Opinion

TUESDAY, AUGUST 20, 2019

DIPLOMACY WITH PAKISTAN

Union Defence Minister, Rajnath Singh

"Now, if talks are held, they will only be held on the issue of Pakistan-occupied Kashmir. There will be no talks on any other issue"

Can boost exports even as global economy slows

This requires lowering taxes/other levies, cutting red tape, opening up mining, ensuring big MNCs invest in India

THE WORLD MAY or may not slide into recession, as many believe, but with US 10-year yields lower than those on 3-month paper and with China's industrial production at a 27-year low, global economic prospects don't look good. Not surprisingly, gold is up to a six-year high; and with the trade war between the US and China showing no signs of abating, indeed it has spread into more dangerous areas like theft of intellectual property, the global picture could get markedly worse. With such uncertainty, cross-border investments could also slow, further accentuating the slowing in GDP; though, with the US economy still growing at 2.1%, and unemployment at historic lows, there may possibly still be enough juice left to stave off the crisis.

At a time when the world is slowing, it is easy to conclude that there is little India can do in such a situation, especially when it comes to boosting its exports. That, however, is completely not true, indeed the US-China trade tensions gives India a historic opportunity to boost trade by, in the same way that China boosted its exports, by getting US firms to set up base here to meet global demand. As this newspaper has pointed out before, to cite the example of mobile phones where global trade is galloping, China-based production centres of firms like Apple account for half the global trade in mobile phones; and while Vietnam is snapping up several producers looking to diversify out of China, there could be a big opportunity here for India. Indeed, even when global trade was doing much better than it is today, India managed to miss the boat; in the last four years, India's overall exports of all good grew just 0.2% a year in value terms. Between 1990 and 2018, while India's exports grew just 18 times, Vietnam's rose 102 times, as a result of which its exports are 75% those of India today; these were a mere 6% in 1960. In other words, it is not how fast global trade is growing that is critical, it is seizing the opportunities this throws up.

Doing so, though, requires India completely reverse its current policy that is focussed on production for the local market since global biggies like Apple and Samsung are unlikely to move their entire production base to India for just the local market; India's local market for smart phones is just $25bn as compared to the global export market of $280-300bn. But getting global firms to relocate to India is not going to be possible when Indian corporate taxes for foreign firms are 43.68% while Vietnam's rates vary between 10 and 20%. Similarly, India has poorer infrastructure, higher electricity costs etc; ideally, any export policy needs to find ways to address this. India's labour laws, similarly, are a big source of frustration and low productivity; it is difficult to see how India can boost its productivity unless this is fixed. How important it is to get large MNCs to use India as a production base is best seen from the fact that the bulk of global trade takes place between companies; where the MNCs decide to locate their operations decide how much of a share each country gets. Anyone who doubts this needs to see just how India's exports of automobiles grew once Suzuki took control of Maruti and decided to use the India operations as part of its global value chain. Unless India is able to sharply increase the share of global FDI it gets, especially in the manufacturing sector, it is difficult to see how its exports can do well on a sustained basis.

Getting it right on ratings

Sebi does well to turn down a consent-plea by an agency

THE SECURITIES AND Exchange Board of India (Sebi) has done well to turn down a consent application by ratings agency ICRA relating to the IL&FS case. The fact is that ICRA, together with other ratings agencies, is guilty of failing to assess the financial crisis at the NBFC and not alerting the markets in time. Had the regulator agreed to the consent request, ICRA would not have needed to admit to the lapse. In other words, it would have got away with a 'not guilty' tag, which it does not deserve. Unless agencies are castigated, the system will remain weak.

The fact is, ratings agencies have been way too casual in their approach, failing investors and lenders. Much like the stable door being bolted after the horse has bolted, the downgrades came in in too late. Some of the blame for this must lie with the regulator since there seems to be no penalty whatsoever for the poor assessments or the delayed alerts. Which is why, it is important that, this time around, Sebi cracks the whip.

For the system to reform, the business model of ratings agencies needs to be revisted. If companies are able to pay their way to a good rating, it is a flawed model. Sebi must explore a model in which the investors pay for the ratings; that way the agencies will earn their revenues without having to compromise on the quality of their assessments. However, this too might not work because wholesale investors—fund managers—and lenders would also want any negative news to be delayed or not announced at all. That would help them maintain the value of the asset on their books—so the NAV wouldn't fall—and, in the case of banks, it would mean they need to provide less capital. In these days of cut-throat competition, there are few bankers and fund managers who are willing to take a hit, unless it is inevitable. To be sure, this is a conspiracy theory and, if there are enough checks and balances, Sebi can get investors to fall in line. It is, of course, important to ensure ratings agencies are able to generate adequate revenues so as to cover their costs and stay profitable. One suggestion is that companies continue to pay for the ratings and that a pool of funds be created from the fees; the rating agencies would then be paid from this corpus but the amount paid would be decided by an accredited panel of investors. The ratings agencies will say this is unworkable since they will have no control whatsoever over their revenues. That is a fair point because, to ensure the quality of its ratings, an agency must invest. Also, there is no guaranteeing the investors will be unbiased while allocating the fees to the ratings agencies. Perhaps investors—bankers, insurance companies, mutual funds, EPFO—should commission ratings assessments and pay for them jointly. That would ensure that no one fund manager influences the rating and, at the same time, the ratings agency would be assured of its fee.

DrugRAP

Instead of going after cartels and organised industry, Punjab is blaming the artistes

PUNJAB POLITCIANS SEEM to be ostrich-like about the state's drug problem. First, it was the needless controversy about *Udta Punjab*, where they were bent upon getting the film banned—or at least, have the title changed—instead of using the opportunity generated by the buzz around the film to talk about the rising addiction amongst the youth. Now, the state's tourism minister, Charanjit Singh Channi, has said that the state is mulling a law to take action against artistes who "glorify the use of drugs" through songs or films. In the minister's opinion, as children look up to these stars, any promotion or glorification on their part would attract more towards drugs. While there are studies showing that popular culture can influence drug experimentation, the research on popular culture driving usage is inconclusive. Besides, as data from the National Crime Records Bureau show, drug abuse has been a major problem in the state even before artistes started featuring drug-use in their lyrics or movies.

What the political class needs to realise is that the over-featuring of drugs in songs and movies reflects ground realities. According to BBC, a government study highlights that more than 860,000 young men in the state, between the ages of 15-35, had taken some form of drugs. Punjab feigning ignorance over the drug problem is the same as the US blaming video games for increased violence on the streets. In the US, it is the easy availability of guns that kills people, and not video games. Similarly, the easy availability of drugs in Punjab's to be blamed, and not artistes rapping about "weed".

REALITY CHECK

THE GOVERNMENT'S NUDGE TO LOOK AT THE BIGGER PICTURE DOES NOT ASSUAGE SHORT-TERM CONCERNS

What to do about the slowdown?

RENU KOHLI
New Delhi based macroeconomist
Views are personal

LAST FORTNIGHT HAS seen a glut of expert opinions concerned about slowing economic activities and suggestions to address the immediate problems. Most reflect a sense of panic and urgency! GDP growth, these commonly say, could decelerate further to 6% in FY20 from 6.8% in FY19; recovery could take one to two years, perhaps even more. It is the prospect of a slow recovery that is triggering panic, with the undertone the economy's potential might have fallen sharply. A debate has stirred on whether the slowdown is structural, cyclical or a combination of the two. The prime minister though, in a recent interview, almost brushed aside these alarming views, nudging everyone look at the big picture and brighter future ahead.

Are these opinions a bit premature? Two significant reasons suggest a degree of caution perhaps. First is the familiar divergence between volume indicators (captured by most lead markers) and the value-added captured by GDP estimates compiled by CSO. Indications from these two variable sets have often diverged, with subsequent revisions in the past, particularly in FY17. This should not be lost sight of. For all we know, value-added may be far more robust than the current weakness depicted by volume indicators.

Second, the GDP deflator—a mix of WPI-CPI inflation rates, applied with varying weights across GDP sub-components—has undergone a sea change (see graphic). The retail-wholesale inflation gap, which touched 10 percentage points (ppt) in September 2015, has sharply reduced to below 2 ppt since November 2016 as the two inflation rates converged. If at all there was an element of overestimation because of inappropriate deflator use, lower growth estimates could be reflecting some natural correction rather than an actual slowdown!

With this caveat, a summary of explanations about the slowdown and its nature is appropriate.

Causes, nature: One set of views emphasises adverse effects of high real interest rates. Another strand holds that past growth was excessively debt-fuelled; this has now run its course—consumers are exhausted by over-borrowing as the income boost from falling prices has worn off while businesses suffer converse effects of aggravated debt. Another opinion argues that the demand from better-off consumers has peaked while low-income populations lack purchasing power for currently produced/imported goods; the concomitant structural distortions, therefore, require correction. Other reasons offered are dampened sentiments and animal spirits from aggressive government policies to increase taxes; the role of adverse demand shocks such as demonetisation; dragdown effects of reforms such as GST, RERA, etc, on specific segments; and the lingering twin balance sheet stress (banks and corporates). An adverse external environment is another explanation; some point to the inappropriate exchange rate policy impact on exports. There is also currency of opinion about risk-aversion, liquidity and lending squeeze caused by the persisting NBFC crisis, which is popularly held to have retarded private consumption.

These insights are not analytically underpinned, e.g., corresponding aggregate fluctuations (GDP, interest rates, consumer spending, investment, employment levels, etc), if downswing is cyclical. Structural interpretations of the slowdown, too, require careful, deeper research.

Remedial policies: Many advocate aggressive monetary easing—another 100 basis points or more! For several years now, we have been sympathetic to easier monetary policy. But, RBI Governor recently said a 50bps cut would've been excessive, 25 bps too little; therefore, the MPC settled for a 35 bps reduction—a Goldilocks solution. The RBI's intellectual ambivalence—fearful of inflation but implicitly desiring its return—is inexplicable when globally, central banks have failed to revive inflation; India is no outlier. One is not sure if RBI is willing to ease further unless inflation surprises on the downside. The finance minister, too, said both government and RBI are on the same page, indicating shared apprehensions about the inflation-growth trade-off.

Can India meaningfully devalue its currency for a competitive exchange rate? Impossible, given intense global scrutiny and prickliness about central bank interventions in forex markets. Further, lower imports resulting from weaker domestic demand and low oil prices could narrow the current account deficit. One should be content if the RBI can manage the rupee at current value given persistent capital account surplus.

What about fiscal policy? Fiscal rules, falling revenues, committed welfare spending and large extra-budgetary borrowings for revenue-capex spends limit this route. Advocates recommend large-scale asset recycling; such monetisation depends upon buyer appetite, suitable hair-cuts, and price effects when many assets simultaneously hit the market. Then too, the question if public capex will restore private demand and inflation remains. What if the past pattern perpetuates when neither private investment revived, nor consumer demand sustained?

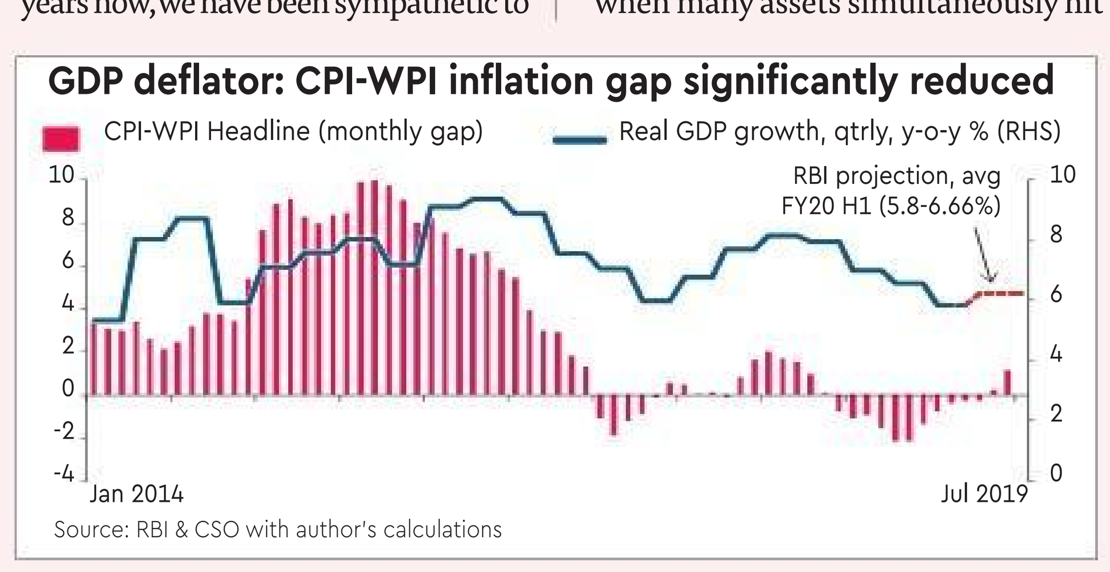
If you cannot devalue or ease monetary-fiscal policies to counteract the demand slowdown, you are in a fix!

That leaves the government with the sole option of structural reforms—focus on a medium-term growth recovery. But, how long could the medium-term be? One is unsure, given the pervasive growth pessimism across economies. Just look back at India's own structural reform efforts in the recent past: Demonetisation and GST were expected to spur formalisation, deliver growth boost in a couple of years' time—so we should be reaping the growth dividend now with more tax revenues. Instead, we have a structural trigger—consumption slowdown at lower income consumer levels—which is a direct fallout of unplanned demolition of the informal sector. The new line of policy advocacy is that the formalisation drive ought to have accompanied distributive expenditure favouring the poor. But where are the tax revenues? The plot is familiar—structural reforms may be good, but outcomes remain unpredictable!

The prime minister expressed confidence on returning to a robust growth trajectory in the long term. Urging all to see beyond a budget or two, he highlighted numerous facets of active policy attention and intervention, committing to investment-led growth with a $100 billion target in five years. This may not comfort many—the UPA II had chosen this path and ended up dragging the banks and the economy into a deeper hole.

Hard choices: There is a hard option to break this impasse, provided the government is prepared for near-term growth sacrifice for medium-term gains. Can fiscal room for capex be created by revenue expenditure cuts, e.g., subsidies? Can corporate taxes be cut to improve returns on private investment? Expenditure-switching on these lines will recoup revenue losses from tax cuts, lower interest costs for the private sector. But this option lies in the political economy domain, and depends upon the government's appetite to use its exceptional mandate for hard, unpopular choices.

GDP deflator: CPI-WPI inflation gap significantly reduced



Source: RBI & CSO with author's calculations

Connectivity holding back innovation

The technology that's allowed so much connection has of course also been positive, but, like many technological changes, it has come with unintended consequences

FAYE FLAM
Bloomberg

SHOULDN'T WE HAVE space colonies and a universal cure for cancer by now?

Instead there are signs that the pace of technological progress is slowing—even as researchers pump out papers at a prolific and increasing rate. With slowing progress in computing power, medicine and agriculture, my *Bloomberg Opinion* colleague Noah Smith warns that the stakes could not be higher.

Surely some of the fault lies with technology itself.

Our connected world has allowed researchers to become so tightly networked that they're falling into the trap of groupthink. That might explain why some researchers seeking cures for Alzheimer's disease, for example, have conceded that they've been throwing years of work and billions of dollars toward a single theory that has failed to lead to any treatment—while ignoring promising alternatives.

Sociologist James Evans of the University of Chicago has concluded that what's being lost, at least in biomedical research, is scientific independence. Being able to work independently of other labs allows researchers to come up with fresher insights.

In a new study, Evans and colleagues found that weak studies are more likely to come from labs that share lots of researchers and methods with others, and strong studies come from labs that do things their own way.

Weak studies are not just those that come to the wrong conclusions but those whose conclusions are fragile. If a competitor tries to replicate them, the result will be different, unless conditions and methods are exactly the same. The conclusions of such studies are unlikely to represent broad biological facts, and probably won't be of much use in medicine.

To sort the weak from the strong, Evans and colleagues were able to use a special case where thousands of studies on the interaction between drugs and genes can be re-tested quickly. A machine can now do what's called a high throughput assay to rerun a whole slew of previous studies. And so Evans was able to evaluate more than 3,000 published claims against the results of this mechanical backup, which can not only replay the exact experiments but also test the robustness of the claims by varying the parameters a bit.

There was a huge correlation between centralised, networked groups and weak studies. The most networked groups were more likely to replicate themselves and each other, but less likely to reach conclusions that checked out with the mechanical system.

Groupthink is well known in politics and media. Where once competing reporters would look into the same events independently and not know the others' results until the next day's papers, now there's an unconscious temptation among journalists to believe the interpretation of the most prominent news outlets, or whoever posts online first.

Scientists are subject to the same human foibles, but groupthink shouldn't be conflated with scientific consensus, which is often based on ideas that are backed up by multiple lines of inquiry. That would include things like the structure of DNA, Einstein's theory of relativity, and the basic physics behind the greenhouse effect. Those are widely accepted now, in part because they were supported by independent, even isolated researchers.

What's rewarded these days is the absolute opposite of those historic claims. While science works best when researchers prove one idea multiple ways, funding agents and journal editors today reward those with only a single line of evidence to support multiple claims. They want bigger claims and are content with lesser evidence.

The technology that's allowed so much connection has of course also been positive, enabling people to collaborate and learn more efficiently. Researchers can sometimes even counteract extraneous noise by harnessing a wisdom-of-the-crowd phenomenon, where many individuals converge on a right answer. But like many technological changes, it has come with unintended consequences. The fact that US researchers are producing 1,000 papers a day shows there's a lot of energy out there to be used more productively—if funding encouraged bold exploration.

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LETTERS TO THE EDITOR

India's cricket coach selection

A coach must reflect the highest standards of professionalism and ought to bear accountability of losses in big-stage tournaments, instead of boasting of accomplishments, especially when there aren't many to show. One wonders if the selection process, although tough and rigorous, as proclaimed, was effective/result-oriented as well. Authorities, seemingly committed to overcome challenges and improve the laggards—haven't dedicated sufficient time/effort to analyse and ascertain the root-cause of India's heart-breaking loss in the semi-final of a prestigious tournament. Even with the current tour to the Caribbean-soil, time was not available to address the rumours of a rift within the team or collectively brainstorm before appointing the next captain/coach. Efforts to critically evaluate the administration, including the coach and captain, were lacking. It is prudent to micro-gauge the performance of a top-ranked favourite side, keeping in view the loss in world-cup semi-final, T20 world-cup championship, Series at England, and ODI home-series against Australia after an initial lead and the low-level of fitness at the big-stage, thanks to the rigorous IPL schedule before the WC. The coach's re-appointment suggests that limited flexibility and a defensive-approach to change are the only attributes that the management isn't short of.
— Girish Lalwani, Delhi

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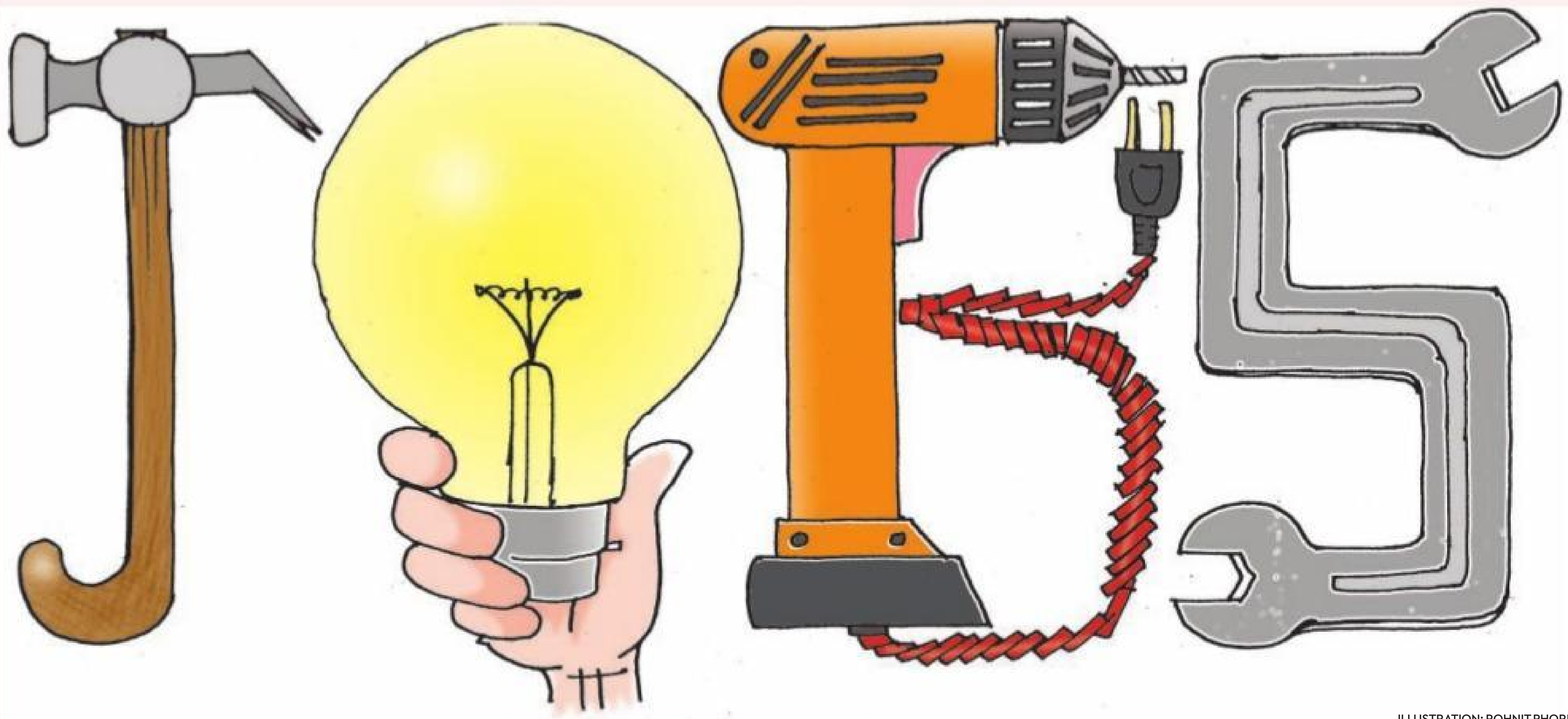

ILLUSTRATION: ROHNIT PHORE

RAJANI SINHA

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Focus on the quality of jobs being created

Apart from the large quantum of jobs that need to be created (8 million per year, according to the World Bank), another important aspect is the quality of jobs. A large proportion of India's workforce is employed in jobs with low productivity, resulting in dismal incomes

ONE OF THE major challenges for the government in the new term would be to create suitable jobs. According to the latest PLFS (Periodic Labour Force Survey), the unemployment rate in the country is at a 45-year high, at 6.1%. Although a lot of debate has gone into the level of unemployment in the overall economy, there is no denying the fact that there is an urgent need to create more jobs to truly benefit from India's demographic dividend.

India has around 65% of its population (about 910 million people) in the working age group of 15-65 years. According to a World Bank report, the country needs to create around 8 million jobs every year to maintain its employment rate. Apart from the large quantum of jobs that need to be created, another important aspect is the quality of jobs—and this needs to be focused upon. In fact, a large proportion of India's workforce is employed in jobs with low productivity, resulting in dismal incomes.

Today, the agricultural sector contributes about 16% to the country's GDP, but it employs 43% of India's labour force. In fact, in the rural areas, the share of agriculture to workforce is at a high of 64%, while agriculture contributes only 39% to rural NDP (net domestic product). The wages of agricultural labourers and cultivators is much lower than that of non-agricultural workers even in the rural areas. According to a NITI Aayog report, the rural non-farm sector offers 2.8 times more productive employment that the farm sector. In the rural areas, there is a shift happening with the labour moving from the agricultural to the non-agricultural sector. However, a large chunk of this labour movement is from agriculture to the construction sector, which, again, has a low labour productivity (although it is higher than agriculture).

The push to agriculture allied sectors will be beneficial to absorb the labour moving out of the agricultural sector in the rural areas. Livestock and horticulture industry has a huge growth potential and also higher labour productivity. The government should give the required push to these sectors to alleviate rural distress.

Apart from agriculture allied sectors, there is also a need for the labour in the rural regions to move to the manufacturing and services sectors. Manufacturing today contributes 18% to rural NDP, but the share in employment is dismal, at 8%. It is apparent that the growth in the manufacturing sector is happening mainly through capital-intensive industries. However, for an inclusive economic growth, the government needs to increase its focus on labour-intensive industries such as textiles, leather, gems and jewellery, food products, etc. In fact, the push to these sectors will also help the country generate higher export revenues. In addition, the labour needs to be adequately skilled to help them get absorbed in the higher productivity industrial sector. The challenge for the manufacturing sector to absorb the labour force is going to increase further, especially as globally manufacturing moves towards automation and artificial intelligence.

> **As per PLFS report, unemployment amongst urban males with secondary and higher education is at a high of 9.2%, while that for rural males is even higher, at 10.5%**

India has leapfrogged the traditional growth model, with the services sector emerging as the engine of growth. However, the services sector has its limitation as far as labour absorption is concerned. The services sector contributes more than 50% to India's GDP, but absorbs only one-third of the total workforce. This is mainly because some of the high productivity sectors such as financial services and real estate have low employment elasticity.

Another major issue with India's labour market is the large number of people employed in the unorganised sector—the share of workers in the unorganised sector as of now is around 80%. In fact, according to a report by the International Labour Organisation (ILO), the share of informal workers in total employment in India is around 90% (unorganised sector plus contractual workers in the organised sector). The concerning aspect is that a large number of jobs in the unorganised sector have very low productivity and no job benefits and social security. There is a large wage differential amongst workers in the organised and unorganised sectors. Moving towards formalisation of the economy through the goods and services tax (GST) is a step in the right direction, but still there is a long way to go for most workers in the informal sector.

While good quality jobs are not growing substantially, the aspirations of the youth in India are rising with higher education. According to the latest PLFS report, unemployment amongst urban males with secondary and higher education is at a high of 9.2%, while that for rural males is even higher, at 10.5%. This leads us to question the very edifice of India's education system. Is the education system skilling the people appropriately to facilitate their absorption in the labour force? According to the India Skills Report 2019 (by Wheebox, the online talent assessment company), the employability score of the country is at a low of 47%. This highlights the need to tune our education system to make it suitable for job requirements.

Another interesting observation from the PLFS report is that unemployment is higher in developed states. In fact, the unemployment rate is the highest in the states of Kerala, Punjab and Tamil Nadu, and lower in Chhattisgarh, Madhya Pradesh and West Bengal. It appears that in the more developed states, the levels of prosperity and aspirations are resulting in a mismatch in the jobs available and those desired. This, again, highlights the need to create more productive jobs and skill the labour appropriately for the job requirements.

Unemployment is not just a local problem; it's a global issue, currently. High unemployment has resulted in many of the developed economies, such as the US, looking inwards and creating barriers to trade and movement of labour. In the developed countries, low cost of capital and the rising trend of automation pose a big challenge for employment generation. For a labour-abundant country like India, the problem is specifically humongous and needs to be tackled on an urgent basis.

Role of industry in managing water

MUKUND VASUDEVAN

MD & country head-India, Ecolab, and co-chair, Water Sector, FICCI

Industry must leverage right technology to reduce its own water consumption

WATER SCARCITY IS one of the biggest problems facing the humanity. Forget oil and gold, water is one of the world's most valuable investments. Not just communities, businesses are also finding themselves in ever-greater competition for this finite resource as growing population drains reservoirs and rivers. Companies will have to start evaluating how their business models can be transformed in support of a water-secure future.

Main consumers of water are the agriculture, domestic and industrial sectors. But the water consumption pattern across these sectors is highly skewed—80% is consumed by agriculture, and 20% by domestic consumers/industries. That said, every sector must play a role in conserving water. We must 'leave no one behind' in our collective responsibility to conserve water. Farmers can look at drip irrigation or less water-intensive crops. Domestic consumers can recycle wastewater within communities and use water-efficient fixtures. Industries can adopt technologies to reduce, reuse and recycle water. There is a realisation that changes to pricing and policy in the agricultural and domestic sectors can be political hot buttons, especially in a country like India. Also, awareness-building and behavioural change takes time. The industrial sector realises the business imperative to reduce water usage. In summers, it's not uncommon for industries to shut down due to water shortage. That leads me to argue that industry can be a front runner in conserving water.

Industries must look at leveraging the right technology to reduce water usage. The 'right' technology is one that not just looks good for a 'sustainability report', but also ensures RoI. A water footprint audit that includes flows and chemical changes to water across a plant can throw insights on where to invest for reducing/reusing water. Automation and predictive analysis can optimise performance of water-intensive assets, like boilers and cooling towers. One large steel plant has reduced its water consumption by 30% over the last three years—by adopting best-in-class technology and driving a culture of continuous improvement. Contrary to popular belief, this was not just a 'sustainability' effort. The new technology showed a less-than-three-year payback due to water and energy saving, and productivity improvement. By way of comparison, 30% water reduction is enough to serve the annual drinking water needs of a city like Delhi!

Second, industries must look at a basin approach. This requires looking beyond their boundaries to adjoining companies and municipalities to optimise water consumption in the entire area or basin (water source). Not only does this create economies of scale for investment, it also highlights some interesting cost-saving opportunities. Take the case of one factory in Maharashtra that was getting tanker water to satisfy production demands. At a conference, the plant manager discovered that a neighbouring factory discharged a lot of wastewater (effluents) and paying for this. Over coffee, a simple but unique idea was born. By treating the second factory's wastewater and transporting that treated wastewater to the first factory, the latter would be able to meet its raw water needs. Not only did the first factory save money by replacing tanker water, it also managed the basin's water resources better. Companies should explore such opportunities, so that total water consumption of both industries as well as communities in the vicinity is optimised. The water resources ministry has passed a law requiring all power plants within 50 km of a city to use treated municipal waste. That is an excellent move to protect water in an entire basin.

Industry bodies like FICCI and CII, through initiatives like the FICCI Water Mission and CII Water Innovation Summit, are doing their bit. Such platforms have recognised businesses that demonstrate their commitment to reduce water consumption and driving a circular economy.

In every country, water is a multifaceted problem. While there are growing instances of innovative practices that are leading to more efficient use of water, the current situation calls for a stronger, nationwide, multi-stakeholder action. We must tackle the demand-side to reduce water consumption by agriculture, industry and consumer. In parallel, we must tackle the supply-side to make more water available to each segment of users. Finally, the government must play a role by ensuring optimal pricing of water, incentives (for conservation), and providing the right water and wastewater infrastructure. In short, saving the world's water requires a concerted effort, where no one is left behind.

AI and the world of tax litigation

Forensic economics, artificial intelligence, tax litigation seen in the Indian context

MALLIKA MAHAJAN & PAWAN KUMAR SINHA

Mahajan is commissioner, Central Board of Indirect Taxes and Customs, India. Sinha is director, International Anti-Corruption Academy, Austria

SUNNY DEOL'S FAMOUS dialogue '*Tarikh par Tarikh, Tarikh par Tarikh*' from the 1993 Hindi film '*Damini*'—quoted in the Economic Survey of 2017-18—articulates people's frustrations of delayed and, hence, denied justice. The authors feel that this malaise could find a solution in the twin tools of forensic economics and technological leveraging.

Combined together, the claims for indirect and direct tax stuck in litigation (appellate tribunal and upwards) by the quarter ending March 2017 amounted to over 4.7% of GDP. As per the Economic Survey 2017-18, there has been an upsurge by 25% in the number of cases stuck in various appellate fora, despite simplification of law, setting up of new tribunals and separate tax benches in the Supreme Court. The Survey points out that the success rate of tax departments at all three levels of appeal—appellate tribunals, high courts and the Supreme Court—and for both direct and indirect tax litigation is under 30%, and is declining. As per the Comptroller and Auditor General of India, the poor success rate is because of the poor quality of adjudication orders.

Another secondary source is used to evaluate the reason for the poor quality of adjudication/assessment orders as well as unnecessary filing of appeals by tax departments. The Tax Administration Reform Commission (TARC) was set up by the government in 2014. It produced four reports that analysed the poor functioning of dispute resolution institutions. According to it, the reason for poor quality of adjudication lies in the revenue bias of adjudicating officers (AOs), who are viewed with suspicion by their reviewing/supervisory officers if they decide a case in favour of the taxpayer. The report mentions that a recurring theme—in what they have heard from both the departmental officers as well as the industry—is that the mentality of AOs is affected by the process of review in tax departments. The revisionary powers provide the authority to examine orders passed by subordinate officers with a view to determining their 'legality and propriety'. The TARC has reported that the primary consideration that weighs with reviewing/revisionary authorities is the tax effect of the order and not so much its legality or propriety. Orders are routinely reviewed and appeals filed against the original orders when they are in favour of the taxpayer. This, coupled with the perceived fear of vigilance and audit, is said to have fuelled the tendency to pass pro-revenue orders without regard to merit and concerns of legality and propriety, forcing taxpayers to approach appellate authorities and courts. The second TARC report also mentions that there is a marked absence of judicial discipline and respect for precedent, which results in a plethora of avoidable disputes. This is attributable to the same risk-aversion to deciding cases in favour of taxpayers. While on the whole the majority of decisions by departmental authorities show a marked revenue bias, in many of those exceptional cases where fair and competent orders are passed, the higher authorities in the administration show a propensity to file appeals to the tribunals, high courts and even the Supreme Court. Such questioning of their orders de-motivates those officers at the junior level who act fairly and objectively, reinforcing the tendency towards arbitrary anti-taxpayer orders. Hence, the major reason for mounting tax litigation is the trust misalignment between supervisory and subordinate officers/principal-agent.

The deleterious litigious effects from the government standpoint are well-documented. The Economic Survey 2017 used data from six central ministries to show that 52 infrastructure projects of over ₹52,000 crore have been impacted because of stay orders that were pending for an average of 4.3 years. Since project costs were predominantly debt-financed, in all likelihood project costs had increased by close to 60%. The 126th Law Commission report stated that "...the state also has to bear the (additional) expenses of setting up courts, providing personnel for manning posts." The topic of the litigious effects on the taxpayer is under-researched. Few studies have suggested that litigation adversely affected SME investment in plant and machinery. Effective interventionistic strategies require the understanding of the economic damages caused by frivolous litigation on tax-paying firms. The authors suggest the use of 'forensic economics' for this.

Forensic economics enables the understanding of hidden behaviour. In our case, it will be the behaviour of firms that are subjected to litigation. The focus of forensic economics is with respect to economic loss calculations. What would firm A have earned had it not been subjected to litigation? But for litigation, what would have been the growth trajectory of firm A? It is a simple framework, only that the expert is required to proffer opinions that fall "within a reasonable degree of certainty or probability." Some have interpreted this to mean at least 51% probability of occurring. Methodologies involve measuring comparisons. In our case, it could be regression analysis of litigation costs and investments in capital goods by the SME.

Where lies the solution to this litigious burden on both state and its taxpayers? TARC reports have suggested solutions. One is the evaluation of dispute resolution officers based on the quality of their orders evaluated for fairness and observance of judicial discipline. Another is peer reviews by panels of selected officers known for their expertise and fairness. From global best practices, the TARC has identified four practices worthy of adoption. The setting up of a dedicated organisation for dispute management, the establishment of an 'enhanced relationship' arrangement between taxpayers and the tax administration, and the issuance of binding technical guidance notes by tax administrations. The last solution is the adoption of ADR (alternate dispute resolution) techniques to resolve tax disputes out of court. The suggested methods are conciliation followed by arbitration, in a sequential manner. These solutions do not appear to be a perfect fit for addressing the trust misalignment between principal and agent. The authors suggest the use of artificial intelligence for overcoming risk-aversion of original adjudicating authorities and trust deficit between AOs and their reviewing supervisors.

Inbuilt in the repair design should be a revenue-neutral reviewing mechanism by supervisory authorities. The proposed remedy should be designed around: (1) Monitoring whether precedent judicial decisions of higher fora are being adhered to, (2) same decisions are being taken on the same questions of law, irrespective of the taxpayer, and (3) there is no delaying of decisions when the same questions of law stands decided by officer himself and/or higher judicial fora. Once repair is designed along the above lines, the discretionary element will be automatically circumscribed and oversight will become easy. This repair design should be based on a digital platform with one organisation tasked with the real-time seeding of judicial precedents/case law accepted by tax boards. Artificial intelligence software with prediction technology that generates results that forecast litigation outcome can be used here. Some known software that even offer consultancy, such as Ravel Law and Lex Machina, can be used. The limitation foreseen is that such software will be most effective in better-settled areas of law where there is a very large amount of relevant data.