

Business. Minus the paperwork.

You live on the go, travelling light.

You want things *now*, not when the courier gets there.

You're connected, 24/7, and you want your reading at your fingertips.

Welcome to the Forbes Tablet Edition

When Growth is the Antidote

hy is economic growth important? Well, it can help increase tax revenues, which would mean more spending on public services. A bump in the GDP will increase consumption, which means more room for investments.

Economic growth can also serve as a useful antidote to social unrest by reducing unemployment, particularly among the youth. In 2013, The International Labour Organization (ILO) came out with its annual World of Work Report titled 'Repairing the Economic and Social Fabric'. This was five years after the global financial crisis; employment rates exceeded pre-crisis levels in 30 percent of the countries analysed, including those in southern Europe and the Arab region. The ILO report concludes that the rising unemployment, a drop in labour force participation and a deterioration in the quality of employment conspired to fuel social tensions in many of the countries—remember the 'Occupy' movement that began on Wall Street and spread to Europe, and the Tahrir Square protests in Egypt that helped topple President Hosni Mubarak.

The ILO devised the Social Unrest Index to determine a link between peoples' discontent and economic indicators. The index was created with five variables: Citizens' confidence in government, living standard, local job market, freedom in their lives and access to internet. The results indicated that the risk of unrest was highest in the EU due to its record high unemployment rate of 12 percent (23.9 percent for the youth), and a raging recession. That would, over the years, pave the way for demands of countries to exit the Union, fear of the foreigner and a resurgence in right-wing nationalism. Corporate greed was the trigger for Occupy Wall Street. And liberation from tyranny for the Egyptian revolution, although unemployment, food

inflation and low wages too may have played their part.

In India, the ongoing strife coincides with industrial activity and investments hitting rock-bottom. Protests across the country have been triggered by not-misplaced fears of a section of Indians losing their citizenship if the Citizenship (Amendment) Act, 2019 (CAA) is followed up with a National Registry of Citizens; other sections of the Indian society joined them in solidarity and students in empathy with their brethren who were victims of violence on university campuses.

The two—an economic downturn and demonstrations against CAA—may, on the surface, have little in common. But here's the danger: With unemployment at a three-year high (8.5 percent in October, according to CMIE data), there is the real danger of joblessness fanning the angst.

It's against such a backdrop that Budget 2020 becomes critical. What is the recipe for kickstarting investments and consumption? And what can we expect on February 1? Samar Srivastava and Salil Panchal attempt to answer those questions in our pre-Budget package. We also take stock of initiatives announced in previous budgets—Varsha Meghani analyses the progress of health care scheme Ayushman Bharat; Pranit Sarda identifies the roadblocks for the highway construction programme, Bharatmala Pariyojana; Divya J Shekhar scrutinises the often-inadequate past efforts to make Budgets gendersensitive; and Naandika Tripathi plunges into the Study in India programme to attract international students.

Away from the Budget, another not-to-miss feature is Pooja Sarkar's deep dive into the towers that the Lodhas built—they're selling well, generating revenue and profits, but the problem may well be the debt piled up. Can next-gen scion Abhisheck Lodha meet his objective of being net debt-free within 30 months? The answer is on *page 18*.



Brian Carvalho Editor, Forbes India

d brian.carvalho@nw18.com

Best,

STORIES TO LOOK OUT FOR





▲ (From left) Funds have been allocated to make budgets gender-sensitive, but their outcomes have been inadequate; fifteen months after the launch of health scheme Ayushman Bharat, stakeholders have mixed views

The best brains in business are now available to you 24x7

With Forbes India now online, you can engage with India Inc.'s most influential leaders in multi-media. Read articles and blogs, watch videos and shows, go behind the scenes with podcasts, share your comments and much more. Interact, share, read, listen, watch and understand the dynamics of business, in a whole new way.

Log on to: forbesindia.com







CONVERSATIONS WITH THE CHANGEMAKERS

India's thought leaders, policymakers and corporate leaders come together on a common platform to discuss how business and sustainability can be integrated with businesses and financial systems to build a sustainable future.

Forbes SUSTAINABILITY CHANGEMAKERS

Championed by



The bank for a changing world

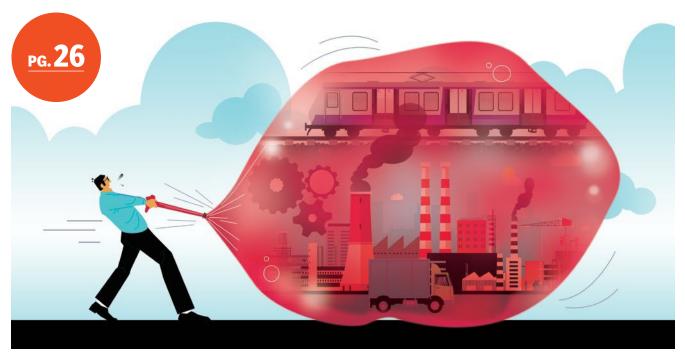
This February | Mumbai







PRE-BUDGET SPECIAL



Data from disparate sources shows that the worst is behind us, but a lot more needs to be done to revive growth and boost sentiment

22 • THE GROWTH PILL

Experts want the FM to announce immediate measures to improve growth in her Budget speech

26 • SLOW BURN

Growth numbers are likely to stabilise in the next few quarters, but there are no signs of a sharp uptick yet

30 • INSIDE INDIA'S HEALTH CARE FIX

Fifteen months after the PM launched Ayushman Bharat, stakeholders have mixed views

38 • ROADBLOCKS AHEAD: EXPECT DELAYS

Land acquisition and lack of funding are likely to delay government's 2022 deadline for Bharatmala project



40 • BUDGETING FOR HER

For the Union Budget to be gender-sensitive, the government will have to be innovative and inclusive

44 • A NEW PLAY AT DRAWING FOREIGN STUDENTS

The Study in India programme is taking baby steps to attract students, but campus protests may halt its progress

FEATURES

ENTERPRISE

18 • CAN LODHA TOWER OVER DEBT?

Inside Abhisheck Lodha's game plan to make his company net debt-free well within three years

8

48 • **BOOM BOOM**

How a stronger brew helped Ankur Jain take Bira to smaller cities and towns

52 • BECOMING A PEOPLE'S CAR, AGAIN

Volkswagen has revamped its India strategy to gain a bigger share of the market

HEROES OF PHILANTHROPY

56 • WAKING UP KINDNESS

Jack Ma has a new focus area: Philanthropy

60 • CATALYSTS FOR CHANGE

2019's list honours individuals tackling a diverse set of issues

INTERVIEW

69 • 'DATA, ALGORITHMS HELP US INVEST BEYOND GEOGRAPHIES'

Anand Rajaraman of Rocketship on what pulled a quarter of their bets to India



Bira 91 is currently the fifth biggest beer maker in India



Jack Ma is entering a new chapter in his storied career

CROSS BORDER 72 • CONNECTING A MILLION DOTS

EquBot is on a quixotic quest to prove that computers can outsmart human stock pickers

LIFE

74 • OF MISHTI, MUGHALS AND NOODLES

A brief lesson in Kolkata's history, through its food

78 • WHERE THE WALLS HAVE YEARS

The Walls of Dubrovnik are an example of the old world's fascination with stone fortifications

82 • SIPS FROM SRI LANKA

Distinct from its Indian counterparts, tea from the country has its own story and flavours to boast

84 • 'WE USE STEREOTYPES AND THEN TEAR THEM APART'

British theatre director Melly Still on the need to reimagine Agatha Christie for an Indian audience

86 • THE MUSIC ROLLS ON

In 10 years, NH7 Weekender has featured over 600 artistes from India and the globe

FREQUENT FLIER 89 • MY SEOUL

A city bustling with places to work and play



Hariharan A at the NH7 Weekender in Pune in 2019



When you put up a novel on stage, it can be boring, says British director-choreographer Melly Still

REGULARS • 12/LEADERBOARD • 90/THOUGHTS

WE VALUE YOUR FEEDBACK:

Write to us at: forbes.india@nw18.com

- Read us online at: www.forbesindia.com
- On the cover: Illustration by:

Chaitanya Dinesh Surpur

Subscriber Service: To subscribe, change address or enquire about other customer services, please contact: FORBES INDIA, Subscription Cell, C/o Network18 Media & Investments Limited, Empire Complex, 414, Senapati Bapat Marg, Lower Parel, Mumbai - 400013. Tel: 022 4001 9816 / 9782. Fax- 022-24910804 (Mon - Friday: 10 am - 6 pm) SMS FORBES to 51818 Email: subscribe@forbesindiamagazine.com, To subscribe, visit www.forbesindia.com/subscription/ To advertise, visit www.forbesindia.com/advertise/

Forbes

Managing Director & Group Editor-in-Chief:

Rahul Joshi

Editor, Forbes India: Brian Carvalho

Chief Creative Director: Anjan Das

Editor (Technology):

Harichandan Arakali

Senior Editor: Samar Srivastava

Associate Editors: Monica Bathija, Salil Panchal

Senior Assistant Editor: Raiiv Singh

Assistant Editors:

Pankti Mehta Kadakia, Pooja Sarkar

Special Correspondent:

Manu Balachandran Savan Chakraborty

Senior Correspondent:

Varsha Meghani

Editor-Desk: Kunal Purandare

Deputy Editor-Desk:

Jasodhara Banerjee, Kathakali Chanda **Senior Sub-Editor:** Divya J Shekhar

Senior Assistant Editor

(Events/Social Media): Ruchika Shah Senior Sub-Editor: Namrata Sahoo

Sub-Editor: Naini Thaker,

Naandika Tripathi **Deputy Managers:** Bhagwan Patil,

Aditi Satam

Creative Director:

Benu Joshi Routh

Deputy Creative Director:

Sachin Dagwale

Associate Creative Directors: Sameer Pawar, Pradeep Belhe

Principal Designer:

Pandharinath Pawar

Chief Illustrator:

Chaitanya Dinesh Surpur

Chief Production Manager-Digital

Imaging & Print: Sushil Mhatre
Production Manager: Mithun Anare

Photography Editor: Mexy Xavier Chief Photographer: Amit Verma

Consulting Editor (Photo):

Madhu Kapparath

Senior Photographer: Aditi Tailang

Junior Photography Editor:

Prakash Rasal

News Trainee: Pranit Sarda

CEO: Priyanka Kaul

FORBES INDIA ADVERTISING SALES
Senior Vice President: Preeti Sahni

ienior Vice President: Preeti Sahn

Girish Sharma, Brijesh Singh, Atishay Singh, Kanwaldeep Singh, Divya Bhatia, Mona Parate, Dilshad Ahmed Khan, Janki Modi, Daksha Solanky, Mitu Midha, Riti Menghani, Anil Bhatia, Abhishek Shah, Priyanka Nalavade, Maulik Thaker, Supriya Sahoo, Richa Kushwaha, Sheshagiri Raj, Arijeet Sengupta, Arijit Nandy

SOLUTIONS

Executive Vice President:

Smriti Mehra

Sachin Mhashilkar, Abhinav Gupta, D Bhattacharjee, Monica Ghose, Manoj Vasudev, Pratika Barua, Priyanka Dhar, Shehzaad Kapadia, Vinita Vyas, Vaibhav Kumar

MARKETING

Brand Head & General Manager:

Shagufta Khan

Jitendra Gujar, Siddhi Patel

SUBSCRIPTION & CIRCULATION General Manager:

Subhadra Bose

Subnadra Bose

Kaushal Pillai, Vinod Parab

ADVERTISING OPERATIONS Senior VP & Head-Business Planning & Strategy:

Chaitali Karia

Smita Suvarna, Krishna Gupta, Madhavi Rane, Ajinkya Tambe

Compliance

Ratnesh Rukhariyar

Legal and Corporate Affairs

Nitesh Shrivastava

Accounts and Finance

Ketan Ravesia Dr Pratik Sangoi

FORBES MEDIA LLC

Chairman & Editor-in-Chief:

Steve Forbes

Chief Executive Officer:

Michael Federle

Chief Content Officer: Randall Lane

CEO, Forbes Asia:William Adamopoulos

Editor. Forbes Asia:

Justin Doebele

Senior Vice President, Forbes Asia:

Tina Wee

Views & opinions expressed in this magazine are not necessarily those of Network18 Media & Investments Limited, its publisher and/or editors. We (at Network18 Media & Investments Limited) do our best to verify the information published, but do not take any responsibility for the absolute accuracy of the information. Network18 Media & Investments Limited does not accept responsibility for any investment or other decision taken by readers on the basis of information provided herein.

"FORBES INDIA is published by Network18 Media & Investments Limited under a license agreement with Forbes IP (HK) Ltd."

"FORBES" is a trademark used under license from FORBES IP (HK) Limited".

©2009 Network18 Media & Investments Limited •

©2009 Network18 Media & Investments Limited • ©2009 FORBES LLC, as to material published in the U.S. Edition of FORBES. All Rights Reserved. ©2009 FORBES LLC. as to material

published in the edition of FORBES ASIA. All Rights Reserved.

Forbes India is published fortnightly.
Copying for other than personal use or internal reference or of articles or columns not owned by FORBES INDIA without written permission of Forbes India is expressly prohibited. Editorial Office: Mumbai - Network18 Media & Investments Limited, Ground Floor, Empire Complex, 414, Senapati Bapat Marg, Lower Parel, Mumbai 400013. Maharashtra.

Tel:+91-22-66667777, Fax: +91-22-24910804. National Capital Region - Network18 Media & Investments Limited, Tower A and B, Express Trade Tower, Plot No 15-16, Sector 16A, Gautam Buddha Nagar, Noida 201301, Uttar Pradesh.

Bengaluru - Network18 Media & Investments Limited, 121, The Estate, Dickenson Road, Bengaluru 560042, Karnataka. Tel: 080-4064 9191 Gurugram - Network18 Media & Investments Limited, U and I, VRI, SCO 83, City Centre, Sector 29, Gurugram 122001, Haryana. Tel: 012-4480 3100 Subscriber Service: To subscribe, change address

or enquire about other customer services, please contact: FORBES INDIA, Subscription Cell, Network18 Media & Investments Limited, Ground Floor, Empire Complex, 414, Senapati Bapat Marg, Lower Parel, Mumbai 400013.

Tel: 022 4001 9816 / 9783. Fax- 022-24910804 (Mon -Friday: 10 am - 6 pm) SMS FORBES to 51818

Email: subscribe@forbesindiamagazine.com, To subscribe or advertise, visit www.forbesindia.com

Forbes India is printed & published by Brian Carvalho on behalf of Network18 Media & Investments Limited & Printed at Print House India Pvt. Ltd. 847/2. T.T.C. MIDC, Rabale, Navi Mumbai – 400701 & Published at Empire Complex, 1^{5T} Floor, 414, Senapati Bapat Marg, Lower Parel, Mumbai - 400 013.

Editor: Brian Carvalho

Network 18

TO OUR READERS

The pages slugged 'Brand Connect' are equivalent to paid-for advertisements and are not written and produced by Forbes India journalists

Forbesindia.com The homepage for India's most influential

Forbesindia.com is India's most authoritative and influential web address, bringing you definitive lists of achievers, cutting-edge entrepreneurial ideas and sharp business and financial analysis. Spanning topics related to wealth creation, buzzing startups and iconic enterprises, thought leadership, philanthropy, lifestyle and technology, Forbesindia.com influences the country's most influential and keeps India ahead in business.



How Smart Is Too Smart? CES 2020 Paints A Picture

Folding tablets, robots at beckand-call and much more **P/14**

What Friends, Family And Funds Mean For Millennials

The Millennial Pivot report shows how youths approach life **P/14**

Tech That: 25x Increase In Funding In A Decade

Startups raised \$14.5 billion in 2019, up from \$550 million in 2010 **P/15**

MARKETS WATCH

Valuations High As Conflict Threat Ebbs

With US-Iran tensions climbing down, markets depend on fund flows to maintain current levels



with the Easing of Us-IRAN tensions [as of the second week of January], Indian markets dodged a bullet in the New Year. While there are no signs yet that the threat of a low-intensity conflict is over, tensions had ebbed. The impact on oil prices, however, was limited. Global and Indian markets, therefore, bounced back swiftly.

Now, as the market waits for its next trigger—the Budget, a bottoming out of the economy, and a long-awaited earnings revival—its staying at present valuations depends as much on global fund flows as it does on the Indian investor. "From a fund flow situation for India's stock markets, passive money is increasing through global and domestic investors while ignoring valuations completely," says Nilesh Shah, managing director, Kotak Mahindra Asset Management

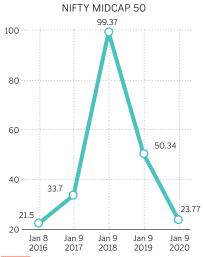
Company. Funds into SIPs stood at ₹8,518 crore in December 2019, an all-time high. Foreign investors have bought ₹21,000 crore of Indian equities since the corporate tax cut announced last September. Since then, the Nifty has moved up 11 percent.

In the run-up to the Budget, a broad market wishlist includes the abolition of dividend distribution tax, rationalisation of long-term capital gains, as well as a cut in personal income tax. It is unclear how much fiscal room the government has for these (the corporate tax cut cost the government ₹1.4 lakh crore) and there is no evidence that the market is pricing it in. Despite that, valuations remain at multi-year highs with the Nifty trading at 28.4 times earnings and the Midcap Index at 23.7 times.

Last, sentiment's slowly starting to turn from bearish to neutral, says

FIVE YEAR PE DATA FOR KEY NIFTY INDICES





Shah. At 4.5 percent, growth, which slid to a 26-quarter low in the second quarter of FY20, is likely to bottom out. Initial signs point to investors pricing in a midcap outperformance. They are expected to do better than their larger counterparts in the medium term, which is usually a leading indicator of a market rally.

SAMAR SRIVASTAVA AND SALIL PANCHAL

NIFTY PERFORMANCE

Positive Show

The Nifty outperformed gold, fixed deposits and government bonds in the last decade



IN THE SHORT TERM, MARKETS are driven by sentiment, but over longer decadal periods,

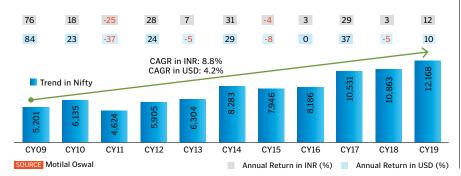
it's the business performance that matters. According to an analysis by

brokerage Motilal Oswal, in the 10 years since 2009, the Nifty rose 8.9 percent annually versus an 8.2 percent earnings growth. A majority of the earnings growth (11 percent a year) came in the first half of the decade and it is anybody's guess whether these valuations will sustain.

While the outperformance was skewed to the second half of the decade, it was led by a familiar set of businesses, with banking and financial services, consumer, auto, IT and pharma accounting for a majority of the gains. The Nifty outperformed gold, bank fixed deposits and Indian government bonds. On a global scale, the Nifty was the second-best performing market in local currency terms after the US (S&P500), but fourth in US dollar terms after the US, Japan and Taiwan.

SAMAR SRIVASTAVA

Nifty-50 delivered eight years of positive returns in the decade; CY11 and CY15 were exceptions



MISTRY-TATA SPAT

Will Mistry Walk Tall After SC Verdict?

Experts says there was no compelling factor for Tata Sons to remove him as chairman

battle reopened in January, this time in the Supreme

Court, and the Tata group has earned some relief as the top court stayed the National Company Law Appellate Tribunal's (NCLAT) December order, which called to reinstate Mistry as executive chairman of Tata Sons.

The Tatas would look to try and block Mistry's re-entry into the group. Mistry, on his part, will continue to want to protect the rights of his family's Shapoorji Pallonji Group that owns a minority (18.37) stake in

VIPIN KUMAR / GETTY IMAGES

Tata Sons. "This legal fight has never been about me. It has always been and will always be about protecting the rights of minority shareholders...," Mistry said in a statement. "In the last three years, both in conduct and in their statements to the world at large, the Tata group's leadership has shown scant respect for the rights of

minority shareholders."

Mistry, who had succeeded Ratan Tata as chairman of Tata Sons in 2013 and was ousted in late 2016, maintains he will not chase the executive chairman post at Tata Sons or the director's post at Tata Consultancy Services or Tata Teleservices. He had challenged the decision of the Tata Sons board in 2018 to take the company private. Mistry also alleged oppression and mismanagement of minority shareholders.

Proxy advisory firm InGovern maintains there was no compelling factor for Tata Sons to remove Mistry as chairman. InGovern's founder and managing director Shriram Subramanian says that Mistry, if reinstated by the Supreme Court, should take up the post and then gracefully resign as executive chairman after an hour. All the other Tata Sons board members should also step down. "The two groups [Tatas and Mistrys] could then reinstate a new board," says Subramanian. "That will recreate an element of trust between them."

SALIL PANCHAL











CES 2020 How Smart Is Too Smart?

The TVs roll up, the tablets fold in and robots whizz around so you don't have to move a muscle. If you remember your vision of 2020 as one with flying cars in it, Uber and Hyundai partnered to deliver a concept of that too (slated to be operational in 2023). Sin City was taken over by machines this past month. Highlights from the Las Vegas event

BY PANKTI MEHTA KADAKIA

Six Indian Startups Wow Honchos

• •

A LARGE PART OF THE

Consumer Electronics Show (CES) floor at the Las Vegas

Sands hotel is dominated by Asian countries showing off their tech innovations. This is the first year that India has its own 'tech park', but it isn't an official government initiative. The CES is the world's largest show for consumer electronics.

The India tech park—called the Motwani Jadeja Foundation booth—has been put together by the foundation. Led by Asha Jadeja Motwani, an angel investor from Ahmedabad, the booth showcased six

It was the first time India had a tech park at CES

Indian startups. "I came to CES last year and discovered that almost every major country has a pavilion here, but not India. That is unacceptable. This year, we have cobbled together what we could with volunteers," she says.

The startups on display include

Calamus, an e-bike that senses obstructions and incoming traffic; Altifarm, self-contained grow units for urban farming and cannabis growing [to be sold in the US and Canada]; home appliance company Hyper Lychee, which has developed a hand-held electric scrubber with multiple attachments; STEMpedia, a stem education kit for children; an air-conditioned three-wheeled electric car called Strom; and Wagr, a smart location and fitness tracker for pet dogs.

Jadeja Motwani says it is surprising that while the government

has allocated funding to take startups global, it does little to promote their presence abroad.

The startups experienced the benefits of being at CES. "I managed to connect with CEOs of big appliance companies in Germany to heads of Amazon launchpads in the UK and Seattle," says Hannan Hakim, co-founder

and CEO of Hyper Lychee. Pratik Gupta, co-founder and CEO of Strom Motors, says: "We've had honchos from companies like Toyota visit and be wowed, and people from all over the world who would like to implement similar tech."



Samsung's HS Kim introduces Ballie

Ballie: The Rolling Robot

• >>

MOVE OVER, ALEXA AND SIRI.

There's a new kind of voice assistant on its way.

Delivering the opening keynote at CES, Samsung consumer electronics president and CEO HS Kim introduced Ballie, a yellow tennis ball-like personal robot that is a camera, speaker, voice assistant, fitness tracker, remote control for your home devices and a 'fun companion' for pets and kids, all rolled into one.

Ballie uses artificial intelligence to learn your routine and preferences, and can integrate with the rest of your smart devices. It is meant to be 'actively helpful' and personalised.

The robot also patrols your home while you're away or at work, keeping an eye on your pets, children or elderly family members, letting you drop in with its camera to see what's going on inside.

14

'Neons Will Be Unique To You'



Pranav Mistry, president and CEO of Samsung Star Labs

IS IT POSSIBLE TO HAVE A FULLY virtual, computationally created being that looks and behaves like us? That's what Pranav Mistry, president and CEO of Samsung Star Labs, is working to build. One of the most awaited demos at the CES, the Neon, Life involves human-like digital avatars who look, speak and move like people, respond in real time, have millions of human expressions and are built to have their own personalities and original thoughts. A digital species of sorts.

At the CES, Mistry, a computer scientist and inventor who grew up in Palanpur, Gujarat, introduced a few kinds of Neon: A yoga instructor, a flight attendant, a student. He spoke with Forbes India on the sidelines of the event. Edited excerpts:

• What was the idea behind creating Neons?

My professional pursuit has been about making machines more human. I wanted to make technology more like us, so that we don't have to worry whether people can read and write. Rather than us learning the language of machines, can they learn our language? That's how it started. What we're doing is unlike what Siri and Alexa do. Our goal is not to have something that can answer questions for you. We want to give you technology that is humane to talk to.

O How are Neons different from an artificial intelligence assistant?

Neons are not connected to the internet... they can learn. Your devices need passwords and two-factor authentication. But Neons have the ability to recognise you and remember your interactions, just as a friend would. Each Neon has a different personality, and character traits that will evolve over the years. Neons will have their own voices and be unique to you.

• Will this impact jobs?

The impact won't be on cutting jobs, but on widening the reach of technology.

(Full interview on www.forbesindia.com)

Vision S: Entertainment On The Go

for its home electronics, announced that it has been working on a concept car called Vision S that combines safety, comfort and entertainment. "The future of mobility will not be dominated just by safety and autonomous driving, but also by entertainment," Sony CEO Kenichiro Yoshida said at the CES.

SONY, TRADITIONALLY KNOWN

The Vision-S prototype incorporates Sony's imaging and sensing technologies, as well as on-board software regulated using its artificial intelligence, telecommunication and cloud technologies.

Thirty-three sensors are embedded within the vehicle, to detect and recognise people and objects both inside and outside the car. If the car detects that a passenger is asleep in the back, it will automatically adjust the temperature.

The Show-Stealers



MERCEDES-BENZ VISION AVTR

Inspired by and developed in collaboration with the team behind James Cameron's Avatar, the slick concept vehicle melds the interior with the exterior for a reptile-like silhouette. It can move sideways and is powered by 'organic' battery, minimising energy consumption with its 33 multi-directional 'bionic flaps'.

INTEL CORPORATION



INTEL'S HORSESHOE

We saw a range of foldable laptops and tablets, including variants from Del and Lenovo, but Intel's Horseshoe Bend made the trend bigger. Based

on Intel's Tiger Lake mobile processors, the design is similar in size to a 12-inch laptop, but the folding touchscreen display opens up to more than 17 inches.

LG'S HERR FRIDGE

A fridge with a farm? We'll take that. LG's new refrigerator can grow herbs within its shelves, selfsustained and with smart controls for temperature, lighting and water supply





WELT SMART BELT PRO

Made with premium Italian leather, the belt can detect changes in your steps and calories burnt, log how much time vou've spent sitting in a day, and

especially for senior citizens, pre-empt a fall by analysing walking patterns.



IMPOSSIBLE PORK

Starting with a plant-based doppelganger of ground beef, Impossible Foods Inc surprised the CES with plant-based pork. Taking on climate change perpetrated by meat and a 'meltdown in biodiversity', the lab-grown 'pork' comes made up of soy, sunflower and coconut oil, and tastes like the real thing.

Friends, Family And Funds

Tata Capital's inaugural Millennial Pivot report highlights how millennials and Gen Z approach life. Things look similar till it's a question of money

On an average, how many hours in a day do you think you spend on social media?

	PERCENTAGE		
	18 to 25 years	26 to 35 years	
Up to 12 hours	10	9	
Up to 8 hours	17	17	
Up to 4 hours	27	21	
Up to 2 hours	25	27	
Up to 1 hour	13	18	
Less than 1 hour	8	8	
Total	100	100	

What proportion of your virtual friends (social media) are also physical friends?

	PERCENTAGE		
	18 to 25 years	26 to 35 years	
Up to 10%	9	9	
Up to 15%	10	13	
Up to 25%	16	18	
Up to 50%	16	12	
Up to 60%	33	34	
All my social media friends/ followers are also physical friends	16	14	
Total	100	100	

If you were planning your itinerary for holidays during the festival season, which of the following would you most like to take up?

	PERCENTAGE	
	18 to 25 years	26 to 35 years
Participate in events with religious significance	28	23
To spend time with family and close friends	41	41
I would use this time to travel or do something else that I like	20	24
There is a lot of chaos around this time, I would use the opportunity to disconnect	12	12
Total	100	100



Festivals are a peak time for sales and discounts, who amongst the following are you most likely to purchase aifts for?

	PERCENTAGE		
	18 to 25 years	26 to 35 years	
Family	70	74	
Friends	44	45	
Business contacts	14	14	
Office colleagues	19	20	
Myself	42	47	
Total	100	100	

If you were to consider borrowing money, which of the following is most likely to be the reason?

	PERCENTAGE		
	18 to 25 years	26 to 35 years	
To buy the newest tech gadget in the market	19	12	
For my next vacation	21	17	
Higher education for self/family member	25	19	
To build my dream house	17	28	
To fund the marriage of family member	10	11	
For emergencies like hospitalisation	8	13	
Total	100	100	

If you were considering borrowing money, who amongst the following are you most likely to turn to?

	PERCENTAGE		
	18 to 25 years	26 to 35 years	
Friends and colleagues	22	11	
Local moneylenders	10	6	
Family	30	19	
Banks	29	46	
Non-banking financial institutions	10	18	
Total	100	100	

LeaderBoard

The amount the government plans to spend on the Indian Railways over the next 12 years for its modernisation

TRANSPORT

Indian Railways' Private Play

Government plans to allow operators to run 150 trains on 100 routes

is set for a major overhaul.
According to a government plan, private operators will now be able to operate 150 trains on 100 select routes, providing everything from on-board services like entertainment and linen to catering, based on a revenue-sharing model with the government. Indian Railways will control everything else, including infrastructure, tracks and signalling.

According to a draft plan published on January 7 by government think tank Niti Aayog, private trains running on a particular route will have a head start of 15 minutes over other locals on the same route. The maximum speed will be set at 160 km per hour and they will be able to have their own guards and crew.

"This is the first step towards



allowing more private sector participation in the railways," says Vinayak Chatterjee, chairman of Feedback Infrastructure, a professional and technical services company. "Such a move will only reduce the burden on railways and bring traffic back," he adds.

The private entity shall be responsible for financing, procuring, operation and maintenance of the

trains, according to the proposed plan. "It shall pay to Indian Railways predetermined charges for haulage and any other payments as specified in the agreement," the document said. The draft also suggests splitting the 100 routes into clusters and allows private operators to collect market-linked fares in addition to the flexibility of class composition and halts.

"This is a model adapted across the world, such as in the UK, and it's time for Indian Railways to follow suit," adds Chatterjee.

The decision comes at a time when the cash-strapped national transporter had decided to rejig the Railway Board through the merger of its existing eight Group A services into a central service called the Indian Railway Management Service.

MANU BALACHANDRAN

TECHNOLOGY

Tech That: 25x Increase In Funding in a Decade

Technology startups raised \$14.5 billion in 2019, up from \$550 million in 2010

• •

TECHNOLOGY STARTUPS IN India in 2019 raised the

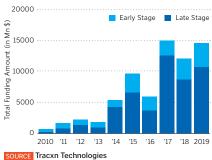
second-highest amount of funding (\$14.5 billion) in the last decade, according to startup information platform provider Tracxn Technologies. The only time they raised more money was in 2017 when the figure was about \$15 billion.

Funding over the last decade increased by more than 25 times: From about \$550 million in 2010 to \$14.5 billion in 2019. During the year, there were 1,185 funding rounds of which 459 were beyond Series A, four public listings, 128 acquisitions and 817 active investors. Nearly 1,900

startups were founded in the year and close to 900 of them were funded.

Two deals raised a billion dollars or more each: hotel booking provider Oyo Rooms raised \$1.5 billion while

Kick-starting Startups



mobile wallet and financial services provider Paytm raised \$1 billion.

Udaan, a B2B online commerce platform provider, raised \$585 million while Delhivery, a logistics provider for ecommerce businesses, raised \$413 million. Among the investors, the top five most active venture capital firms were Sequoia Capital, Accel, Tiger Global Management, Blume Ventures and Chiratae Ventures. The most active private equity firms were Steadview Capital, General Atlantic, FMO, Sabre Partners India and CDC Group. "The range of companies and sectors that are active today has broadened and deepened," Dev Khare, a partner at Lightspeed Venture Partners, told Forbes India last July. The ecosystem too has grown. "We now have founders coming back for the second time, some even for the third time to start up companies," added Khare.

HARICHANDAN ARAKALI

By POOJA SARKAR

Can Lodha Tower Over Debt?



n August 2014, at a fancy red carpet event at Four Seasons Mumbai, which looked nothing less than a Hollywood movie premiere with golden barricades on the sides of the red carpet and glasses of

bubbly being passed around in sleek glasses, sat the current President of the United States. Back then Donald Trump, more famous for his TV show *The Apprentice* and his real estate business, was flanked by son Trump Junior. And there was the man who

had brought the two to the city and was to develop their Trump Tower in Mumbai: Abhishek Lodha, nextgen scion and managing director and CEO of the erstwhile Lodha Developers Ltd, officially Macrotech Developers Ltd since May 2019.





Two years before, in 2012, Lodha had swooped in to acquire DLF's land parcel in the Lower Parel neighbourhood of Mumbai called NTC Mills for ₹2,727 crore. Back then DLF was the largest developer by market capitalisation, but the

Delhi-headquartered realtor was stressed with nearly ₹23,220 crore in net debt and had started paring its national footprint and debt; that provided Lodha the opportunity to fuel his ambition of transforming Mumbai's skyline with a canvas of skyscraping luxury towers.

The construction of Trump Tower is now complete, Lodha has sold 80 percent of the project, with 451 apartments of 2,222 yet to be sold. That may not be a problem. There are other dangers: Of looming debt, downgrades by credit rating agencies and an all-important US denominated bond that comes up for redemption in March 2020.

Sitting in the meeting room of Lodha World Towers—the one cheek-by-jowl with Trump Tower—the 39-year-old Lodha shows few signs of stress: "Ultimately the proof of the pudding is in the cash," he says with a smile. He's confident of being net debt-free "in the next 24 to 30 months".

At the end of March 31, 2019, the consolidated net debt of Macrotech Developers stood at ₹24,983 crore and it posted negative net cash flows as it ploughed back ₹1,729 crore for its overseas project. And then there are the downgrades, which began at a business in London.

In 2012 and 2013, the Lodhas had begun to look overseas for land parcels. After scouting cities like Dubai and Singapore, in November 2013, they decided to buy their first property in central London, MacDonald House, for nearly \$530 million (₹3,000 crore then). Abhinandan Lodha, Abhishek's younger brother, was in charge of the project. In February 2014, the Lodhas acquired another property on Carey Street for nearly ₹920 crore. By 2015 Abhinandan left the company and went on to launch Lodha Ventures, the financial services arm of the family.

Lodha Developers UK Ltd now consists of these two projects in which Macrotech Developers has an



"Last year our cash flow was 54 percent of the total cash flow of the top 10 listed developers."

ABHISHEK LODHA,

MANAGING DIRECTOR AND CEO, MACROTECH DEVELOPERS

economic interest of 76.25 percent and 78.63 percent, respectively (as per a draft red herring prospectus the company filed before a planned public issue in 2018). It has completed one project and the other one is a few months away from completion. As per Macrotech's FY 2019 annual report, it sold 158 units in its London properties for £468 million (₹4,349 crore). According to rating agencies, debt sanctions for Lincoln Square and 1 Grosvenor House stand at £290 million (₹2,695 crore) and £517 million (₹4,803 crore) respectively.

Lodha says it has since sold units worth more than £600 million and expects to sell out both projects over the next 18 months; the company expects free cash of about £550 million (₹5110 crore) from these two developments. Lodha insists it will be free cash after repayment of any liability. The net margins on its London projects are around 20 percent.

According to Lodha, the London assets have a debt of £750 million (₹6962 crore) against which they have already paid £200 million (₹1856 crore) in the last three months, and "the debt will be fully paid off by July 2020". This means Lodha needs to pay £550 million (₹5,110 crore) in the next six months, but that may not be the big worry. What has been a matter of concern for the credit rating agencies over the last year has been the developer's ability to pay off its dollar denominated bonds worth \$325 million (₹2,241.15 crore).

Lodha confidently says, "We have made full arrangements for the repayment of the bond." These include about \$155 million which has been arranged through financing against unsold inventories in the London project, while another \$110 million will be infused by promoters through family offices. Another \$60 million will come through the recent sale of its commercial office property in New Cuffe Parade (Wadala), which it sold to a joint venture of the Tata Group and Varde Partners.

The realtor has sold its commercial office building in New Cuffe Parade for ₹1,350 crore of which the Tatas have paid ₹300 crore and Varde Partners the rest. The money came in during the last week of December.

For now Lodha is busy with roadshows for his next US-denominated bond. At the time of the interview in the third week of December, he said that they have already done two roadshows and discussions were on with investors to undertake a fresh bond issuance in February of \$200 million.

Lodha rues that credit rating agencies and Indian investors don't understand his business. On November 12, Moody's Investor Service downgraded the corporate family rating of Macrotech Developers to Caa1 from B3; Caa1 indicates poor quality and very high credit risk, and B3 suggests speculative and a high credit risk. Later that month, India

The London assets have a debt of £750 million against which the Lodhas have already paid £200 million in the last three months, and "the debt will be fully paid off by July 2020"

Ratings & Research downgraded the company's non-convertible debentures (NCD) and bank loans to IND BB (moderate risk of default) and maintained a rating watch negative (RWN). The bank loan amount was ₹150 crore and NCDs worth ₹495 crore come up for maturity in July 2023.

BACK TO BOMBAIM

Lodha's India business is geographically concentrated across the Mumbai Metropolitan Region (MMR). At the end of FY 2019, it had 38 ongoing projects in India across 28.59 million sq ft; another 1.82 million sq ft are the London

properties. In its India operations, the company managed to sell 6.4 million sq ft for a realisation of ₹7,162.7 crore in FY 2019 as against 7.4 million sq ft for ₹8,130 crore in FY 2019.

Lodha says, "Our market share in the MMR region has gone up from 10 percent two years ago to about 17-18 percent now; just to put it in context, the top 10 developers are 35 percent, so we are half of the top 10 developers." He adds, "Last year our cash flow was 54 percent of the total cash flow of the top 10 listed developers."

According to its latest available annual report for FY 2019, on a consolidated basis Macrotech Developers posted revenues from operations of ₹11,907 crore for the full year, a 23 percent jump over the previous year. Net profit more than doubled to ₹1,647 from ₹794 crore in FY 2018.

These numbers tell a story of growth, although finance costs too have headed northward—to ₹511 crore in FY 2019 from ₹203 crore in the previous year. The company states in its annual report that it has changed its accounting standards and a comparison to the previous year's number isn't fair.

But then there is the spiraling debt. Net debt of ₹19,006 crore at the end



1 Grosvenor House is one of Lodha's two properties in London

of March 2017 increased to ₹22,094 crore a year later (restated in the latest annual report), which means the company's net borrowing went up by ₹3,088 crore in one year. By the end of FY2019, there was a jump of another ₹2,890 crore, taking the net debt up to ₹24,983 crore. In the last three years the company's net debt went up by ₹5977 crore. Gross debt at the end of FY 2019 stood at ₹25,640 crore. Forbes India has calculated net debt by adding borrowings, current maturities and deducting cash and equivalents.

Lodha is unperturbed: "The performance (of the company) speaks for itself, if we had a mismatch there would be a problem somewhere, right?"

He reasons that the first thing that happens when a developer is short of cash flows is that he stops delivering his units, "...but that's what Lodha is known for, for delivering units. For every four out of five units we build, more than 80 percent of the units are delivered ahead of time."

According to the Lodha Group in an emailed statement, it has registered residential sales of around ₹5000 crore in April-December 2019. Of this, it claims it raised ₹2,000 crore in the festival period of October-December 2019, a growth of 30 percent over a year ago. By the end of FY2020, the Group expects to clock net new sales of over ₹7,000 crore.

On the debt front, the company says it has repaid its debt worth ₹1,500 crore and has plans to reduce it further by ₹2,500 crore taking the overall reduction in group debt by at least ₹4,000 crore this financial year itself. During the interview, Lodha said if needed, they would sell another commercial asset next year (2020) to pay off any debt requirements.

THE LISTINGS THAT BECKON

Lodha believes that because the company is a private one there is little information out there for the "gurus". While this may be partly true, it isn't that Lodha didn't try

Profit and Debt

Year	31-Mar-19	31-Mar-18	31-Mar-17	
	(In ₹ Crore)	(In ₹Crore)	(In ₹ Crore)	
Revenues from Operations	11906.98	9677.27	7754.45	
Net Profit	1646.67	794.04	578.76	
Net Debt	24983.19	22093.65	19005.58	
Finance Cost (net)	510.99	202.95	199.57	

SOURCE Macrotech Developers Ltd Annual Report FY 2018-19; (Forbes India has calculated net debt by adding borrowings, current maturities and deducting cash and equivalents)

to list the company; a 2018 public issue had to be canned after markets tanked. In February 2019, Macrotech raised equity capital of ₹500 crore in its affordable housing project Palava City in Dombivli on the outskirts of Mumbai from Piramal Enterprises Ltd and Ivanhoe Cambridge, a real estate subsidiary of Canadian investment firm CDPQ through its joint residential equity fund. Palava is spread across 4,500 acres and Macrotech has completed Phase I comprising 300 acres; work is underway on another 700 acres.

A listing of the entire company is now off the table. Lodha has new plans. "We have two focus areas: our affordable housing business and our office or rental business, so when we go to the public markets we want to make sure we take to the market separate opportunities for investment."

The company's medium-term plan includes launching a real

Lodha said if needed, they would sell another commercial asset in 2020 to pay off any debt requirements estate investment trust for its rent-yielding assets in the next 2.5 years by when it expects to have 8-9 million sq ft of ready office space in its portfolio. At the end of March 2019, it had completed office leasing space of 3.83 million sq ft.

The long-term plan, which Lodha is evaluating, is a public listing of its affordable housing business. "But that is very preliminary."

The realtor is evaluating proposals to raise equity capital at the project level for both affordable housing and premium residential projects. Last year it started its affordable housing brand Crown and has already launched two projects under the brand. Apart from that it is building an office in New Cuffe Parade and has launched a residential project in Lower Parel. It plans to launch one or two more projects by the end of March 2020.

That's a far cry from the high-end housing ambitions of a few years ago. "Of course, when you think of Lodha, you think of all the premium and luxury housing that we build; we have in the past built a lot of that but going forward clearly mid-income and affordable housing are the thrust of our business. That's what our residential business is focused on and sales are very strong there." Currently affordable housing accounts for 60 percent of the Indian business.

But it all boils down to the race between cash flows and debt repayments. Lodha admits he is "very concerned about reducing" debt and reducing it quickly. He estimates cash flows in the range of "₹8,000 crore to ₹9,000 crore" by March. If Macrotech Developers intends to repay all its domestic debt obligations in the next three years, it has to generate a net operating cash flow of a minimum ₹8,000 crore every year for the next three years; it stands at a negative ₹465 crore. Even assuming that the India operations provided a positive cash flow of ₹1,264 crore in FY 2020, can Lodha climb this tower? 10





Structural reforms will help in the long term. But experts want the finance minister to announce immediate measures to improve liquidity in key sectors, as well as ease taxes By SALIL PANCHAL **EXPORTS** \$5 TRILLION

inance Minister Nirmala Sitharaman faces the most challenging period of her tenure as she prepares to present the Union Budget on February 1. The economy is in the doldrums with the pace of growth slowing at a worrisome pace. According to data released by the Ministry of Statistics and Programme Implementation in January, the economy is forecast to grow at 5 percent for the current financial year, the slowest in 11 years. Labour participation rate is at an all-time low of 42.4 percent as of November 2019 and credit growth from banks has more than halved in 2019 compared to a year earlier.

The government is focusing on structural reforms to stem the rot, but those, at best, will boost economic competitiveness in the coming years. There appears to be no immediate remedy.

Sitharaman thought she had found her mojo to kick-start economic activity last September when she slashed corporate tax rate from 30 percent to 22 percent for local companies. Corporate India and investors lauded the move, resulting in a 5 percent surge in the Sensex index that day. Four months down the line, the cut appears to have failed to move the needle although it was a positive structural move.

The finance minister also announced that there would be no surcharge on capital gains and no tax on buybacks. But this meant a blow of ₹1.45 lakh crore to the government's tax collections annually, thereby putting more pressure on fiscal deficit. There is also a strong possibility that India could miss its disinvestment target of ₹1.05 lakh crore, having clocked just ₹17,364 crore since April 2019. Missing the target will mean the fiscal deficit will widen further.

Economists say the government's reforms, by their very nature, are anti-growth, at least in the short term. Most of them have come at a time when non-banking financial



Easing FDI

Easing foreign direct investment (FDI) in the insurance sector is likely to be discussed. This is one of the few sectorsbesides telecom and media—which remains restricted to foreign investment. The FDI limit for foreign investment into an insurance company is 49 percent, through a joint venture with management control resting with the Indian partner. There is a possibility that this investment limit will be raised to 74 percent in the Budget. The Life Insurance Council estimates

that India could attract \$10 billion in investment if FDI norms were eased further. Corporates say Indian control can still be achieved by the government by ensuring key managerial persons and majority of the board members are Indians.

Many of these measures are low-hanging fruit that the government could use to improve the investment climate. But if India has to be on track to achieve a \$5 trillion target by 2025, more structural reforms need to fall into place.

companies (NBFC) are getting choked with inadequate access to market liquidity in the backdrop of infrastructure lending giant IL&FS's collapse. This lowered the ability of NBFCs to provide loans to customers in the auto and real estate sectors—both critical to economic activity—and impacted sales for both. The task ahead is huge, but not unmanageable, according to experts.

REVVING THE CREDIT CYCLE

"One of the challenges that the finance minister has is to revive the credit cycle. The IL&FS default and issues at DHFL have led to a situation where confidence of market participants has significantly been impacted. The short-term credit markets and commercial papers remain frozen leading to most NBFCs having to contract their balance sheets," says insurance giant

Allianz's Asia CEO and CIO Ritu Arora, who is based in Singapore.

As credit creation gets impacted, so does growth. "The government needs to introduce sentiment-boosting measures to reinstate confidence within NBFCs. Quick reviews of the capital position of NBFCs by the Reserve Bank of India (RBI) could be one important measure," adds Arora.

Though Sitharaman and the government have been proactive in announcing reforms, including the Real Estate (Regulation and Development) Act, Insolvency and Bankruptcy Code and the Goods & Services Tax (GST), the timing has been wrong. "Reforms carry a friction cost and businesses need to deal with them, particularly GST," says Nitin Jain, CEO of Edelweiss Global Investment Advisory. These reforms were rolled out when monetary policy and market liquidity were relatively tight. "This had increased friction. Growth has been badly impacted," adds Jain.

Monetary policy has now eased, interest rates are low, but the transmission rates continue to be weak. This means while the RBI lowered its benchmark repo rates—by 135 basis points between February and October—the lending rate for fresh loans has fallen by only 44 percent, according to RBI's latest data.

The hope was that consumer demand and spending would pick up in the five-month-long festive season which ended in December. Sales of cars picked up by about 5-7 percent during this time, but tapered off soon. Passenger car sales fell by 17.9 percent year-on-year between April and November.

The need for a fiscal stimulus for the real estate and auto sectors is real, which Sitharaman is likely to endorse in the Budget.

BANKING ON REAL ESTATE

The illness plaguing NBFCs has spread to the real estate sector, which contributes around 8 percent to the GDP. Unless volumes and pricing for these lenders improve, a lot more NBFCs could be in deeper trouble. "The government needs to create positive sentiment in the real estate, farming and MSME lending segments. While some steps have been taken, more is possible," says Edelweiss's Jain.

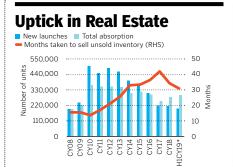
There are signs of an uptick in sales for real estate across sectors. Data from the top eight cities in India reveals that unsold inventory has fallen from 802,535 units in 2018 to 758,756 units in 2019 (see box). Demand has risen to 292,519 units from 281,308 units in the same period.

Experts anticipate more sops to revive the sector. The hope is that there is an increase in the deduction of interest of housing loan for selfoccupied property. "Currently there is a deduction of only ₹2 lakh on interest paid on a housing loan under Section 24. A hike in this limit will spur housing demand," says Sharad Mittal, CEO of Motilal Oswal Real Estate Funds. [The deduction limit is ₹3.5 lakh on an affordable housing loan for a first-time home buyer.]

To ease liquidity in the sector, Mittal says there needs to be a more direct approach to resolve the crisis. "The government should look at a one-time restricting of loans by the NBFCs. This will allow them to surpass the current slump in real estate and focus on acquiring assets rather than focusing on generating liquidity," explains Mittal.

MORE TAX RELIEF

In each budget, every incumbent finance minister is judged depending on the relief provided to personal taxes. For a government that has unabashedly declared itself as propoor, there could be more relief for individual taxpayers. Economists and corporate heads Forbes India spoke to are confident that Sitharaman might provide relief for the lowest bracket (starting ₹2.5 lakh income) of the individual taxpayer.



SOURCE Edelweiss Securities, Prop Equity; *Trailing 12 months

It is understood that the committee to frame the new Direct Taxes Code (DTC) has suggested a rehaul of the personal income tax slab rates with a rate of 5 percent for incomes of ₹2.5 lakh to ₹5 lakh, 10 percent for those earning between ₹5 lakh and ₹10 lakh, 20 percent for ₹10 lakh to ₹20 lakh, 30 percent from ₹20 lakh to ₹2 crore and 35 percent for those with incomes above ₹2 crore.

Currently individuals under the age of 60 and with income between ₹5 lakh and ₹10 lakh are taxed at ₹12,400 plus 20 percent tax while those earning above ₹10 lakh are taxed ₹112,500 plus 30 percent tax.

"It will be interesting to see if these recommendations are implemented," says Hitesh Gajaria, partner and head (tax) at KPMG in India. "The 2019 surcharge rate placed taxes for the super-high incomes earned at over 42 percent, but if the basic threshold level and large portion of middle class are given relief in the form of enlarged slabs, it might help by putting more cash in their hands. This might

"WHAT MIGHT GET TRACTION THIS YEAR IS THE ASSET MONETISATION PROGRAMME, WHICH HAD BEEN ON THE BACK

> ABHEEK BARUA, chief economist. **HDFC Bank**

boost individual savings or spending, both of which, in appropriate doses, are salutary to our economy."

A couple of other areas experts believe Sitharaman should look at are the dividend distribution tax (DDT) and long-term capital gains tax.

Dividends below a total of ₹10 lakh in a financial year are exempted from income tax for all shareholders. But they are taxed for shareholders who reside overseas. The committee to frame the new DTC is believed to have suggested a change in the way dividends are treated for tax purposes and a comprehensive package of measures has been recommended. "If corporate tax reforms in the form of abolishing DDT and reverting to the classical system of dividends taxation are introduced, they will give a hugely positive signal to overseas investors," says Gajaria.

FISCAL DEFICIT WOES

Last year, Sitharaman had set a fiscal deficit target of 3.3 percent for the current financial year. HDFC Bank's chief economist Abheek Barua says it is likely India will miss the deficit target and it would, in fact, widen. The finance minister met economists from most top banks and financial services firms in December to understand and discuss the pain points in India's economy.

The economists had told her that it was inevitable that a fiscal slippage would take place and the government would need to consider increasing spending to revive growth. Barua, who was part of the meeting, forecasts India's fiscal deficit target to touch around 3.8 percent this fiscal. "We might have some kind of explanation for the slippage and then we will attempt to go back to the consolidation path," says Barua. "If we have to look at things cynically, it will be a Budget which will tend to rankle and we will have to wait for the year to pan out. What might get traction this year is the asset monetisation programme, which had been on the back burner." **F**



Forbes

GET INFLUENCE. GET RICH. GET EVEN.

Slow Burn

Growth numbers are likely to stabilise in the next few quarters, but there are no signs of a sharp uptick yet

By SAMAR SRIVASTAVA

he retail sales numbers for December pleasantly surprised Maruti Suzuki. At 212,000 units, it was the highest monthly number in the company's history. "I can't comment on future months, but for December, at least, it indicated an improvement in demand," says RC Bhargava, chairman of the country's largest carmaker. He also pointed to swift sales in

October when customers prefer to buy because of the festive season.

In fact, there are indications that Maruti was caught off guard with the increase in demand.
Inventory levels at dealers are down to nine days from the usual 30.
"We'll have to restock aggressively in January," says Bhargava, referring to what economists term as the bullwhip effect.

While it is still early days,
Maruti's numbers, which usually
act as a bellwether for the auto
sector, could point to a stabilising of
consumer demand. Slowing growth
numbers and consumer loans that
were harder to come by had dented
sales for 11 months in a row in
2019. The increase, which may be
the result of pent-up demand and
an anticipated rise in prices due



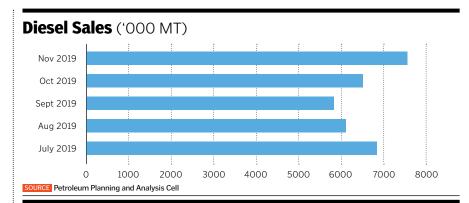
æ

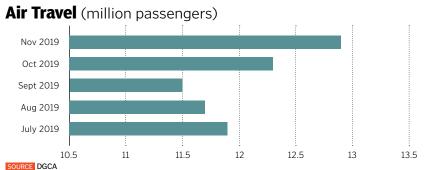
to the implementation of stricter pollution norms, point to a consumer willing to put money on the table.

As GDP growth slowed in each of the last five quarters, the questions most asked were: 'Have we reached the bottom and how fast can growth return?' While the longer-term verdict on whether growth numbers are structurally headed lower is not out, numbers from Maruti and commentary from consumer goods companies point to initial signs of the decline in growth numbers stabilising. Data from disparate sources, the Index of Industrial Production, diesel sales, number of air passengers, electricity consumption and new project announcements all indicate that the worst may be behind us.

But there are few signs of India







Consumer Loans Rising

Credit card debt

Up 24.1 percent in the year to November 2019

Personal Loans

Up 21.3 percent in the year to November 2019

SOURCE RBI

reaching the 7.3 percent growth rates it registered in the decade to 2020. The key reason: For the last seven years, the economy has been held up mainly on account of consumption spending and government expenditure. Net exports and investments have been comatose. In the absence of these, the chances of higher growth numbers are low. On January 7, the government-released figure for anticipated 2019-20 growth stood at 5 percent, up from 4.5 percent in the second quarter of the current

Capacity Utilisation (%)

SOURCE RBI	
Q1FY20	73.6
Q4FY19	75.1
Q3FY19	75.9
Q2FY19	74.8
Q1FY19	73.8

fiscal. "We have had a standard economic slowdown and now we will have a standard economic upturn," says Saurabh Mukherjea, founder of Marcellus Investment Managers.

A CONSUMER-LED SLOWDOWN

Since 2011-12, growth has been overly reliant on consumption spending. In 2017-18, the last year for which statistics are available, it

THE WORST MAY BE BEHIND US, BUT THERE ARE FEW SIGNS OF INDIA REACHING THE 7.3% GROWTH RATES IT REGISTERED IN THE DECADE TO 2020

PRE-BUDGET SPECIAL

GST Collections (₹ cr)

SOURCE PIB

Aug 2019	98,203
Sept 2019	91,916
Oct 2019	95,380
Nov 2019	103,491
Dec 2019	103,184

Project Annoucements (₹ tln)

	March 2019	June 2019	Sept 2019	Dec 2019
New ones	2.76	1.03	1.5	4.28
Those completed	2.61	0.81	0.79	1.37
Revived projects	0.13	0.29	0.51	0.8

SOURCE CMIE

contributed to 59 percent of growth, according to the ministry of statistics and programme implementation. A key component of this growth was the reliance on debt to power spending on everyday gadgets, including mobile phones and washing machines, and high-ticket items like cars and foreign holidays. In the four years since November 2015, the amount of personal loans increased

to ₹675,823 crore, with an annual

rate of growth of 26.2 percent.

The increase in leverage also coincided with a collapse in inflation, which led to nominal growth numbers slowing down. Companies lost pricing power, debt took longer to pay off and salary increases stalled. Still, a large number of shadow banks and fintech companies continued to push loan products in large part due to their cost of capital falling. (Several government banks with high levels of bad loans and low capital adequacy numbers were prohibited from making new loans.) These were in the garb of zero percent finance schemes as well as short-term payday loans.

The collapse of IL&FS in September 2018 and the freeze in the credit market put an end to the consumer lending boom. Several non-banking financial companies (NBFC) saw their business shrink and consumers as well as small businesses found it impossible to raise money. Sales of cars and two-wheelers went down, dealers of consumer goods were unable to raise working capital loans and real estate companies defaulted on their debt. Growth in bank credit also slowed with an increase of 8.6 percent in November 2019, the lowest in 11 years.

While final numbers for 2018-19 are not yet out, anecdotal evidence suggests that government expenditure in the run-up to the May 2019 elections also slowed. In 2017-18, it accounted for 11.1 percent of GDP, and along with consumption, was the main driver of growth. As sales slid, companies moved to realign production levels to lower demand and orders to their suppliers fell. At 4.5 percent in the second quarter of fiscal 2020, India registered its lowest growth in 26 quarters. In the next few quarters, help could come from an unexpected source—the rural economy.



"WE HAVE HAD A STANDARD ECONOMIC SLOWDOWN AND NOW WE WILL HAVE A STANDARD ECONOMIC

SAURABH MUKHERJEA, founder. **Marcellus Investment Managers**

REVIVING GROWTH

The last five years have been tough for rural India. Two important drivers-farming and construction employment—had their terms of trade reversed. As global food prices rose slowly, growth in minimum support prices offered by the government to farmers also reduced. At the same time, the government refused to pass on the benefits of falling oil prices. As a result, farm input prices remained high. In addition, 2014 and 2015 were drought years. Wages for the rural employment guarantee scheme indexed to inflation barely rose.

Since the start of 2019, food inflation has inched upwards with a sharp pick-up since August led by the rise in onion prices. It rose from 3.2 percent to 5.5 percent in the three months to November. At 600.32 lakh hectares, up by 6.8 percent from last season, according to the department of agriculture, the increase in prices has promoted strong sowing numbers for the rabi (winter) crop. A good harvest and rising prices would mean more income for farmers. Still, as former chief statistician Pronab Sen cautions, "The increased sowing could lead to a crash in crop prices. We will have to wait till March to see whether this happens."

The second driver for growth is the increased flow of credit to consumers. Government banks disbursed loans worth ₹252,000 crore in October and NBFCs have started accessing the credit market and growing their loan book. Credit to small enterprises has started flowing again, albeit at interest rates north of 10 percent. "There was a lack of supply led by tight credit

Mixed Signals

- Reviving growth dependent on rural spending and increased flow of credit
- Corporate India shows no signs of investing as capacity utilisation numbers have moved down in the last four quarters
- Government expenditure contributes 11 percent to growth in 2017-18, a multi-year high
- Food inflation could end the rate cut cycle and leave fiscal policy as the only growth lever

standards and abundant liquidity," according to a note by brokerage Motilal Oswal. It also points out that a broad-based revival in credit growth may take time as monetary policy has played its role. For now, it is hard to estimate how these can add to growth, but the net result of increased rural demand and more credit flow means growth should stop sliding.

Outside of rural spending and credit growth, there is also the fact that the base effect will kick in from the second half of fiscal 2021, which means growth numbers could start looking better despite relatively slow growth. "The macro data still points to continued weakness and so we do not expect a strong revival," says Venugopal Garre, director at Bernstein, a brokerage. Most brokerages have forecast growth at 5.1-5.5 percent this fiscal with a likely revision once third quarter numbers are out. In the last four quarters, capacity utilisation numbers have trended downwards to 73.6 percent, leaving little incentive for companies to start investing again. Gross fixed capital formation has steadily fallen to 28.3 percent in 2018 from 34.5 percent in 2007.

Corporate India has used this period to reduce debt, lower promoter pledges on shares and get rid of businesses that are not part of their core. There has also been a resolution of the Essar bankruptcy case defining the rights of operational creditors. This should quicken the pace of



At 212,000 units, the retail sales numbers for December pleasantly surprised Maruti Suzuki

decisions under the Insolvency and Bankruptcy Code. One area that could present a risk is loans given to the real estate sector, which stand at ₹500,000 crore, according to data compiled by consultancy CRE Matrix. Slow sales loans to this sector could go bad if nominal growth doesn't



"I CAN'T COMMENT ON FUTURE MONTHS, BUT DECEMBER, AT

RC BHARGAVA, chairman, Maruti Suzuki

pick up. In a recent paper, former chief economic advisor Arvind Subramanian said this could lead to a second wave of bad loans for banks.

Besides, over the last five years, merchandise exports have been stagnant at an average of \$310 billion a year. This has been partly due to petroleum products and gems and jewellery, which contribute to about a third of exports. As global oil prices fell, the value of India's petroleum exports too slid. Since then the number (for petroleum products and gems and jewellery) has fallen to 26 percent. There is now evidence that the government wants to provide business-specific incentives to get exports going. "Since value addition in textiles is low, we have argued that electricity and logistics costs should be lowered and tax refunds need to be made quickly to let us compete with Bangladesh and Vietnam," says Mohit Jain, vice chairman of Indo Count, a textile exporter. He says the government has heard them out. Last year saw auto components, mobiles, textiles and specialty chemicals register strong numbers, according to the Directorate General of Foreign Trade. If this continues, exports could turn out to be a small-yet-significant lever of incremental growth.



Inside India's Health Care Fix

Fifteen months after Prime Minister Narendra Modi launched the Ayushman Bharat health scheme, stakeholders have mixed views. Is it too ambitious to succeed?

BV VARSHA MEGHANI

n a humid afternoon last summer, Tasneem Sayed made her way to a student's shanty in Kishanganj in northern Bihar, bordering West Bengal. The 26-year-old taught English and mathematics to Class 5 students while pursuing her BA alongside. "I returned home after tuitions that day and suddenly got high fever. I

was totally fine until then," she says, shrugging her slender shoulders.

When the fever didn't subside, her father, a farmer, took her to the local hospital where she was diagnosed with jaundice. A sonography further revealed that she had a tumour, the size of two tennis balls, in her liver. "We were devastated when the doctors told us it was cancerous,"

says Tasneem, whose identity has been changed on request.

On the doctor's suggestion, Tasneem travelled to Mumbai for treatment at the Tata Memorial Hospital. Sitting on her bed in the female ward, arms wrapped around her bent legs, Tasneem wears a bubble-gum pink dupatta over her white hospital overalls. Her face

30

is hollow-eyed and pale, but her high cheek bones and sharp nose cut a striking figure. Her surgery was successfully completed a few days ago, says her brother, Amir, who sits by her side.

"We received help through Ayushman," he says measuredly, referring to Prime Minister Narenda Modi's massive government-funded programme that promises health insurance to half a billion people. Dubbed 'Modicare', the scheme is built on two pillars: Establishing 150,000 primary health care centres to focus on prevention and early detection of diseases; and providing a cashless cover of ₹5 lakh per family per year for secondary and tertiary care hospitalisation through the Pradhan Mantri Jan Arogya Yojana or PMJAY. Around 10 crore families or 50 crore people who make up the bottom 40 percent of India's population as per the socioeconomic caste census data (SECC 2011) are eligible.

Since its launch in September 2018, six months ahead of the general elections, 71.69 lakh people have benefited from Ayushman Bharat-PMJAY, resulting in cost savings of ₹10,312 crore for them. Claims totalling ₹8,872.5 crore have been approved as of December 2019. "We have gained tremendous momentum

"I AM NOT SUGGESTING THAT THE SCHEME NEEDS MORE MONEY... I AM SAYING THE INSURANCE MODEL IS INHERENTLY A COST ESCALATING ONE."

INDRANIL MUKHOPADHYAY, Professor, OP Jindal University

in the first year," says Dr Indu Bhushan, CEO of AB-PMJAY, in an interview at his New Delhi office.

ndia's public health record is abysmal. The government spends just about 1 percent of GDP on health care—one of the lowest levels in the world. The US, UK and China spend 8.5 percent, 7.9 percent and 3.2 percent respectively. Neighbouring countries Bhutan and Sri Lanka also score better, spending 2.5 percent and 1.6 percent, according to the World Health Organization.

Poor public spending on health has meant that access to free, quality health care at government-run hospitals is sparse. In search of better care, poor people wager their life's savings, borrow money from informal lenders and sell assets to pay the bills. Out-of-pocket spending, which accounts for 65 percent of an individual's health care expenditure in India, pushes 3 to 5 percent of the population into poverty, says the

Public Health Foundation of India.

So to provide publicly funded health care to India's poorest is a "game changer", says Dr Devi Shetty, founder and chairman, Narayana Hrudayalaya Hospitals.

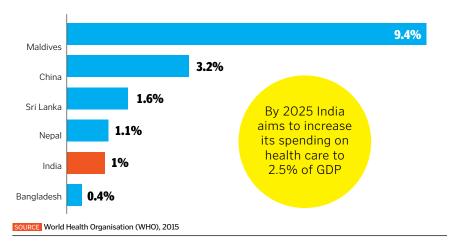
The premium for providing a ₹5 lakh annual medical cover to each family comes to around ₹1,100 and will cost around ₹12,000 crore in central and state government funds; costs are to be borne by the Centre and states in a 60:40 ratio. When the late Arun Jaitley, as finance minister, had announced the scheme in his 2018 Budget speech, he called it the "world's largest governmentfunded health care programme".

But the challenge lies in its implementation.

AB-PMJAY is an expansion of the central government's Rashtriya Swasthya Bima Yojana (RSBY) which has an annual medical coverage of ₹30,000, and numerous other state government-funded health insurance schemes that have been

India's public health spending lags most of its neighbours

Government health expenditure as a percentage of GDP



Out-of-Pocket Expenditure (OOPE) as a percentage of health expenditure

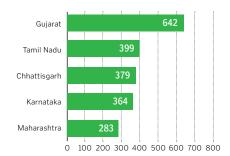




The Tata Memorial Hospital in Mumbai charges 30-40 percent less for medical treatments compared to for-profit private hospitals

running for several years. But these have had a patchy record. Several studies have reported no reduction in out-of-pocket expenses of those insured. One such study looking at hospitalisation cases based on

Top 5 states by number of AB-PMJAY claims (crore)



SOURCE Government of India in Lok Sabha, September 2019

National Sample Survey Office data found that for every 100 cases under various state government-funded health insurance schemes, only three got cashless treatment. This could be due to poor monitoring and improper regulatory regimes, write the authors.

"The government, health care providers and patients will have to go through teething troubles for the next year or so before things start running smoothly," predicts Shetty, who has allocated 5 to 10 percent of beds at some Narayana Hrudayalaya hospitals for Ayushman Bharat patients.

t Mumbai's Tata Memorial Hospital, Amir pulls out a laminated, pink card from his shirt pocket. It's Tasneem's AB-PMJAY card, complete with a photo and fine print on the reverse detailing the services that can be availed of. "The government authorities came home to give this to us.... just months before I fell ill," says Tasneem, smiling feebly.

"I didn't know what it was at the time, but when we decided to come to Mumbai, I remembered I had read something about free medical treatment at the back of the card, so I got it along," she says. The card entitles Tasneem to care at any private or public sector hospital empanelled under the scheme. Pre-admission tests as well as all expenses during the hospital stay, including tests, drugs, consumables, post-operative care, and even transportation and food for the patient, are supposed to be covered under AB-PMJAY.

So far, the government claims to have issued 11.78 crore cards.

Unlike RSBY, which required individuals to enrol themselves into the scheme at a particular time of the year, AB-PMJAY is an entitlement-based scheme. Cards have either been sent to eligible individuals based on the SECC 2011 data or they can approach an 'Arogya mitra' stationed at every empanelled hospital to get a card made on the spot. "This is a considerable difference between the two schemes and one that is less exclusionary for a patient seeking care," says Dr Indranil Mukhopadhyay, health economist and associate professor at OP Jindal University, in Haryana.

Another difference between the two schemes is that states are given the flexibility to implement AB-PMJAY in the way they like. They can opt for an insurance-based model, deploying an insurance company to handle the claims or they can go with a trust model where the state government handles the claims. Of the 33 states and Union Territories that have taken up the scheme—Delhi, Telangana, Odisha and West Bengal are not yet on board—a handful have opted for a mixed model, combining the best of the insurance and trust models. Some states like Karnataka and Kerala, which had seven and three state health insurance schemes in place respectively, are in the process of subsuming them under AB-PMJAY, says Bhushan. Others like Maharashtra, which runs the Mahatma Jyotiba Phule Jan Arogya Yojana (MPJAY) health insurance scheme (previously known as the Rajiv Gandhi Jeevandayee Arogya Yojana), is implementing AB-PMJAY as a parallel scheme. The former has a medical cover of ₹1.5 lakh. Once that amount is used, then only can patients dip into the additional ₹5 lakh offered under AB-PMJAY.

In Bihar, Tasneem and Amir's home state, no state health insurance scheme existed prior to AB-PMJAY.

NILOTPAL BARUAH



"THE GOVERNMENT,
HEALTH CARE PROVIDERS
AND PATIENTS WILL
HAVE TO GO THROUGH
TEETHING TROUBLES FOR
THE NEXT YEAR OR SO
BEFORE THINGS START
RUNNING SMOOTHLY."

DR DEVI SHETTY, Founder and chairman, Narayana Hrudayalaya Hospitals

• •

"We are lucky," says 30-year-old Amir. He left Kishanganj a few years ago to settle in Mumbai where he teaches Arabic at a madrassa. It pays him ₹6,000 a month. He rents a room in a chawl in Malad and gives tuitions to supplement his income. "I end up earning a total of ₹10,000 to ₹15,000 a month. Without this," he says, holding up the pink card, "we would not have come so far." Tasneem, still hunched over her bed, nods in agreement.

n 2018, the government allocated ₹1,200 crore to the primary health care pillar of Ayushman Bharat and ₹2,000 crore to insurance pillar, PMJAY. The following year, the latter was ramped up to ₹6,400 crore.

"This is far below what is needed to deliver what the government claims," says Mukhopadhyay. If, he reasons, you have 2.7 crore hospitalisation cases every year (5.4 hospitalisations per 100 people enrolled, assuming 50 crore people are covered)—in the first 12 months, 46.5 lakh patients received treatment under AB-PMJAY, but as awareness picks up, more patients will follow—and ₹20,000 is the average package rate, it works out to a total of ₹54,000 crore, at current prices. If 40 percent of the cost is borne by the states, that leaves ₹32.000 crore for the Centre to foot. "The entire budget of the Ministry of Health and Family Welfare is ₹62,000 crore. So you're talking about half of that just for PMJAY," he says. "And mind you, ₹20,000 is far below the average package rate, so this is a base level estimate."

"I am not suggesting that the scheme needs more money... I am saying the insurance model is inherently a cost escalating one," says the professor. RSBY, with its ₹30,000 coverage, for instance, had a premium ranging from ₹350 to ₹900, with the amount increasing every year. With PMJAY too, as the number of claims increase, premium prices—currently at around ₹1,100—will shoot up. Reimbursements demanded by hospitals will consequently increase.

However, Bhushan bets that as the number of claims increases, the marginal costing of hospitals will decrease. "Eventually we want hospitals to move to a high volume, low margin model," he says.

Hospital executives tend to disagree. "You can't run hospitals like factories," says the head of one leading private hospital chain on the condition of anonymity. "Doctors and nurses are human and can only work so many hours in a day. The whole 'economies of scale' argument just doesn't work in the health care sector."

AB-PMJAY currently covers 1,393 medical procedures, and the package rates for them are between 40 percent and 80 percent lower than what private players charge. Months after the scheme was launched, the Association of Healthcare Providers, a

Prices have since been revised; the government brought on board the Post Graduate Institute of Medical Education and Research, Chandigarh to come up with more suitable rates. But private players are still unhappy.

o combat Tasneem's liver cancer, doctors at the Tata Memorial Hospital first gave her transarterial chemoembolisation (TACE) injections thrice, at weekly intervals. The injections helped destroy some of the cancer cells and also reduced the supply of blood to the tumour, starving it of the nutrients it needs to grow. "The injections helped shrink the tumour," says Amir.

AB-PMJAY covered the entire

"IF THE AVERAGE INDIAN CAN SPEND ₹500 ON A DIGITAL PLAN FOR THEIR PHONES, AN AMOUNT SIMILAR TO IT [TOWARDS INSURANCE] IS WELL WORTH IT FOR GOOD HEALTH."

SUNEETA REDDY, Managing director, Apollo Hospitals Group

₹1 lakh cost of the treatment. "I didn't have to pay anything," he says. He just had to show his sister's card and medical file at the AB-PMJAY counter at the hospital; the authorities keyed the data into their computers and gave the Sayeds the benefit of cashless treatment.

Often, surgery can be avoided after TACE injections, but in Tasneem's case, it was necessary. She was successfully operated upon, but this time the ₹1 lakh-plus bill that was clocked up could not be covered by AB-PMJAY because the package amount was exhausted. "I showed

them her card at the counter after the surgery, they checked their computer and said I will only get ₹10,000 now," says Amir. Tasneem winces in pain as he speaks, pressing her forearm to her upper-right abdomen, just under her ribs. "I feel a shooting pain on and off," she says softly.

Amir managed to get the balance amount from a trust that specifically helps patients from Bihar, but the expenses are spiralling. "The hospital stay, the tests, drugs, transportation, it's all adding up," says Amir. "They say it's a ₹5 lakh cover, but you don't get that amount. I understand they have their limits per treatment, but her treatment is not yet done."

profit margins of listed hospital chains are 15 percent to 20 percent at best. If the discount between our prices [for medical treatments] and Ayushman Bharat's listed prices is more than 15 percent, we'll go at a loss," says the chairman of a top hospital chain that has chosen not to be part of AB-PMJAY.

He breaks down the economics of a hospital: Say the cost of a surgical procedure is ₹100. Doctor fees, direct consumables and medicines cost about ₹50 on average. Thereafter around ₹35 gets consumed by other costs such as staff salaries, administration costs, electricity, power, stationary etc. That leaves an operating profit of ₹15.

"Your interest and loan repayments are made from the ₹15; what's left thereafter is your cash flow. That is the construct of a hospital business," he says dryly.

"Now if the market price is ₹100, the Ayushman Bharat price is close to ₹30. But let's say, it's ₹50.

What does it entail?

₹5 lakh

medical cover per family per year

3 days of pre- and 15 days of posthospitalisation expenses are included

Covers 1393 secondary and tertiary care procedures

Who is eligible?

10.74 crore families

or roughly **50 crore** people who make up the bottom **40 percent** of population as per SECC 2011 data

No cap on family size or age

How is it funded?

₹12,000 crore

Annual estimated cost basis a premium of $\ensuremath{?}1100$

Cost to be shared by the Centre and states in a 60:40 ratio

Successes so far

71.7 lakh patients treated



Treatments worth ₹10,312 crore provided



19,985

hospitals empanneled of which more than half are private



33 states and Union Territories implementing the scheme Delhi, Odisha, Telangana and West Bengal are not on board



Claims totalling ₹8872.5 crore approved

SOURCE AB-PMJAY data for 15 months ended Dec 2019

How can we do this? It's totally unviable. If anyone can do this, they should have 50 percent margins."

Forbes India interviewed more than 20 C-suite executives, doctors and technicians working at private hospitals in metros and smaller towns, most of whom spoke off the record. They were unanimous in their view: AB-PMJAY is noble in intent and they'd like to play a role is offering quality health care to the less privileged, but at the present package rates, it is unfeasible.

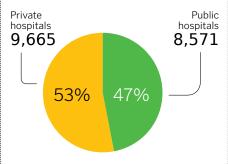
So which hospitals are carrying out procedures under AB-PMJAY? According to official data, 53 percent of the 46.5 lakh treatments completed as of September 2019 have been carried out by private players. Since most of the large private hospitals have stayed away from the schemenotable exceptions are Apollo which has allocated about 5 percent of its bed capacity in tier 2 and 3 towns for AB-PMJAY patients and Narayana Hruduyalaya—what's left are smaller hospitals and nursing homes. According to AB-PMJAY's 2018-19 annual report, of the 53 percent treatments carried out by private players, 71 percent were done at hospitals with less than 25 beds.

"Packages are unrealistic," says Dr Shailesh Shrikhande, head, division of cancer surgery and deputy director, Tata Memorial Hospital. "We are in a privileged position because our costs are anyway 30 to 40 percent less than what a [forprofit] private hospital would charge because of bulk buying of drugs and equipment. We also receive a subsidy from the Department of Atomic Energy [because of the radiation technology used in treatment]," he explains. Tata Memorial treated 1,183 patients under the AB-PMJAY scheme between January and November 2019; 48 percent of those claims have been settled.

Take, for instance, a surgery to treat pancreatic cancer or Whipples as it's known in medical parlance. It

Supply-side statistics

18,236 hospitals were empanelled in the first 12 months of AB-PMJAY



71 percent of the private hospitals that have been empanelled are nursing homes with less than 25 beds

SOURCE AB-PMJAY Annual Report 2018-19

is widely regarded as one of the most complex operations, says Shrikhande, referring to his area of specialisation. Without complications, such a surgery costs around ₹1-1.5 lakh at the Tata Memorial Hospital. A forprofit private hospital would charge between ₹3 lakh and ₹15 lakh for the same procedure. Government hospital rates tend to be about six times lower,



"RATES CAN'T BE
THE SAME FOR AN
ANGIOPLASTY DONE IN
A TIER 2 CITY HOSPITAL
AND ONE DONE AT
AIIMS OR ESCORTS."

DR ASHOK SETH, Chairman, Fortis Escorts Heart Institute according to a recent pan-India study by the Union Ministry of Statistics and Programme Implementation.

Ayushman Bharat offers a measly ₹25,000 package. "This is a clear reflection that detailed homework has really not been done," says Shrikhande, adding that the Whipples package offered by the Maharashtra government-funded MPJAY is much higher at ₹75,000. The latter, he says, is "not bad" as one can cross-subsidise the balance amount from full-fee paying patients. However, patients might still have to resort to catastrophic out-of-pocket expenditure, he cautions.

Add complications into the mix, which happen in 30 percent of the cases, he estimates, and the economics just don't work.

"You can't expect Shiv Sagar rates at JW Marriott," says one private hospital executive.

"I've been told by officials that they don't really want hospitals from metros to come on board the scheme," says another head of a group of hospitals. "They're looking at hospitals in tier 2 and 3 cities. Even then, I don't think the math works out."

"It's a myth that these rates are viable in tier 2 and 3 city hospitals," says a doctor-cum-promoter of a hospital chain in interior Maharashtra. "Staff costs might be lower here, but it's still loss-making for us to treat patients at these rates."

To incentivise large hospitals to set up shop in smaller towns, AB-PMJAY is offering land at subsidised rates and also "viability gap funding" to support infrastructure building. "We are considering such an option... the success of the scheme relies on participation from the private sector," says Dr Ashok Seth, chairman of Fortis Escorts Heart Institute.

nee surgeries grew in popularity when the procedure was included in the Gujarat government's Mukhyamantri Amrutum health

PRE-BUDGET SPECIAL

insurance scheme launched in 2012. "Private players were cooking up patients, doing unnecessary surgeries just to claim the reimbursement," recounts the head of a Gujaratbased chain of hospitals on the condition of anonymity.

"One day we got an X-ray with the patient's name scratched out for checking. Our doctors examined it and said no surgery was required," he recalls. "We were later told that a knee surgery had already been performed on that patient... the government authorities debarred that hospital." Herein lies the flip side of increasing package rates too much and too fast private players are tempted to profit from the scheme. The AB-PMJAY authorities, he says, are equally vigilant. "They have spent lots of time with our team here to understand the challenges in implementation." Meanwhile, artificial intelligence and machine learning are being used to catch abnormalities in patient data and take corrective action if needed, says AB-PMJAY's Bhushan.

"It is, of course, a drain on the exchequer to keep increasing the package rates. That's understandable," says Abhay Soi, chairman of Radiant Life Care, which acquired Max Healthcare in December 2018.

Tiered pricing for different hospitals based on geography, hospital accreditation and patient outcomes is one solution. "Rates can't be the same for an angioplasty done in a tier 2 city hospital and one done at AIIMS or Escorts," explains Seth.

Co-payment could be considered where patients contribute say ₹10 to the scheme every month, says Shrikhande of Tata Memorial Hospital. "This will increase the pool of money available." In fact, the next stage of AB-PMJAY, says Apollo Hospitals' Suneeta Reddy, must include India's middle class. "If the average Indian can spend ₹500 on a digital plan for their phones, an amount similar to it is well worth it for good health," she says.

"The entire model needs to be re-thought," says Soi. "If the government can reverse auction land in metros for volunteering maximum beds to Ayushman Bharat, large FDI can be attracted for creating infrastructure. We can then treat Ayushman Bharat patients as well as other [full-fee- paying] patients. That is a viable model."

MADHU KAPPARATH



"IT IS, OF COURSE,
A DRAIN ON THE
EXCHEQUER TO KEEP
INCREASING THE
PACKAGE RATES. THE
ENTIRE MODEL NEEDS
TO BE RE-THOUGHT."

ABHAY SOI, Chairman, Max Health Care and Radiant Life Care

Finally, strengthening primary care is imperative. The 150,000 "health and wellness centres" that form the first pillar of Ayushman Bharat are an "investment for the future", says Mukhopadhyay of OP Jindal University. With the focus on prevention and early detection of diseases, especially noncommunicable diseases (NCDs), these centres in the long run will protect people from falling severely ill and reduce the burden on secondary and tertiary care hospitals. According

to official data, almost 20,000 such centres were fully functioning as of July 2019. "Much more resources are needed [₹1,200 crore has been allocated thus far] to fully equip these centres with the right infrastructure and manpower. The insurance scheme with its escalating costs diverts funds away from this," adds Mukhopadhyay.

mir hops off the train at Mumbai's Parel station with a heavy knapsack slung on one shoulder, and weaves his way to the Tata Memorial Hospital. He has to take an appointment for his sister's next visit with the doctor. She was discharged a week earlier. Dressed in a white kurta and a skull cap, Amir completed his morning classes at the madrassa and got here. "Can't it be done over the phone?" Forbes India asks. "It can," he says haltingly, "but it's much quicker if you come here and do it. Takes just 10 minutes." But he quickly adds, "Of course it's troublesome coming all the way from Malad, but it's for my sister."

As he waits in queue for his turn, he swings his knapsack towards his chest and pulls out Tasneem's file. He points to an ID number on the front. "They need this to give me the appointment," he explains. Soon enough Tasneem will have to start radiation and chemotherapy. Avushman Bharat will cover some of the cost, but not all of it. Amir opens the file and shows copies of the letters he has sent to different charitable organisations asking for monetary help. "Once she's done with all this, I'd like her to do a nursing course. And then get some practical training at a hospital. I want her to be independent," he says.

Can Ayushman Bharat truly reduce the burden of health care costs on poor families? "I had no hope that we would come even this far with Tasneem's treatment. But look where we are," says Amir. "We'll take one step at a time, Mashallah. Something will work out."

'The Private Sector Will Never Be Happy'

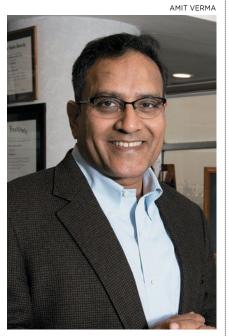
Dr Indu Bhushan, CEO, Ayushman Bharat, on why private players need to change their mentality, and making the scheme foolproof

Q Studies have shown that the Rashtriya Swasthya Bima Yojana (RSBY) didn't reduce patients' out-ofpocket expenditure (OOPE). How will Ayushman Bharat overcome that?

RSBY was a narrow scheme. It did not cover catastrophic illnesses that push people into poverty. Primary health care was also not covered under it. So the impact of OOPE may not have been noticed. But one also has to see that OOPE has other correlates, the largest being incomes. As your income increases, OOPE will also increase. In RSBY, we saw that OOPE increased because previously people were not going to hospitals. Once the patient went to hospital, he got a lot of treatment for free, but he had to pay for some, including transport, food, loss of wages etc. Usually with OOPE, it's like an inverted-U. When no health care services are available. OOPE is zero. But as health systems improve, OOPE first increases and then it comes down. So one has to see where you are catching the curve in terms of impact.

Q The package rates are a pain point for private players. How are you approaching the issue?

These prices are quite reasonable. They are based on rigorous studies and a wide range of consultations, including with the private sector. The private sector will never be happy because they want to take more and more. We are providing them with volume, and we keep saying we want the industry to move to a high volume and low margin approach, rather than low volume and high margins that they have right now. So it's a give



"WHEN NO HEALTH CARE SERVICES ARE AVAILABLE, OUT-OF-POCKET-EXPENDITURE (OOPE) IS ZERO. BUT AS HEALTH SYSTEMS IMPROVE, OOPE FIRST INCREASES AND THEN IT COMES DOWN."

and take... they have to change their mentality and whenever we find some of our prices are not right, we will keep modifying them. We've done the first round of modifications and believe they are fine. We also have some empirical evidence to support us because we have done close to 67 lakh treatments [as of early December 2019] and out of this, more than 50 percent are done by private players. If these rates were so unviable, how do you explain close to 40 lakh treatments by the private sector? There is some disconnect somewhere.

Q Providing a continuum of care between the primary 'health and wellness centres' and hospitals providing secondary and tertiary care is critical for the success of Ayushman Bharat.

Ayushman Bharat provides support for secondary and tertiary care, but we have to have a close link with the primary health care pillar under which 1.5 lakh health and wellness centres are being developed. A lot of the initial screening for diseases, including non-communicable ones, will take place there and those patients who are found to be positive will be sent for treatment. The treatment should be followed up at the centres. The whole circle of screening, ensuring preventive care, linking it with the treatment and then providing curative and rehabilitative support can be done at the community level by the primary health and wellness centres. That linkage is still missing and we need to work on that.

Q There have been instances of empanelled hospitals gaming the system. How do you prevent fraud and abuse?

We want to ensure that our checks and balances are so strong that no fraud takes place. And if it does, we should be able to detect it quickly and take action. We have de-empanelled a number of hospitals. We are in the process of finalising a vendor who can help us with big data analysis and artificial intelligence to spot potential fraud cases. We are also in the process of engaging medical audit agencies to carry out audits based on suspicious as well as random cases.

Roadblocks Ahead: Expect Delays

Land acquisition and lack of funding hold up work as government barely meets a quarter of its target under the Bharatmala project ahead of its 2022 deadline

By PRANIT SARDA

ike the economy, highway construction seems to have hit a slowdown. Halfway through the 2022 deadline of the government's ambitious Bharatamala Pariyojana, only 27 percent of project contracts have been awarded, according to credit rating agency ICRA.

Bharatmala is a central government scheme to build highways, cleared by the Union Cabinet on October 25, 2017. It aims to complete Phase I-24,800 km of fresh roads and 10.000 km of roads subsumed from the National Highways Development Project—by 2022, at a cost of ₹5.35 lakh crore. However, by September 2019 contracts for only 9,577 km of the 34,800 km had been awarded. Rajeshwar Burla, vice president, associate head-corporate ratings, ICRA, says, "Ideally, the government should have awarded everything by now because it takes at least 2 to 2.5 years to complete a road project."

What are the roadblocks that the government have hit? First, land acquisition that can cost at least 25 to 30 percent of every project; there can be projects where it is even higher than the cost of construction. It not only escalates overall project costs, but also causes enormous delays.

VK Sharma, chief general manager, land acquisition, National Highways
Authority of India (NHAI) writes
in the September 2019 issue of the magazine *Indian Infrastructure*: "In a study conducted by NHAI on 106



The Dwarka Expressway, connecting Delhi and Gurugram, was expected to be completed by 2012, but has been delayed because of land acquisition issues

projects, worth over ₹1.5 billion, facing implementation delays, issues pertaining to land acquisition were identified as one of the important causes for the delay in almost 50 percent of the projects. Besides, about 5 percent of these projects were delayed exclusively because of land acquisition issues."

The government's burden to acquire land has risen in compliance with the Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013, that mandates it to pay four times the market value of acquired land in rural areas and two times in urban areas. Rohan Suryavanshi, head-strategy and planning at Dilip Buildcon, a road construction company, says, "Before 2013, people didn't want to part with

land. Now, they are willing because of the generous compensation." Sharma says in *Indian Infrastructure* that the NHAI has been able to get about 13,982 hectares in 2018-19, the highest in the past 18 to 19 years. But, according to ICRA, the average cost of acquisition has gone up from ₹0.9 crore per hectare to ₹3.4 crore per hectare; the awarding cost of contracts has, therefore, gone up from the initial plans of ₹15.37 crore per km to ₹24 crore per km.

While costs have risen, financing has nosedived. "Historically, banks were the main source of finance for infrastructure projects. But they have constraints in providing long-term finance as it leads to significant asset liability mismatches," says Debabrata Mukherjee, head-business at NIIF Infrastructure Finance Limited.

While earlier development financial institutions funded infrastructure projects, they have now turned into commercial banks and are suffering from the stresses that the banking ecosystem is facing.

There are other challenges too. It is mandatory to acquire 80 percent of land before a project starts; the mandated amount of land is 90 percent in engineering, procurement and construction projects (EPC) projects. Environment clearances also pose a hurdle, like with the ₹1,850 crore Char Dhaam project.

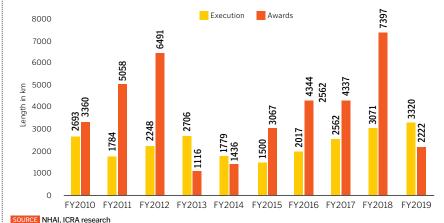
To fund its projects, the NHAI also needs to complete and operate projects so that they are monetised. Says Burla, "The progress on monetisation has not been as it was envisaged. In this context, the recent decision by the Cabinet Committee on Economic Affairs that authorised NHAI to set up an Infrastructure Investment Trust (InvIT), a first from a central public sector enterprise, is a positive."

The difficulty in raising funds from completed projects is increasing NHAI's reliance on borrowings; these have risen by more than 2.4 times in the past two years, from ₹75,385 crore as on March 31, 2017 to ₹1.79 lakh crore as on March 31, 2019. It is expected to double by FY22.

Mukherjee says, "Earlier, NHAI funded most of its projects through the BOT model under public-privatepartnerships. Apart from land, it didn't have any other significant costs. Of late there has a been steep rise in land costs, leading to higher debt." Officials from the NHAI or the Ministry of Road and Transport did not respond to Forbes India queries. Adds Burla, "Since October 2017, 90 to 92 percent of projects have been awarded via either EPC or HAM route (see box). Less than 10 percent were awarded through BOT-Toll route. As a result, the financial burden on the government is high."

The government needs to award more projects via the TOT model





instead of the EPC or HAM models. TOT projects have seen the interest of a lot of Indian developers tying up with foreign funds. In the three Bharatmala projects auctioned under the TOT model, where the first and the third have been successful, the trend is to tap the financial muscle of foreign funds and the operational capabilities of local developers.

The government could also try and bundle under the BOT programme projects where land acquisition and environmental clearances are not a big challenge. The trend for BOT projects have changed, explains Mukherjee. "When the road development programmes started in the late 1990s and early 2000s, many developers queued up to bid under BOT. But many of them suffered badly as

Contract Sheet

- Engineering, Procurement and Construction (EPC): Government bears the cost, private contractors do the work
- Build-Operate-Transfer (BOT): Developer builds and operates for a while before transferring ownership to the government
- BOT-Toll/Toll-Operate-Transfer:
 Construction, maintenance and toll collection done by developer
- Hybrid-Annuity (hybrid of EPC and BOT): Government pays 40% upfront; developer initially pays the rest; later the government pays semi-annually over 15 years

they were unable to handle risks as they had aggressively bid for these projects based on optimistic traffic projections, leading to overleveraging of their balance sheets."

For any infrastructure funding, the new key source is InvITs, where investors can purchase units of a portfolio of completed infrastructure assets. While today we see more private InvITs than public ones, NHAI has the government's nod to set up its own. Importantly, NHAI will have to be conscious of the asset selection as the InvIT portfolio will drive investor interest.

NHAI will release partial payments to highway builders for their work, even if they don't achieve a milestone. This will ease the path for developers as working capital advance is aimed at completing projects and providing liquidity.

The government's fight with debt will increase their expectations from the upcoming Budget, but given the economic conditions, allocations might not meet expectations. Thus, as long as funding is concerned, the government will have to look for other sources. Mukherjee says, "Project selection and structuring are key to success. Projects in high-traffic corridors that are awarded with better preparedness will have higher probability of getting funded."



Budgeting for Her

For the Union Budget to be gender-sensitive, the government will have to be more innovative, inclusive and responsible with fiscal allocations for women

n her 2019 Union Budget speech,
Finance Minister Nirmala
Sitharaman waxed eloquent
about *naari* being a *narayani*(women being goddesses). She
said a "bird cannot fly on one wing"
while stressing on the equality
of men and women in India's
development story. Sitharaman even
proposed forming a broad-based



40

CHAITANYA DINESH SURPUR

committee with "government and private stakeholders" to evaluate the budget with a gender lens and pave the way for more inclusive fiscal outlays. One year on, the committee remains only on paper, while development indices for Indian women have never been more bleak.

The Global Gender Gap Report 2020 released by the World Economic Forum (WEF), for instance, indicates that India slipped four ranks from last year to 112 among 153 countries. The report measures how countries perform in reducing women's disadvantage compared to men in politics, economic empowerment, health and education. India's overall ranking is 14 positions lower than where it was in 2006, when the WEF first started measuring gender gap.

The economic disparity between men and women in India is particularly staggering, according to the report, with only one-third (35.4 percent) of the distance being bridged. India ranks among the bottom four countries of the world when it comes to economic participation and opportunities for women (rank 149), followed by health and survival (rank 150).

At the same time, estimated budget outlays for the ministry of women and child development (WCD) have only increased consistently in the last three years. In 2017, the total budget estimate for the WCD was ₹22,095 crore, nearly a 20 percent increase from ₹17,640 crore the year before. In 2018, this allocation was hiked by almost 12 percent to ₹24,700 crore. Last year, Sitharaman increased the outlay by another 17 percent to ₹29,000 crore. Many women-oriented schemes received heavy backing during the same time, including homes and shelters for widows, the government's flagship 'Beti Bachao, Beti Padhao', Mahila Shakti Kendras, and the maternity benefit programme Pradhan Mantri Matru Vandana Yojana.

Economists and policy experts

believe that budgetary allocations have not translated into on-ground development largely because of the lack of targeted expenditure backed by adequate research and analysis. Other factors include low implementation at the state and district-levels, less emphasis on data collection and interpretation, incomplete inclusion of the informal sector into the process, and limited to no accountability among government officials.

OUTLAY VS OUTCOMES

As an essential first step to gender budgeting, inputs need to drive the right outcomes, and the outcomes have to be connected to human development indices (HDIs). Lekha Chakraborty, professor, National Institute of Public Finance and Policy (NIPFP), calls the lack of macroframework for gender the "biggest lacuna" in the budgeting process.

"Gender development is highly



fragmented at the micro and sectoral levels. If we can identify, say, five gender development goals for the medium term, set targets to be reached, along with the processes, the path and the budgetary backup, it will be easy to follow that roadmap. The ministry of finance (MoF) can take the lead in making this 'roadmap' happen," she says. The team at NIPFP pioneered the research related to the introduction of gender budgeting in India back in the early 2000s, besides getting it institutionalised within the MoF.

Gender-responsive budgeting (GRB) was introduced in 2004 as a "silent revolution", says Chakraborty. The idea was not to produce a separate budget for women, but to apply a gender lens to fiscal expenditure and allocate funds with a priority on gender-specific outcomes. That the policymakers took essential steps to institutionalise GRB at the MoF level is often seen as a strength.

India has been producing genderbudgeting statements as part of the Union Budget since 2004-05. It is divided into two parts, depending on the intensity of the gender component in public expenditure. Part A includes schemes that are 100 percent targeted for women, while Part B is composite schemes with at least 30 percent benefits to women.

In 2015, the WCD ministry also released a handbook on gender budgeting, offering states comprehensive implementation guidelines. Yet, as of today, only about 16 states have undertaken GRB, while the gender budget occupies less than 1 percent of the

"GENDER DEVELOPMENT IS FRAGMENTED AT THE MICRO AND SECTORAL LEVELS. IF WE CAN IDENTIFY, SAY, FIVE GOALS, SET TARGETS AND PROCESSES, IT WILL BE EASY TO FOLLOW THAT ROADMAP."

LEKHA CHAKRABORTY, National Institute of Public Finance and Policy

PRE-BUDGET SPECIAL

total Gross Domestic Product (GDP). The spending on gender has not increased proportionately with the Union Budget either, with the GRB as a percentage of total expenditure hovering mostly between 3 percent and 6 percent in the last decade.

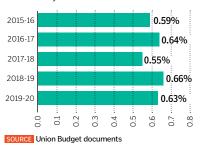
"GRB in India is still more about aggregation of allocations and expenditures for women-centric schemes. There is no real focus nor is it used enough as a policy tool for a more gendered discourse of implications," says Avani Kapur, fellow, Centre for Policy Research. She believes gender weights are assigned to expenditures with a degree of arbitrariness. "That the entire Pradhan Mantri Awas Yojana [affordable housing scheme] allocation is being reported as 100 percent women [in Part A of the Budget] is a case in point."

Chakraborty says that even within allocations, the gender budget shows signs of fiscal marksmanship, which refers to the deviation between budgetary promises and reality. "Just announcing a flagship programme in the Budget also needs to be taken with caution," she says, explaining that higher budgetary allocations do not guarantee higher spending on women.

For example, an analysis of the gender budget indicates that the budgetary allocation of ₹267 crore for the National Mission for Empowerment of Women in 2018-19 was revised to ₹115 crore. Similarly, allocations under the Ujjawala (distribution of LPG connections) scheme was slashed from ₹60 crore to ₹20 crore during the same period. Chances are that the actual on-ground spending might be even lower than the revised estimates. "We need independent institutions like fiscal councils to capture fiscal marksmanship. They act as watchdogs," says Chakraborty, confirming that the broad-based committee for gender budgeting, as announced by the finance minister, has not been constituted yet. Officials

Gender Budget and GDP

Over the years, the size of India's gender budget has remained less than 1 percent of the country's GDP



from the WCD ministry, under whom this committee is to be formed, did not respond to *Forbes India's* queries.

Experts point out that spending on gender is usually concentrated with four or five ministries, and that the Budget in February is an opportunity to diversify allocations. For example, as per Union Budget documents, between 2016 and 2019, about 35-37 percent of the gender budget was allocated to the ministry of rural development,



"THE MSME DEPARTMENT RUNS ABOUT 300 GOVERNMENT SCHEMES. WHY DOESN'T ANY OF IT HAVE A GENDER LENS?"

MITALI NIKORE, Economist

followed by about 19 percent for health and welfare, 19-22 percent for human resource development and 12 percent to the WCD ministry. In short, about 85 percent of the total gender budget allocation was just within these four ministries.

"There is no planning on how to make this expenditure more effective for women," says independent economist Mitali Nikore. "The MSME department, for example, runs about 300 government schemes. Why doesn't any of it have a gender lens? Textile and food processing industries employ maximum women workers, then why aren't allocations done keeping that in mind? The gender budget needs to focus on specific industries and departments."

A large part of the problem might also be a mindset that views women as maternal or reproductive entities and not economic drivers, adds Tara Krishnaswamy, co-convenor, Shakti, a non-partisan collective working to increase women's participation in legislature. She might not be far off the mark. Last year, the Centre's allocations for mother and child welfare got a major boost. The maternity benefit outlay under the Pradhan Mantri Matru Vandana Yojana was doubled from ₹1,200 crore to ₹2,500 crore, while the budget for the Integrated Child Development Services increased from ₹925 crore to ₹1,500 crore.

"While it is supremely important to have healthy mothers and children, we need to help women be productive contributors to the economy," Krishnaswamy explains. "Focus on revenue and tax benefits for working women. For example, women are much more part-time workers than men are, and in countries like the US, you have health insurance benefits for part-time work, which act as an incentive for keeping women in the workforce." The Budget, she adds, must also be more inclusive of women in unpaid care or informal economy.

INDIA COULD ADD MORE THAN 18 PERCENT TO ITS GDP SIMPLY BY GIVING EQUAL OPPORTUNITIES TO WOMEN. IT MIGHT BE KEY TO BECOMING A \$5 TRILLION ECONOMY

FROM PAPER TO PRACTICE

An April 2018 report by the McKinsey Global Institute says India could add more than 18 percent (up to \$770 billion) to its GDP simply by giving equal opportunities to women. Legislators and party representatives suggest this might also be key to India's goal of becoming a \$5 trillion economy. "The government must increase fair participation of all three genders in budget preparation. Often, it is more men in the bureaucracy who work on the budget." says Apsara Reddy, national general secretary, All India Mahila Congress, who believes that gender narratives must be mainstreamed into public finance management on priority.

Implementation of gender budgets at the district and state level is a half-baked story, given the lack of capacity, shortage of funds and absence of accountability mechanisms. For example, Kerala—one of the early-adopters of the gender budget along with Odisha, Karnataka, Gujarat, Himachal Pradesh, Tripura, Uttar Pradesh and Bihar—faces problems ranging from lack of gender disaggregated data to no dedicated gender budget cells.

"We have not been able to evaluate the impact of gender allocations so far for various reasons, ranging from lack of funds to low gender rights awareness among people. We'll pursue it aggressively after the upcoming Budget," says Dr Mridul Eapen, member, Kerala

Gender Gap in India

India ranks 122 among 153 countries when it comes to gender gap



Labour Force Participation Rate (%)	24.8	81.6
Literacy Rate (%)	65.8	82.4
Estimated earned income (intl \$1,000)	2.3	11.1
Women in Parliament	14.4	85.6
Years of female / male head of state (last 50)	19.5	30.5
Legislators, senior officials and managers	13.7	86.3

SOURCE 2020 Global Gender Gap Report, World Economic Forum

GRB: Global Best Practices

Make it Legal: Austria, Bolivia and Rwanda mandate gender budgeting in their constitutions. Binding with legal status will ensure that GRB remains a priority

Align with global goals: Align budgetary goals with national gender equality plans or the UN's Sustainable Development Goals. Countries like Morocco and Afghanistan are examples

Revenue and taxation: Finland, Ireland and Spain have committed to undertake studies to look at the gender aspects of revenue and taxation policies

Total government involvement: Uganda has "Local Budget Clubs" where citizens discuss expenditure priorities and hold government accountable for equitable spending right from the local level.

Budget analysis: The UK and Canada conduct thorough annual, gender-sensitive analysis of the Budget

SOURCE World Economic Forum

State Planning Board. The impact assessment will involve, she says, evaluating women's welfare institutes, making schemes like the National Rural Employment Guarantee Act (NREGA) more female-friendly by ensuring equal wages, sanitation and child care facilities for women, increasing security and workforce participation. "For example, Kerala's Startup Mission was supposed to put aside 10 percent of the ₹70 crore they received for womenled startups. We will follow up if they have done that," she says.

According to Eapen, most states find it difficult to pursue gender budgeting effectively because of a disconnect between the finance, women and child development, and other departments. "In Kerala, the Planning Board acts as a nodal agency that ensures gender-related policies exist across sectors. It is important that individual departments integrate gender components in the planning process itself, rather than an afterthought."

Economist Nikore says the government should not centralise provisions. "Decentralised expenditure will lead to inclusive spending. Central schemes like 'Beti Bachao, Beti Padhao' must be more participative, with state governments having more autonomy in implementing them."

It is also important for the government to conduct and publish surveys offering insights on gender development periodically, says Krishnaswamy. "The current government, from 2014 to date, has dialled down on surveys. So it is becoming impossible to know, even at the state level, what the accurate numbers are in order to measure the impact of programmes," she says. "And where we have data, it is not collected and interpreted properly. The whole notion of data-driven governance with a systematic, scientific mindset has not caught up in India at all."

In order to get out of this vicious circle of low socioeconomic opportunities leading to less budgetary allocations for women, it is important to politicise and talk about gender, Krishnaswamy believes. "Right now, the gender budget feels like a checkbox that the government is not even serious about. There is a complete dearth of imagination and innovation as far as fiscal policies are concerned. You cannot magically reach the \$5 trillion economy mark without empowering your women first."



A New Play at Drawing Foreign Students

The Study in India programme is taking baby steps to attract more students to the country, but protests at university campuses will not help its cause in the short term

By NAANDIKA TRIPATHI



44

ith a civil war raging in Syria for eight years, education there has suffered. "Many Syrian students want to complete their education, but are unable to do so as the situation there is pretty bad. Getting admission to colleges in Syria has become difficult because the government offers limited seats," says Jafar Isa, 28, who found a way to pursue his studies by coming to

Pune's **Symbiosis** International University has got 85 students via the Study in India initiative

India in October 2018 through the Study in India (SII) programme.

"Before coming here, I got admission in Czech Republic, Europe. But my parents were not comfortable sending me there because Europe is expensive. Within two weeks, I got a scholarship from the Study in India programme," says Isa, a student of MSc economics at Symbiosis International University in Pune. "I'm grateful for this scholarship because of which I can pursue my masters... it wouldn't have been possible to get this opportunity in my country. A lot of Syrian students have come here from cities which were under terrorist control and India has saved them."

Isa is one of thousand Syrians who got a fully paid scholarship last year under SII, a joint initiative of the ministry of human resource development (MHRD), ministry of external affairs and ministry of commerce and industry, launched in April 2018 to streamline and attract international students to

the country (the scheme shot into prominence when Finance Minister Nirmala Sitharaman announced it in her Budget 2019 speech).

According to the SII portal, there are 2,000 scholarships of \$3,500 per annum available

for "meritorious undergraduate and postgraduate students".

"The focus of SII is not only to increase demand with students across the globe, but also to strengthen the supply side by providing support and facilitation services with allied institutions to international students," says Manoj Kumar, chairman and managing director, EdCIL India, a public sector undertaking and the implementing agency of the SII programme. "The SII programme is working on scholarships for students, global hostels and bridge courses. We are also updating our website and building a multi-lingual interface. Our team will soon be expanding to regions like Asean,

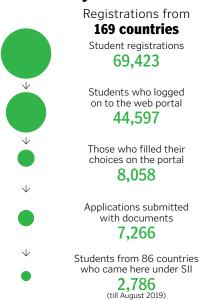
Middle East and other developed economies where India needs to further build and develop its global identification as an education hub."

India is ranked third in terms of higher educational network with more than 38,000 colleges and over 800 universities. However, it ranks 26th among the top destinations for international student mobility, globally. The top 10 countries constitute 63.7 percent of the total foreign students enrolled and according to the 2018-19 data by All India Survey on Higher Education, there were over 47,000 international students (accounting for 1 percent of global international student mobility) studying in higher educational institutes in India. The aim is to attract 1.5-2.5 lakh international students by 2022 and jump to No 15 in the world in attracting international students, according to the EdCIL-CII Survey on Internationalisation of Indian Campuses 2019.

"The initiative also caters to the demand from developed markets through collaborations with selected institutions that offer

Study in India: Academic Cycle

SOURCE MHRD



niche courses in yoga, Buddhism, Tibetan studies, ayurveda and more. The target markets are Europe, Latin America, North America and Middle East," says Kumar.

Ten years ago, Fawzia Merzaye, 26, from Afghanistan had got a scholarship to India from the Balkh province, but her family did not allow her to travel for higher studies. "Due to regional fanaticism and conditions at the time, my family opposed the move. But luckily, over the years, there have been significant changes... now girls have the right to study and can go out of the country to pursue further education. When I got an offer from the Symbiosis International University, I was extremely happy," says Merzaye, who came to India in August 2018 via the SII programme and is pursuing an MBA in agri business.

More than 150 institutions in India have enrolled with EdCIL to offer seats and scholarships for international students, including top universities from IITs and IIMs, NITs, the OP Jindal Global University, Narsee Monjee Institute of Management Studies (NMIMS) and the Symbiosis International University.

"Since the inception of SII, we have partnered with the National Institutional Ranking Framework (NIRF) and National Assessment and Accreditation Council (NAAC) certified institutions in the country. We cater to NIRF Top 100 institutes in any category except medical institutes, along with a NAAC accreditation of 3.26 or above and those which have been empanelled by UGC, be it government or private," says Kumar.

The government provisioned ₹50 crore in the 2018-2019 Budget and ₹65 crore in the 2019-2020 Budget for the programme, primarily for brand promotion activities. Besides attracting students, the idea is to build quality institutions. In Budget 2019, the government increased the allocation for "world-class



"THE SII PROGRAMME
IS WORKING ON
SCHOLARSHIPS FOR
STUDENTS, GLOBAL
HOSTELS AND BRIDGE
COURSES."

MANOJ KUMAR, Chairman and MD, EdCIL India, the implementing agency of SII

institutions" to ₹400 crore from ₹128.9 crore, to "establish ten worldclass institutions each in public and private sector in a reasonable time".

According to MHRD, till August 2019, 7,266 students had submitted their final applications on the SII portal. After evaluation, it brought 2,786 students from 86 countries to India, a majority of them from Nepal, Ethiopia, Bangladesh, Afghanistan, Bhutan, Sri Lanka, Uganda, Tanzania, Nigeria and Indonesia.

The Symbiosis International University, which has had global students since 1971, supported EdCIL in creating a lot of the processes. "We've streamlined our admission process for foreign students. This is why we were involved in SII. We are happy the government has initiated this programme because this is what was done by the founder of Symbiosis, Dr Mazumdar, way back in 1971," says Dr Vidya Yeravdekar, pro chancellor of Symbiosis International University, which has got 85 students

so far through the SII initiative.

Colleges like NMIMS and IIT-Madras have not seen foreign students coming specifically through SII as of now. "The institute started advertising it four months ago. It hopes that it will start to see fruits of that outreach in the coming semester," says Prof Mahesh Panchagnula, dean (international and alumni relations) at IIT-Madras.

There are other challenges that need to be addressed. "The average GMAT score to get admission in a two-year MBA PGPX programme at IIM-Ahmedabad is more than 700. So students who are academically strong and get the desired score have an opportunity to study in any country. There are less chances of them opting to study in India because they have better options for colleges. Also, they will get better job opportunities in other countries," says a faculty member from IIM-Ahmedabad.

According to Dr Yeravdekar, a lot of universities don't want foreign students because they don't want to get into too many hassles. "This is because the students come from a weak education background and need to be trained well. Nobody wants to put in those efforts. Our teachers have to train these international students before they start pursuing their course. How many of us are willing to do that? Universities need to understand that in the long run, it's going to pay not only for us but for our country as well." She adds that the Indian embassies across the world needs to be proactive and the higher education system here needs to be marketed well. "It's not just about attracting students, we need to ease out things like visa issues, their internship as well as employability," says Dr Yeravdekar.

Besides, with students from esteemed universities agitating against fee hikes, the stifling of democracy and incidents of police action against students, the SII programme has a major challenge in projecting India as a global educational hub.



WISDOM • POWER • INFLUENCE NOW AT YOUR FINGERTIPS

Download the Forbes India App on your iPad today.

Cell 18

1 yr subscription	Cover Price	You Pay	You Save	Discount
iPad App	2900	1599	1301	45%





By RAJIV SINGH

P BABURAYANAKOPPAL, SRIRANGAPATNA, KARNATAKA

n Christmas eve, around 2.30 pm, Channegowda was about to make a bold move. "Onedu strong beku (give me a strong beer)," requested the 32-year-old electrician. The retailer stared back. "Are you inspired by Virat Kohli?" he asked, alluding to the huge billboard of the Indian cricket captain that greets consumers at the Sri Kalikamba Wines Store in Baburayanakoppal village, some 130 km from Bengaluru. The hoarding of Royal Challenge sports drinks, endorsed by Kohli, flashes the brand's signature message: Make a bold move.

"Virat strong beda, bunder strong beku (I don't need Virat strong. Give me monkey strong)," Channegowda replied, pointing to a bottle. "It's Boom and has a quirky monkey head," his friend chipped in, who induced Channegowda into shunning his old beer brand. "Idu tumba tasty mattu strong (This is different, tasty and strong)," he insisted.

Another 40 km from Baburayanakoppal is Kwality Spirits, a wine retail shop that has a singular distinctive identity: A massive advertisement of Knock Out, a beer brand owned by SABMiller. Lokesh, a painter, is enjoying a chilled beer in a steel glass. "Beer mugs are for the cities. Here you get the monkey drink in a glass," he says, pointing to a bottle of Boom, a strong beer brand he got hooked on to six months ago. "It gives me a kick," he says.

"Welcome to Karnataka. It's Boom

time," says Vikash Bakrewala, division director (south) of B9 Beverages, the maker of Bira 91 and Boom beer. "We have just started. The pace and the reach are set to accelerate," he says. Bira 91 got 60 percent of its sales from Tier II cities and beyond in the last two quarters of 2019 compared to 24 percent and 40 percent in 2018's corresponding quarters. From 159,766 cases of Boom-its strong beer brand launched last Februarysold in the first quarter of last year to 607,367 cases in the last quarter, the monkey jump has been staggering.

With over 85 percent of the beer market in India dominated by strong beer—with alcohol content between 6 percent and 8 percent—Boom is helping Bira 91 make a transition from a craft beer brand to a player that's getting most of its growth from smaller cities and towns. What Boom has also done is enable Bira 91 to expand aggressively-from 56 cities at the start of the year to 386 cities now-and become the fifth

"We have been able to penetrate really deep into Bharat... this has happened primarily because of Boom."

ANKUR JAIN, FOUNDER, B9 BEVERAGES, MAKER OF BIRA 91



biggest beer maker in India with 2.7 percent value market share.

For a brand that began its innings in February 2015 in Delhi, the journey has been phenomenal: From a paltry gross revenue of ₹50 lakh in fiscal 2016 to striking a run rate of ₹700 crore for the financial year that ends in March 2020; from a presence in 60 outlets to reaching a little under 29,000 by end-March; and from selling in one country to now being present in 16.

In Delhi, the success of Boom has whetted the appetite of Ankur Jain. "We are soon going to be in 20 states.



This is the power of Boom," says the founder of B9 Beverages. Boom, he lets on, was the primary reason for the tremendous growth in 2019 even though the industry was in the throes of a slowdown. While Bira 91 managed to grow at a brisk pace in the premium markets of top cities—its biggest is Delhi and second largest Bengaluru—Boom helped it make massive inroads into the hinterland. "We have been able to penetrate really deep into Bharat," says the founder.

Jain is now brewing a heady plan. "Revenues have jumped brilliantly

and so has our ambition," he says. The target is to become the beer of choice for consumers. For a company that had a modest aim of selling across just 30 pubs in Hauz Khas in Delhi in February 2015 to becoming the fifth biggest and now wanting to break into the top three, the quantum jump in aspiration is striking. "We are a refreshingly modern brand as opposed to traditional," says Jain, who once identified himself and the brand with craft beer. "I can't sort of deny the fact that that's where the journey really started," he says. Tradition,

Jain explains, has not been on his side. "We are rooted in modernity."

Ironically, it's the tradition of the beer market in India, which has historically skewed towards strong beer, that is helping Jain make the most of Boom's success. The modern element, though, is that the beers are not plain vanilla. They are flavoured. "This generation loves flavourful beers," he says.

Non-metro India is getting a hang of strong flavoured brew. "Tier II and beyond is where the action is," says Rahul Singh, founder of Beer Café, a chain of beer bars. "Drive 10 km away from any city and the world of beer transforms. It is value for money and gives a better kick for the buck," he explains, adding: "Bira 91 seized the opportunity."

The strong beer market, reckon analysts, was also ripe for disruption. Over the last few decades, the alcoholic beverages segment has been bereft of innovation, says N Chandramouli, chief executive officer of brand insights company TRA Research. While there has been a dramatic shift in the openness among consumers to experiment, the bigger and older players stuck to the triedand-tested course. "Boom is likely to give a stiffer fight to the oldies who have ruled the roost for long," he says.

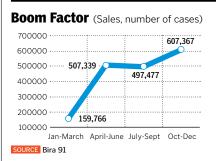
Demographics and beer statistics, too, are loaded in favour of any challenger brand that dares to innovate. While an estimated 25 million turned 21 in 2019, 30-odd million will be of drinking age that most states allow by 2024. The per capita consumption of beer in India stands at a low 2 litres compared to China (36 litres), Russia (76 litres) and the US (78 litres). "The headroom for growth is massive," says Chandramouli.

The David of the Indian beer market is taking on the Goliath. Given Kingfisher's market share—over 50 percent—the only way for Bira 91 to grow is either to capture new markets -millennials-or go head-on. "Bira 91 is doing both," says Jessie Paul, founder of Paul Writer, a marketing advisory firm. Lighter, more expensive beers would restrict Bira to the urban, millennial market that can afford them. Boom exploits an understanding of the Indian preference in both taste and pricing, she adds.

Investors in Bira 91, too, are happy with the shift from the craft beer theme. "Today Bira 91 is not just a reimagined craft beer brand for a niche market," says Sakshi Chopra, principal at Seguoia Capital India Advisors, an investor in B9 Beverages. INFOGRAPHICS: SAMEER PAWAR

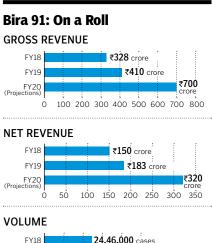
2013

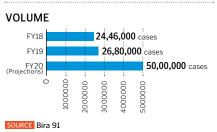
Beer Market Size in India (Volume in million hectolitres) 37.8 27.4 22.1 10 0 0



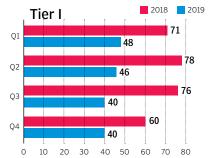
2018

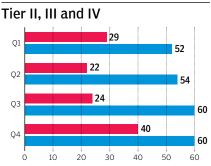
2023 (Estd)





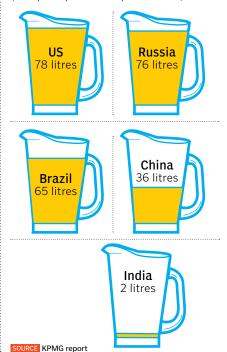






Headroom for Growth

(Beer per capita consumption in 2019)



It is also an aspiring pan-India brand that appeals to consumers across price points and age groups. "We backed a disruptive and innovative brand in an otherwise-fairly-oligopolistic

market," she says, adding that Bira 91 has forced some of the large incumbents to sit up and take notice.

What has made them react is the pace of the growth of the premium

NISHAL LAMA FOR FORBES INDIA

and super premium segment. From 0.8 million hectolitres in 2013, the volume pole-vaulted to 2.4 million hectolitres in 2018 and is pegged to almost double in three years, which in value terms would be equivalent to \$2.7 billion.

Last month, United Breweries (UB), India's largest brewer, launched Ultra Witbier, its first non-lager beer, in Karnataka and Goa. Ultra Witbier 330 ml is priced at par with Bira White and Simba Jungle Wheat in Bengaluru. Last year, UB added a non-alcohol variant called Radler under the Kingfisher brand.

Last October, AB InBev-the world's biggest beer maker with brands such as Budweiser and Corona under its belt-inked a deal with The Indian Hotels Company Limited to launch a chain of 15 microbreweries over five years to sell craft beer. It also plans to invest ₹1,000 crore into its Indian subsidiary. In 2015, AB InBev acquired SABMiller for \$107 billion, but it took it over two years to complete the full acquisition of the British-South African beer maker. Last year, the Belgian-Brazilian brewer launched Budweiser 0.0, a non-alcoholic beer in India.

Though the fight is getting intense in the premium segment, Jain is focusing on the mass (strong beer) market. "We have an opportunity to define what beer means for this generation," he says. The redefining journey, though, has had its fair share of mistakes and learnings. In fact, the brand had a near-death experience after a heady summer of 2016. "We

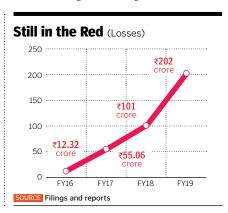
How they Stack Up (Market share by volume) United Breweries AB InBev and 18% Carlsberg Som Distillery & 3% Bira 91 2.7% Mohan Meakin 2% 20 OURCE Budweiser IPO prospectus and analyst reports



Boom is helping Bira 91 establish its presence in smaller cities and towns

became a victim of our own success." recalls Jain. The company couldn't predict the overwhelming demand. In the business model pitched to Sequoia for funding, the company had done its math on the assumption that it would be able to sell one case a week or four cases in a month at least. B9 Beverages ended up selling 500 cases a month.

Poor anticipation in demand was made worse by a rickety supply network. While the company was initially dependent on imports, transition to domestic production was set to start by early 2016. It didn't happen. While an agreement with a supplier in Rajasthan feel apart, an Indore plant—which was scheduled to open by April 2016—got delayed by six months. "The entire season was gone. It might well



have been the death blow. It was a painful period," says Jain, sharing his biggest learning: The need to have a five-year strategic plan rather than quarter-on-quarter execution. "We decided to expand our capacity," he says. B9 Beverages now has four plants; the most recent one in Mysore started shipments a month back.

The second mistake, Jain says, was in delaying the foray into Tier II and beyond markets. "I had this bias of a south Delhi kid that outside Delhi, Mumbai or Bengaluru there are no takers for great products," he says. The faulty assumption delayed the expansion plan. "Had we started a year earlier, we would have been in a much better position today," he says.

What spoils Bira 91's report card are its mounting losses: From ₹12.32 crore in fiscal 2016 to ₹202 crore three years later. Jain is keen to fix the problem. In the beer world, one needs to have a long-term approach to business. "And this can't be driven by consistent losses over multiple years," he says, adding that the company plans achieve breakeven at the Ebitda level by fiscal 2022.

What keeps Jain on his toes is a four-letter 'F' word. "Fear of failure is constant. The larger the business, the bigger the fear," he says. 19

WHAT IS AVAXHOME?

AVAXHOME-

the biggest Internet portal, providing you various content: brand new books, trending movies, fresh magazines, hot games, recent software, latest music releases.

Unlimited satisfaction one low price
Cheap constant access to piping hot media
Protect your downloadings from Big brother
Safer, than torrent-trackers

18 years of seamless operation and our users' satisfaction

All languages Brand new content One site



We have everything for all of your needs. Just open https://avxlive.icu



<u>53</u>

Becoming a People's Car, Again

German automaker Volkswagen has revamped its India strategy to gain a bigger share of the country's booming auto market

By MANU BALACHANDRAN

urpratap Boparai certainly knows the importance of planning well. He often spends a few weeks every year riding across India on his Triumph Thruston R and in the last few weeks of December, the managing director of Skoda Auto Volkswagen India (SAVI) rode from Mumbai to Wayanad in Kerala, a distance of more than 2,000 km over 10 days. Certainly, that could not have been done without a detailed plan in hand.

It is perhaps this attention to detail the engineer-turned-business executive is banking on to resurrect the fortunes of the world's largest carmaker, the Volkswagen Group, in India. A veteran of the Tata Group, Boparai, 50, is known for the phenomenal success of SUV maker Jeep, when as the head of FCA India Automobiles (Fiat) he played a crucial role in bettering localisation levels and ensuring seamless production of the Compass model. At SAVI, Boparai has several challenges in the year ahead.

The Volkswagen Group—makers of Skoda, Volkswagen, Audi, Lamborghini, and Porsche—has struggled in India, particularly against Korean and Indian carmakers, in gaining a sizeable presence for more than a decade. Having begun operations in 2001 through its subsidiary Skoda Auto India, the

Wolfsburg-headquartered company is yet to replicate its global success in India, the world's fifth-largest automobile market. In 2018, the Volkswagen Group sold nearly 11 million vehicles globally; in India it didn't even cross 100,000. With a combined market share of 2 percent, Volkswagen's fortunes are in stark contrast to Hyundai Motors, which began operations in India four years before Skoda's entry and has emerged as the country's second-largest carmaker, cornering a little over 18 percent of the market.

"It is no secret that we have struggled so far," says Boparai, who was roped in from Fiat in 2018. "The market share is not in line with what we expected. As a group we want it to grow to 5 percent by 2025."

To do that, Boparai and the Group have devised a new three-pronged strategy, code-named India 2.0: It will merge different units to create an umbrella organisation and increase dealer networks; it has developed a new platform, MQB A0-IN, on which to launch four new vehicles, starting 2021; Skoda, the Volkswagen Group's Czech subsidiary, has been handed the mandate to lead India operations, in line with a global strategy where one Group subsidiary drives strategy and sales in a specific region. "The idea was to reboot our approach to India," says Boparai.

"The real difference in their India 2.0 strategy is that it essentially combines all their efforts," says Vinay Pipasarnia, global consulting director at Counterpoint Research and former executive director at Ford Motors India. "Individually all their companies have been very small, but when you put them together, they have a wholesome presence in various categories. The most important thing for them is to keep costs down, and hence the pivot towards newer models. When you are chasing together, there will be lesser duplication of efforts and more experience."

STARTING TROUBLES

Since its launch in India, the Group was simply not able to woo mass customers. Although Skoda Octavia, Volkswagen Polo and Vento did manage to ignite consumer interest, they could never match more popular models from Maruti Suzuki or Hyundai, which boast cheaper vehicles and better service networks.

Skoda launched the popular Octavia in 2001 in India, followed by the successful hatchback Fabia and SUV Yeti. But the company didn't localise productions and chose to import Completely Knocked Down units. The arrival of Volkswagen in 2007 allowed the Group to manufacture the Polo, Vento and Rapid within the country.

"The group had a serious identity crisis," says Deepesh Rathore, co-founder of Gurugram-based automotive consultancy Emerging Markets Automotive Advisors (EMAA). "While Skoda was seen as a cheaper brand in Europe, in India it positioned itself as a luxury brand and they managed to find limited success." But, with the arrival of Volkswagen the Group struggled to position it. "In Europe, Volkswagen competes with Toyota, and in India Skoda was already doing that," says Rathore. "That created a lot of confusion and they didn't know where to place the Volkswagen brand."

"Indian consumers give good weightage to European brands," says Puneet Gupta, associate director of Automotive Forecasting at IHS Markit. "Skoda and Volkswagen did manage to create a great impact on their arrival in India, but were not able to sustain the momentum. There were no new launches and replacements, and they failed to target the sub-4-metre category, which could have emerged as a good volume churner."

The Group also entirely missed the SUV bandwagon. "If the group could bring out a vehicle in the Hyundai Creta or Maruti Suzuki Brezza segment, with plush interiors and mark it even 10 percent higher than the competitors, they would have a winner," says Rathore.

Now, the company has opened a new technology centre in Pune that will develop market-specific vehicles. "The SUV segment is booming across the world and not just in India," says Boparai. "People like the high driving position and the robust and safe feel of SUVs. But we will not be limited to SUVs, and are looking at the C segment and maybe the upper B segment."

The company will also be focussing more on petrol in the small car segment, moving away from diesel. "In the smaller cars, the economics of diesel becomes extremely challenging," says Boparai.

MADHU KAPPARATH



Skoda's Aurangabad plant (above) will have synergies with Volkswagen's factory in Chakan, Pune

Last October the Group created Skoda Auto Volkswagen India by merging Skoda Auto India, Volkswagen India and Volkswagen Group Sales. "The plan is aligned with our strategy to re-enter the volume segment in the country," says Boparai. Re-entering this segment is financially critical for the Group, in addition to re-establishing the brand that has lost sheen largely due to a poor portfolio and higher maintenance cost.

A NEW STRUCTURE

Much of the restructuring to which the parent company has committed €1 billion (₹8,000 crore) is in line with the Group's experiments with new strategies. Under a 2018 plan, it distributed responsibility for its subsidiaries in different markets, where one brand assumed responsibility for a region. "This will make it possible to take decisions in a decentralised way and the board of management will be able to concentrate on overarching strategic topics. This will make Volkswagen faster, slimmer and more efficient," Herbert Diess, CEO of the Volkswagen Group, had said at that time.

While the Volkswagen brand assumed responsibility for the Americas and Sub-Saharan region, SEAT got the mandate for North Africa. Luxury carmaker Audi was given charge of the Middle East and the Asia-Pacific region, while the Volkswagen Group itself retained China, where it sells some 4.21 million vehicles annually. Skoda was given the mandate for India and Russia. While Volkswagen in Germany will be going flat out on electrification, Boparai prefers to wait and watch. "Ours is going to be a top-down approach with battery electric vehicles from Audi and Porsche, and then respond to the other brands," says Boparai.

Then there is the merger of various units to streamline operations. Earlier, the Group's three arms worked independently: In Aurangabad, Skoda Auto India made the Octavia, Kodiag and Superb, in addition to Volkswagen's Passat and Tiguan, and Audi; Volkswagen India's Pune plant made the Polo, Vento and Rapid; the Volkswagen Group sales functioned as the sales and marketing arm for Volkswagen, Audi, Porsche and Lamborghini in India. Now, even as the brands will maintain their identities, dealer network and customer experience initiatives, Boparai and the Skoda brand will lead the common strategy for the Indian market.

"One of the reasons for this merger is to have everyone pulling in the same direction. It also gives us synergies of resources. When

55

manufacturing and sales are part of the same organisation, it gives you far more reactivity and speed to react to the market," says Boparai.

Already, the Volkswagen arm plans to achieve a 3 percent market share in the next five years. "Volkswagen is developing modern and cost-effective retail models called 'popup and city stores' for tier 2 and 3 markets," says Steffen Knapp, director, Volkswagen Passenger Cars India. "Not only will it increase the brands' accessibility and visibility, it will also be an effective and profitable sales tool for our investors."

Audi's plans include the launch of new vehicles through 2020. "While we follow our brand strategy, we will also reap the benefits of being part of SAVI," says Balbir Singh Dhillon, head of Audi India. "Not only do we achieve internal synergies in manufacturing, deal with relatively higher costs because half their components were imported. In comparison, Hyundai Motors built an ecosystem of suppliers in India, which brought it remarkable economies of scale.

"Skoda started very well. It positioned itself very well," says Boparai. "For the segments apart from Fabia and Rapid, because they are low volume, the localisation isn't very high. And when you don't have localisation, prices are high. The other thing we suffered from is patchy services, and expensive spares."

The company wants to cut costs by standardising components and production processes. "The localisation percentage will be higher, which will help us address the total cost of ownership," explains Boparai. For the past two years, the company has managed to bring the share of for India, the platform has better emission and fuel consumption norms, in addition to better safety, comfort and infotainment systems.

"While the platforms and dimensions of the new products will be the same, the body style and design language will be distinct for Skoda Auto and Volkswagen," Boparai adds. "The segments served by each of our brands appeal to a distinct audience."

"If they can find success with one model, then the dealers will begin to line up," says Rathore of EMAA. "By streamlining operations and localisation, they will save millions. That means if they can bring out a vehicle that retains its build quality at a competitive price, they have a winner in hand."

WILL IT WORK?

As the Group gears up to capture 5 percent of the market in the next five years, it won't be a smooth ride. "It all depends on the competitive environment," says Gupta of IHS Markit. "The Chinese players are making their entry and there are companies such as Kia that are becoming very competitive. To take away market share from them won't be easy. But 5 percent certainly looks achievable, especially since the Group has a reputation for building good quality vehicles."

Others agree that with the brand reputation the German group has garnered over the years, the India 2.0 plan could work for it. "If they can offer a product, which is well known for its safety and engineering, and package it well, it could help with the turnaround," says Pipasarnia. Rathore also reckons that the decision to hand over the lead to Skoda will help the Group, particularly since the Czech brand has a relatively better brand positioning.

On paper, the India 2.0 plan has the potential to succeed. And who better than Boparai to know that the better the planning, the safer and smoother the journey. •

Sales Record

COMPANY	2014-15	2015-16	2016-17	2017-18	2018-19
Skoda Auto India Pvt Ltd	15,003	15,368	13,712	17,387	16,521
Volkswagen India Pvt Ltd	45,018	41,096	50,042	45,329	34,859

SOURCE SIAM

personnel expertise and back-office operations, but also find common dealer partners and better sourcing."

Volkswagen's gamble comes at a time when the Indian automobile industry is in the doldrums. An overall slowdown in the economy, alongside a liquidity crunch and uncertainties over the transition to stricter emission and safety norms have destabilised the country's automobile sector. Between April and November 2019, vehicle sales fell by nearly 20 percent. There is also the government's push towards more electrification.

FOCUS ON COSTS

Under India 2.0, one of the concerns the Group is trying to address is the exorbitant price of its vehicles and spare parts. Since their launch, Skoda and Volkswagen had to localisation to about 82 percent, much of it made possible by the progress made by local suppliers who now meet the required standards. "Higher localised contents will help in bolstering the domestic supply chain, agile need-based customisation, and faster service response," says Boparai.

The new platform, MQB A0-IN, will also help cut development and manufacturing costs, while enabling 95 percent localisation. "The MQB A0-IN increases flexibility while developing new vehicles. Most of the technical development will take place in India," says Boparai. The new offerings from the Group include two SUVs and two sedans from Skoda and Volkswagen, built entirely in India on the MQB A0-IN platform. Besides these, MQB A0-IN will support the development of further new models. Built specifically



Waking Up Kindness

With a new focus on philanthropy, Jack Ma builds on a substantial base

By JUSTIN DOEBELE

eople say I am one of the richest people in China, but I don't think it is my money," says Jack Ma. "It is money that people have entrusted to you, and you want to spend it in a better, smarter way." Ma is explaining his new focus, philanthropy, in an exclusive interview with Forbes Asia in October. Having spent the last two decades building Alibaba Group, the Hangzhou, Chinabased internet giant, Ma announced iust over a vear ago he would step aside and give his executive chairman title to Alibaba CEO Daniel Zhang.

"I will devote more time and effort to education, philanthropy and the environment," he wrote in an open letter to shareholders (and the world). It was a transition that Ma had planned for a decade. "When Alibaba had its 10-year anniversary, on that day I started to think I should prepare for my retirement. That day, I decided on the day of the 20-year anniversary, September 10, 2019, will be the day I leave," he said during the Forbes Global CEO Conference held in Singapore in October, just after receiving the Malcolm S Forbes Lifetime Achievement award.

Now, having turned 55, Ma is entering a new chapter in his career—but one in which he has considerable experience. Alibaba, for example, has long had CSR programmes. In 2006, Alibaba launched its first organised philanthropy to help underprivileged mothers in China, dubbed the model mother programme.

To date, some 20,000 mothers have got free training and funding to become online entrepreneurs.

The company made a major commitment in 2010, when Alibaba started to earmark 0.3 percent of its revenues to philanthropy. Two years later, it established the Alibaba Foundation to manage its philanthropic efforts. With \$56 billion in revenues for the 2019 fiscal, 0.3 percent would be \$168 million (Alibaba doesn't disclose the actual figure).

Ma's personal philanthropy started in 2014, when he set up the Jack Ma Foundation. In April that year, about six months before Alibaba's IPO on the New York Stock Exchange, Ma set aside options representing 35 million shares to be put into his foundation. Today the Jack Ma Foundation has 23 million Alibaba shares, worth about \$4.6 billion.

Since its founding, the Jack Ma
Foundation has distributed or pledged
at least \$300 million, according to
figures from Alibaba. This year, the
foundation pledged about \$14 million
to protect wetlands in Hangzhou.
The majority of funding for its
projects comes from the foundation,
however, it does accept small outside
donations to help in some projects.

In addition, it also joined in July with the Alipay Foundation and Joe Tsai Foundation in a ten-year, \$143 million pledge to support the development of women's soccer in China (the Alipay Foundation is part of Alibaba's affiliated

A World of Worthy Causes

Here are seven examples of causes funded by the Jack Ma Foundation. Only one, women's soccer in China, is not wholly funded by the foundation. The other six have received an estimated total of \$212 million, either pledged or already distributed. The year when each initiative was launched is at the bottom of the column

SOURCE Alibaba Group

CHINA



RURAL EDUCATION IN CHINA

A ten-year programme to train headmasters and educational leaders in rural China

FUNDING:

\$30 MILLION

2016

CHINA



TEACHER TALENT IN CHINA

Ten-year programme to train and develop teachers in rural China

FUNDING:

\$45 MILLION

AUSTRALIA



MA & MORLEY SCHOLARSHIP, UNIVERSITY OF NEWCASTLE

The scholarship is named after Newcastle resident Australian Ken Morley (who died in 2004). Ma first met Morley in 1980 in Hangzhou, and they had a decades-long friendship. The scholarship helps 20 students each year with expenses, while another 10 get a 12-day immersion programme in China

FUNDING:

\$20 MILLION

2017

AFRICA



AFRICA NETPRENEUR PRIZE INITIATIVE

A total of 100 African entrepreneurs will receive \$100 million over ten years. Nigerian medical supply startup LifeBank won the top prize among ten contestants in an award ceremony held in November

FUNDING:

\$100 MILLION

MIDDLE EAST



QUEEN RANIA FOUNDATION

Run by Jordan's Queen Rania, the foundation got \$3 million to support educational initiatives in the Middle East, including Edraak, a free online education platform offered by the foundation

FUNDING:

\$3 MILLION

2018

CHINA



WOMEN'S SOCCER IN CHINA

SPONSORS:

Alipay Foundation, Jack Ma Foundation and Joe Tsai Foundation

A partnership of three foundations to support the development of women's soccer in China over ten years

FUNDING:

\$143 MILLION

CHINA



WETLAND PROTECTION

The funds will go for research and protection of the Xixi National Wetland Park in Hangzhou

FUNDING:

\$14 MILLION

2019

CLOCKWISE FROM TOP LEFT: GETTY IMAGES; GETTY IMAGES; REUTERS; SHUTTERSTOCK; REUTERS; GETTY IMAGES; REUTERS





Clockwise from top: Jack Ma singing at Alibaba's 20th anniversary celebration; the entrepreneur (circled) with employees in Alibaba's early days; Steve Forbes handing the Malcolm S Forbes Lifetime Achievement award to him at the Forbes Global CEO Conference held in Singapore in October



Digital Teacher

Ma worked as an English teacher in his hometown of Hangzhou before starting Alibaba in 1999, and becoming one of China's earliest internet entrepreneurs. Alibaba went public on the Hong Kong stock exchange in 2007, before voluntarily delisting in 2012. Two years later Alibaba went public again on the New York Stock Exchange. It was the world's largest IPO by amount, raising \$25 billion. The shares have now more than doubled to \$200, giving Alibaba a market capitalisation of \$527 billion. Ma is the richest person in China, at \$38.2 billion and the No 21 richest in the world. Ma is shifting to philanthropy at the age of 55, just three years later than Bill Gates, who did so at 52

Ant Financial and the Joe Tsai Foundation is funded by Alibaba Group co-founder Joe Tsai).

Aside from China, the foundation has helped causes in Africa, Australia and the Middle East. "Philanthropy is also about efficiency. If you can spend \$3, why spend \$5? If you can finish it in two hours, why do four hours? The way I learnt how to run a company, that is the way I learnt how to run a philanthropic organisation," says Ma.

Ma also wants to encourage the spirit of philanthropy in others. "The world won't change because you donate money, but it will change if your heart is changed. You can never save all the poor people and heal all the illness, but we can wake up the kindness inside everyone in the world," he said in 2016.

The former teacher has a special interest in improving education in his country's rural and impoverished areas, and his foundation has already pledged at least \$75 million to training teachers and headmasters, along with other educational efforts.

"China has a great culture of charity, but China needs to build up the culture of philanthropy," says Ma. He'd like to develop academic programmes on philanthropy. "I want to develop a course with a university [in China] to train people in how to do philanthropy," he says. As he said at the Forbes Global CEO conference: "I believe China one day [will have] hundreds of thousands of businesspeople who will build up their own charities or philanthropy foundations."

Others share his view. "Asian philanthropists, particularly those in China, are still waiting, with great anticipation, to see what Jack Ma will do with his philanthropy. He has an extraordinary opportunity to be a leader and role model in the field," says Laurence Lien, CEO of the Singapore-based Asia Philanthropy Circle, in emailed comments.

Ma hopes to do more to support women's causes too. "The secret sauce of Alibaba's success is that 34 percent of the senior leadership of Alibaba are women, and almost 47 percent of employees are women," Ma said in Singapore.

So what will Ma do next as a philanthropist? First, he'll do some research, as he wrote in last year's open letter: "While I will not allow myself to sit idle, this time, I will be able to spend time on choosing interesting and meaningful causes that I can be passionate about." He elaborated on this in his interview: "I am not in a hurry, I want to spend a year travelling around to many countries, talking to the ministers of education, talking to schools, talking to teachers, and talking to those who have great ideas."

In November, Ma went to Ghana to be one of the judges in the first-ever African Netpreneur awards, sponsored by his foundation. "If we can discover and help more Jack Mas, Bill Gates, Warren Buffetts, Africa will be different," says Ma.

The Jack Ma Foundation has only one office and less than 30 full-time staff. This may seem small, but recall in 2000, when Alibaba had only 150 employees, Ma declared to *Forbes* his intention to make Alibaba one of the world's top ten websites. When asked where the Jack Ma Foundation will be in five years, Ma already appears to be planning ahead: "It will be a respected organisation that is doing things in an efficient way."

Catalysts For Change

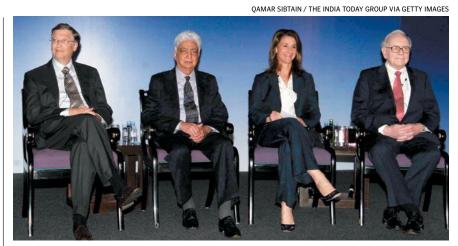
2019's list honours individuals tackling a diverse set of issues across the Asia-Pacific—and includes Asia's biggest-ever giver

Edited by GRACE CHUNG

zim Premji made history in 2019 as Asia's most generous philanthropist by donating \$7.6 billion worth of Wipro shares to his education-centred foundation. raising his total lifetime giving to \$21 billion. Established in 2000, his eponymous foundation now works with more than 200,000 public schools across India to train teachers and provide better curriculums. among other initiatives. "A role model for all of us. I wish more people would follow his example," says Anu Aga (a 2010 honouree).

Premji is one of the 30 outstanding altruists we've chosen for our 13th annual Heroes of Philanthropy list which honours billionaires, entrepreneurs and celebrities across the region who are committed to solving some of the most pressing issues facing the Asia-Pacific.

2019's members are devoted to a range of endeavours. Among them: Angel Locsin, one of the Philippines' most famous actors, supports causes aiding victims of violence, natural disasters and the conflict in Mindanao. Australian billionaire Judith Neilson, set up an institute to support independent journalism. And then there's Jack Ma from China, who recently received the Malcolm S Forbes Lifetime Achievement Award after stepping down as chairman of Alibaba to devote more time to philanthropy. Other honourees are working to



From left: Bill Gates, Azim Premji, Melinda Gates and Warren Buffett in 2011

Azim Premji, 74 Founder and chairman, Wipro

Premji in March 2019 solidified his position as Asia's biggest philanthropist by giving away a chunk of his shares, worth \$7.6 billion, in tech firm Wipro to his education-focussed Azim Premji Foundation. The foundation will use the funds to increase its activities, including expanding the Azim Premji University in Bengaluru. The billionaire retired in July as

Wipro's executive chairman after more than five decades at the helm and said he would focus more on philanthropy. The first Indian to sign the Giving Pledge, his lifetime giving now stands at \$21 billion. Premji has also endowed his foundation with stakes in Wipro Enterprises, his privately held consumer goods company, and in his private equity arm, Premjilnvest. Inspired by Mahatma Gandhi and his mother, Premji says that "to whom much has been given, much should be expected".

NAAZNEEN KARMALI

protect wildlife, improve access to health care and aid the elderly.

To choose these honourees, we sifted through dozens of candidates, reviewing their monetary contributions, the depth of their involvement and the reach of their philanthropic efforts. Our aim is to highlight those giving their own money, not their company's (unless they are the majority owners of a privately-held firm). We also don't include those who are full-time fundraisers or foundation heads, unless they've personally

given the bulk of funds to start a charitable organisation. All are citizens of countries or territories in the Asia-Pacific or have long resided in the region. The focus is on individuals who provide the capital and are personally committed to achieving a long-term vision. As always, we have focussed on new names, unless there was a significant development in a previous honouree's philanthropy that justified relisting them. The final selection is unranked—all are considered equally honoured on this list.

<u>60</u>

REUTERS



Theodore Rachmat, 76

Founder, Triputra Group INDONESIA

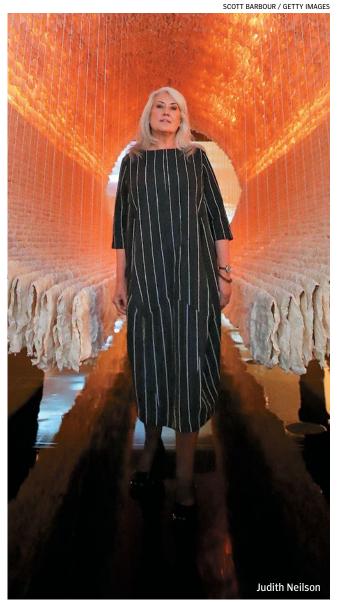
Mining and agribusiness tycoon Rachmat has since 2018 donated nearly \$5 million toward his A&A Rachmat Compassionate Service Foundation, which supports educational opportunities, health care and orphanages. Launched in 1999 as a scholarship fund, the foundation has awarded scholarships to 21,000 recipients over the years, with Rachmat contributing \$12.5 million. To ensure that students stay in school and learn effectively from an early stage, the foundation also organises annual training programmes for primary school teachers. In 2005, it expanded into health care, setting up clinics in rural areas that charge patients less than \$2 a visit.

• JOLIE TRAN

Jeffrey Cheah, 74

Chairman, Sunway Group MALAYSIA

Through his eponymous foundation, Jeffrey Cheah has donated almost \$39 million to fund scholarships and educational causes since 2018. Cheah has also provided funding to public primary schools, giving a combined \$2.5 million to SJKC Chee Wen in Selangor state and SJKC Gunong Hijau in Perak state, and another \$6 million to schools around Malaysia. Cheah is founder and chairman of Sunway group, which has interests in 11 industries across the Asia-Pacific. Since 2009, he has gradually transferred his entire stake in



Sunway Education Group—valued at more than \$238 million—to the Jeffrey Cheah Foundation.

• DANIELLE KEETON-OLSEN

Jack Ma, 55 Founder, Jack Ma Foundation CHINA

SEE PROFILE ON PAGE 64

Judith Neilson,

73
Founder and Patron, JN
Projects
AUSTRALIA

Neilson committed A\$100 million (\$72 million) in November 2018 to establish the Judith Neilson Institute for Journalism & Ideas in Sydney. The institute sponsors grants, education and events to encourage quality independent iournalism, including more reporting on Asia. In July, it announced its first series of grant programmes, which will support a number of news outlets, including the reopening of the Australian Financial Review's Southeast Asia bureau. Neilson owns a 21 percent stake in Platinum Asset Management, the global investment group founded in 1994 by ex-husband, Kerr Neilson. She also owns one of the world's most significant collections of Chinese contemporary art, which is displayed in her White Rabbit art gallery in Sydney.

• LUCINDA SCHMIDT



COURTESY: SUNWAY GROUP





Andrew and Nicola Forrest have also donated to Telethon, a fundraiser that raises money for sick children

Andrew Forrest, 57

Chairman, Fortescue Metals Group

Nicola Forrest,

57

Co-founder, Minderoo Foundation

AUSTRALIA

The Forrests donated A\$655 million (\$455 million) in May to their Minderoo Foundation, marking Australia's largest single gift from a living donor and taking the couple's total giving to A\$1.5 billion. The foundation supports cancer research, early childhood development, indigenous equality, healthy oceans and the elimination of modern slavery. It is named after the cattle station in West Australia's remote Pilbara region where Andrew Forrest grew up. Minderoo is funded by dividends the Forrests receive

from iron ore miner Fortescue Metals Group, which Andrew founded in 2003. He retains a 35 percent stake in the company.

• LUCINDA SCHMIDT

Le Van Kiem,

74

Co-founder and chairman, Long Thanh Golf Investment and Trading Joint-Stock Company

Tran Cam Nhung, 73

Co-founder and vice chairman, Long Thanh Golf Investment and Trading Joint-Stock Company VIETNAM

Since 2018, Kiem and Nhung have contributed \$11 million to various causes in Laos and their native



Vietnam. A war veteran, Kiem donated nearly \$5 million between early 2018 and April 2019 to support families of army retirees, while his wife Nhung in April gave over \$5 million to charities, primarily to treat infants with heart failure and to provide financial aid to students. The pair made its fortune in textiles and rubber when in the 1980s Vietnam adopted economic

COURTESY: AMORE PACIFIC



reforms. The bulk of their interests are now in property and golf courses. Since 2009 when he set up a scholarship fund, Kiem has given \$900,000 in scholarships for students to attend his alma mater, Hanoi's Thuy Loi University. The duo has given more than \$20 million over the past ten years toward causes not only in Laos and Vietnam, but also in Cambodia and Japan.

JOLIE TRAN

Suh Kyung-bae, 56 CEO, Amorepacific Group SOUTH KOREA

The Suh Kyung-bae Science Foundation in September awarded 10 billion won (\$9 million), to be allocated over five years, to four South Korean scientists for research in neuroscience and genetics. Suh established the foundation in 2016 with a personal endowment of 300 billion won. The head of South Korea's largest cosmetics company, Suh inherited Amorepacific from his father Suh Sung-hwan, who believed that

science was integral to innovation. Since 2017, the foundation has awarded 14 scientists grants of between 1.5 billion and 2.5 billion won. Suh pledged in 2016 to donate whatever was needed to bring the foundation's total funding up to 1 trillion won. With those funds, the foundation plans in 2021 to increase the number of scientists who receive its grants to 25 a year; it aims to mark its 20th anniversary in 2036 by giving grants to 100 scientists.

JIHYUN PARK

Gong Junlong, 50

Co-founder and vice chairman, Long Thanh Golf Investment and Trading Joint-Stock Company CHINA

Gong pledged \$50 million in June 2018 to build the Lufeng No 2 People's Hospital in his hometown of Shanwei, Guangdong. The hospital, with 14 floors and a total area of 57,000 square metres, will house 500 beds when it opens.

The property baron also donated \$5.6 million last year to fund the expansion of a high school in Shanwei. He previously gave \$35 million to build a new campus for his alma mater, Jiazi High School, which opened in 2012

JANE HO

Angel Locsin, 34

After earthquakes hit Mindanao

Actor

PHILIPPINES

island in October, Locsin donated 1 million pesos (\$19,000) and distributed truckloads of relief supplies to affected residents. Locsin, whose mother was adopted by a family from the island, has long helped the region, which has been riven by sectarian strife for decades. During the 2017 battle between the Philippine army and Islamist rebels in Marawi, she joined the Rural Missionaries of the Philippines, donating and distributing food packets and school supplies to tens of thousands of displaced victims. "These are urgent times when we have to act as fast as we can to save lives and rehuild communities, and we don't even have to think why," she says. Locsin is best known for playing superhero Darna in a 2005 TV series and for her role in 2012's One More Try, which earned her "best actress" in the 2013 Film Academy of the Philippines Awards. In 2017, she once blogged: "You don't need to wear a costume to be a superhero." Over the past decade, Locsin has donated as much as 15 million pesos to causes such as educational scholarships for students, supporting the economic and political rights of indigenous people, and ending violence against women and children. Her donations have also helped roughly 500 families hit by some of the country's largest disasters: Tropical Storm Ondoy in 2009, Typhoon Habagat in 2012 and Typhoon Haiyan in 2013, one of the deadliest storms on record, leaving 6,300 dead. Locsin has also inspired many of her millions of social media followers to give back. "It's like taking little steps towards substantive, holistic

change for the future of the next

generations," she says. "The only motivation we need is being part of humanity."

• SUNSHINE LICHAUCO DE LEON

Wu Yuanxi, 61

Chairman, Green City Group

Wu Yuangang

Chairman, Hanking Group
CHINA

The Wu brothers, both property tycoons, gave \$49 million in June 2018 to build new campuses for two existing high schools in their hometown of Shanwei, in Guangdong province. One of the schools, which opened in September, dates back to a Chinese classics academy from the 18th century. Elder brother Yuanxi previously helped build seven other schools in the city, and in 2008 established the Wu Yuanxi Charity Foundation, which has supported over 1,000 poor students pursuing college education

JANE HO

COURTESY: HEXAWARE TECHNOLOGIES



Atul Nishar, 64 Founder and chairman,

Hexaware Technologies

After selling his stake in software services firm Hexaware Technologies in 2013 to Barings Private Equity Asia for \$200

COURTESY: TSAO FOUNDATION

million, Nishar has donated roughly \$1.5 million annually to various causes. In 2019, Nishar gave \$1.5 million to a centre for leadership at the Avasara Academy, a girl's school near Mumbai that provides free education to underprivileged students. He was one of the early donors to Ashoka University, a private university, and in 2016 donated \$1 million to SRCC Children's Hospital in Mumbai, India's largest paediatric hospital. The tech entrepreneur has also established three computer education centres in southern India, which provide free training. "Being able to contribute in this way makes me feel good," says Nishar

• NAAZNEEN KARMALI

Mary Ann Tsao, 64

Director, Tsao Family Office SINGAPORE

Through their Tsao Foundation, Tsao and her family have donated \$2 million over the past year to caring for the elderly, bringing the family's total giving to \$55 million since the foundation was established in 1993. As chairman, Tsao oversees its primary goal to improve senior citizens' quality of life, enabling them to lead active social lives and age comfortably at home. Among the foundation's notable initiatives: Launching the Hua Mei Mobile Clinic in 1993, Singapore's first health care service for homebound elders; and creating in 2016 the country's first gerontological counselling programme to train counsellors and social workers on caring for the elderly in community settings. Tsao is the daughter of the late shipping magnate Frank Tsao, a Shanghai-born entrepreneur who founded the IMC Group. She also leads the family's investment office, which has interests in property, manufacturing, F&B and investments. The foundation was formed in Singapore by her then-89-year-old grandmother, who convinced Tsao to leave her thriving career as a paediatrician in New York to help build the organisation. In 2017, the Asian Development Bank appointed the Tsao Foundation as a partner in its \$2.5 million project on



Member Countries' Capacity in Elderly Care", to exchange knowledge on eldercare services.

JOLIE TRAN

Tang Wee Kit,

Chairman, Tang Holdings SINGAPORE

To commemorate Singapore's bicentennial, the chairman of investment and property group Tang Holdings in May donated the largest private collection of books and letters once owned by Sir Stamford Raffles to the National Museum of Singapore, saying it belonged to the nation. Raffles played a key role in establishing Singapore as a thriving British trading port, attracting migrant workers like Tang's father. Tang owns 98 percent of Tang Holdings and purchased his entire Raffles collection in two auctions. in 2004 and 2005, for a total of £560.000 (\$730.000 in today's dollars). Tang Holdings in 2015 donated \$750,000 to ethnic charities and needy schoolchildren to mark the 20th anniversary of its flagship Singapore property, Tang Plaza, which houses the company's



headquarters, Tangs department store, and the Marriott Tang Plaza Hotel.

• PAMELA AMBLER

Yoshiki Hayashi, 54

Co-founder, X Japan JAPAN

After his home prefecture Chiba was hit in September by a typhoon, Hayashi donated ¥10 million (\$92,000) to help victims there. The leader of the popular Japanese band X Japan, Hayashi, who resides in Los Angeles, has contributed to causes mainly in Japan and the US

through his Yoshiki Foundation America. Started in 2010, the foundation has contributed to disaster relief, orphanages, and treatment for children with bone-marrow disease. He has also held concert fundraisers in Japan, and in 2018 auctioned a drum set for ¥6 million to fund the Japanese Red Cross

JAMES SIMMS

IU (Lee Ji eun),

26 Singer, Actor SOUTH KOREA

The youngest to make the list, the singer-actor, who goes by her stage name IU, has given a total of 900 million won (\$800,000) to a variety of causes since 2018. In April, she donated to Gangwon Province to help fund relief efforts after a massive forest fire left nearly 4,200 people homeless. She was the first of many celebrities, including fellow K-pop stars PSY and Suzy Bae, to donate to that cause. In March, she made a donation to the Seoul Association of the Deaf after starring in a drama series that highlighted the lives of deaf and speech-impaired individuals. In

<u>64</u>

"Strengthening Developing

BRENT LEWIN / BLOOMBERG VIA GETTY IMAGES



May, she donated to Childcare Korea, an organisation that serves underprivileged children. IU, who grew up poor, has made annual donations of 300 million won to 500 million won to various charities for the past five years.

• JIHYUN PARK

Hans Sy, 64

Chairman of the executive committee and director, SM Prime

PHILIPPINES

Child Haus in July opened its newly renovated and expanded centre in Quezon City to house 40 cancer-stricken children and their caregivers. Sy, previously CEO of property firm SM Prime, paid \$400,000 in 2010 for the property, which now provides poor provincial families with temporary shelter, as well as programmes and activities that promote healing. On his 60th birthday in 2015, Sy bought the land for Child Haus' first location in Manila for \$600,000 and paid \$1.4 million to build it. Opened in 2017, he still covers its operating expenses. Sy's associates have become co-sponsors and provide Child Haus with additional financial support and in-kind contributions.

• GRACE CHUNG

Chuchat Petaumpai, 66

Chairman of the executive committee, Muangthai Capital

Daonapa Petampai, 66

Managing director, Muangthai Capital THAILAND

The husband and wife duo in 2019 made their largest single contribution to health care in

Thailand, donating roughly \$2.7 million to Bangkok's Thammasat University Hospital to construct an outpatient building for its radiology department, which will include X-ray, MRI and related services. The couple's Muanathai Capital is one of Thailand's biggest consumer finance companies. Last year they donated \$1.7 million to Khirimat Hospital in Sukhothai. The couple began donating multimilliondollar sums to health care centres throughout Thailand in 2015, shortly after taking their company public.

• DANIELLE KEETON-OLSEN

COURTESY: CHILD HAUS



You Zhonghui,

57

Chairman, Fortune High Investment Group; chairman, Seaskyland Technologies CHINA

You has committed \$1.4 million through her Fortune High Investment, an educational assessment services group of which she owns 81 percent, to renovate a boarding school in China's Guizhou province. The donation is being made through the Sun Yat-sen Fraternity Foundation. You gave \$140,000 in 2017 to upgrade a wildlife rescue station for black snub-nosed monkeys in Guizhou's Fanjingshan National Reserve. The same year she became the first woman from China to sign the Giving Pledge created by Bill Gates, Melinda Gates and Warren Buffett

JANE HO

Marcus Blackmore, 74

Executive Director, Blackmores

AUSTRALIA

Blackmore donated A\$10 million (\$7.2 million) last November to Australia's Southern Cross University to establish a National Center for Naturopathic Medicine. It was the single largest donation the university had ever received and will be used to support higher education and research. "We have a responsibility to respond to the growing health care needs of Australia, and evidence-based natural medicine will play an increasingly active role in that response." Blackmore says. His Southern Cross donation follows a similar one in 2017 to the National Institute of Complementary Medicine at Western Sydney University and a A\$1.3 million donation in 2015 to establish a chair in integrative medicine at the University of Sydney. Blackmore owns a 23 percent stake in the Blackmores health supplements group that his father. Maurice, founded in the 1930s.

LUCINDA SCHMIDT

time-philanthropist, has given

away nearly S\$4 million (\$2.9

traditional Chinese medicine to

the underprivileged and elderly,

with almost \$\$300,000 of that

chairman of the Sian Chay

donated since 2018. As executive

million), primarily to provide

COURTESY: TANOTO FOUNDATION



Belinda Tanoto. 34 Director, Royal Golden Eagle

Anderson Tanoto, 30

Director, Royal Golden Eagle **INDONESIA**

The Tanoto siblings lead their family's philanthropy through the Tanoto Foundation. The family in 2019 donated \$16.7 million, up 30 percent from 2018, primarily to support and provide education for all, from early childhood to university. It also aims to prevent stunted growth in Indonesia's children—which afflicts an estimated 10 million of the country's youth. Of the two, Belinda is the most actively involved in the foundation and focuses primarily on early childhood development. The foundation has so far trained 15,000 teachers and funded nearly 7,500 university scholarships. The Tanotos own Royal Golden Eagle, which holds interests in various companies across Asia. Their parents, Sukanto and Tinah Bingei Tanoto, started giving to philanthropic causes in the 1980s. The family's efforts have since expanded as far as China, where the foundation offers training to parents in rural areas. In Singapore, the

foundation supports research on diseases prevalent in Asia. Separately, Anderson devotes about a fifth of his time to the foundation's leadership training programmes and its support of the United Nations' sustainable development goals

Toh Soon Huat. 59

Executive chairman, Sian Chay Medical Institution **SINGAPORE**

Toh, an entrepreneur-turned-full-

Medical Institution, an unpaid position, Toh has expanded the PUDJI LESTARI 118-year-old institution from a single clinic serving 26 patients a day to 15 clinics serving roughly 1,100 patients daily across Singapore. The son of a taxi driver, Toh started his furniture brand Novena in 1984 and in 2000 listed it on the Singapore Exchange. He sold his roughly 28 percent stake in 2009 for S\$8.5 million; his wife Lee Kek Choo



sold her minority stake between

Liu Daoming, 62 **Wang Ping**

Chairman and owner. Myhome Real Estate **Development Group**

CHINA

Liu and his wife Wang Ping last year pledged \$11 million to the Myhome Community Volunteer Philanthropic Foundation in China's Hubei Province. The couple set up the foundation in 2016 with a \$3 million endowment to help senior citizens volunteer for community services in their area of expertise: For example, retired teachers tutor children and former medical professionals offer free health care lectures. A total of 11.000 volunteers have so far spent nearly 310,000 hours in the foundation's programmes. Liu's Myhome property group is a publicly listed company that had 2.5 billion yuan (\$350 million) in revenue last year. This year, Liu signed the Giving Pledge.

JANE HO

Kathy Xu. 52

Founding partner, Capital **Today**

HONG KONG

Venture capitalist Xu gave \$4 million late last year to her alma mater Naniing University to endow the Kathy Xu Artificial Intelligence Development Fund, which aims to recruit top talent and advance the field of artificial intelligence. Her previous donations include \$6 million since 2010 for scholarships at the university. Among them is an award established in 2015 that gives up to \$60,000, the largest scholarship the university offers, to an undergraduate to go overseas to study science, technology, engineering, or mathematics. Xu, who graduated from the university in 1988, founded Capital Today in 2005



COURTESY: CAPITAL TODAY



and now manages \$2.5 billion in funds that invest in China-based startups.

JANE HO

Bill Bensley, 60

Founder and owner, Bensley Design Studio THAILAND

Bill Bensley, the owner and operator of an eponymous architecture firm with offices in Bangkok and Bali, is a well-known designer of upscale resorts in Asia. In 2018, he opened Shinta Mani Wild, a luxurious jungle retreat in southern Cambodia to serve as a charitable operation. "This is one of the last untouched areas in Cambodia. I wanted to protect, and also share it." he says. "People can come and see iust why we must save it." Bensley has spent \$15 million since 2010 to buy and develop 400 hectares of riverside property for Shinta Mani Wild, with all profits from the resort to be donated to Wildlife Alliance, a conservation group battling poachers and logging in an adjoining rainforest abounding with elephants and other rare

The American architect has lived for three decades in Bangkok. He has designed about 200 properties, including the Four Seasons Tented Camp Golden COURTESY: SHINTA MANI WILD



Bill Bensley (top); Rangers on duty (below left) and the Shinta Mani Wild jungle retreat $\,$



COURTESY: SHINTA MANI WILD

Triangle in northern Thailand, the Capella Ubud in Bali, the InterContinental Danang Sun Peninsula in Vietnam and the new Rosewood Luang Prabang in Laos. But Shinta Mani Wild is part of his own Bensley Collection of upscale boutique inns.

Bensley has long been giving back in Cambodia. Bensley's donations are all made through the Shinta Mani Foundation, which Cambodian hotel and restaurant entrepreneur Sokoun Chanpreda created in 2004. The foundation has given more than \$850,000 to build 1,600 wells and more than 100 homes, and has provided over 12,000 bicycles to locals. Additional contributions from him and others have



COURTESY: SHINTA MANI WILD

provided 15,000 dental checkups and teeth cleanings for needy children in the country.

Shinta Mani Wild tries to support Wildlife Alliance with more than money: Guests can join nature walks with rangers in a protected forest showcasing what's at stake. The foundation provides support for the rangers, and the resort has also built a ranger station for their use. Bensley's latest brainchild: A collection of Wildlife Alliance outdoor gear he has designed and launched this year, with all proceeds going to the conservation group.

• RON GLUCKMAN

Shigenobu Nagamori at the opening ceremony of a cancer research centre which he funded



COURTESY: NIDEC

Shigenobu Nagamori, 75

Founder, chairman and CEO, Nidec

JAPAN

Nagamori in August 2018 donated ¥3.2 billion (\$29 million) to build a new community centre in Muko, the city where he grew up. The centre has a 500-seat concert hall, but can also be used in emergencies to shelter about 750 people and provide bathing. cooking and sleeping facilities. "Instead of being delighted with the fat bank account that fate has given me, I've decided to use that money to help where there are true needs," he said during a news conference to announce the donation. Nagamori's Nidec, which is based in the city of Kyoto, is one of the world's largest manufacturers of motors for hard disks and optical drives. Nagamori has to date donated at least ¥20 billion toward educational and health care initiatives. His other recent gifts include funds to build an engineering school and a cancer research centre, both in Kvoto.

JAMES SIMMS

Ronald Chao,

Vice chairman and director, Novel Enterprises

HONG KONG

HEROES of PHILANTHROPY

COURTESY: BXAI



Chao's Bai Xian Asia Institute has handed out at least 85 scholarships to Asian students in 2019, each up to \$25,000, to study at universities in China and Japan. The funding for these scholarships comes primarily from a \$100 million endowment Chao made in 2014 to establish the education-focussed institute. The institute has four other founders, who donated a combined \$10 million. Chao is its honorary chairman, his daughter Ronna is a co-founder and CEO and brother Silas Chou sits on its advisory council. Chao made his fortune from the family's textile business, Novel Enterprises, which started as an unbranded supplier of clothing and then moved into branded merchandise, developing both Tommy Hilfiger and Michael Kors into major brands. A lifelong believer in international education, he earned his bachelor's degree in mechanical engineering from the University of Tokyo in 1962 and a master's in mechanical engineering from the University of Illinois in 1964. The experience, he says, helped him realise the

NILOTPAL BARUAH



importance of cross-border relationships. To date, the institute has awarded 480 scholarships to students from 25 Asian countries and territories.

SUZANNE NAM

Kiran Mazumdar-Shaw, 66

Chairman and managing director, Biocon

John Shaw, 70 Vice chairman, Biocon INDIA

Biotech entrepreneur Mazumdar-Shaw and her husband in July donated \$7.5 million to the University of Glasgow, the largest single donation the university has received. Shaw, his brother and late mother are alumni. Twothirds of the grant is earmarked for a research hub to be called Shaw Plaza. The remainder will endow a professorial chair in precision oncology. The couple

Rita Tong Liu

COURTESY: GALE WELL GROUP

also pledged \$2 million recently to the Memorial Sloan Kettering Cancer Center in New York to establish the Mazumdar-Shaw International Clinical Fellowships. Mazumdar-Shaw, who signed the Giving Pledge in 2016, has also given \$3.5 million to Krea University, a new liberal arts university in southern India. "I remain committed to continue making a difference through philanthropy," she says.

NAAZNEEN KARMALI

Rita Tong Liu, 71 Chairman, Gale Well Group

HONG KONG

A devout Catholic, Liu marked her 70th birthday in June 2018 by giving HK\$80 million (\$10 million) to the Catholic-run Caritas Institute of Higher Education through her family's L&T Charitable Foundation. The funds will be used to help the school evolve into Hong Kong's first Catholic university. The Institute has named its school of business and hospitality management after Liu and its school of social sciences after her mother. Felizberta Lo Padilla Tong. Liu, who founded property developer Gale Well Group in 1976, is Hong Kong's fourth-richest woman. She set up L&T in 2003 and in 2015 established the RitaT Liu Foundation, both of which have donated a combined HK\$400 million over the years to causes such as cultural heritage conservation, medical research, and women's rights.

JANE HO

Thippaporn Ahriyavraromp,

51

Founder and Group CEO, DT Group of Companies (DTGO)

THAILAND

The daughter of Thai billionaire Dhanin Chearavanont, Thippaporn has been a lifelong champion of philanthropy and is devoted to causes in education, the environment and health care. She channels 2 percent of the revenues from her privately held investment group, DTGO, to the education-focussed Buddharaksa Foundation, which she started in 2002, and to her family's Dhanin Tawee Chearavanont Foundation, which she chairs. Last year, Thippaporn and her husband Jwanwat Ahriyavraromp founded the Blue Carbon Society, an environmental group focussed on protecting Thailand's mangroves. Mangroves can be critical in fighting against climate change, the group notes, as they absorb greenhouse gases up to four times faster than land-based forests. Blue Carbon signed an agreement in August with the United Nations Development Program to protect 24 sq km of mangroves southwest of Bangkok. The couple will donate \$350,000 to fund the three-year project.

RON GLUCKMAN





'Data And Algorithms Help Us Invest Beyond Geographies'

Anand Rajaraman of Rocketship on what pulled a quarter of their bets to India and his take on sky-high valuations

By SAYAN CHAKRABORTY





nand Rajaraman has been there, done that, first as an entrepreneur and later an investor in startups. He tasted the highly-coveted but mostly elusive entrepreneurial success, a profitable exit, pretty early in his career. Within two years of its launch, Junglee, a comparison and price discovery startup he co-founded with Venky Harinarayan, Ashish Gupta, Rakesh Mathur and Dallan Quass, was

bought by Amazon for \$200 million in 1998, a stellar exit in those days.

Ever since, a pursuit to make sense of tomes of data—Rajaraman also teaches machine learning at his alma mater, Stanford University—and Harinarayan have been constant fixtures in Rajaraman's professional outings. The duo started Cambrian Ventures, an early-stage fund backed by Jeff Bezos, in 2000. In 2005, they launched Kosmix, an ecommerce-focussed social media startup, that

was bought by Walmart for about \$300 million. Together, they have invested in several startups, notably Facebook and Lyft in the US and Urban Ladder and Snapdeal in India.

Their latest venture, a \$40 million early-stage fund Rocketship, has made about a quarter of its 32 bets in India, including Fynd, PaySense, Mad Street Den, Moglix and Locus. A similar proportion of its corpus has been deployed here. In the midst of raising a second fund for Rocketship

(he declines to divulge details), Rajaraman, in an interview with Forbes India, talks about the fund's data-driven approach to investment, the need for an investor to identify an addressable market and lessons learnt from his India investments. Excerpts:

Q How has online retail played out in India vis-à-vis the US? How many such businesses, both horizontal and vertical, can India accommodate?

The US and India are not different. In the US, there is one leader in ecommerce, Amazon. In India, there are two businesses competing, Amazon and Flipkart. India as a market can possibly support one or probably two big ecommerce companies. The market is just not big enough.

There was a bit of over-investment and the valuations were out of sync with reality. You can expect that anywhere in venture capital. In certain verticals, there is room to build. There was a belief that certain verticals will go online before India was actually ready for them, furniture for example. India still needs an online-offline model for some of these things and that obviously takes longer and more capital to build. From a broad market point of view, if anything can be done purely online, you can expect the market leaders like Amazon or Flipkart to be dominating those.

Q Did we overestimate the market in India? As an investor, how do you differentiate between overall market and addressable market?

I imagine so. We are an early-stage investor. At that stage, it is hard to know the exact size of the market opportunity. We see if the business has product market fit, whether the early cohorts look good and if there could potentially be a big market. When I invested in Facebook, I had no idea what the size was. I believe even Mark Zuckerberg or Accel (another early investor) didn't know the size of the market. Sometimes

there are positive surprises and sometimes negative ones. People can say they saw a great market and went in, but that's all hindsight.

Our median valuation for Series A has been \$20-25 million. At that valuation, we can take those risks. At the later stages, however, investors are evaluating market size and price of the round etc. People coming in later have to be more cautious on the pricing.

There is always a little bit of a herd mentality in all venture capital. It happened in the US as well. A lot of it is the fear of missing out. Suppose I don't have a self-driving car startup and they become big, I will look foolish. All these are eventually baked into the economics of the model, at least for the good funds. The bad funds go out of business. When the boom starts, a lot of investors are drawn in

"In India, things always take longer than you think. The regulations change, so companies have to adapt to those things, which doesn't happen as often in the US."

from the fringes who don't necessarily have the expertise and when the bust happens, a lot of these people leave.

Q With Rocketship, was there any particular gap that you set out to address?

Both Venky (Harinarayan) and I understand venture capital and we had our wins and losses. We knew the old model and didn't really want to do that again with Rocketship. The old model is a network-driven model. It works well when there

are geographic concentrations. Most venture capitalists spend their time cultivating their network.

But entrepreneurship and innovation have gone completely global. How do you invest in these hot companies across the globe? The answer that we hit upon was, the right way to do this is to use data and algorithms. If we can build a big data set of startups in the world, then we can run machine learning models on it and we might be able to identify these companies and instead of waiting for them to contact us, we can proactively reach out and invest. We license data from many data providers, like Tracxn in India. We also crawl the web, we look at social media and it's all automated. At Rocketship, we probably have the most comprehensive data set of startup activity in the world—more than 10 million companies globally.

Q Is dependence on machine learning a full proof method to identify potential winners? Are the algorithms evolved enough to identify, for instance, fudged data?

The first set of (machine learning) models is a screen. The initial models, of the millions of companies in the data set, identify about 500 companies a year. We talk to them and get the second level of data from them and then we invest in 10 of those.

There is some element to this that is data-driven and some element that is our expertise. The algorithms will say whether the pattern looks interesting, but whether it is fudged or not is something that we will have to look and see. The important thing to realise is that it is not the algorithm or machine learning model making the decision. It's a combination of those models and us as venture capitalists with 20 years of experience. We are combining these things. I don't believe in that (completely automated decision-making) model. My strong belief is that the future is about humans and artificial intelligence

(AI) working together to make better decisions and not in isolation. You train the AI on some data, but it is completely blind to what else is going on in the world. Humans are good at broad vision. It's a combination.

Q While everybody talks about data being the new oil, do all companies know how to do something meaningful with the data they are sitting on?

This whole data thing started way back in the 1990s. There was no World Wide Web, but companies were using their own data to make better decisions. At the point, data was internal and private. The second phase happened when World Wide Web came around and there was so much more public data available. That unleashed a wave of innovation. Companies were built on publicly available data and the biggest success story is Google. The third era was when social media came out and then we had social data, which is kind of neither public nor private data.

The new set of data that companies are trying to get are through trained machine learning models.

There is an interesting dynamic called network effects, which create lock-ins that make it hard for competitors to enter. When you are an early entrant, you might put out a very ordinary product. But since you are the first product, people start using it and when they do, you gather usage data and you can use that to build better models and improve the product. This is a network effect and when this starts rolling, it becomes very hard for a new entrant to come into the market because they don't have this usage data to make their products as good. That is what exactly happened in case of search. The market leaders who have this network effect going have an edge.

Q You were late in entering India. Why, and what interesting opportunities did you spot here? India started happening for us around 2017-18. Jio had launched. We didn't consciously say we wanted to be in India. As a fund, our algorithms pulled us here. They were showing a lot of companies in different segments with good adoptions. Companies in the short video space. A lot of growth in fintech and vernacular languages. Rural ecommerce is another interesting idea. With Jio, it looks like the market can be much bigger.

In terms of sector and spaces, serving the second and third tier cities, serving the non-English user base, both in terms of entertainment and communication, commerce, interest us. Fintech is going through some issues, but we are keeping a close watch. Health care as well. We are looking at B2B

"India as a market can possibly support one or probably two big ecommerce companies. The market is just not big enough."

software as a service for Indian companies with a global market.

Q Data may guide you to sectors where a lot of companies are coming up or money is going in? How do you make sure that you don't enter a bubble?

We are focussed on specific companies and their numbers and execution, as opposed to the overall ecosystem. For us, the themes come bottom up. We look at the companies, get excited by them and then we see if the company is part of a theme or whatever. Many investors are thesis-driven. We are the other

way round. We fixate on specific companies as opposed to themes. We are not thesis-driven at all.

Q What are the lessons learnt from investing in India?

In India, things always take longer than you think. The regulations change, so companies have to adapt to those things, which doesn't happen as often in the US. Sometimes, the regulatory changes create opportunities. That's an interesting learning that whenever there is some kind of a change, that can be an opportunity for an interesting company.

Q How comfortable are you with the valuations here?

I don't take private market valuations seriously because it is one investor's belief of what the company is and not that of the overall market. It may or may not reflect any underlying strength in the business. Massively funded companies with big valuations do fail as well. In the first wave of ecommerce, many companies raised lots of capital and they didn't end up going anywhere. Private market valuations should be taken with a pinch of salt. Only when a company goes public, you know if the valuation is real or not.

Q Are investors more inclined to back business model innovations while others get sidelined as science projects?

There are companies with good technology that have been built. It is right to say that technology alone is not enough. In the early stages, I won't know the size of the market, which is okay. We want a technology to be innovative and the adoption has to solve a real customer pain point and cause disruption in the market. Clearly, there are going to be science projects and there are going to be some that will solve interesting pain points and those are the ones that we will back.

Connecting a Million Dots

EquBot is on a quixotic quest to prove that computers can outsmart human stock pickers

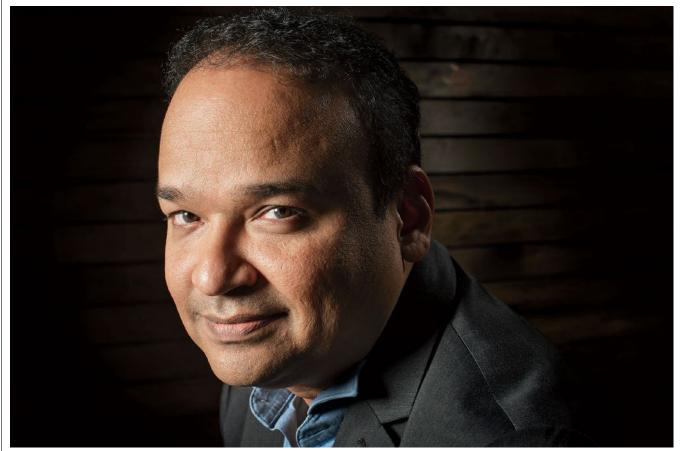
By WILLIAM BALDWIN

computer can recognise a cat. Can it spot a bargain stock? Sitting in a business school lecture on hedge funds four years ago, Chidananda Khatua got the inspiration to answer this question. A veteran Intel engineer working on a nights-and-weekends MBA

at UC Berkeley, Khatua imagined that something powerful might come out of the ability to blend precise financial data with the fuzzier information to be found in annual reports and news articles.

For most of their history on Wall Street, computers have been strictly quantitative—dividing, say, prices by earnings and ranking the results.

But that is destined to change. A dramatic demonstration of silicon's verbal potential came in 2011, when an IBM system called Watson bested two human champions at Jeopardy! To accomplish this feat the computer had to grasp not just numbers but genealogical relationships, time, proximity, causality, taxonomy and a lot of other connections.



Chidananda Khatua at EquBot's San Francisco office. Maybe computers are chauvinistic: His software made a timely recommendation to buy shares of Zendesk, a software developer located nearby

72

The world's fastest computer

No computer exhibits artificial intelligence unless it can think quickly. Here's a time line of the fastest—the earliest of which would have been smoked by any smartphone—with speeds measured in billions of floating point operations per second.

1964 CDC 6600 Control Data (US) 0.003 GFLOP

1974 Star-100 Control Data (US) 0.1 GFLOP 1985 Cray 2 Cray (US) 0.9 GFLOP



1996 Hitachi SR2201 Hitachi (Japan)



iPhone 11 Pro
Apple
(US)
600 GFLOP

Apple
(US)
149M GFLOP

Put that kind of artificial intelligence (AI) to work and it could do a lot more than win TV game shows. It might function as a physician's assistant, as a recommender of products to consumers or as a detector of credit card fraud. Maybe it could manage portfolios.

Khatua, now 44, enlisted two B-school classmates in his venture. Arthur Amador, 35, had spent much of his career at Fidelity Investments advising wealthy families. Christopher Natividad, 37, was a money manager for corporations.

They didn't have any illusions that a computer would have understanding the way humans do. But it could have knowledge. It could glean facts—a mountain of them—and search for patterns and trends in the securities markets. Perhaps it could make up in brute force what it lacked in intuition.

The trio chipped in savings of their own and \$735,000 from angel investors to create EquBot, advisor to exchange-traded funds. IBM, eager to showcase its AI offerings, gave the entrepreneurs a \$120,000 credit toward software and hardware bills.

Two years ago EquBot opened up AI Powered Equity ETF, with a portfolio updated daily on instruction from computers. In 2018 it added AI Powered International Equity.

Chief Executive Khatua presides over a tiny staff in San Francisco and 17 programmers and statisticians in Bengaluru, India. The system swallows 1.3 million texts a day: news, blogs, social media, SEC filings. IBM's Watson system digests the language, picking up facts to feed into a knowledge graph of a million nodes.

Each of those dots to be connected could be a company (one of 15,000), a keyword (like "FDA") or an economic factor (like the price of oil). There are a trillion potential arrows to link them. After trial and error inside a neural network, which mimics the neuronal connections in a brain, the computer weights the few arrows that matter. Thus does the system grope its way toward knowing which ripples in input data are felt a week, a month or a year later, in stock prices.

On a busy day EquBot is doing half a quadrillion calculations. Thank goodness for Nvidia's graphics chips. These slivers of silicon were designed to keep gamers happy by simultaneously processing different pieces of a moving image. They turned out to be ideal for the intensely parallel computational streams of neural networks, and

On a busy day EquBot is doing half a quadrillion calculations

they power the computer centres that Amazon rents out to EquBot and other AI researchers.

Last year EquBot's software picked up a buzz around Amarin Corp, an Irish drug company with a prescription-only diet supplement that uses omega-3 fatty acids. The international ETF got in below \$3, well before the regulatory nod that sent the stock to \$15. Another move involved adding Visa to the domestic fund after the system measured ripples leading from announcements of chain-store closings toward higher credit card volume.

The computer has its share of duds. It fell in love with NetApp and New Relic, perhaps reacting to a flurry of excitement in cloud computing. The stocks sank. Not to worry, says Khatua. Neural networks learn from mistakes.

It's too early to say whether EquBot, which manages only \$120 million, will succeed. So far its US fund has lagged behind the S&P 500 by an annualised 3 percentage points, while the international one is running 6 points ahead of its index.

EquBot, which says its funds are the only actively managed ETFs using AI, won't have this turf to itself for long. IBM is selling AI up and down Wall Street. Donna Dillenberger, an IBM scientist in Yorktown Heights, New York, is working on a stock market model with millions of nodes, and she says billion-node systems are around the corner.

An equally large threat comes from those human analysts Khatua is trying to put out of work. They can track drug trials or notice that Amazon doesn't take cash. What EquBot has in its favour is the explosion in digitised data and a comparable growth in chip power. Humans can't keep up with all the connections.

"Ninety percent of the data in existence was created in the past two years," says Art Amador, EquBot's chief operating officer. "In two years that will still be true."

PHOTOGRAPHS: KALPANA SUNDER

nside the bustling Natun Bazar neighbourhood of North Kolkata, we walk through narrow, muddy lanes, lined with small shops and homes, stray goats, and children playing, to Makhan Lal Das & Sons. The factory-cum-shop has been in the business of selling sweetmeats since 1830, and its nondescript appearance is no indication of its lineage.

Shib Nath Das is the ninth generation of a family that came from Debrajhat village in the Purba Bardhaman district of West Bengal to first sell sweets in the local haat, or market; he sits on a wooden platform, supervising the sweets that are being made to order. Thickened milk is made into chena (cottage cheese) and then into sandesh (sweets), sometimes with *nolen gur* (palm jaggery), sometimes chocolate, and sometimes a dash of saffron. Two large plates in front of Das contain the samples of the day, with fanciful names like 'Mono Hara' (one who steals your heart) and 'Abar Khabo' (I will eat again). Wooden moulds in different shapes and sizes lie on another board, where an artisan makes conch shell-shaped sweets. Small clay cups of creamy mango curd and different varieties of sandesh are offered to us.

Mishti, or sweetmeats, is an integral part of Kolkata's cuisine. Many attribute the beginnings of the sweet industry to the Portuguese who introduced cottage cheese to the region in the 16th century. Others claim that in those days, the milkman would often be left with unsold milk at the end of the day that would then go sour, and, therefore, *chena* was made (by curdling the milk) and mixed with sugar to make it more palatable.

Kolkata is a veritable melting pot, with the British, Portuguese, Chinese, Armenians and Jews making it their home when the city became the hub of the East India Company in the mid-18th century. Its culinary heritage is a product of all these cultures and communities, which I am in the process of discovering while on a culinary trail curated by Novotel Hotels and Residences, and Indrajit Lahiri, a food blogger. By sampling some quintessential items from the city's diverse foodscape, we get a peep into the culinary history of more than 300 years in the course of a few days.

THE NEIGHBOURS FROM NEXT DOOR

Kolkata was home to India's largest Chinatown, with the Chinese coming to the city in the late 18th century to set up sugar mills in a neighbourhood called Achipur, on the invitation of the British. We walk through the narrow lanes of Tiretti Bazar, which is one of the two Chinatowns (the other





OF MISHTI, MUGHALS AND NOODLES

A brief lesson in Kolkata's history, through its food

By KALPANA SUNDER





(Clockwise from top left)
A selection of made-to-order
sandesh at Makhan Lal
Das & Sons; Shib Nath Das,
the ninth generation scion
running the store; Nizam's
kaathi roll; the chimney
soup at Eau Chew; Chinese
breakfast at Tiretti Bazaar;
sweet buns at Nahoum





being in Tangra) where every morning prawn baos and dumplings are served for breakfast from the sidewalks. Large stacks of aluminum steamers are set up on makeshift tables: There's siumai—Cantonese pork and shrimp dumplings—fish ball soup, and even Chinese bread shaped like churros. One vendor sells Chinese sauces, spices and noodles. It's a communal atmosphere, with people sitting on plastic stools and reading Chinese newspapers, while others chat with friends.

We continue on our Chinese food trail with a visit to Eau Chew, one of the oldest family-run Chinese restaurants in Kolkata, which dates back to the 1920s. It is located on the first floor of a building in the rundown compound of a garage, above a closed petrol pump, and is open for only 7 hours a day. Red Formica-covered tables and a no- frills ambience, with only a fish tank and framed photographs of the first owners for decoration, indicate that this experience is all about the food. Joel Huang, who runs the restaurant today with his mother Josephine and wife Doren, says his great-grandparents came in the early 20th century and set up a small tiffin house for Chinese immigrants at the same location, although the name Eau Chew, in Mandarin, means 'Europe' and was intended to attract a European clientele.

Right from chopping vegetables, cooking and billing the customers, everything is done by Josephine, Joel and Doren. They follow traditional recipes with no improvisations or variations. "Our customers know what they like here, and come to find that," says Joel. We have their famous 'chimney soup' that is kept hot with glowing embers of coal, steamed fish with soy sauce, and hearty 'Josephine noodles' created for a customer who wanted to eat something off the menu and different. The dish comprises noodles topped with gravy, vegetables and meat.

Many of the old-fashioned Chinese restaurants of the city, such as Nanking and Song Hay, have shut over the past few decades; Chung Wau in the Burra Bazaaar neighbourhood is one of the last of these restaurants that are still in operation, with cabins named after Bengali classics. It remains famous for its food, which includes roasted chilli pork and other dishes based on authentic recipes from Hakka Chinese immigrants. The old has slowly given way to the new, with chains like Mainland China serving more popular versions of Indian Chinese food.

THE ANGLO-INDIAN ANGLE

To get a taste of the city's Anglo-Indian food—one of the pillars of its diverse culinary heritage, which

is an amalgam of Portuguese, French and British influences—we go to Scoop, inside the New Empire Cinema complex, in the Dharmatala area. It is an ice cream parlour and multi-cuisine restaurant owned by Joanna Mantosh, an Anglo Indian, and her husband. They have cooked up a special Anglo-Indian meal for us: Jungli pulao with chicken curry, yellow rice with coconut milk and turmeric, pantaras (deep fried, breaded meat-stuffed pancakes), and chicken vindaloo. Anglo Indian food was not an integral part of the restaurant scene in Kolkata in the past; it was cooked more at home by families, and shared within the community and served in a mess or canteen run by the community.

In the early 19th century, Kolkata was home to a vibrant Jewish community of almost 20,000 people. Today, even though the community has dwindled, their beautiful synagogues, such as the Magen David and the Beth El in the Burra Bazaar area, survive and are manned by Muslim caretakers. Inside the labyrinthine alleys of New Market in Dharmatala, lined with shops selling everything from Portuguese 'Bandel cheese' to garments, furnishings and crockery, stands Nahoum, the oldest Jewish bakery in town.

Founded by Nahoum Israel, a Baghdadi Jew, in 1902, the shop houses vintage teak wood furniture, and glass shelves heaving with fruit and plum cakes, rum balls, lemon puffs, cream-filled pineapple pastries and fruit buns. The fourth generation of the family continues to own and run the bakery and shop, which have now become a precious piece of nostalgia in Kolkata's food fabric.

Our next stop is Nizam's, next to New Market on Hogg's Street. A no-frills restaurant, it is supposed to have invented, in the 1930s, one of the quintessential elements of Kolkata street food—the kaathi roll. The origins of the iconic roll are a bit hazy: Some say it was made for a customer who wanted a non-messy on-the-go snack, while others say it was made for finicky British clients who did not want to soil their fingers. "It's a perfect snack of carbs and protein: A crisp paratha stuffed with raw onions, kebabs roasted on skewers, or chunks of paneer," says Lahiri.

Mughlai food, from which the kaathi roll



Flury's, a stylish tea room started in 1927 by a Swiss couple

FOOD

originates, was introduced in Bengal under Mughal emperor Shah Jehan in the 17th century, when Burdwan became a revenue collection centre for Bengal. Mughlai parathas stuffed with kheema, and biryani were some of the most popular dishes at that time, and continue to remain so. Mughlai cuisine was also brought in from Awadh by its 10th and last nawab, Wajid Ali Shah in the 19th century. Many of these dishes also had Turkish and Afghan influences, from the spices to cooking methods.

Our last stop is Flury's, a stylish tea room and confectionary shop that is a Kolkata icon from 1927, started by Swiss couple Joseph and Frieda Flury, and now owned by the Apeejay Surendra Group, who also own the Park Hotels. Located on Park Street, Flury's was just a tea room to begin with and has since morphed into a large confectionary and restaurant famous for its breakfasts of Eggs Benedict and beans on toast. On offer are pineapple and chocolate pastries and cakes, rum balls, and a variety of confection. Like Nahoum's, Flury's is an integral part of Kolkata's foodscape, thronged by college students and families for decades.

In the past couple of decades, Kolkata has adopted to new and contemporary trends in food and restaurants, with sweetmeat shops and fine dining restaurants both catering to increasing demand. Molecular gastronomy and fusion fare are also popular trends. At the same time, the Hakka Chinese restaurants of Tangra and Tiretti Bazar, as well as the traditional bakeries and kaathi roll joints, continue to have their loyal patrons for whom food is still cloaked in nostalgia. In Kolkata, the old and the new exist in harmony. **F**

IN THE LAST FEW DECADES, KOLKATA HAS ADOPTED TO CONTEMPORARY TRENDS IN FOOD WHILE NURTURING ITS TRADITIONAL BAKERIES AND FOOD JOINTS. IN KOLKATA, THE OLD AND THE NEW EXIST IN HARMONY





WHERE THE WALLS HAVE YEARS

The Walls of Dubrovnik in Croatia are an example of the old world's need for, and fascination with, stone fortifications

By CHARUKESI RAMADURAI



ver since the world discovered Dubrovnik, things have not been the same for this beach destination on the Dalmatian coast, fondly known as the 'Pearl of the Adriatic'. Or for Croatia, for that matter. And then came *Game of Thrones*. Things only got more frenzied, with fans of the immensely popular television series thronging its narrow cobblestoned lanes in search of their favourite filming locations, and specialised guided tours mushrooming almost overnight across town. On any good day in high tourist season, it is almost impossible to find a quiet spot inside the old town or walk into a restaurant for dinner without prior reservation.

The walls in Dubrovnik go on for almost 2 km around the old town. They rise up 80 feet from the ground

If tourists who drive up or fly down to Dubrovnik are not enough, over 800,000 cruisers hop off at the port every year for a day's worth of wander.

None of this is to say that I dislike this pretty town in the southern tip of Croatia, located nearly 600 km from the capital city of Zagreb and washed by the blues and greens of the Adriatic Sea. Dubrovnik's fame and status as a Unesco World Heritage Site are utterly justified. We are in Dubrovnik just after the madness of the summer months has somewhat subsided, and we have the luxury of sitting in silence by the harbour late at night, with a view of the city's night lights and in the company of

PHOTOGRAPHS: SHUTTERSTOCK

TRAVEL

cats that strut around like they own the city.

Despite the rich history of the region, Dubrovnik's museums are fairly uninspiring. However, the War Photo Limited gallery—a permanent space showcasing the devastating 1990s war in Yugoslavia—is a sucker punch to the soul, with compelling images of the horror and futility of war. We stroll along the Stradun, the pedestrianised promenade (officially called Placa)—it is lined with lively cafés and pubs, new souvenir shops and old churches—that cuts through the heart of the old town.

But what I have looked forward to the most are the walks along the city walls. And so early one morning, we line up for tickets to the Dubrovnik City Walls—locally called 'Dubrovački miri'—and find ourselves at the lower Pile Gate (pronounced Pile-uh), one of the main entrances to the walled city, complete with drawbridge and padlocks. It is one of the three spots from which to begin the walk, and after taking some local advice, we get there when it just opens for the day.

Dubrovnik's protective ramparts have been destroyed and repaired many times since they were first built in the 9th century. What exists today are from the 15th century, when they were finally reinforced to guard what was then called the Republic of Ragusa. By then, Ragusa was free from Venetian rule, but faced the threat of invasions from the Ottoman Turks. The walls go on for almost 2 km around the old town, and include a complex of watchtowers and citadels looking out on to the sea, from where pillaging pirates too posed a threat. The walls rise up 80 feet from the ground, with a width of 5 to 10 feet on top, and getting there involves climbing a series of steep steps.

This is only the beginning, since the walls have more than 1,000 steps going up and down throughout its length. People are only allowed to walk in the counter-clockwise direction, which means there is no shoving or squeezing past anywhere on the trail. Once I recover from the initial bout of huffing and puffing, I can see why this is the recommended starting point. The Stradun stretches out in front of us, with the bulbous Onofrio fountain

DUBROVNIK'S FAME AND STATUS AS A UNESCO WORLD HERITAGE SITE ARE UTTERLY JUSTIFIED. ITS WALLS INCLUDE A COMPLEX OF WATCHTOWERS AND CITADELS LOOKING OUT ON TO THE SEA







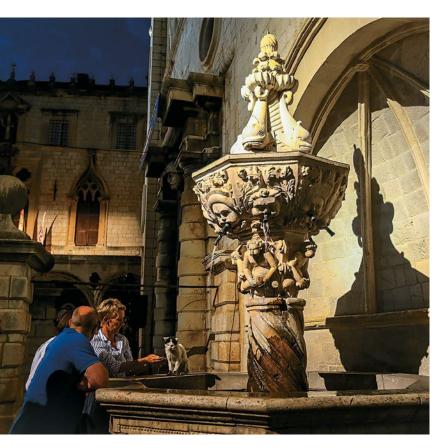
Clockwise from top: The Great Wall of China receives more than 10 million tourists every year; the Stradun promenade is lined with old churches; view during walks along the walls

right below. Before the walk, we had filled our bottles with cool drinking water from this fountain, built in 1438 to mark the end of the aqueduct network. Moments later, I can spot the Lovrijenac fortress occupying a small island nearby. Also known as St Lawrence Fortress, or as the Gibraltar of Croatia, this fortress was built in the 11th century on a rock, to prevent the Venetians from using it as a vantage point in their plan to conquer the city again. This citadel on the sea is now open to visitors who want to view the spectacle of the old City Walls from a distance and not just walk on them, and also hosts the annual Dubrovnik Summer Festival.

hroughout the world, and through the ages, expansive stretches of walls have been used as strategic means of fortification and defence.

One of the oldest such examples is the Unesco World Heritage Site of the Dún Aonghasa ruins on the Aran Islands in Ireland, dating back to about 700 BC. While many great cities from Jerusalem to New York have been walled at some stage of their history, it is the Great Wall of China that is undoubtedly the superstar of city fortifications.

Said to be one of the greatest man-made structures ever, the Great Wall is actually a series of numerous walls running contiguous or even parallel to each other, and was built through the course of 2 millennia across northern China. To this date, there are conflicting estimates about its length, varying from 2,400 km to 21,000 km (although





contrary to urban legend, it cannot be seen from the moon). Although it is believed to have been first built more than 2,000 years ago, roughly in 221 CC, the version that exists today is from 1368-1644, the time of the Ming Dynasty. It crests over hills and encompasses rivers, with moats and ditches for additional safety. More than 10 million tourists tramp up and down these fragile walls every year, most of them in the popular Badaling section.

The Great Wall may have been a symbol of the might and grandeur of Chinese emperors, but the one in Dubrovnik was meant only to keep outsiders away. Along the 2 km stretch, there are three more bastions, with the Minceta tower at the highest point and overlooking the town, Fort St John, Fort Revelin and Fort Bokar and guarding the open sea and harbour. All through the undulating, curving line of the City Walls, the dazzling views of the Adriatic Sea are a constant companion. There are a few cafés along the way, and after 45 minutes of the walk, with over an hour to go, we stop at one of them for a refreshing glass of orange juice.

Incidentally, orange—the colour, not the fruit—is another recurring theme on this walk. Once we get inland, the sea continues to shimmer at a distance, but the primary vista is that of the terracotta tiles of roofs in the old town. Known as Kupe Kanalice—from their original hometown of Kupari in Croatia—these handmade clay tiles have been traditionally used since the Middle Ages. During the 1990s' war that tore Yugoslavia

The Onofrio fountain (left), built in 1438, and dazzling views of the Adriatic Sea

asunder, Dubrovnik was bombed by the Yugoslavian People's Army in 1991, destroying more than 400 buildings in the old city. Later, the Institute for the Restoration of Dubrovnik assessed the damage and helped rebuild them. The modern technique used to make these tiles gives them a bright and uniform orange colour, which stands out in the midst of the older and fading terracotta roofs of varying colours as yet another poignant reminder of the war.

By the time we walk around towards the Minceta Tower, close to the end of the trail, the sun is blazing down and we are glad to have caught a cool hour on these bare stones. The Croatian flag is fluttering in the wind from the top of this fort, but we are sweating and sore; there is only so much wall that I can take, even if it comes with picture postcard views.

Back on the limestone street of Stradun, we cool off with more water from the Onofrio fountain before heading on for an early lunch. Later, much later in the evening, mildly rejuvenated from a long nap, we drive up to the top of Srđ hill to catch the sunset along with dozens of other tourists who have likely taken the cable car up. As the sun begins to descend on the Adriatic, painting the sky orange and pink, the lights in Dubrovnik's old town begin to twinkle. I can see small boats bobbing up and down at the harbour, while Lokrum island, a popular day trip destination goes dark. I trace the white line of Dubrovnik's City Walls, once again admiring how they have withstood the test of time and tide. F



Fortune further favoured Taylor when, in 1869, an outbreak of fungus destroyed many coffee trees, and tea became its substitute on many estates.

who trained him in the process of plucking, withering and rolling tea leaves, in the manufacture

of samples, and the pruning of tea bushes.

By the 1880s, there was a steady increase in tea production, and, by 1888, it had exceeded the production of coffee. After a central tea factory was set up in 1884 on Fairyland Estate in Nuwara Eliya, more factories began to sprout in surrounding regions, with machinery being imported from companies like Marshals of Gainsborough and Davidson of Belfast. The growth of plantations led to the development of infrastructure, with road and rail networks being set up to transport the tea from different plantations to Colombo, from where it was exported.

What began as Sri Lanka's first consignment of tea to the London auctions in 1872—consisting of two packs totalling 23 pounds, and valued at ₹58—today contributes 5 percent of global manufacture and 15 percent of world exports. In 2018, Sri Lanka produced 303,843 tonnes of tea, of which 282,363 tonnes were exported, mainly to Iraq, Russia, Iran, Turkey, Libya, China, the UAE, Azerbaijan, Saudi Arabia and Japan.

eylon tea is different from the varieties grown in India as close to 95 percent of Ceylon tea is produced through the specialised orthodox manufacturing system. Almost 90 percent of Indian tea is produced through the mass-scale CTC manufacturing system. The soil, topography, elevations and rainfall that contribute to the flavour, character, quality, strength and aroma of tea is different in Sri Lanka and India," explains Pavithri Peiris, director, promotion, Sri Lanka Tea Board. In Sri Lanka, 95 percent of tea leaves are hand-plucked while in India, a significant amount of mechanisation is also used. As an island, Sri Lanka enjoys two monsoon seasons—the North-East and South-West—which makes its tea more diverse.

The Chinese variety of tea plant is dark green, because of more chlorophyll, while the Assamica tea plant from Assam is a lighter shade. A few decades ago, hybrid bud grafted clonal plants—which embody the best of both the Chinese and Assam varieties and enhances the flavour—were developed by the Tea Research Institute of Sri Lanka.

Different varieties of Ceylon tea





It takes about two to three years for the tea plant to be ready for plucking, which continue for four to seven days. If the shoot is left unplucked for more than a week, its healthy chemical components are reduced. Almost all the tea—two leaves and a bud—is plucked by hand, by women, while summer remains the preferred season for plucking.

The plucked leaves are first withered by spreading them on troughs fitted with fans that blow air over them. They are then passed through rolling machines that squeeze the juice out of the leaves, giving the tea its flavour. "The leaves are then fermented—for between half an hour to three hours—in a cool and humid area to enable oxidation, which changes their colour from green to copper. They are then dried by passing hot air over

copper. They are then dried by passing hot air over them to stop the fermentation," explains Sarath Gamini, general manager of Oak Ray Tea Bush Tea Factory & Museum. The leaves are then sorted according to their size, and packed and transported to buyers. Blended teas are more popular in Sri Lanka—most brands take tea from several estates and mix it according to their own formulae.

Tea is grown at elevations of 2,000 feet to 8,000 feet above sea level, and is mainly classified as high-grown, mid-grown and low-grown, depending on the elevation at which it grows. High-grown Ceylon black is light, low-grown is stronger in taste, while mid-grown tea is full-bodied. Tea in Sri Lanka grows mainly in Nuwera Eliya, Kandy, Uva Province, Galle, Ratnapura and Matara, and some of the popular tea factories include Neluwa, Nandana, Lumbini Tea Valley, Nayapana, Craighead, Dartry and Dabathanna.

While black tea is the most popular variety, green and white tea are also grown in Sri Lanka. Green tea is made by rolling and drying—it is not withered or fermented—and is mostly harvested in the Uva Province. It is darker compared to other green teas, and is highly coveted in the Middle



(Clockwise from top left) Silver Tips, the white tea that is the country's most expensive; withering of leaves in progress; hot air is passed to stop fermentation of the leaves

East. "Ceylon white tea is known as Silver Tips and is the country's most expensive tea. It is manually harvested and rolled, and dried in the sun," adds Gamini.

Although climate, soil and elevation are crucial to the flavour of tea and decide its variations, the leaves are graded on the basis of their size. For instance, Orange Pekoe, which is the highest grade of tea, has large leaves. "When the leaves are bigger, the tea is light. It also has low caffeine content and is exported to countries with a warm climate, like in the Middle East," says Gamini Weerasooriya, general manager of the Halpewatte Tea Factory, in Ella. Other grades of tea include Broken Orange Pekoe, Pekoe, Orange Pekoe A,

Orange Pekoe 1, Broken Orange Pekoe Fanning (the country's most popular tea grade), Broken Orange Pekoe 1 and Flower Broken Orange Pekoe.

The job of a taster involves tasting tea and inspecting the infusion, which is checked for colour, body and aroma. "When the taster makes a sucking sound while sipping the infusion, it enables the sample to be mixed with oxygen and reach the tongue. This helps determine the freshness and fullness," explains A Katapitiya, general manager of the Dambatenna Tea factory in Haputale, which was started in 1890 by Sir Thomas Johnstone Lipton, who is well known for founding the eponymous brand of tea.

What started as the enterprise of a 17-year-old today contributes 11 percent of the country's total exports and nearly 2 percent of its GDP. There are, however, challenges ahead. According to the Tea Exporters Association of Sri Lanka, for long-term sustainability, the industry needs some re-engineering to achieve global competitiveness. The cost of tea production in Sri Lanka is among the highest in the world. Rising input costs, declining productivity, uneconomic age profile of tea bushes and high social costs have led to declining profits.

'WE USE STEREOTYPES AND THEN TEAR THEM APART'

British theatre director Melly Still talks about the need to reimagine Agatha Christie for an Indian audience

By KATHAKALI CHANDA

ritish director-choreographer Melly Still was never a big fan of Agatha Christie in her youth till she was offered to direct a production of *The Mirror Crack'd* From Side To Side. A re-reading of the crime fiction writer brought in new perspectives and she jumped on board to direct a production that was adapted for the stage by award-winning playwright Rachel Wagstaff (who has adapted Paula Hawkins's *The Girl On The Train*, among others) and co-produced by the Wales Millennium Centre and Wiltshire Creative. Still is in Mumbai to direct another production of The Mirror Crack'd... recontextualised for an Indian audience by writer Ayeesha Menon. The play will be staged at the NCPA in Mumbai between January 30 and February 9. Still, who has previously directed adaptations of Louis de Bernières's Captain Correlli's Mandolin and Elena Ferrante's My Brilliant Friend, gives *Forbes India* a peek into what to expect from the staging of Christie's bestseller, this time set in a sleepy hamlet in Goa. Edited excerpts:

Q Despite being set nearly half a century ago and

produced multiple times for cinema and theatre what makes Agatha Christie's works interesting even now?

Christie is brilliant at plots, and people love a good whodunnit. But what people don't talk about much and one of the problems I have with it is that the characters are just so two-dimensional, and they are so stereotypical. She was writing of her times, which means her attitude to different classes was bigoted at times. I had read all of Christie's novels when I was about 12 or 13 and had become a bit snobbish about them until this project came up, when I started reading them again. And what I found interesting is that she writes through the

lens of what it's like to be a woman. All of Christie's women characters are trying to deal with what it means to be slightly marginalised. But it's done in quite delicate a manner; she doesn't shout about it. And ultimately, she doesn't judge her characters. She can be a bit moralistic with the character of Miss Marple, for example, but if you take that out, the characters are psychologically interesting.

In this play, Miss Mistry (as Miss Marple is called in the adaptation) sees the world from the point of view of how she's experiencing life, and then through her predicaments she starts to empathise and understand the characters. In our version, she's not foolproof; she makes mistakes.

Q The flipside of doing a much-read and performed story like *The Mirror Crack'd...* is that you've got to reinvent it. How did you approach this play?

When you put up a novel on stage, it can be quite boring, because two people discussing a plot isn't interesting. Only action is dramatic because it lets you see the dynamics between the characters. In this case, we've had to go back and forth in time as

> different characters remember what happened. Miss Marple wasn't there at the crime scene, so she's having to put together all the versions of the event. We are starting to see one particular event subtly shifting through the lenses of different suspects. We had to find a way of making it physical. We have an open stage and a lawn chair for prop. It's Miss Marple's sitting room but also her mind. Once a character is introduced, it stays there somewhere in the recesses of her mind, hovering until called forward again. With these movements in time and place, it is quite a dynamic piece of theatre.

The premise of the piece is

People have the hunger for live interaction: Melly Still

FORBES INDIA • JANUARY 31, 2020

about Miss Marple being injured and no one's coming to see her and she's feeling a bit lost and lonely. This is about ageing and forgetting and what we remember. We play on the idea of memory being malleable and fluid.

Q What was the need to reimagine this for an Indian audience?

It seemed an anathema to me if I came to India and ask Indian actors to be set in a little English village. It's fine if an Indian director did that, but it just didn't make any sense for me. I wanted to work with Indian actors on a story that made sense to me about who they are and what their cultural heritage is. If we didn't reimagine the story, how would the Indian characters speak? With an English accent? That seems weirdly colonial and awful.

Q You've directed the play before with a British cast. When you chose to do an Indian adaptation, what were you looking for?

When I came here in May to hold auditions, I met a lot of actors whom I asked, 'What would this character be like if they were Indian?' In the end, it was more about how the actor portrayed the character.

Once the casting emerged, Ayeesha Menon, the writer who re-contextualised the play for an Indian audience, started to shape the story around them. This was an unusual set of circumstances where the casting happened first and then the story.

Q What sort of adaptation can the audience expect from this production?

We don't have the moralising Marple; we take the characters that are stereotyped and we subvert the idea. All the characters are bigoted and they stereotype others—like 'Oh, she's a Punjabi', or 'Oh, she's a Muslim', and then that unravels. In a way, we're using the Christie trope of stereotypes and then picking away at it and illuminating it so that they all start to become aware of their snobberies. The latter, though, doesn't happen in an Agatha Christie novel.

In the British context, Christie sets this story in seismic times, both socially and politically. This complacent, sleepy little village in the middle of England on one hand is being invaded by working class people from London. On the other side is Hollywood in the form of the glamorous actor Marina Gregg, who's come to live there. It represents the encroaching commodification of America on one side and class mobility on the other. Marple is slightly anxious about it but at the

same time wants to embrace it. We talked about how to re-contextualise that here. So, Ayeesha, who's Goan, has set it in Goa in the mid-1970s. The encroachment is the hippies on the beach and the drugs and the instability that they generate, and Miss Mistry is trying to cope with the change.

Q When you talk about characters with bigoted views, did you have the recent Indian political context in mind?

We're not being on the nose about it, but the same is happening in the UK, and all over the world. You can't help but make those connections. Someone in the play says, 'Oh, but she's a Muslim'. To which Miss Mistry says, 'And what's that got to do with



The casting for The Mirror Crack'd... happened first and then the story was reimagined

anything?' At the same time, she's a bigot in some ways too and she's having to come to terms with it.

Q With the explosion of OTT platforms, do you see the audience for live theatre waning?

Strangely, no. People have the hunger for live interaction. It's something about the live experience that's unsurpassable. We can enjoy the comfort of our homes and bed and Netflix, but, in the end, it's lonely. There's nothing more exhilarating than watching live performances. It's a social interaction and you can't measure that visceral experience.

On the other hand, I've directed a piece for the National Theatre [in London], an adaptation of *My Brilliant Friend* by Elena Ferrante. It has four parts, each lasting for one hour or more and you can see it all in one day. It's like binge-theatre and shows we are beginning to borrow from the Netflix experiences and bringing them into the theatrical form.

THE MUSIC ROLLS ON

In the 10 years since it started, NH7 Weekender has featured over 600 artistes from India and around the world

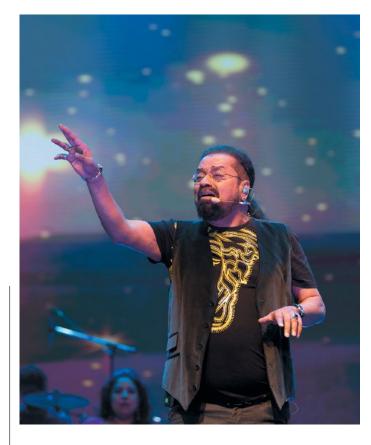
By **NAANDIKA TRIPATHI**

ressed in a yellow kurta, with a garland around his neck and a tilak on his forehead, Australian singer-songwriter, Nick Murphy aka Chet Faker seemed to have fallen in love with India on his first visit. And India seemed to return the sentiment. "I love you Nick, marry me!" shouted a young woman as the man who solo-travelled the world for four years recording vocal tracks in spaces that inspired him for his album 'Run Fast Sleep Naked' (April 2019) took the stage at the 2019 edition of Bacardi NH7 Weekender Pune last month.

The show was packed, and some people in the crowd had bought tickets just to see him perform on the last day. Spread across the sprawling 30 acres of Mahalakshmi Lawns in Pune, the festival was a three-day story of soldout tickets, six stages and a vibe that stayed with the crowd long after the festival was over.

NH7 Weekender has come a long way from when it first started in Pune in 2010 with just four stages, 35 artistes and 3000 attendees. In its tenth year, the Pune edition saw over 100 artistes across genres like indie, metal, rock, electronic and a whopping 65,000 attendees over three days. One of the biggest music festivals in India, conceptualised by Only Much Louder (OML Entertainment), NH7 has featured over 600 artistes from India and around the world across genres, and has expanded to include weekends in Bengaluru, New Delhi, Kolkata and Meghalaya.

"When we started, we just wanted to bring people who love music together, especially the independent music community. We have 20 percent international artistes and 80 percent local talent. And we like to keep it that way because we want to celebrate homegrown Hariharan A, who used visuals to keep the audience engaged





talent," says festival director Supreet Kaur.

Twenty-two-year old Ritviz Srivastava is one of the artistes who first performed at NH7 Weekender Delhi in 2015. That year, Srivastava had just opened for another artiste. "When I was playing, there was literally no crowd, except for my parents," he recollects. A week after the launch of his song *Udd Gaye* in 2017, he again played at NH7 Weekender,

<u>86</u>





JISHNU CHAKRABORTY

this time in Pune. "I was so nervous, I wasn't sure if people even knew about this song. But 3,000 people turned up. That is where I found my audience and the crowd started recognising me. As an artiste, I've got a lot of opportunities after performing at NH7. This year I was headlining the electronic stage for the second time and almost 4,000 people turned up. Weekender is special to me because I've

(Above) Nick Murphy, one of the headline acts of the Pune edition; (left) Over 100 artistes and 65,000 music aficionados attended the 10th edition of Weekender in Pune

grown from zero audience to thousands," he says.

Celebrating a decade of bringing local and international acts, the 2019 edition in Pune had performances by Irish rock band Kodaline, Ritviz, Indian Ocean, pop and folk band Easy Wanderlings, Faridkot, Midival Punditz, Swarathma among others. The likes of Nick Murphy aka Chet Faker, Hariharan A and Brodha V used visuals extraordinarily to keep the audience engaged while Malayalam folkfusion artiste Job Kurian set a foot-tapping mood. The festival's headlining acts included Opeth and heavy metal performances by PENGSHUi, Bhayanak Maut and Gutslit. The festival also saw performances by Kokoroko, Wadalis, Sandunes, Lifafa, Garden City Movement and Swadesi.

"I've attended all 10 editions of NH7 Weekender Pune and the festival has given me some very special memories over the years. Of course, I've been able to see some of my favourite international bands live-Karnivool, TesseracT and Opeth will top that list; but I've also discovered some great music out there, and often from genres I don't traditionally listen to," says Deepak Gopalakrishnan, a freelance writer from Mumbai. "It's got such a diverse line-up that those who are open-minded enough will certainly find something new to discover."

MUSIC

THE CLIQUE PHOTOGRAPHY



Last year, the festival also brought in standup comedy. "It just makes sense to have different entertainment experiences at a festival where there is such a huge overlap of an audience that appreciates both music and comedy. Ultimately, it's a coming together of different artistic expressions that are cultural products," says festival director Kaur. The comedy stage too was packed throughout as the festival showcased comedians like Biswa Kalyan Rath, Kanan Gill, Kenny Sebastian, Zakir Khan and Sumukhi Suresh, some of whom brought in a different element to standup through singing, music and mind games.

The festival has been its share of controversies. In 2018, there was a call to boycott NH7 Weekender following allegations of sexual harassment against OML employees. Despite several attendees calling off their plans to attend the fest and artistes such as Bengaluru electronica producer Disco Puppet and New Delhi indie label Azadi Records pulling out, Weekender survived. "There was very little impact of the whole controversy in 2018 and it didn't affect footfall," says music journalist Amit Gurbaxani. "In fact, it was more. As far as I know, none of the artists even mentioned it on stage. There was this one person walking around with a placard, that's all."

The festival also took up some interesting

"THE NH7 WEEKENDER HAS GOT SUCH A DIVERSE LINE-UP THAT THOSE WHO ARE OPEN-MINDED ENOUGH WILL CERTAINLY FIND SOMETHING NEW TO DISCOVER."

DEEPAK GOPALAKRISHNAN, freelance writer

Comedian Kenny Sebastian performs at the NH7 Weekender in Pune initiatives this year. They partnered with NGO The Humsafar Trust and 6 Degrees to make the space LGBTQ-friendly, with a safe space on ground to provide counseling to anyone in need. Besides, there was the Paper Boat Project, which aims to build libraries in the remotest corners of India and attendees could donate books.

A few years ago, the festival partnered with Skrap to ensure it generates as little disposable waste as possible. Skrap provides sustainable waste management solutions for events and organisations. "NH7 is actually the first festival where we piloted our end-to-end waste management project. Each year we keep piloting new sustainability initiatives. We've partnered with NGO SWaCH in Pune and follow a decentralised waste management system. We don't want to send it out to a facility where we don't have insight and control. Everything is done here, in the backyard of the festival," says Divya Ravichandran, founder, Skrap Waste Management.

Attendees were also urged to reuse their cups to get a discount on their next drink. "We were unsure whether this would work or not, but over 70 percent people came back for refills," adds Ravichandran. Plastic straws were banned and drinks were served in rice husk glasses while the food stalls used compostable cutlery. The festival worked with Cupable to provide drinking water—people could purchase one recyclable cup and get unlimited water refills for all festival days. "Last year we collected about 10-12 tonnes of waste, out of which over 85 percent was reused or recycled," says Ravichandran.

Meanwhile, the organisers are already looking ahead to continue providing a platform to independent music artistes to showcase their talent. "Some of us work through the year to make it happen. We've already started reaching out to artistes for 2020," says Kaur.

Gaurav Raina of Midival Punditz, who has been performing at Weekender for five years, believes festivals like Weekender don't just provide a platform. "Weekender and a bunch of other promoters all over the country are responsible for letting Indian musicians know that there is a career in music. Earlier it was not considered as a career because of unavailability of such platforms. Today, artistes who would normally not be musicians full time are taking it up and that's saying something good about the future," says Raina.

Freelance writer Gopalakrishnan agrees. "As a musician once told me—at Weekender, no matter who you are or what you play, you will find a supportive audience. And I think that's amazing." **F**

MY SEOUL

A city bustling with places to work and play

travel to Seoul once or twice every year, as my organisation has its headquarters there. I was awestruck when I landed in Seoul for the first time. In the 1950s, after the Korean War, the country was one of the poorest; in 1960, its per capita GDP was \$79. Now it has the fourth largest economy in Asia and the 11th largest in the world. The transformation speaks of the determination and hard work of the Korean people. The cleanliness, punctuality and ease of service in the city will remain in the minds of any visitor for a long time.

RECOMMENDATIONS

By far the best property in town is the Four Seasons Hotel at Jongno-gu, the heart of the city. I would also recommend any place in and around Myeong-dong. The best shopping and food is found around it. It is centrally located and provides easy access to all places. Gangnam and Itaewon would be the other locations to stay at. Seoul is about business and meetings, with the ideal meeting place located in and around Gwanghwamun. Most restaurants have closed rooms for having food and discussing official matters. Most hotels also have business lounges. Karaoke bars are a great place to end a successful meeting. The people of Seoul are passionate about food. Myeong-dong is a street with rows of food stalls, and I have tried dumplings, egg bread, fishcakes and prawns. A popular restaurant is Tosokchon, within walking distance from the Gyeongbokgung Palace. The most famous dish there is the samgyetang: A whole chicken stuffed with sticky rice, ginseng, and chestnuts in a smooth broth. For vegetarians, the temple food of South Korea is a must-have.

GETTING AROUND

Seoul has an advanced public transportation system: The subway is extensive and highly efficient. Buses and taxis are easy to use and

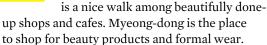


relatively inexpensive. Walking is a great way to see the city, and most of the locals prefer it.

AFTER HOURS

From the finest restaurants to the best of pubs, the city has it all. If you like dancing, the pubs at

Iteawon would be right for you. For good food, visit Gangnam or Gwanghwamun. Koreans love to spend their evenings at a local BBQ restaurant with fried chicken and soju (the local drink). Pubs, karaoke bars and BBQ restaurants are at Itaewon. Even if you are not a bar person, you should go there to feel its energy. Visit Insa-dong for a flavour of local culture and souvenir shopping. It





SWARUP MOHANTY

Seoul is a well-dressed city. So people in shorts and T-shirts could feel out of place. Also, don't leave the hotel without its name and address written in Korean. Taxi drivers may not understand English. A word of advice for vegetarians: Even if a dish is called vegetarian, it would have egg and beef garnish. So please be specific while ordering food. F

> • THE WRITER IS CEO, MIRAE ASSET GLOBAL INVESTMENTS (INDIA) PVT LTD

THOUGHTS >>>

ON BUDGETS

TOPICAL PRESS AGENCY / GETTY IMAGES



In a Budget, how important is art versus music versus athletics versus computer programming? At the end of the day, some of those trade-offs will be made politically.

-BILL GATES

The Budget doesn't have much control over the government. Then again, the government doesn't have much control over the Budget.

-PJ O'ROURKE



A Budget is more than just a series of numbers on a page; it is an embodiment of our values.

-BARACK OBAMA

Budgets can make or break reputations and governments.

-PRITI PATEL



The Budget should be balanced not by more taxes, but by reduction of follies.

-HERBERT HOOVER

The Budget evolved from a management tool into an obstacle to management.

-FRANK CARLUCCI

Budgets are nothing if not statements of priorities.

-JEFF MERKLEY



We need a proper balance between government spending on nursing homes and nursery schools—on the last six months of life and the first six months of life.

-THOMAS FRIEDMAN

A Budget is telling your money where to go instead of wondering where it went.

-DAVE RAMSEY

Balanced budget requirements seem more likely to produce accounting ingenuity than genuinely balanced budgets.

-THOMAS SOWELL

The national Budget is not a safe deposit box. It's a spray can.

-HONORÉ DE BALZAC

Economy is idealism in its most practical form.

-CALVIN COOLIDGE



Hope you loved our Forbes Tablet Edition

Do mail us your feedback at: letterstoforbesindia@nw18.com