RBI dollar swaps: Into the unknown

Compared to standard liquidity management tools that are usually profitable, RBI takes on considerable macro risk with the swaps

DIVA JAIN

The Reserve Bank of India (RBI) has been the cynosure of media attention recently and financial commentators have heaped high praise on it for "innovative" liquidity management through a highly successful dollar swap auction. Emboldened by the response, the venerable central bank has now announced a second tranche to be auctioned today (April 23). Normally, one expects little attention to be given to routine liquidity operations of central banks but RBI's actions are neither routine nor limited to purely liquidity management. Under the innocuous wording of dollar swaps hides an exotic beast rarely seen even in the densest jungles of developed capital markets.

The rarity of the beast unleashed by RBI and its attractiveness to many financial agents, as witnessed by the heavily oversubscribed offering in March, lies in two main features — tenure and structure. RBI's swaps are three years in tenure. This means that RBI is giving bidders rupee in return for dollars at current exchange rates with a promise to return those dollars in three years at the same exchange rate. In return for this facility, RBI is charging a fee, called the spread, to be determined at the auction. For the March auction, the spread was 776 paise and the spot exchange rate was ₹68.86 for each dollar. In other words, the RBI paid rupee to banks in exchange for dollar at the rate of 68.86 and promised to return those dollars in three years at the rate of 68.86+7.76 = ₹76.62 for each dollar. This is an economically complex transaction whose structuring and tenure can have significant financial ramifications for the RBI.

A sword of Damocles with interest rate and exchange rate risk as its two edges hangs over what is essentially a hedge fund trade by the RBI. By accepting dollar in return for rupee in the swap, RBI forgoes the income it could have earned by lending in rupee terms. If it deploys the dollar inflow, it will earn the dollar interest rate which is currently much lower than the ruoee interest rate foregone for a period of three years. If the rupee interest rates rise in the next three years, RBI would have foregone higher potential income and thus suffer a loss. Conversely, if the dollar interest rate rises in the next three years, RBI will earn more on the dollar deployed and incur a gain. Therefore, by entering the swap the RBI is essentially betting against rising rupee interest rates and in favor of rising dollar interest rates.

This would have made sense if interest rates were predictable and stable. Unfortunately, modelling and forecasting interest rates is one of the most challenging problems in finance. It is for this reason that only the most sophisticated hedge funds with armies of MIT PhDs trade interest rate risk. Jointly modelling rupee and dollar rates is even more herculean and the long three-year-tenure of RBI's swaps makes it immensely more complicated thereby making one wonder what makes the RBI so confident about taking joint exposure to dollar and rupee rates.

The second source of risk is the exchange rate. The RBI has promised to pay back the same amount of dollars after three years. If there is a precipitous decline in the rupee against the dollar, RBI will end up losing a significant chunk of money. Thus with this trade, RBI is betting against rupee depreciation. Again, modelling exchange rates for three-year-tenure is a non trivial exercise for even the most hardened egg heads and jointly modeling it with interest rates is impossibly complex.

It is for these reasons and the "unique" structuring of this "swap" that such a transaction is rarely offered by seasoned hedge funds and investment banks. Most cross currency swaps are non deliverable — meaning no cash is exchanged either at initiation or completion of the swap term. Counterparties do not physically exchange the currencies being swapped. This is done to reduce transfer and counterparty risk. RBI's swap on the other hand is deliverable, meaning that RBI will actually hand out rupee in exchange for dollar, thereby taking on counterparty risk (risk that banks may not pay back rupee after three years). This makes it a fairly rare beast in the swap world. While RBI is getting compensated in the form of the spread there is good reason why sophisticated investors rarely dabble in such transactions and limit their involvement to forwards and standard swaps.

Thus, compared to standard liquidity management tools like OMOs and repo transactions that are low risk and usually profitable, the RBI is taking on considerable macro risk with the swaps. While innovative, one can argue that this is high stakes casino style liquidity management which we saw the Fed indulge in at the peak of the 2008 financial crisis. By shunning its image as stodgy "*babu* bankers" and marching in to territory where hedge funds fear to tread, Mr Shaktikanta Das has boldly gone where no RBI chief has gone before. While the results of this enterprise will be clear only after three years, in the meantime, the behaviour of this exotic beast created by the RBI will continue to worry fans of Mary Shelley and students of financial history.

The author is a "probabilist" who researches and writes on behavioral finance and economics

CHINESE WHISPERS

A 'real' brother-in-law

Nakul Nath, the son of Madhya Pradesh Chief Minister Kamal Nath, is contesting from the Chhindwara Lok Sabha constituency. Sanjay Singh Masani is a regular face in his election rallies. Masani is the brother-in-law of former chief minister Shivraj Singh Chouhan. Nath introduces him as thus: "*Yeh aapke nakli mama ke asli sale hain*" (he is the real brother-in-law of your fake uncle). From being called "*paon paon wale bhaiya*" (foot soldier), Chouhan came to be addressed as "*mama*" (maternal uncle) by the children in the state. For his part, Masani joined the Congress before the Assembly elections and contested the Waraseoni Assembly seat on the party ticket. He lost to independent candidate Pradeep Jaiswal. Jaiswal is now cabinet minister in the state government.

₹15 lakh vs surgical strike

The former chief minister of Madhya Pradesh and Congress candidate from Bhopal, Digvijaya Singh (*pictured*), was addressing a public gathering in the Berasia locality of the state capital when he targeted the government at the Centre for what he termed were its "fake promises". He asked the people gathered if any one of them had received the ₹15 lakh promised by the incumbent government. A young man from the crowd who raised his hand was called by Singh on the stage. The Congress leader even said that the youth would be honoured publicly if he was able to prove that he had received the money and handed over the microphone to him. The youth began by waxing eloquent about the surgical strike against Pakistan undertaken by the government. A visibly embarrassed Singh signalled to some Congress workers who dragged the youth away. In no time, a video of the episode went viral on social media.

Dubious distinction

Gujarat and Tamil Nadu have traditionally been engaged in healthy competition to project an investment-friendly image by assuring ease of doing business and attracting industries to set up shop in the state among other things. But these two states have found themselves competing for an unwanted record of late. Tamil Nadu has surpassed all other states in the country, including Gujarat, while unintentionally chasing this record. We are talking about the total value of cash seizures related to the Lok Sabha elections and the Assembly by-polls in the state. Till Monday, the amount stood at ₹935.54 crore in Tamil Nadu while Gujarat is at number 2 with seizures worth ₹545.29 crore. If in Gujarat drugs and narcotics worth ₹524 crore formed the biggest chunk of the seizures, in Tamil Nadu it was precious metals worth ₹708.69 crore. The National Capital Territory of Delhi came third with seizures at ₹395.71 crore so far.

Steel looks East for growth

Global demand remains tumultuous in the wake of US-China trade war and slowing car sales, but the rest of Asia will continue to drive demand

KUNAL BOSE

This is the time of year when demand forecasts by the World Steel Association, whose members represent around 85 per cent of global production of the ferrous metal and the industry leader ArcelorMittal, which with production of 92.5 million tonnes (mt) of crude steel in 2018 was not much behind India's 106.5 mt, are made available. Coming from establishments of such standing, their countrywise demand projections give some guidance to how the prices of steel and the principal raw materials that go into its making such as iron ore and metallurgical coal will behave for the rest of the year.

TAKE TWO

However, as we have seen recently with iron ore, a tailings dam collapse in January at an iron ore mine in Brazil owned by Vale and then the March tropical cyclone Veronica causing major disruptions in production in Australia's Pilbara region, prices could always rise to very lofty levels. As some contracts of the mineral are now made at multi-year highs of close to $100 a tonne, the message goes that more than a demand story, iron ore is a supply story.

Lending credence to the observation, Federation of Indian Mineral Industries Director General R K Sharma says: "Iron ore prices fell to their lowest level at sub-$40 a tonne in December 2015 since the commodity was moved to the spot market away from annual contracts in 2009. This happened then because of supply side pressure emerging from big miners such as BHP Billiton and Rio Tinto who were pumping out larger and larger quantities of the mineral while the Chinese demand was faltering." In any case, Indian miners cannot take advantage of the strong rally in the commodity now because the 30 per cent export duty on ore with iron content of 58 per cent and more make Indian ore globally uncompetitive.

How the global broader economy will fare in the coming months will necessarily have a bearing on steel demand, subject to regional variations in growth in metal use. IMF has in its quarterly World Economic Outlook projection released earlier this month has once again scaled down global GDP growth to 3.3 per cent. Both WSA and ArcelorMittal also had to factor in continuing trade tensions the US is having with China in particular but also with other countries, including India.

US trade actions such as anti-dumping and anti-subsidy duties on all four flat products, 25 per cent customs duty on steel imports from most countries and ongoing investigation into anti-circumvention imports (that is, when a producing nation sends steel products through another country to benefit from concessional duty available to the latter) have hit all exporting countries across the board. Any demand forecast could not also have overlooked the slowdown in automobile production in China and India in 2018 and that continued through this year's first quarter. Globally, the automotive industry is user of 12 to 13 per cent of steel production.

TOP TEN STEEL USING COUNTRIES Million tonnes

Country	2018	2019 (forecast)	2020 (forecast)
China	835.0	843.3	834.9
United States	100.2	101.4	101.7
India	96.0	102.8	110.2
Japan	65.4	64.7	64.2
South Korea	53.6	53.4	54.1
Russia	41.2	41.6	42.2
Germany	40.8	40.4	41.0
Turkey	30.6	29.1	31.4
Italy	26.4	26.7	27.0
Mexico	25.4	25.8	26.1

Source: WSA

It is a given that China, which alone had a share of 835 mt of the total world use of 1.712 billion tonnes (bt) of steel in 2018 will continue to make a profound impact on the rate at which global steel demand will move. According to WSA, China, even with the likely help of a higher level of government stimulus, will be able to lift steel consumption by just 1 per cent to 843.3 mt in the current year. But in 2019, Chinese demand is to slip 1 per cent. ArcelorMittal, however, thinks Chinese steel demand could fall by up to 1.5 per cent in 2019, against 3.5 per cent growth in 2018. No wonder then, WSA is projecting global steel demand growth will moderate to 1.3 per cent to 1.735 bt in 2019 and then 1 per cent to 1.751.6 bt in 2020.

Both WSA and ArcelorMittal, which has secured the approval of committee of creditors for acquisition of Essar Steel, remain bullish about steel in India. According to WSA, India having overcome the "shocks" of demonetisation and initial chaos in implementation of goods & services tax should be seeing strong steel demand growth "starting in the second half of 2019 following the general elections." Both in 2019 and 2020, Indian steel use will be growing by over 7 per cent first to 102.8 mt and then to 110.2 mt. Developing Asia, excluding China will stay as the fastest growing region in the global steel industry with expected 2019 growth at 6.5 per cent followed by a slightly lower 6.4 per cent in 2020. Developed Japan will, however, experience demand shrinking on "moderation in construction activities and decelerating exports." South Korea continues to experience fall in steel demand as its shipbuilding and automobile sectors are facing difficult times.

India's per capita steel consumption of about 70 tonnes falls far short of the world average of 208 kg. Steel intensity here will get a boost if more steel is used in house building and construction reducing cement application as is the case in developed and emerging markets, the metal is used as replacement of wood as Tata Steel is doing with doors and windows and a push is given to its consumption in semi-urban and rural areas.

ON THE JOB

Elections & employment

MAHESH VYAS

Weekly estimates of labour statistics from CMIE's Consumer Pyramids Household Survey provide a good sense of the direction in which the labour markets are moving. They are, therefore, a good predictor of what would the direction of change be in the monthly estimates of labour market indicators.

Weekly estimates of the unemployment rate during March 2019 for example, did indicate a declining trend. The unemployment rate initially was high and rising. It was 6.9 per cent in the first week and 7 per cent in the second week. Then it fell in the last two weeks to 6.2 per cent and 6.4 per cent. As a result, March ended with an unemployment rate of 6.7 per cent, which was much lower compared to 7.2 per cent in February.

April weekly rates indicate a rise in the unemployment rate. The first three weeks of the month have seen the rate rise from 7.9 per cent to 8.1 per cent and then 8.4 per cent in the third week ended April 21. Each of these is higher than the unemployment rate in the weeks of March.

It is, therefore, very likely that the month of April will end with an unemployment rate that would be much higher than the 6.7 per cent print of March 2019.

Interestingly, the higher unemployment rate of April is accompanied by a higher employment rate. The average employment rate during the first three weeks of April was 40 per cent. This is a tad higher than the employment rate during the first three weeks of March, which was 39.5 per cent.

Evidently, we are likely to see an increase in employment and unemployment in April.

This is happening because there is an increase in the labour force participation rate. This merits some explanation.

An increase in the labour participation rate indicates that a greater proportion of the adult population is seeking jobs. Some of these already have jobs and some get jobs but some others don't. A serious problem that India faces is that its labour force participation rate is low compared to global standards. Fewer adults in India seek work compared to the rest of the world. So, it is good to know that there was a rise in the labour participation rate recently.

The labour force participation rate touched a recent peak of 44.3 per cent in the week of April 14. In fact, this is the highest labour participation rate seen in 59 weeks, that is, since the week ended February 25, 2018.

The average labour force participation rate during the first three weeks of April 2019 was 43.5 per cent compared to 42.3 per cent during the first three weeks of March 2019. This is a sharp jump. The labour participation rate started to rise in the third week of March, that is, the week ended March 24.

Now, we revert to the increase in the employment rate mentioned earlier. The employment rate is the proportion of the adult population that is employed. This proportion has increased marginally. It is worth celebrating that an increased labour participation rate was accompanied by an increased employment rate.

But, we also see a rising unemployment rate. The unemployment rate is the proportion of the labour force that did not get jobs. Note that unlike the employment rate, the unemployment rate is not a ratio of the total adult population. It is a ratio of the labour force. This ratio has been rising.

So, we may summarise the current labour conditions as indicating a substantial increase in labour participation where some of the increased labour participation did meet with increased employment but, many others experienced unemployment.

It would be safe to conjecture that the increase in labour participation rate is an outcome of the current national election campaigns. Elections are labour intensive. There is a sharp increase in demand for labour to organise rallies and also attend to rallies, to campaign from house to house and to supervise booths, to manage social media etc.

As the demand for labour increased from electioneering, the labour participation rate increased and so did the employment rate. The increase in the unemployment rate indicates that many more people are willing to take up this temporary employment than there are on offer. This is very interesting. It could indicate that the wage rates being offered for this work is high. Electioneering never suffers because of insufficient supply of labour.

Farmers often complain of lack of labour on farms. Political parties seem to suggest that labour is available if you pay them well. But, the risk-adjusted returns from farming are, arguably, not as lucrative as they are from politics.

The author is the MD & CEO of CMIE

LETTERS

False sense of security

This refers to the editorial "Lessons from Jet". The role of the banks in this sad saga is a matter of concern. First, the banks completely ignored the danger signals which were emanating over the past few months. Were there issues such as diversion of bank funds? Was income accruing to Jet Airways being booked in private, closely held firms of the promoters? Second, in the latter half of last year why didn't banks force the politically influential and well networked promoters to bring in new investors in Jet Airways? Thirdly, all these months, why was the chairman of the State Bank of India (SBI) assuring the public that fresh funds will be infused knowing fully well that bank funds could not be invested until serious investors were willing to buy stakes in the beleaguered airline, especially with promoters not willing to give up control? Such assurances gave false hope to the employees, suppliers, vendors of Jet Airways and not to mention members of the public who continued to book tickets on the airline whose steadily deteriorating financial situation would eventually ensure there would be no planes to fly and no money to buy fuel. Did the bankers give these assurances to give the false impression that this airline will be revived when the clear objective was to ensure that the inevitable does not happen before the elections? Well it did happen and there is no real investor willing to put in money. So now the banks are saddled with 50 per cent of the equity of a dead airline and huge amount of unpaid loans. No lessons were learnt from what happened to Kingfisher.

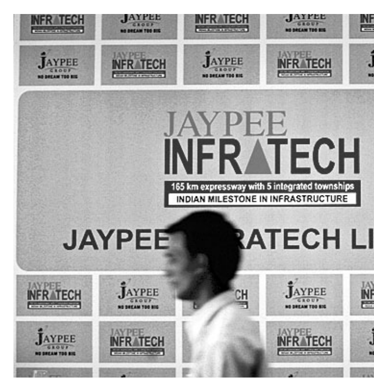
It is imperative to look into the real reasons for the fall of this airline — the role of promoters and banks, the diversion of bank funds and accounting irregularities.

Arun Pasricha New Delhi

Unfortunate deadlock

This refers to "NCLT consults Centre, IBBI on Jaypee Infra deadlock". In response to the severe hardships faced by homebuyers due to incomplete real estate projects, the government amended the Insolvency and Bankruptcy Code (IBC) to recognise homebuyers as financial creditors and thereby provided them representation in the Committee of Creditors. Hence, it is disappointing to see the Jaypee Infratech resolution process at a virtual standstill due to the non-participation of home buyers. One solution would be to amend Section 30(4) of the aforesaid Code so as to stipulate that a resolution plan shall be approved by a vote of not less than 66 per cent of voting share of financial creditors actually present in the meeting.

Another suggestion is to revisit this threshold of 66 per cent itself. This may be seen in the context of the recent recommendation of Indian Banks Association to the Reserve Bank of India (RBI) on a 90 per cent threshold. The Jaypee Infratech case best illustrates why this recommendation should never be accepted. Earlier this month, the Shipyards Association of India had requested the RBI that the threshold be reduced to 50.1 per cent. This is a valid suggestion which will go a long way in speeding up the resolution process, the prime objective of the IBC.



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The supreme test case

Due process should be followed in the SC complaint case

Chief Justice Ranjan Gogoi's response, in seeing the sexual harassment allegation against him as an attack on the judiciary, would obviously have been coloured by the manner in which the complaint has been made and spread to the public. The process adopted by the complainant has indeed been strange. She wrote to 26 judges and simultaneously to four news websites, as though seeking advance publicity which can only be with a view to destroying someone's reputation as an end in itself. As Finance Minister Arun Jaitley said in a blog post on Sunday, this raises questions about motive and therefore a larger undisclosed purpose. A direct complaint in the appropriate manner might well have evoked a completely different response from Justice Gogoi, who enjoys a completely clean reputation.

But it will surely be a test case of the procedural guidelines that the Supreme Court set out in a path-breaking case in 1997, which became law in 2013. The Vishakha Guidelines, as they were initially called, named after the non-government organisation that fought the case on the victim's behalf, defined sexual harassment for the first time and mandated complaints committees in organisations with more than 10 employees. The apex court set up its own Vishakha committee in 2013 — that is, after Parliament parlayed the guidelines into law. But it has not been invoked in this case. Justice Gogoi's courageous participation in the unprecedented group protest against then Chief Justice Dipak Misra's procedural transgressions in January last year established his reputation for being a stickler for due process and the rule of law. Yet, he didn't apply these rules to himself. Instead of activating an investigation via the sexual harassment complaints committee mechanism, which would have been the proper thing to do, he chose the unusual route to defend himself. On being informed of the accusations by the solicitor general, Justice Gogoi called a special Bench hearing, which was attended by Justice Sanjeev Khanna and Justice Arun Mishra. The hearing, he said, was on a "matter of great public importance touching upon the independence of the judiciary". Then he spoke for half an hour to protest his innocence, which included information about the modest size of his bank balance and observations about the victim's reputation.

Several obvious questions arise about this course of action, one of them being why the complainant was not permitted a hearing at the special Bench. This question assumes importance because of a gap in the law that requires the chief justice's permission for the complaints committee to accept a complaint. There is no procedure for a complaint against the chief justice. In the absence of a hearing from the alleged victim, the court issued a statement, signed only by Justice Mishra and Justice Khanna, calling on the media to act responsibly and decide whether to publish "wild and scandalous" allegations. An independent investigation would have been a better course of action.

Unreasonable ban

TikTok has been unfairly targeted

The ban on TikTok, a video-creation and sharing app, has made its pool of 120 million Indian users unhappy. Users record short videos and watch videos by others. On April 3, the Madurai Bench of the Madras High Court imposed an interim ban on TikTok on the basis of a complaint that it was "degrading culture and encouraging pornography besides containing explicit, disturbing content and causing social stigma and medical health issue between teens". This is not the first time that TikTok has been caught up in a legal quagmire. A few months ago, it paid $128 million to settle a US court case in which it was alleged that it enabled sexual predators to target minors. Bytedance, the Chinese company that owns it, claims that it has since put parental and privacy controls in place to ensure children can safely use it. It is, of course, imperative that minors should be protected. But a ban may not be effective in fulfilling that aim. Moreover, this ban itself may set a precedent of impinging on freedom of expression, and the freedom to earn a living, and infringement of privacy.

To begin with, "degrading culture" is a matter of opinion and not illegal. The other allegations in that complaint should be based on hard data. Banning an app or a software tool on the basis that it can be used to create objectionable, or obscene content, seems like an over-reaction. Any video-creation-cum-sharing platform — and there are many — could be used for such purposes. Moreover, when it comes to protecting children, some part of the responsibility devolves upon parents. Unfortunately, even though privacy and parental control tools exist, the generation gap often means that minors are more tech-savvy than their parents. There have indeed been a few disturbing incidents involving TikTok. For example, there have been accidents when youngsters have attempted to make videos while riding motorcycles. However, the lack of parental knowledge should not result in a ban, nor can the app be blamed for lack of caution, or common sense, on the part of users. In analogy, taking selfies in dangerous circumstances has resulted in many fatal accidents worldwide but nobody has suggested banning camera-mobiles.

TikTok is an important platform for the talented to showcase content and promote brands. These users could claim, and with justice, that their freedom to work is being infringed. Also, if a user creates and hosts explicit videos on a private account, that is really nobody else's business. A blanket ban infringes those rights. In practice, this ban is also an example of shutting the stable door long after the horse has bolted. There is no reasonable way to shut down 120 million users. Nor will the ban stop tech-savvy persons from downloading the app. Instead, the court might perhaps have asked the company to prominently feature its privacy controls and educate parents about safe usage. The court has appointed amicus curiae to help it to come to a decision by the next hearing on this matter. One only hopes the court considers the multiple precedents this case could create and come to a reasonable decision. In any case, bans hardly serve any purpose. After TikTok was banned in India, downloads of the Chinese social media app reportedly surged by 10-15 times on third-party sites.

India's consumption acceleration

To benefit from the spending boom, we need guideposts to understand which goods will see a surge in demand and when

Now that the Chinese economy has started to slow structurally, many investors are looking for the next driver of global consumption. In multiple products, be it smartphones or cars, Chinese demand has seemingly plateaued. Given that China was till recently driving global demand across products, the need for a new global consumption engine is obvious.

For most, India is the next frontier: A population of 1.3 billion people, median age below 30 and the world's fastest growing major economy. I have seen multiple reports recently from both financial analysts and consultants highlighting the India consumption potential. They all make use of a consumption acceleration framework loved by the consultant community, and used successfully to track and project consumption trajectories of multiple emerging economies at various stages of economic development.

The basic framework lays out the concept that demand, for certain goods and services, will grow disproportionately as incomes rise and the structure of demand shifts. Household spending on certain goods and services does not grow smoothly, despite steady income growth. Spending seems to accelerate on different products as we cross different income thresholds.

AKASH PRAKASH

Here is an example taken from a recent Gavekal report: If an economy has a bell shaped income distribution curve and the average income of the economy were to grow by 25 per cent from $10,000 to $12,500, then the percentage of population earning more than $15,000 would not increase by just 25 per cent. It would rise seven-fold from 2.3 per cent to 15.9 per cent. This is the acceleration dynamic at work. Obviously, demand for products consumed by this cohort would accelerate dramatically, much more than the 25 per cent headline growth in average incomes.

All the reports I have seen have tried to model this consumption acceleration phenomenon for India. To do so, one has to make certain modelling assumptions. First of all, one has to understand the income distribution curve of the country. While India does not have the bell shaped curve beloved of textbooks, there is limited data on the actual distribution. While we had a GDP per capita of $2,000 in 2018, more than two-thirds of the population earned less than half of that. Therefore, income distribution in India has a very long tail. Most analysts look at proxies like the consumption data from sample surveys and build out a distribution curve.

Then you have to project income growth for the economy. Will we continue growing for another decade at greater than 7 per cent? The growth assumed makes a big difference. Most of the reports have India growing at between 7.5 per cent and 8 per cent for the next five years and then gradually tapering to 7 per cent thereafter.

One has to also model urbanisation, as urban incomes are much higher than rural incomes. Faster urbanisation will lead to greater consumption. In order to understand the impact on demand for specific goods and services, we need to establish certain income thresholds, at which consumption tips and starts to grow rapidly. Once you have established the income thresholds, you can model how many new households are entering each income cohort over the coming decade and its likely impact on consumption.

The cleanest categorisation I have seen is in the Gavekal report. They have three buckets, the first, called the emerging consumer, has an income level between ₹2 lakh and ₹5 lakh based on 2016 prices. This category tends to buy entry level smartphones and two-wheelers. The second category is the aspiring consumer, with an income between ₹5 lakh and ₹12 lakh. They can buy an entry-level car and start vacationing overseas. The final category is the affluent consumer with an income over ₹12 lakh. They buy designer brands and prioritise experiences.

Looking through the various reports, their modelled income distribution and economic growth rates, with the above categorisation, certain conclusions are clear. Firstly, less than half of India's households are currently involved in the modern consumption economy. As per the Gavekal categorisation, today we have 71 million households in the emerging consumer bucket, 33 million as aspiring consumers and only 18 million in the affluent consumer bucket. That is only 120 million households, less than half the total economically engaged.

Using a scenario of nearly 8 per cent GDP growth till 2025, tapering to 7 per cent by 2030, combined with a continuation of current urbanisation trends, these number change drastically. Over the coming decade, we will see the number of households in the emerging consumer bucket double to 140 million, the aspiring consumers triple to over 100 million and affluent consumers quadruple to 72 million. The number of households involved in the modern consumer economy will move from 120 million to over 310 million.

To get a sense of how important economic growth is to this equation, consider this: A difference of two percentage points in GDP growth over a decade (difference between a high growth and low growth scenario) will change the number of households in the upper two consumption buckets from 193 million to 136 million. That is almost 60 million fewer households uplifted because of slower growth for just a 10-year period.

To understand the real impact of accelerating consumption for certain goods and services, we need to see not just the net numbers being added to each of the above three categories (as some households enter and others leave) but the gross additions to each category from the cohort below. Looking at it from this perspective, the last decade was clearly the era of the emerging consumer cohort. In 2009, about 2.5 million new households entered the emerging consumer bucket per annum, this has continuously grown and in 2019 about 12 million new households will enter this bucket (data from Gavekal). This number will continue to grow, peaking at about 15 million by 2025. Thereafter, as India grows wealthier, the affluent consumer bucket will take leadership and start adding the most new households. From 4 million new consumers added in 2019, we will see almost 10 million new households being added annually to the affluent consumer grouping by 2025, and then 13 million by 2030. It will cross the emerging consumer grouping in new additions.

This switch from the emerging consumer grouping to the affluent consumer group in the coming decade as the biggest recipient of new consuming households will have some interesting implications.

Over the last decade, we saw a surge in consumption for those categories favoured by the emerging consumer grouping. Two-wheelers, for example, tripled in sales from seven million to over 21 million. Basic consumer goods also had strong growth as penetration rates improved across all categories.

Over the coming decade, as the aspiring consumer grouping gains more prominence, different categories should benefit — car sales, for one. Over the last decade, we have seen passenger vehicle sales grow from 1.2 million to 2.2 million, and the sales trajectory should accelerate in the coming decade, as by 2025, 10 million new consumers will enter the potential car purchasing income bucket per annum. Branded clothing and foreign travel are other categories poised to explode for exactly the same reasons.

India will grow through its own consumption acceleration dynamic just like we have seen in China and other emerging markets. It is critical to understand, however, what this acceleration will look like and which goods and services will be impacted in what time frame. An analysis like the one done by Gavekal and others are helpful guideposts in understanding this upcoming growth acceleration and how to position for it.

The writer is with Amansa Capital

Governing uncertainty in geoengineering

Imagine 2030. Faced with a decade of record-breaking temperatures and three years of consecutive drought, China deploys sulphate particles in the stratosphere to reflect sunlight and reduce temperatures. A year later, India's monsoons face a severe shock, resulting in significant crop losses. It is not clear if the Chinese intervention caused or influenced the monsoonal aberration. How would this issue be resolved? Would it be limited to climate negotiations? Would it warrant higher political intervention?

At the fourth session of the UN Environment Assembly (UNEA-4) in Nairobi in March, a draft resolution "to prepare an assessment of the status of geoengineering technologies…" was withdrawn after parties failed to reach an agreement. "[D]eeply concerned about…potential global risks and adverse impacts…", Switzerland and 10 other countries (from Burkina Faso to Mexico to South Korea) had proposed the resolution to assess climate geoengineering (CGE) science, actors and activities involved, expected impacts, and options for governance. Its failure illustrates that lack of global governance of CGE is deeply rooted in uncertainties, affecting technological research, political intentions, legitimacy of forums, and public trust.

INFLEXION POINTS

ARUNABHA GHOSH

Climate geoengineering is deliberate large-scale intervention in Earth's climate system to limit adverse global warming. It involves two categories: Carbon-dioxide removal to reduce CO2 atmospheric concentrations; and solar radiation management to increase Earth's reflectivity and reduce the outgoing infrared radiation from Earth's surface that greenhouse gases (GHGs) absorb, resulting in warming.

The first lesson from the failed resolution is that we have no consensus on how to govern uncertainty. Uncertainties abound about the effectiveness, second-order impacts, safety and affordability of CGE technologies. The risks surrounding carbon removal are different from those related to solar geoengineering. For instance, bioenergy with carbon capture and storage (a carbon removal idea) raises concerns about the vast land requirement. But injecting sulphate particles in the stratosphere has implications for rainfall in other regions.

Whereas the US opposed clubbing carbon removal and solar geoengineering together, the EU argued that all CGE technologies merited caution. The proposed resolution rightly adopted a precautionary approach in calling for an assessment. The Convention on Biological Diversity had been even more cautious in 2010 when parties imposed a moratorium on geoengineering activities that may affect biodiversity. But opponents of the Swiss resolution, in particular the US and Saudi Arabia, opposed even this weakly limiting framework. If governance has to enable research to plug gaps in our knowledge, there must be a minimum understanding about the need for caution.

Secondly, attempts to define thresholds between emissions mitigation, climate adaptation and geoengineering will remain fraught. Within academic circles, scientists have tried to separate computer modelling, small-scale field experiments, large-scale experiments and eventual deployment. But the real worry for many countries is that CGE research will reduce incentives for mitigation.

According to some sources, the US opposed the resolution because it suggested that geoengineering was not a substitute for emissions reduction. This is deeply problematic. Promised actions under the Paris Agreement on climate change are well below what is needed to stabilise temperature rise. If the largest polluters view CGE as even a potential substitute for mitigation, it signals grave injustice and an abandonment of any notion of historical responsibility.

Thirdly, there is no consensus about the forum at which to discuss geoengineering. Neither codes of conduct for scientists to self-govern themselves nor solely national-level governance will suffice. If we are willing to contemplate technological interventions at a planetary scale, eventually we would have to contemplate political interactions — and disputes — at a planetary scale as well.

Those opposing the UNEA resolution argued that the Intergovernmental Panel on Climate Change or the UN Framework Convention on Climate Change were more relevant forums. The IPCC has no mandate to suggest governance options. There are other multilateral treaties that also have some relevance: the Montreal Protocol (to govern sulphate aerosols), the London Convention/ London Protocol (to govern ocean fertilisation), MARPOL (to govern marine cloud brightening), etc. But at which forum can countries ascertain incentives and motivations, or hold private interests accountable, or get legal recourse if something went wrong?

Opponents of CGE will question governance that enables further research (and possibly field experiments) as too permissive; proponents of CGE will question global governance that regulates scientific research as too restrictive. We are unlikely to find a single forum that will satisfy all parties on both technical relevance and political legitimacy. By its very nature, climate geoengineering will be debated across several venues.

The fourth lesson, therefore, is that transparency must form the bedrock of any conversation on CGE. Transparency has a dual role: Reduce public risk and build public trust. Timely and salient information about CGE research proposals, methodologies and funding is needed to reduce uncertainties about motivations. For any planned outdoor experiments, transparency is needed to secure prior informed consent from potentially impacted communities. Transparency about research results, direct impacts in controlling temperature rise, and associated impacts on precipitation, hydrological cycle, oceans and biodiversity is necessary (if not sufficient) to establish responsibility and liability for adverse transboundary consequences.

Climate geoengineering occupies both a rarefied world of climate science as well as the messy world of geopolitics. Currently, we have no means to legitimately weigh the risks of not acting against climate emergencies against the risks entailed in deploying controversial CGE methods. This is not a mere technical debate; it is high politics. We have no means today to govern this uncertainty.

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Debating austerity

BOOK REVIEW

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Under the basic Keynesian model, the impact of austerity measures on the economy is quite straightforward. Cuts in government spending reduces aggregate demand, which leads to a fall in output, lowering gross domestic product and private income. This creates a multiplier effect as a fall in private consumption translates to a further fall in output.

The greater the propensity to consume out of current income, in other words, the lower the propensity to save, and the greater is the multiplier effect. This fall in aggregate demand also deters investments.

On the other hand, an increase in taxes negatively impacts output, though to a lesser degree. Higher taxes reduce personal disposable income thereby translating to lower consumption. But as consumers spend only a fraction of their disposable income, they also tend to save, so higher taxes have a smaller impact on output. Thus, under this model, austerity implemented through spending cuts is more harmful than that implemented through raising taxes.

This basic Keynesian framework continues to dominate popular discourse. However, economists Alberto Alesina, Carlo Favero and Francesco Giavazzi differ from their approach. In a new book titled *Austerity – When it Works and When it Doesn't* the economists, who have long researched the effects of austerity, argue that the typical anti-austerity argument that tax increases and expenditure cuts "cause long lasting recessions," does not present the complete picture for many reasons.

For one, "the effects of fiscal policy are not limited to the demand side of the economy." Rather, changes in tax structure and government spending also create incentives that influence the supply side.

Second, "economic decisions of consumers, investors, workers and savers depend not just on the present but also on expectations of the future." This is important "as decisions regarding taxes and spending made today affect the future."

At the crux of the book is the notion that when governments are facing an unsustainable debt position, it is much better to rein back deficits through spending cuts rather than tax increases. Marshalling decades of data, the authors argue that an "increase in labour taxes tends to reduce labour supply while simultaneously raising labour costs and thus prices". Further, higher taxes, also reduce disposable income thereby reducing aggregate demand.

On the other hand, even though spending cuts reduce aggregate demand, "if they are perceived as permanent, they will lead to expectations of lower taxes in the future." This, they argue, has ramifications for consumer spending today.

According to economists Milton Friedman and Franco Modigliani, consumption decisions are based not only on current incomes but also on long-term incomes. If consumers expect lower taxes in the future, then "private consumption may react immediately to the announcement of a permanent cut in government spending," the authors argue.

Then there's also the investment effect. The authors contend that if investors expect future taxes to go up to pay for government spending they are less likely to invest today for two reasons. First, they are likely to face higher taxes in the future. And second, higher taxes levied on consumers will also reduce demand in the future.

On the contrary, a cut in government spending signals a reduction in future taxes, which may stimulate investment today.

Thus, in their view, the negative effects of austerity are outweighed by the impact of austerity in boosting household and investor confidence —which in turn will get them to spend. They estimate that although tax-based austerity drives lead to "deep and prolonged recession" that lasts many years, the recessionary impact of expenditure-based austerity dissipates "within two years after a plan is introduced."

At the crux of their argument is the belief that expectations and confidence matter. This is a tall order. Also, much of the debate lies in estimating the magnitude of these fiscal multipliers. This is where analyses differs.

While economists will continue to debate on the merits and demerits of expansionary or contractionary fiscal policies, the fundamental question is whether austerity is a politically saleable proposition. Is austerity a bad word? Will voters reward governments who boost spending or those who pivot to parsimony?

The authors note that "in academia and political circles the idea is that voters always punish incumbents who raise taxes or cut spending to reduce deficits."

This argument stems from the line of thinking that voters, guided by short-term imperatives, are more likely to vote for governments who increase spending, without an understanding of the future costs that such higher current spending entails. However, the authors disagree. According to their estimates, "the recent historical evidence on electoral effects of austerity, the results are much less clear cut than the conventional wisdom would suggest."

AUSTERITY: WHEN IT WORKS AND WHEN IT DOESN'T
Alberto Alesina, Carlo Favero, Francesco Giavazzi
Princeton University Press; Pages 276