, leading to a digital revolution where an increasing number of people will shift to digital platforms for music consumption. By the end of December 2018, the number of people using music streaming services across the country reached nearly 150 million, but it is only 60 per cent of the online video audience of 225 million-plus. This indicates a significant growth opportunity for increasingly popular audio OTT platforms which procure content from music labels, publishers and other distributors, and deliver the same over the Internet by independently hosted applications. The Indian OTT market, including audio and video streaming, is currently valued at over $280 million, with revenues from the audio OTT industry contributing to 67 per cent of the total recorded music revenue.

"Although there are over 150 million audio streaming listeners in the country, only 1 per cent pays for the music. So, when we talk about pure growth potential, it is huge. In fact, as per the *Digital Music Study 2018* released by the IMI and the International Federation of the Phonographic Industry (IFPI), income from subscriptions to audio streaming tripled to ₹220 crore compared to the previous year," says Amarjit Batra, India Managing Director of Sweden-based Spotify.

THE INDIAN OTT MARKET, INCLUDING AUDIO AND VIDEO STREAMING, IS VALUED AT OVER $280 MILLION, WITH REVENUES FROM THE AUDIO OTT INDUSTRY CONTRIBUTING TO 67 PER CENT OF THE TOTAL RECORDED MUSIC REVENUE

What Works for India

A growing user base is no doubt good news, but converting users to paid subscribers in a price-conscious market is no easy task. International price tags are not likely to work here and key players have tuned in with a host of affordable options. For instance, Spotify offers ad-supported free subscription across devices while Spotify Premium is an ad-free service priced at ₹119 per month (₹59 for students) that provides high-quality streaming (320 kbps) and download option for offline consumption. You also get a free trial for the first month. Besides the monthly plan, there are choices galore as you can subscribe for a day (₹13), a week (₹39), a quarter (₹389), six months (₹719) and a year (₹1,189). It also features city-specific playlists in addition to Bollywood Blast, Desi Hits and Editor's Picks such as Punjabi 101 and Jashn-e-Qawwali to build instant rapport with multilingual audiences.

YouTube Music from Google's stable also offers ad-supported free music and an ad-free paid service called YouTube Premium. The latter charges ₹99 per month for a single user and ₹129 a month for family sharing. You also get a free trial for three months – the offer is valid until March 31, 2020. One can use the app to watch music videos as well or turn them off using a toggle at the top. Recommendations are based on your YouTube history and Google's best-in-class algorithm ensures excellent user experience.

Apple Music, with more than 50 million songs, is an ad-free music and video-streaming service that allows downloads for offline listening. There is a three-month trial period, and you need to pay ₹99 per month for individual use and ₹149 a month for family access. Ad-free streaming on Amazon Music (bundled with Prime membership at ₹129 a month or an annual charge of ₹999) enables offline listening, supports hands-free voice commands and can be accessed via the Echo range of smart speakers. In the hands-free mode, users can interact with Alexa and ask it to play the songs that they heard a week, a month or almost a year ago.

Airtel-backed Wynk follows a similar model. Ad-supported Wynk is free while unlimited downloads without ads cost ₹119 a month. Airtel subscribers get free and unlimited downloads, though. Reliance-owned JioSaavn offers ad-supported free streaming, and so does Gaana, which is backed by Times Internet and Tencent. But both have slashed annual fees for premium services in the face of stiff competition. JioSaavn Pro is now down to ₹299 a year from ₹999 while Gaana Plus charges ₹ 298 annually instead of ₹1,098. The student's subscription plan is priced at ₹149 a year.

"The latest IFPI report says India's music industry grew by 24.5 per cent in 2018, and this trajectory indicates that India will be in the top 10 music markets by 2022," says Batra of Spotify.

But the key question remains: What will differentiate the market leader? With so many players to choose from and little difference in pricing, consumers may bet big on seamless access and flawless user experience across devices and digital infrastructures. A user-friendly interface, intuitive search, well-curated lists, content diversity and original music production are likely to play a vital role in gaining traction. **BT**

Prices valid at the time of going to print.

@nidhisingal

HUAWEI P30 PRO

CAMERA WONDER

By NIDHI SINGAL

PRICE ₹71,990

TALK OF FLAGSHIP PHONES and many would discard Huawei as a serious contender. But the Chinese manufacturer has come out with stunning technology breakthroughs, the latest being the P30 Pro that can compete with the likes of Samsung Galaxy S10 Plus and Google Pixel 3 XL and beat them on the camera front. This one houses a Leica quad camera set-up at the rear and uses the RYYB sensor for the primary lens (instead of the standard RGB sensor), which captures 40 per cent more light and is extremely convenient for low-light photography. The rear camera module comprises a 20 MP ultra-wide angle lens at the top, a 40 MP primary wide angle lens in the middle and an 8 MP 'SuperZoom' telephoto lens and a time-of-flight (ToF) camera placed below the flash for accurate depth detection, producing a superb bokeh effect in portrait mode. The best part is the periscope-style 'SuperZoom' camera, which is perpendicular to the smartphone's surface and comes with an array of lenses. What we see from the outside is a prism that rotates light towards the lenses inside, enabling 5x optical zoom, 10x hybrid zoom and up to 50x digital zoom.

In the default photo mode, I was able to switch seamlessly between wide angle, 1x, 5x optical and 10x hybrid zoom, and the images did not suffer any clarity loss. Even when zooming in, the AI support quickly identifies elements while balancing light and colour. Better still, the phone captures clear, noise-free pictures even in pitch dark. Taking macro shots was a delight as I captured close-up views from 2.5 cm.

But there is more. It has a curved glass front (6.47-inch FHD+ display) and back, a teardrop notch, and an in-display fingerprint sensor. Running on Android 9.0, it is powered by Kirin 980 octa-core processor and paired with 8 GB of RAM and 256 GB of onboard storage. It performs smoothly and does not overheat even after long sessions of camera usage. The 4,200 mAh battery lasted me a day and a half and was quick to charge. It supports wireless charging and reverse wireless charging (you can charge other devices with this one), but Huawei has also bundled a 40W charger in the box. BT

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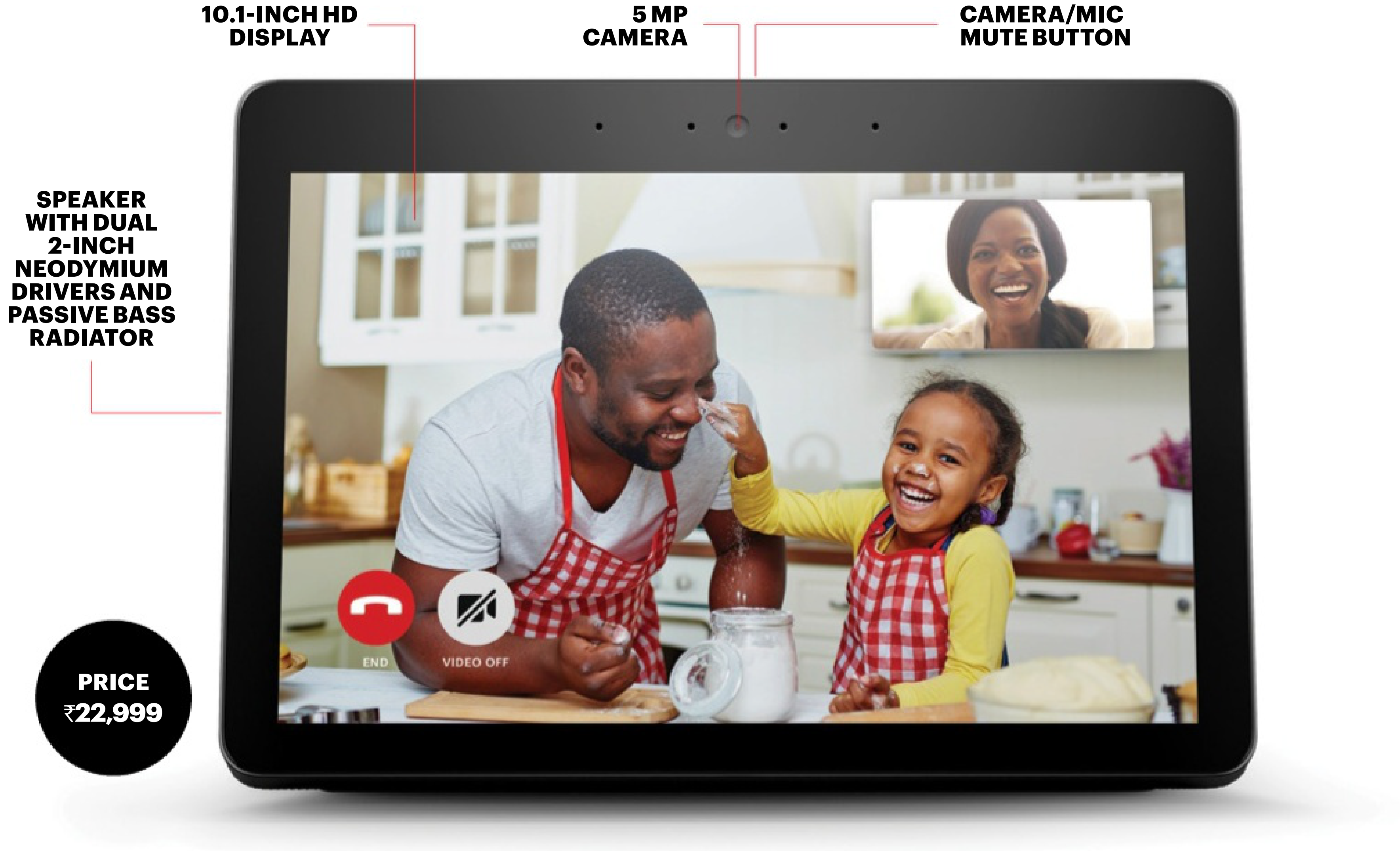

AMAZON ECHO SHOW (2ND GEN)

AN EXPENSIVE UPGRADE

BY NIDHI SINGAL

A DISPLAY at the front, physical buttons for volume control at the top and a trapezium-shaped rear, housing the speaker and the power cable (the lumpy rear looks like the back of a CRT TV) – the design part of the second-generation Amazon Echo Show may not wow you, especially as it is quite expensive by Indian standards. But it features an Alexa-powered smart speaker with a 10.1-inch HD touch display, eight microphones to pick up commands even when music is playing and comes with a refined software programme, all of which make it bigger and better.

Smart speakers are a great way to communicate and adding a screen further enhances user experience. The Echo Show can be placed anywhere at home or in your office cabin depending on where you need quick access to information and home controls. For the latter, you get the Zigbee smart hub built-in for pairing with devices such as the Philips Hue bulb (without the hub). One can also retrofit it with existing home automation solutions. Moreover, an increasing number of Alexa-compatible devices also support Wi-Fi connectivity, making them easy to operate. Just tell it: Alexa, discover devices, and it starts looking for compatible gadgets and connects with them. If you want to ditch the voice command, swipe down from the top of Echo Show to get one-touch access to all smart appliances paired with Echo Show. But for all this, you will have to enable compatible skills (apps for the voice assistant). Other than controlling home devices, I was able to fetch news updates, access recipes, play music, answer quiz questions, get information on 2019 Lok Sabha elections and Cricket World Cup and did much more.

Alexa is not perfect, though. When I asked for euro-to-INR conversion, it managed to fetch the day's rate, but could not provide the previous day's currency rate or the fluctuation chart for the month. Another pain point is its lack of YouTube skill. Although I could watch trailers, movies and videos on Amazon Prime or other skills, I had to use Silk or Mozilla browser to access YouTube, and it was not a seamless experience.

The 5 MP camera above the display can be used for video calls on the Alexa ecosystem or Drop In. The latter is a two-way communication with Alexa where the camera and the mics get activated automatically. Those concerned about privacy can disable them by using the mute button at the top.

Finally, Echo Show packs in dual 2-inch neodymium drivers and a passive bass radiator for the audio, but the sound is still muffled. Although I was able to adjust bass, treble and mids, the audio lacked clarity and base. Overall, the latest offering from the Echo stable works well and looks cool. But with so many screens around us, do we need another one with expensive upgrades?

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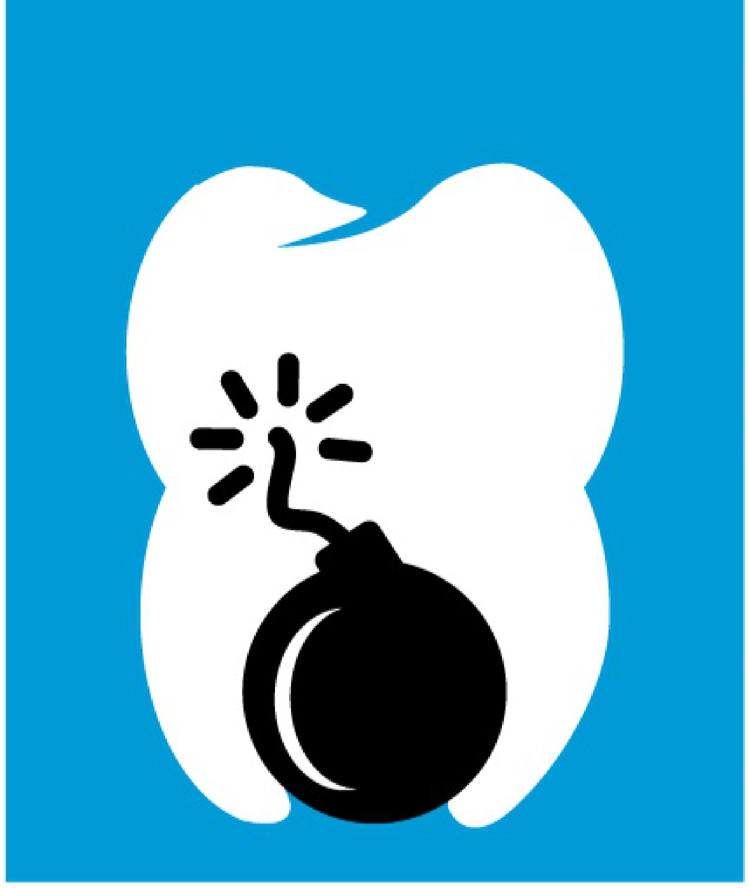
EXECUTIVE HEALTH

WHY DENTAL DECAY IS SCARY



NEGLECTING ORAL HEALTH NOT ONLY CAUSES TOOTH DECAY BUT ALSO LEADS TO SERIOUS HEALTH PROBLEMS.

By E. Kumar Sharma
ILLUSTRATION By Safia Zahid

BELIEVE IT OR NOT, poor dental health will not only cost you a fortune when you seek emergency dental care but may also lead to serious health problems such as gum inflammation, tooth loss, bone issues, diabetes and cardiovascular diseases. Failure to maintain oral hygiene is emerging as a new area of concern as people now live longer and gorge more on junk foods. Dr Deepil Mehta, a Navi Mumbai-based dental surgeon who has been practising for nearly a decade, calls it a lifestyle disorder, adding that many people often neglect simple things like brushing their teeth at night (brushing should be done twice a day, every day, along with flossing). Such negligence, coupled with unhealthy food habits over a long period, can have a damaging impact on dental health.

"Typically, if you consume 300 ml of aerated drink (one bottle) every week for two years, you could end up destroying 50 per cent of the tooth enamel, the hard, outer surface that protects the inner part of the tooth," the doctor says. It is quite serious as addiction to aerated drinks is on the rise. The erosion of tooth enamel exposes nerve endings and leads to rapid tooth decay after that. Sugar, included in some food flavouring agents or food additives, is also bad for your teeth while regular intake of tea and coffee is likely to stain them. Here is Dr Mehta's quick word of caution about cleaning your teeth, "What we eat matters, but what we do after that is even more important." If food particles are not flushed out after a meal and stay in our mouth for 8-12 hours, there will be bacteria and plaque build-ups and tooth decay will follow soon, he says. Doctors will also ask you to use the good old tongue scraper as most of the bacteria are there on your tongue. Also, be careful about the kind of toothpaste, toothbrush, mouthwash, tooth whitener and bleach you are using – they should only contain effective and safe ingredients.

According to Dr Alluri Surendra Kumar, a dental surgeon from Hyderabad with more than two decades of experience, gum care is of critical importance and negligence in this respect may lead to gingivitis (gum inflammation and bleeding) and other gum diseases, which are often linked to diabetes, stroke, heart conditions and lung infections. In brief, oral hygiene cannot be ignored just because one has a hectic work schedule.

Interestingly, there is a growing demand for cosmetic dentistry as more people are seeking solutions to improve their looks and smiles, says Dr Mehta. This branch of dentistry includes several procedures, right from teeth whitening to getting veneers where super-thin and shell-like material is glued on a tooth to improve its appearance. Costs could vary between ₹40,000 and ₹4 lakh, depending on how far you would go to enhance your smile.

GO DIGITAL

DIGITAL DENTISTRY is all about using tech tools for dental procedures. According to Dr Mehta, a digital scan helps a dental surgeon simulate an implant on screen before attempting it in real, thus leading to better outcomes. But computer-guided surgical interventions are expensive and a tooth implant could cost between ₹35,000 and ₹1 lakh. Dr Surendra Kumar thinks there will be a huge demand for implants as part of rehabilitation dentistry, helping people who have lost their teeth due to decay/diseases or trauma. And costs often vary depending on the quality of implant materials (usually imported). Titanium and zirconium implants are generally preferred (the latter is more expensive) as these are biocompatible and do not cause inflammation or other complications. BT

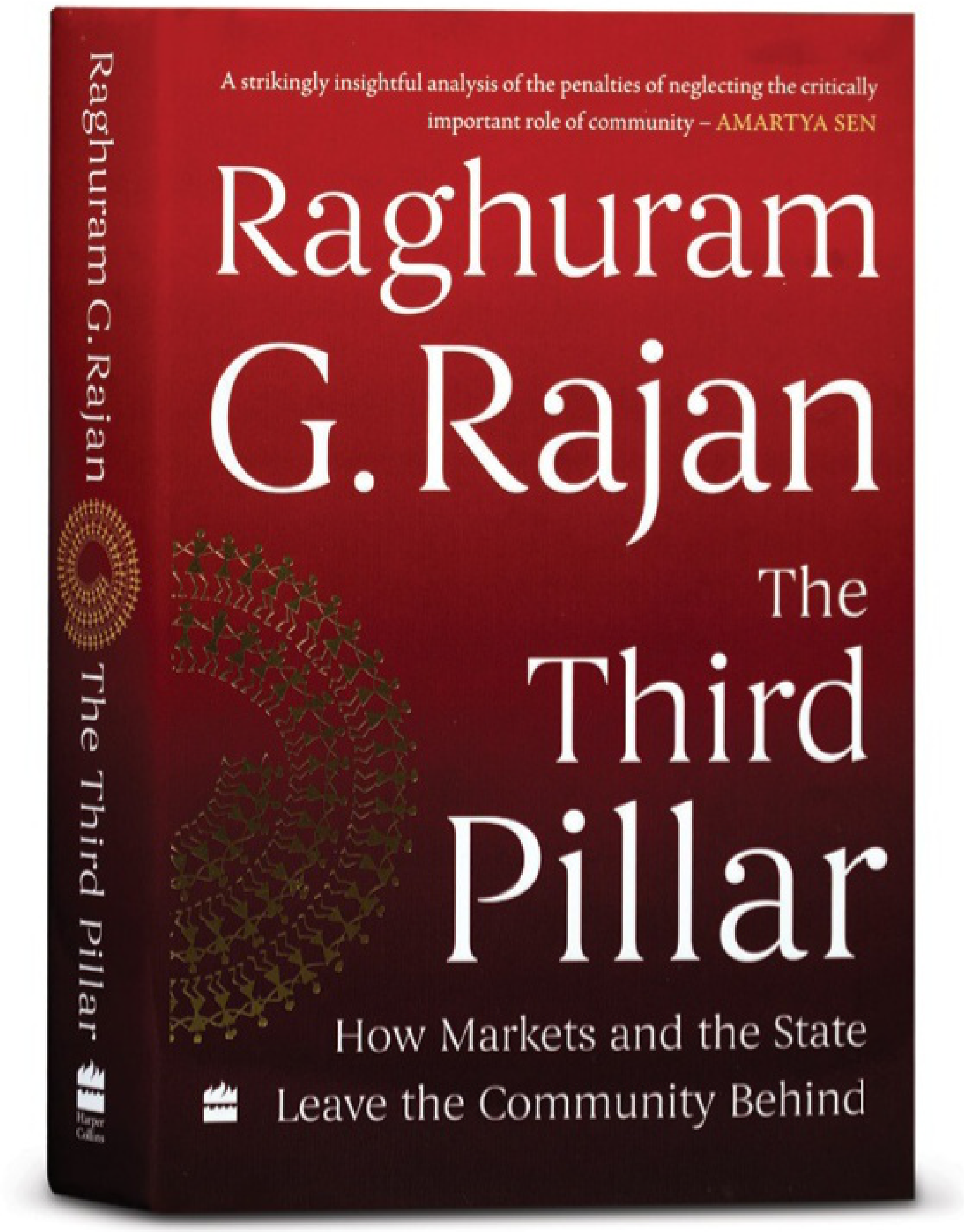
The Third Pillar: How Markets and the State Leave the Community Behind

By Raghuram G. Rajan

Publisher: **HarperCollins India**

Pages: **464**

Price: ₹**799**



EX-LIBRIS

IN SEARCH OF NEW ETHOS

A HARD LOOK AT WHAT MAY HAPPEN IF EQUITABLE DEVELOPMENT IS LEFT OUT OF THE BIGGER FRAMEWORK DOMINATED BY GOVERNMENTS AND ECONOMIC FORCES.

By Ankur Sarin

STUDENTS OF IIM-AHMEDABAD are spoilt for choice when it comes to celebrity speakers. But very few academicians turn out to be charismatic crowd-pullers like Raghuram Rajan. His earlier books addressed a larger audience, but *The Third Pillar* strongly underlines his new status as a public intellectual. The 'third pillar', as the book lays out, is the community, which the author believes, has been neglected (at least by economists) vis-à-vis the State and the Markets. As Rajni Bakshi and Rohini Nilekani put it: *Samaj*, *sarkar* and *bazaar* need to be in balance. So, this is not an original insight. However, Rajan's larger concern is that he finds the "establishment discredited". The fact that it comes from someone who has worked in the innards of both national and international institutions with the critical eye of an academician makes the book significant.

The writer's concern takes him down the route of tracing the evolution of the 'establishment' as it stands now. Those waiting to find out what is happening to the 'community' at this point may feel impatient about the journey that Rajan eruditely takes us through, but it is worth taking. There are chapters here that should be compulsory reading for anyone in an MBA programme or in businesses which employ MBAs.

Rajan builds on his academic background and works to explore areas that probably go far beyond his expertise. Nevertheless, they reflect concerns of an individual who has grappled with reality outside the ivory tower. The book might be weakest in precisely those areas that Rajan wants us to pay attention to, but he raises questions for conversations which need to be held urgently if a more hopeful society is to be imagined. For those inclined to believe in the power of markets (and Rajan is clearly one of them), the book is probably one of the most precise and easily digestible articulations of the fact that no market operates outside of political, social and cultural values. All 'free markets' operate within institutional limits and, as Rajan repeatedly highlights, "institutions... rest on a bedrock of any underlying distribution of power". His blunt statements that "property rights is a social construct" is a mantra that a lot of us need to chant and understand.

Along this journey come candid confessions. Here is one that stands out: The revival of declining communities resembles the development of nations in many ways, especially in that economists understand very little about either process. Of course, the revival of declining communities is the rationale here, but the statement is a harsh indictment of an entire edifice of work that has dominated most public policy thinking. If economists understand very little about development, why are they working with policymaking institutions tasked with development? If communities have to be brought back in, as Rajan very strongly articulates, where will the ideas and the action to do so come from? The suggestions that the author espouses may seem superfluous to those who have worked with communities. If, indeed, a new ethos emerges, will these researchers, who have spent a lot of time trying to understand and strengthen communities, be given a greater say in the policy discourse?

Given his penchant for reasoned, informed and impassioned logic, many have looked at Rajan to speak more forthrightly on current political and economic scenarios in India. But I think his strong desire to remain objective and apolitical will never allow him to do so freely. But probably realising that this is a particular moment in history, he admits that he has "never been more concerned about the direction our leaders are taking us than I am today". Considering the countries and communities to which he is closely connected, one is bound to place it in the immediate context.

It is perhaps this concern that leads him to describe, albeit analytically, "the truly committed majoritarian Hindu leader, drawn from a young age into the RSS, is usually personally austere – which endears him to those who dislike corruption – and committed to the cause, which makes him ruthless in his methods. They are a serious threat to a liberal tolerant innovative India... and effective in using their periods in power to infiltrate India's institutions with their sympathisers." Coming from a person who chooses words very carefully, one cannot help but wonder if these words come from personal experience. **BT**

The writer is Associate Professor, Public Systems Group, IIM-Ahmedabad.

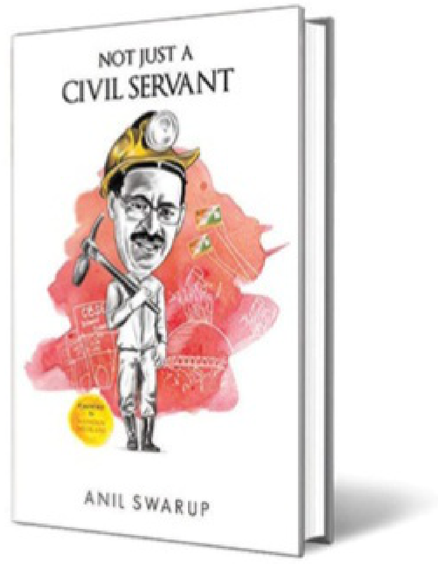
NOT JUST A CIVIL SERVANT

BY ANIL SWARUP

Publisher: **UNICORN BOOKS**

Pages: **200**

Price: **₹499**



OBJECTIVE AND INSPIRING

THE MEMOIRS FOCUS ON HOW THE BUREAUCRACY WORKS AND HOW IT CAN LEAD BY EXAMPLE.

By Parameswaran Iyer

AN INTIMATE ACCOUNT of the evolving role of an IAS officer, *Not Just A Civil Servant* by Anil Swarup is a crisp and inspiring narration of the author's remarkable, nearly four-decade-long career. The book chronicles the journey through his early career in Uttar Pradesh where he faced a myriad of issues at district and state levels, and also at the national level where he worked for the Ministry of Labour, the Cabinet Secretariat and then served as Secretary, Ministry of Coal, and Secretary, Department of School Education and Literacy under the Ministry of Human Resource Development. Wherever he worked, Swarup gives us a frank account of the back story in his inimitable style.

The memoirs, however, start on a humorous note as the author recalls his parent's aspirations regarding his career and some amusing incidents at the Police Academy. Readers are further buckled in with absorbing episodes of national importance. As the title suggests, Swarup had gone well beyond the routine and this foray outside the conventional boundaries drawn for civil servants makes for very interesting reading. In terms of new light being shed on episodes of national importance, readers become privy to a fascinating exchange between Swarup and Kalyan Singh (then Chief Minister of UP) that took place on December 6, 1992, the day of the Babri Masjid demolition. He takes us through the conceptualisation of the Rashtriya Swasthya Bima Yojana, how he 'midwifed' the procedure by pulling all-nighters and completed a complicated term with successful delivery. We also get a no-holds-barred account of a successful coal auction.

One of the key premises of the book is its focus on the "nexus of good", which is strongly supported by Swarup's incessant desire to add value to the system. While he shines the spotlight on the Indian bureaucracy, no doubt is cast on the ability of the Civil Services to deliver. But it is, indeed, a clarion call for action so that bureaucrats across India may serve the country and her people even better as elaborated in the fourth chapter, Serving the Poorest of the Poor. Quoting from an earlier media article written by him, Swarup makes a strong case for today's babus to 'lead by example, focus, show objectivity, consistency, empathy, commitment to the task and answer to an ever-burning desire to deliver', which is essentially the core of his story. The foreword by Nandan Nilekani sums it up well when he says it "is a must-read for those who want to understand the complexities of Indian Administration and how a few good men and women can make all the difference!" **BT**

The writer is Secretary, Ministry of Drinking Water and Sanitation; views are personal

LEADERSPEAK

MOTOFUMI SHITARA, CHAIRMAN, YAMAHA MOTOR INDIA GROUP OF COMPANIES
Under his leadership, focus on premium motorbikes and key launches helped the Japanese giant post growth in a slowing Indian two-wheeler market in FY2018/19.

PHOTOGRAPH BY A.R. SUMANTH KUMAR

Q. The biggest challenge in your career

A. It happened when the Lehman Brothers collapsed in 2008. At the time, I was associated with Yamaha's marine business. Sales of large-sized boats were rising in the US and we had to set up a new factory to increase the production of outboard motors. But we suffered a huge loss that year due to the meltdown. I was then asked to shift to business planning and rebuild the marine business. We made it profitable next year by thoroughly reviewing the company's internal costs and taking some necessary steps. It is still the most profitable business across Yamaha. The lesson I learnt was that adversity could lead to great opportunities.

Q. Your best teacher in business

A. The company itself is my best teacher. Yamaha offers a positive environment so that we can take on new challenges. I have learnt a lot about business strategies from my superiors here. All our employees are ready to face challenges and this spirit is deeply embedded in our company culture.

Q. One management lesson for young people

A. Face new challenges without the fear of failure. To pursue new possibilities, we should explore areas other than where our expertise lies and continue to learn with dedication and determination. If we do so, nothing can hold us back from achieving our goals. Of course, we may not succeed, but when the goal is clear, the reason for failure will be clear, and we can prepare ourselves by using our experience.

Q. Two essential qualities a leader must have

A. You must have a clear vision and must select the right option. When your mind is made up, do not give up until the goal is fulfilled. BT

"FACE NEW CHALLENGES WITHOUT THE FEAR OF FAILURE. TO PURSUE NEW POSSIBILITIES, WE SHOULD EXPLORE AREAS OTHER THAN WHERE OUR EXPERTISE LIES AND CONTINUE TO LEARN WITH DEDICATION AND DETERMINATION"

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