



Give and take

The Centre and the RBI did well at the board meeting to address each other's concerns

After the heat and dust of the last one month, the board meeting of the Reserve Bank of India on Monday turned out to be muted and professional, as it should have been. Any summary and precipitate action by the Centre to have its way would have created more problems than it solved, apart from it not going down well with the markets. The decisions taken by the board address the concerns of both the Centre and the central bank, though on balance it appears that the RBI carried the day. Two of the biggest concerns of the Centre where it was expecting an immediate resolution – relaxation of the Prompt Corrective Action framework on 11 public sector banks and provision of liquidity for non-banking financial companies – will be addressed at a future date. The first one has been referred to a department of the RBI for examination, while no decision seems to have been taken on the second. In addition, the Centre's attempt to tap the RBI's rich reserves has also been staved off for now, with the matter left to be decided by a committee set up exclusively for the purpose. This is as it should be. Given that the membership and terms of reference of the committee will be jointly decided by the Centre and the RBI, there is little scope for either side to complain of bias. The RBI has been transferring all of its surpluses to the Centre in the last five years based on the recommendations of an earlier committee led by Y.H. Malegam. Given this, it is unclear what more the new committee can possibly recommend on future surpluses, unless of course it is allowed to go into sharing of the reserves that now exist on the RBI's balance sheet.

The central bank partially yielded to the Centre on two other issues – the Basel capital framework for banks and easing credit flow to micro, small and medium enterprises (MSMEs). The RBI didn't concede the demand for alignment of the capital norms to Basel (they are higher now), but by pushing back the deadline by a year for increasing the capital buffer, it has freed up funds for banks to lend. Again, by permitting debt recast for MSME borrowers of up to ₹25 crore, the RBI has attempted to address their credit concerns, which was one of the major demands of the Centre. Clearly, there was enough give-and-take in the meeting that left both sides with the feeling that they had gained something. At Monday's meeting the board turned hands-on probably for the first time in recent memory, from being just an advisory body. That the meeting went on for over nine hours clearly indicates that there was an intense exchange of views, which is not a bad thing at all. Differences between the Centre and the central bank must be thrashed out in such a setting, rather than in the media or in public speeches.

When giants clash

The U.S.-China discord at APEC highlights the dangers of their tariff war

Breaking with more than a quarter-century of history, the Asia-Pacific Economic Cooperation (APEC) organisation wrapped up its summit with no joint communiqué issued. Its leaders, principally led by the U.S. and China, clashed over the proposed wording of the document. The economic rivalry between Washington and Beijing appeared to fracture the 21-nation summit into two segments. The source of the friction stemmed from the Trump administration's "America First" policy, under which Washington led the charge on "unfair trade practices". This was an implicit accusation that China wasn't levelling the playing field in global trade. The U.S. has been urging China to increase market access and grant intellectual property protections for American corporations, cut back on industrial subsidies and, at a broader level, bring down the \$375-billion trade gap. Vice President Mike Pence, who attended on the President's behalf, also hinted at strategic pushback when he called upon nations to eschew loans that could leave them in a debt trap with Beijing. The Chinese message at the plenary was a strategic one too: President Xi Jinping did not mince words in touting Beijing's Belt and Road Initiative. The BRI has worried smaller Asian nations and the U.S., particularly given that China views the Asia-Pacific landscape as a means to secure economic predominance worldwide.

To understand what this clash of the global economic titans portends for the world trading system, it is instructive to examine the path of their mutual conflict thus far. The troubles began over the summer when both countries started taxing \$50 billion worth of the other's imports, followed by the U.S. slapping \$200 billion of Chinese exports with a 10% tariff, to be ratcheted up to 25% by the year-end. China, unsurprisingly, retaliated with a promise to impose reciprocal taxes to the tune of \$60 billion. Already, the tariff war has resulted in the IMF downgrading its global growth outlook for this year and the next to 3.7%, down 0.2 percentage points from an earlier forecast. If this continues, eventually global supply chains may be hit, and shrinking trade volumes may cause companies to seek out new trading routes and partners. Institutionally, multilateral rule-making bodies such as the WTO may lose their authority, and an interlocking system of bilateral trade treaties and punitive sanctions networks may substitute the consensus-based approach that was forged so painstakingly after World War II. Asia will be at the heart of this war of attrition because strategic control of its high-value maritime trading routes is the key to China's dreams of global trade dominance. After the APEC summit the world is still poised on the edge of the trade war vortex. The forthcoming G20 meeting in Argentina offers an opportunity to pull back from the brink.

Make it the Indian way

As industrial 3D printing transforms manufacturing, the country must adapt to additive technologies



HEMANT KANAKIA & SONALDE DESAI

If 'Make in India' is to succeed, it needs to encompass 'Make it the Indian Way'. It need not emulate mass production technologies, fuelled in Detroit by massive capital investment or in Beijing by cheap labour. We are fortunate to be in a historic moment when the manufacturing sector is about to go through a transformation wrought by disruptive technologies – we have to find a way of making it work in India's favour rather than against it.

Getting a measure

Industrial 3D printing has begun to transform manufacturing in Western countries. The 3D printing has not yet entered our everyday lexicon, and even people who have heard of it view it as a toy technology that geeks play with, creating prototypes of robots using small machines that create moulds using materials such as plastic and photosensitive resins. Part of it must be the name, whoever heard of serious manufacturing using a printer! Rename this to "additive technology" and think of Ford Motors cutting down its cost of creating a new car prototype from six months and several hundred thousand dollars to four days and \$4,000, and you begin to see its power.

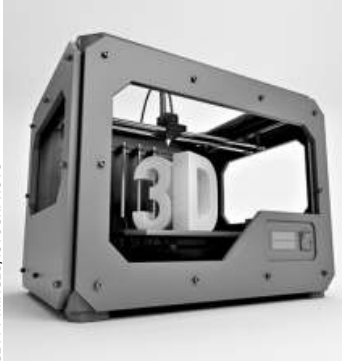
Traditional manufacturing of mechanical parts involves making a mould and then stamping out parts by thousands every day. The

equipment to make these parts and moulds is expensive, thus the cost of the first hundred units is high. Per unit costs decline only when they are mass produced. Because of limitations of how this technology works, one typically builds many small parts, which are later on assembled on an assembly line using unskilled labour or robots to build an entire system. Traditional manufacturing leads to high inventory costs of multiple parts that need to be produced and stored before being assembled. This makes the design phase complex and costly, rendering it expensive to redesign to correct initial mistakes or innovate to meet changing consumer needs.

In additive manufacturing, the physical object to be built is first designed in software. This design is fed to computerised machines, which build that object layer by layer. The technology is suitable for building the entire system in one go, with hollow interiors without assembly or interlocked parts. Changing features or tweaking shapes is a simple software change effected in minutes. Retooling of machines is not required and each unit can be customised. By eliminating the need to hold a large inventory of parts, set up an assembly line and purchase costly machines, adaptive manufacturing reduces capital and space requirements as well as the carbon footprint.

No longer geeky

Additive manufacturing started out as a technology for nerds and geeks trying to build an arm of a robot or a body of a drone in their garages. Rapid progress in technology over the last five years has taken this type of machines from using one nozzle and simple resin



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materials to multiple nozzles, diverse materials and materials with different hardness in the same system. Today it is possible to build an entire shoe, including shoelaces, in a university laboratory. Tomorrow, Adidas and Nike may well start manufacturing them en masse.

Although it began as a quick and cheap way of developing prototypes, additive manufacturing has now gone mainstream in developed countries and is beginning to replace traditional manufacturing for many different applications. One recent survey of U.S. manufacturers shows that about 12% have started using additive manufacturing for their products and expectations are that this will result in about 25% of products in the next three-five years. This technology is used to build helmets, dental implants, medical equipment, parts of jet engines and even entire bodies of cars. In some industries, the progress is astonishing. Nearly all hearing aid manufacturers now use additive manufacturing.

This technological nirvana carries dangerous implications for developing nations. It decreases reliance on assembly workers and bypasses the global supply chain that has allowed countries like Chi-

na to become prosperous through export of mass-produced items. This may well lead to the creation of software-based design platforms in the West that distribute work orders to small manufacturing facilities, whether located in developed or developing countries, but ultimately transfer value creation towards software and design and away from physical manufacturing. This would imply that labour intensive manufacturing exports may be less profitable.

Opportunities in India

Fortunately, this manufacturing paradigm has several features that play to the strengths of the Indian ecosystem. First, it eliminates large capital outlays. Machines are cheaper, inventories can be small and space requirements are not large. Thus, jump-starting manufacturing does not face the massive hurdle of large capital requirement and the traditional small and medium enterprises can easily be adapted and retooled towards high technology manufacturing. Second, the Indian software industry is well-established, and plans to increase connectivity are well under way as part of 'Digital India'. This would allow for the creation of manufacturing facilities in small towns and foster industrial development outside of major cities. Third, it is possible to build products that are better suited for use in harsh environmental conditions. Products that required assembly of fewer parts also implies that they may be better able to withstand dust and moisture prevalent in our tropical environment and be more durable. Fourth, in a country where use-and-throw is an anathema, maintaining old products is far easier because parts can be manufac-

tured as needed and product life-cycles can be expanded. Finally, maintaining uniform product quality is far easier because the entire system is built at the same time and assembly is not required.

For countries that have already invested in heavy manufacturing, this shift to adaptive manufacturing will be difficult and expensive. For new entrants, it is easier to leapfrog. The "Make it the Indian Way" approach we advocate will need public-private partnership and multi-pronged efforts. On the one hand, we need to accelerate research at our premier engineering schools on manufacturing machines and methods and encourage formation of product design centres so that the products built suit the Indian environment and consumers. We also would need government support to provide incentives for distributed manufacturing in smaller towns, and for the IT industry to work on creating platforms and marketplaces that connect consumer demands, product designers and manufacturers in a seamless way.

However, a combination of science and art, with a pinch of Indian entrepreneurship thrown in, will allow us to develop a manufacturing ecosystem that will not only allow India to compete with global manufacturing, it will also create products that are uniquely suited to Indian conditions. The Industrial revolution somehow bypassed India, but we have a unique opportunity to catch the wave of the manufacturing revolution if we can learn to surf.

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Amid institutional decline

The issue today is whether a dishonest system can be managed honestly



ARUN KUMAR

Allegations of interference in major institutions have been the big news of late. The ongoing fracas in the Central Bureau of Investigation (CBI) has got out of hand, with the two top officials in the chain of command accusing each other of corruption. The recent pronouncements in the Supreme Court do not promise an early resolution.

The fight against widespread graft in the country has been set back. The Deputy Governor of Reserve Bank of India (RBI) has highlighted the serious consequences if there is an erosion of its autonomy. The intervention by the Supreme Court in the CBI issue places a question mark on the independence of the Central Vigilance Commission (CVC) and the functioning of the government as a whole in making key appointments in the CBI. The CBI controversy has also left an imprint on the Intelligence Bureau and the Research and Analysis Wing.

The list of institutions in decline is long. The ongoing #MeToo movement has exposed the sordid goings-on in large swathes of the media and the entertainment industry. Earlier too, the Election Commission was under a cloud over the announcement of election dates, action taken against some Delhi legislators and the functioning of electronic voting machines. The functioning of the judiciary itself has been a cause for concern. Then there is the attempt to introduce Civil Service Rules in Central universities, an attempt to erode the autonomy of academics. The crisis in the banking system and the huge non-performing assets that overrun their balance sheets impact the viability of the financial system.

The present and past

The storm is gathering pace. The decline of institutions in India is not recent. In 2016, demonetisation brought out the centralisation of power and a lack of consultation with important sections of the government. The chaos prevailed for months and about 99% of the money came back into the system, thus defeating the very purpose of carrying out this draconian measure. Those with black money escaped and those who had never



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seen black money were put to great hardship. The RBI and the banks were marginalised.

The CBI imbroglio is no surprise. Political interference in the agency and corruption among its ranks have been talked about but are hard to prove. The Supreme Court, in 2013, even called the agency a 'caged parrot' but this was not concrete enough. The political Opposition when feeling the heat of various investigations has always accused the agency of being its 'master's voice'. Now that the spat within has come out in the open, with a spate of accusations, these fears have become all the more credible.

A deep rot

The rot has set in deep, with charges of government manipulation in crucial cases. With the Vineet Narain case, in the 1990s, the Supreme Court tried to insulate the

CBI from political manipulation by placing it under the supervision of the CVC. But that has not worked since the independence of the CVC itself has been suspect.

Why is the autonomous functioning of the CBI and CVC such an irrevocable issue?

The CBI is an investigative agency largely manned/controlled by personnel drawn from the police force. And this is a force used to doing the bidding of the ruling dispensation. The rulers themselves commit irregularities in the routine and depend on the police to cooperate with them. The rulers cannot pull them up in their own self-interest.

In the police, there are 'wet' and 'dry' duties where money can be made in the first but not in the second. Being on the right side of the political masters is lucrative. While earlier there may have been few such officers doing political bidding, now it seems they dominate.

It is akin to having a 'committed bureaucracy', an idea floated during the Emergency. The issue is: Committed to whom? To the national interest or to the rulers?

The rule of law is being subverted and illegality being committed on a large scale. Growth of the black economy is a measure of ille-

gality. It has gone up from 4-5% of GDP in 1955-56 to the present level of 62%. It has become 'systematic and systemic' and eroded institutional functioning all across the board. This has damaged institutions.

Institutions provide the framework for individuals and systems to function. Their breakdown leads to a breakdown of societal functioning – democracy is weakened, the sense of justice is eroded and the Opposition is sought to be suppressed. The tainted not only survive but also get promoted and damage institutions.

If institutions are strong, they are respected and it becomes difficult to manipulate them. It enables the honest to survive. In strong institutions, individual corruption is an aberration but when they weaken, it becomes generalised. It leads to individualisation, illegality becomes acceptable and the collective interest suffers. Even an 'honest' Prime Minister tolerated dishonesty under him. The dilemma is, can a dishonest system be managed honestly?

Arun Kumar is Malcolm Adeshiah Chair Professor, Institute of Social Sciences, and the author of 'Understanding Black Economy and Black Money: An Enquiry into Causes, Consequences and Remedies'

LETTERS TO THE EDITOR

Letters emailed to letters@thehindu.co.in must carry the full postal address and the full name or the name with initials.

Dharmapuri case

The Tamil Nadu government has committed an error of judgment after Tamil Nadu Governor Banwarilal Purohit cleared its recommendation to release three AIADMK men connected with the Dharmapuri bus burning incident prematurely. (Page 1, "Dharmapuri bus burning convicts set free", November 20). The sentiments of the families of the students whose lives were snuffed out have been overlooked. The decision to release those accused is even more appalling when there are thousands of undertrials languishing in prisons without ever being even convicted for any crime. It is unfortunate that political affiliations have got the better of ethics, morality and the principles of equity and justice.

V. SUBRAMANIAN,
Chennai

Judges for India

I do not think values ever went into the appointment of judges (Editorial page,

Criteria for the courts", November 20). It was Kumaramangalam who was the first to make an attempt at it, wrongly described as "supercession of judges". Fairly speaking, it was a supersession of ideas. He did not want a judiciary committed to the government but a judiciary committed to the Constitution. It is here that Kumaramangalam was misunderstood and Nani Palkhivala came in a big way. It is Palkhivala's school of thought that largely dominates the judiciary. Today, the judiciary is more career oriented. If that was not so, where does the question of supersession come in? It is not seniority but merit that should count. Not many look into the secular and socialist credentials of the Constitution when it comes to the appointment of judges. The NJAC consisting of elected representatives of people in the matter of selection of judges was struck down by the Supreme Court. Now, we

have only the collegium which must attune itself to the values referred to. N.G.R. PRASAD,
Chennai

In the neighbourhood

The return and of triumph of democracy in the Maldives is a welcome step (Editorial, "Maldivian reprieve", November 20). It is desirable that India has friendly and democratically governed neighbours. While the new government will be watched closely in the coming days for its approach to domestic and international issues, a new issue is Sri Lanka where the democratic polity seems to be in turmoil.

SIDDHARTH CHATURVEDI,
Mumbai

Maratha reservation

The proposal of the Maharashtra government to provide reservations in government jobs and educational institutions for Marathas is political opportunism at its worst, which has been undertaken more out of political

exigency than for socio-economic reasons (Editorial, "Quota math", November 20). For a State that has witnessed violence and bloodshed on account of regional and linguistic chauvinism, it is most unfortunate that a sensitive and divisive issue that was used to arouse and inflame passions in the past is now being vigorously pursued by the Devendra Fadnavis government. The Maharashtra government needs to get its priorities right by addressing the agrarian crisis and employment generation in right earnest.

B. SURESH KUMAR,
Coimbatore

Partial breakthrough

Had the Central government invoked Section 7 of the RBI Act, the simmering tensions between the Reserve Bank of India and the Centre would have reached their zenith. The gap appears to be improperly bridged since the major and contentious issues of

governance remain unresolved. The Centre must act prudently to uphold the RBI's autonomy. Both should work in tandem, chalking out innovative methodologies and strategies to put the country's economy on the growth path ("Govt., RBI call truce", November 20).

KIRAN VADDEMPUDI,
Guntur, Andhra Pradesh

Missing in education

A majority of educational institutions are focussed only on books, assignments, projects, examinations and other activities that are largely centered on employment when it comes to a student's academic life (OpEd page, "A gender curriculum" November 20). The time allotted to essential social skills, social interactions and the crucial subject of 'gender respect' is limited to just a paragraph of a textbook or just a class lecture. The funniest part is that school administrators become conscious of gender rights

when a girl and boy are found talking together.

JEMIN JOHN SUNNY,
Nalanchira, Kerala

Scaling up sanitation

Reinvented toilets are what India needs to scale up its sanitation mission. In a developing country such as India where 80% of sewage goes untreated into water bodies and which are also a major source of drinking water, a "zero emission toilet" will truly be a blessing. Such as innovation can also end the number of deaths due to cleaning faecal sludge from septic tanks. The byproducts one can get from toilet waste can also be a cost effective and environment-friendly solution. Such toilets should become a part of schemes such as the Swachh Bharat Mission and the Clean Ganga Mission (OpEd page, "A 21st century revolution", November 20).

KAMINI BHARDWAJ,
Jind, Haryana

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