



PORTRAIT: SHYAM KUMAR PRASAD

● FOOD CAFE:  
AR VENKATACHALAPATHY

## Decoding the Tamil psyche

The Tamil historian and writer shares with Sushila Ravindranath that the Tamil Nadu developmental model has succeeded because there is widespread education network, serious attempts at sensitisation and importance is given to quality healthcare

**A**R VENKATACHALAPATHY, professor at the Madras Institute of Development Studies (MIDS), Chennai, has done extensive work on Tamil Nadu's Dravidian movement. He has a PhD in history from the Jawaharlal Nehru University (JNU), New Delhi, and has taught at the University of Chicago and the National University of Singapore; he has also held fellowships in Paris, Cambridge and Harvard. His research, among other things, focuses on the early history of nationalism, the social history of the Dravidian movement, caste politics, politics of language, and literary cultures.

Venkatachalapathy is a recipient of the VKRV Rao Prize (in 2007), and has published more than 30 books on a variety of subjects. His latest, 'Tamil Characters: Personalities, Politics, Culture', is an attempt to deconstruct Tamil Nadu to the rest of the country. "Tamil Nadu poses a challenge to common sense. Its politics and culture continue to confuse outside observers. The state has been ruled for half a century by two regional parties. Its politics has been marked by language pride, non-Brahmin movement, caste-based reservation, regionalism, welfare populism, and cinema. Despite all the negatives, Tamil Nadu is one of the most developed states in the country, scoring high on all human development indicators," he says in his preface.

The Mandal reform left Tamil Nadu unscathed, as reservations had been successfully implemented far ahead of other states, opening up education and jobs to a new generation. How did all this happen? We meet at Mathsya, a popular restaurant situated close to MIDS, to discuss these issues and decode the Tamil psyche.

The pure vegetarian restaurant has a nice old-world ambience, with large windows. Venkatachalapathy knows what he wants. He likes the Udupi special platter. I want the famous Karnataka oil-free *neer dosa* and the equally famous *bisi bele huli anna* dripping with *ghee* and full of cashew nuts.

We ask for cold tender coconut water; Chennai's brief spell with good weather is over. "There are many historical reasons for Tamil Nadu being what it is. Calcutta had a head start over Madras at the time of Independence. But it paid the price of cultural and intellectual leadership by the *bhadralok* (gentlefolk) who were just emotional. Bombay, on the other hand, was primarily a business centre with Gujarati and Parsi capital, and capital coming from other places. There was nothing of great intellectual impact happening there. Tamil Nadu, in terms of trade and commerce, was seen as a laggard," he says.

He adds what went unnoticed was that Madras produced well-educated, non-flamboyant intellectuals with razor sharp legal minds who played a major role in the mainstream. "People were also setting up industries and trading businesses. However, post-Independence, the Tamil Brahmins who held powerful positions in Delhi did nothing to promote Tamil Nadu. They constantly projected the culture and politics of the state in negative terms. They could not come to terms with the Dravidian parties. I was constantly writing rejoinders to their

columns in the 1990s."

Tamils have always managed to maintain their distinctiveness. Venkatachalapathy says the social profile of Tamil intellectuals and intelligentsia differs from other states. "Take JNU, for example. Almost every surname of students, who come from all parts of the country, will carry their caste identity without them even being conscious of it. The entire Bengali renaissance happened because of *bhadralok*. In Kerala, in spite of the upper caste Nair dominance declining, 90% of the intellectuals are Nairs. If a state has two dominant castes, they flourish at the expense of other castes, as is the case in Andhra Pradesh and Karnataka. Tamil Nadu's intellectual class is much wider because of the Dravidian movement."

Our food arrives. The special platter has a variety of *dosas*, *vadas* and *rice* in small portions. Although my *bisi bele* is aromatic and tastes as it should, I wish I had ordered the platter.

"There has always been a conception of Tamil country from the ancient times, and an idea of how it is bounded. There has been a very long continuity of Tamil culture, going back to the Chola period, which was maintained by subsequent dynasties as well. The south of India, especially Tamil Nadu, has always demanded a separate history," he says.

As I start eating the oil-free *neer dosa*, I ask Venkatachalapathy about the long-lasting influence of EV Ramasamy Naicker, known as Periyar (sage), who changed the cultural and intellectual

landscape of Tamil Nadu. "Only Brahmin Nadu has seen a full-blow non-Brahmin, Dravidian movement. The state was dominated by a minuscule community. Its caste system is marked by the absence of intermediary Kshatriya and Vaishya *varnas*. The Brahmins controlled rituals and enjoyed prosperity historically. Lands were endowed to them from the Chola times at the cost of other castes, in some cases," he replies, adding, "Periyar was a man of ideas. He questioned all religions, particularly the dominant role of Hinduism. Indian intellectuals were largely Brahmins, and Periyar loathed them. He appealed to the common man suffering from oppression by the upper castes. He was a man way ahead of his times. His questioning of patriarchal norms regarding marriage, chastity and motherhood was breathtaking."

As we polish off our food, we order coffee, which is always good in a Udipi restaurant. I then ask Venkatachalapathy how Periyar continues to remain an icon and a major influence till today, although the Dravidian parties broke away from him?

He replies: "Periyar brought about social transformation. Not a day went by when he did not address a public meeting. People became aspirational, thanks to him. Congress chief minister K Kamaraj, who did not come from an upper caste, set Tamil Nadu's development agenda of building roads, rural electrification and a nascent stage of noon meal scheme in motion. CN Annadurai, the founder of the DMK and the first non-Congress chief minister of the state, also worked on people's aspirations. When M Karunanidhi became the chief minister, he nationalised private transport companies. This resulted in every village being connected."

He adds that the Tamil Nadu model is a combination of many things. "There is widespread education network, serious attempts at sensitisation and, most importantly, importance is given to quality healthcare. There are 18,000 pharmacies in Tamil Nadu as compared to 1,000 in Bihar."

Tamil Nadu has always had relative communal harmony. However, there has been increasing caste violence and violence against women in recent times in the state, which is seen as progressive. "Rapid changes after the 1990s have brought about economic mobility among the lower castes. The dominant castes see them as upstarts. The religious jingoism in Tamil Nadu is a product of affluence," says Venkatachalapathy.

There is much more to discuss. We have run out of time. We agree to meet again after he completes his definitive biography on Periyar.

sushila.ravindranath@  
expressindia.com

**Rapid changes, especially after the 1990s, brought about economic mobility among the lower castes in Tamil Nadu. The dominant castes started seeing them as upstarts. The religious cultural jingoism in Tamil Nadu is a product of affluence**

**What SMBs need is the equivalent of a low-cost KPMG or PwC—a services company that can study markets, suggest business models, and offer tax and financial services advice**

## Energise SMBs to fuel employment

AJAY  
KELA

The author is president & CEO, Wadhvani Foundation

SMBs in India can be the answer to manage the troublesome increase in unemployment and underemployment

**S**MALL AND MEDIUM BUSINESSES (SMBs) are critical to every economy. In developing nations, with few conglomerates, SMBs can be the lifeblood of the economy and employment. India, with its 63.4 million non-agricultural SMBs, is no exception. Here, SMBs—more accurately, micro, small and medium enterprises (MSMEs)—employ over 111 million people and contribute nearly 29% to India's GDP. It's the 111 million they employ that is intriguing and a matter of great interest to the country, given youth unemployment stands at 16%, the highest in the last 20 years, and where wages are dangerously depressed, primarily due to underemployment. Globally, SMBs account for close to 70% of all new jobs created, annually. Can SMBs in India be the answer to managing the troublesome increase in unemployment and underemployment?

Let's examine the traditional strengths of SMBs. They are largely founded on personal conviction; they are mostly established on personal savings or small borrowings from family and friends; they have suppliers and distributors based on trust and strong personal relationships; their manufacturing and service lines are reasonably well tested; they have an intimate knowledge of their markets and their customers; they are frugal; and because they are small operations, they tend to have larger retention of employees. In most instances, they have mature businesses that already comply with regulatory norms—and if they don't, it is often easy to bring them in line with compliance.

Examining their challenges, SMBs fail to scale and achieve their true potential for a number of reasons. SMBs are unable to find new suppliers and distributors in newer market and who they can trust. They are not certain if their brand will be trusted outside their areas of operation. They cannot find sales leads easily. They cannot scale their manufacturing, procurement and marketing because of limited funding. And they are unable to find investors because they don't have formal and well-documented practices.

This is an irony. Investors are hungry to put their money down in tried-and-tested products and services, where the entrepreneur is passionate and takes complete ownership, has a proven record, has existing customers and a clearly visible potential for growth. SMBs tick all these boxes, but investors aren't lining up. What can prompt investor interest and energise these businesses?

Now, let's dream a bit. Suppose we could identify all SMBs with a turnover in the range of Rs 5 to Rs 50 crore and put in place people, processes and policies that would help them scale 2X to 10X. The solution is starting at us, but our fixed perceptions of reality tend to obscure it. What SMBs need is the equivalent of a low-cost KPMG, PwC or a Bain & Company—a professional services company that can study markets, identify opportunities, conduct discovery with SMBs, suggest new business models and transformation plans, help in execution of initiative including going digital so that they can serve customers and markets that were previously unreachable, manage mergers and acquisitions, and offer tax, private equity and financial services advice.

Our ideal high-quality business analyst would provide services tailored for SMBs. These would include digital knowledge sessions, business and technical training, staffing solutions, on-demand mobile connects to curated mentors, sector-specific experts, paid and *pro bono* ex-consultants from major analyst firms, professors, marketing experts, curated service providers, partners and distributors, regulatory professionals, risk officers, etc, all at a fraction of the cost of the Big-5 and at a global level to serve the globalised market.

This could be made possible by leveraging technology, crowd-sourcing consultant and experts networks, and having all of this anchored by an apex organisation with a finely-honed understanding of entrepreneurs and their ecosystems. Of special advantage would be an on-demand digital platform managed by the apex organisation that connects SMBs and their ecosystem players across the globe. Once connected, they could work collaboratively to find new markets, better suppliers, share business practices and adjust capacity and pricing to their advantage.

Essentially, the model suggested here mimics big-league business by addressing customer, cash and capacity in a structured and professional manner, leveraging technology solutions and global networks. If all goes well, this could turn out to be the ideal solution to India's and other emerging economies' unemployment problem.

**O**N JUNE 23, 2016, the UK held a historic referendum. With a thin margin, the 'Brexit' camp that wanted to leave the EU won. This was an unexpected result and took even the most seasoned political pundits by surprise. The campaign was a fiercely fought one. Those who wanted to 'leave' raised issues of the UK's eroding sovereignty and how, as a member state, she was getting a raw deal. Additional thorny issues of jobs being taken by foreigners were raised. In retrospect, many of the claims made by the campaigners to leave the EU have turned out to be blatant lies. For instance, the data relied on upon by the 'leave' campaign in terms of the National Health Service gaining additional millions of pounds per week was not supported by any credible research. Further, in a speech made by the current PM in 2014, she had claimed that an illegal immigrant could not be deported because of his 'pet cat'. This was again a fabricated claim to discredit the Human Rights Act of 1998 (which incorporates the European Convention on Human Rights into the UK law).

The aftermath of Brexit has been equally messy. The first political casualty was the then PM David Cameron. Rather ironically, he was the one who had sug-

## Brexit: The Great British disaster

The next few days are extremely crucial for both the UK and the EU

VISHAVJEET  
CHAUDHARY

Assistant director, Centre for Penology, Criminal Justice and Police Studies, OP Jindal Global University

gested a referendum in 2013 as part of his election campaign! This was followed by a premature general election where the governing Conservative party remained the single largest but lost majority in 2017. Many politicians who were at the forefront of the 'leave' campaign have gone into oblivion. Boris Johnson, for example. Political turmoil, though, is far from over. Last month, the Parliament rejected a deal that the PM had negotiated with the EU. The very next day, she faced a no-confidence vote, which she survived. The deal, nonetheless, is far from settled.

What perhaps complicates the situation further are calls for a second referendum; the argument being the first one was wrought with lies, deceit and misinformation—the second one needs to be clearer. This is an undesirable situation for any democracy—the people have spoken and their will, according to most, should be respected.

An analysis of the Brexit vote presents a curious result. In London, the 'remain' campaign had a clear majority. This was reversed in the Midlands. Scotland also voted to remain. Data suggests that



among people aged 18-24, more than 70% voted to stay. In fact, a majority voters younger than 44 voted to stay, and a majority of above 44 voted to leave. This glaring national discrepancy shows the country's mood—irrevocably divided by region and age.

The UK's future, in the short as well as in the long run, is disturbingly uncertain. It is unclear what Brexit will mean for free movement between the EU, free trade and economic ties. London's strongest industries—finance and related services—are also under pressure. HSBC has

moved substantial operations to across the channel in France. Many others are expected to follow. The role of EU Directives and Regulations is unclear. Will the Human Rights Act be scrapped? When the Act came into force, the then government had famously described it as 'Bringing Rights Home.' The status of these rights at home is now uncertain. Negotiations to leave have reopened—and only time will tell what deal is agreeable to both the EU and the UK.

In a deeply divided world, post the wars, the EU was seen as a hopeful align-

ment of nations to further economic, strategic and political alliance in the 1960s. The core values of the EU were 'to promote peace, its values and the well-being of its citizens' and 'to offer freedom, security and justice without internal borders'. The 1970s saw the downfall of the last dictatorship in Europe and ushered in a new form of politics. The merger of appreciation. The 1980s culminated with the fall of the Berlin Wall and the 1990s saw frontiers being brought down in the EU. The past two decades have been challenging amidst economic hardships and new threats to developed world faces. Brexit has triggered demands for similar referendums in other European countries as well.

The coming few days for the UK and the EU are extremely crucial. Divisive, populist moves are threatening the fabric of the society. The EU, which at one point was one the strongest alignment of nations, is bearing the brunt. The deal is a testing time and will have an impact on the EU. For countries like India, Brexit means better ties with the UK. Whilst it isolates the UK from the EU, it simultaneously opens it up for business to the rest of the world, including Africa. As things stand, though, it can only be described as a 'great British disaster'.



# Opinion

FRIDAY, MARCH 15, 2019

## A GUARDED APPROACH

Arun Jaitley, Union finance minister

It is a diplomatic issue, and India will take a decision after a careful thought. We're not a small player on the global stage, but foreign policy issues are tackled in a measured way, not in a knee-jerk manner



## INDO-US TRADE TENSIONS

INDIA HAS TO END THE CAT-AND-MOUSE PLAY AND FOCUS ON NURTURING ITS LONG-TERM STRATEGIC RELATIONSHIP WITH THE US

# Can't look for US support and fight a trade war with it

**W**E WERE HOPING against all hope. The message was loud and clear but we were turning a

deaf ear to it. After months of simmering tensions between India and the US on the trade front, the US has just announced its decision to withdraw trade concessions under the Generalised System of Preferences (GSP). India was slammed for being a "a very high-tariff nation" denying the US "equitable and reasonable access to the markets of India". At the heart of the dispute lies the soaring trade deficit in the US and key sectors like medical devices, agriculture and dairy products which were identified as trade barriers. What added fuel to the fire was India's recently announced changes to its e-commerce rules that are perceived to be detrimental to American giants such as Walmart and Amazon.

This tit-for-tat action has clearly spelt out two things. Firstly, the world will not take India's rising protectionism lying down. If India closes its markets, it will also find doors closed to its exports. Second, the US is using GSP to leverage tariff reforms across sectors. The larger questions are: who will blink first and who has got the stomach to suffer the setback?

It is a no-brainer that withdrawal of India's GSP status is a cause for concern on the economic and trade front. India has been the largest beneficiary of the program and the US remains India's top export destination. Given the forthcoming elections, the government has cleverly tried to downplay the impact and stated that the decision would not have a "significant impact" on exports as the "economic value of GSP benefits are very moderate". They say the impact of removing GSP concessions on Indian products is minuscule, amounting to only \$190 million in tariffs on a total

export amount under GSP of \$5.6 billion to the US. The withdrawal of trade concessions, though, is a cause for concern. The government may respond mildly to the move, but it knows the impact is much larger.

India is one of the few countries that has a trade surplus with the US. Although the products impacted by the withdrawal of tariff concessions may be limited in number, the risk of losing competitive advantage and integration with global markets are wider. Further, smaller, labour-intensive industries that benefit from duty-free entry into the US market will be hit most as the same will significantly hit employment.

In an attempt to reduce trade barriers set by India, the US has overlooked the GSP benefits that were accruing to them in the past with the EU in 2002, the case in which it came out victorious. It can also go down the tit-for-tat route by imposing retaliatory tariffs to US tariffs on steel and aluminium imports which it has deferred multiple times. The retaliatory approach, although tempting, can have a cascading effect on other aspects of the India-US relationship and tarnish India's global image as a leading investment destination.

If we look at GSP withdrawal from a bird's eye view, the economic impact may be inconsequential. However, strategic relationships are larger than

US-China trade war. The financial markets were doing well, partly because of India becoming a prospect for trade vis-à-vis China. However, the non-GSP status for India does not promise sustained growth. So who could be the real winner? China, which maintains a trade surplus with both India and the US, could benefit from new opportunities. Exports to the US could potentially be replaced by Chinese ones as several products such as bulk industry bags, plastics, etc, will become less competitive against Chinese products without GSP benefits.

The GSP annulment kicks in within 60 days and, meanwhile, India has several options that it can explore. It can drag the US to the WTO like it has done in the past with the EU in 2002, the case in which it came out victorious. It can also go down the tit-for-tat route by imposing retaliatory tariffs to US tariffs on steel and aluminium imports which it has deferred multiple times. The retaliatory approach, although tempting, can have a cascading effect on other aspects of the India-US relationship and tarnish India's global image as a leading investment destination.

If we look at GSP withdrawal from a bird's eye view, the economic impact may be inconsequential. However, strategic relationships are larger than

in the past with the EU in 2002, the case in which it came out victorious. It can also go down the tit-for-tat route by imposing retaliatory tariffs to US tariffs on steel and aluminium imports which it has deferred multiple times. The retaliatory approach, although tempting, can have a cascading effect on other aspects of the India-US relationship and tarnish India's global image as a leading investment destination.

If we look at GSP withdrawal from a bird's eye view, the economic impact may be inconsequential. However, strategic relationships are larger than

**GOPAL JAIN**

Senior advocate of the Supreme Court of India



**In an attempt to reduce trade barriers set by India, the US has overlooked the GSP benefits that were accruing to them**

## BSNL-MTNL losses will be far more than even Air India

New 4G spectrum will cost them ₹20,000 cr and, with even Airtel/Vodafone-Idea bleeding, their losses will only mount

**A**T A TIME when, like Kingfisher Airlines, even Jet Airways looks like it could shut down—and when even IndiGo is cancelling so many flights—many point out that Air India continues to fly without as many problems; the argument is made in the context of the demand for shutting down chronic loss-making PSUs such as Air India or MTNL and BSNL that don't even have enough money to pay salaries. Seductive as the argument is, it is totally misleading since, if Kingfisher—or Jet Airways—had the hapless taxpayer to make good all its losses, year after year, it too would be flying today. Put another way, if the poor taxpayer wasn't there to ensure that all of Air India's debts were repaid, top executives of the airline would also, like Vijay Mallya, be seeking refuge in the UK or, like Naresh Goyal, be grounding planes and looking for a white knight to take over the airline.

While the government has just released ₹171 crore to allow MTNL to pay salaries for February, and will probably do the same for BSNL should it fail to drum up the necessary resources, prime minister Narendra Modi—and whoever the next prime minister is—needs to think hard about whether the two PSU telcos should be shut down since, while they are not pillaried like Air India is, their loss levels are much greater and the likely trajectory is likely to be even higher. For FY19, for instance, their combined loss could be around ₹11,500 crore; while BSNL's losses are likely to be around ₹8,000 crore, MTNL lost ₹2,634 crore in the first nine months of FY19 as compared to ₹2,970 crore in all of FY18.

Noris there any real plan to turn around the PSUs that continue to lose market share quite regularly. BSNL's market share in the mobile segment, for instance, has fallen from 13.3% to 9.7% between 2008 and today, and for MTNL, the fall is from 1.2% to 0.3% over the same period. Indeed, while BSNL was once seen as the only telco willing to go to rural areas, most private sector telcos have a far higher share of this market. The collapse in revenues has meant that while its wage bill equals 99% of its turnover in the case of MTNL, it is around 55% in the case of BSNL; most private telco salary bills are 4-5% of turnover. And unlike Air India whose big capex days are over—the government's main expenditure is in funding annual losses—the government needs to fund a generous VRS for both PSUs that could run into ₹6,000-7,000 crore; if both telcos want 4G spectrum, this will cost another ₹20,000 crore or so for just 5 MHz while most private telcos have several times this amount; and renewing its existing 3G spectrum that will soon expire will cost MTNL around ₹9,500 crore. Also, leading telcos like RJio and Bharti Airtel spend around ₹20,000-25,000 crore in annual capex.

Even after all this is given, and there is no guarantee that it can be given by a cash-strapped government, it is not clear that this is enough to ensure the two telcos will turn around. Both Bharti Airtel and Vodafone-Idea are well-run companies and have a lot more 4G spectrum than either of the two PSUs—assuming they both buy 5 MHz each of this—but thanks to the hyper-competition unleashed by RJio, their losses were ₹2,000 crore and ₹10,000 crore in Q2 and Q3 of FY19; in which case, even if the government gives the two PSUs what they want, their losses will increase dramatically. Indeed, it is to fund this cash-burn that Bharti Airtel is raising ₹32,000 crore and Vodafone-Idea ₹25,000 crore. While Air India's attractiveness to a buyer, should there be one, is in its ready-made network across the country as well as globally, replicating the BSNL/MTNL network is not difficult as other telcos are, in any case, creating fresh capacity and can take on their subscribers quite easily. In which case, while selling either won't be easy, Modi needs to decide if he wants to throw so much good money down the drain.

## Maharashtra's water-wars

The state must discourage sugarcane farming, fix water usage

**W**HILE INTER-STATE water wars are fairly common, intra-state ones were almost unheard of until two regions of Maharashtra locked horns in the Supreme Court in November last year. Cane farmers and the sugar industries along upstream Godavari in western Maharashtra have challenged the Bombay High Court's September 2016 order that held that the river's water must be used equitably as envisioned by laws on regulating water resources and irrigation enacted by the state government. Farmers from the Marathwada region that lies downstream of the river have countered this, saying if upstream reaches didn't release enough water to the Jayakwadi dam, the lifeline of the downstream areas, the water rights of the people of Marathwada would have been violated. This water-war, as *Down to Earth* (DTE) reports, has poor water resource management, wasteful water use perpetuated by a strong sugar lobby in the state, graft, climate change and ill-conceived policy at its core.

How disastrous Maharashtra's moves on water have been are evident from the fact that while the state suffered a 27% deficiency in rainfall in 2015 as compared to 9% in 2018, the number of drought-hit villages has risen, from 15,747 to 20,000. The amount of water stored also fell dramatically, from 63% to 10% in the case of medium and minor irrigation projects and from 38.5% to 16% for major irrigation projects. While long dry spells and a few days of incessant downpour during the monsoons instead of more evenly distributed rainfall—this is increasingly becoming common, thanks to climate change—is a factor, a hasty, ill-conceived shift to a disaggregated storage, watershed management and groundwater recharge scheme, the Jal Shivar Abhiyan (JSA), experts have argued, is also responsible. Ironically, the scheme's adoption happened against the backdrop of the state investing ₹70,000 crore in irrigation projects between 1999-2009 that increased the state's irrigation potential by a mere 0.1%. Experts say the stream-deepening and widening model of the JSA has resulted in aquifers getting exposed and drying up. When, in 2017, the state government announced incentives under JSA for farm ponds, farmers started hoarding groundwater in ponds even though these ponds were meant to store rainwater. Indeed, the alarm on the state's falling groundwater levels had been sounded long ago, but little has been done to curb it. While there were 40 borewells per square km in 1960, the figure stood close to 200 in 2018.

The water-guzzler sugarcane is exacerbating the state's water woes—it is cultivated in just 4% of the cultivable land in Maharashtra (though the area under sugarcane is seeing rapid increase every year), but consumes 70% of its irrigation water. The sugar lobby in the state has ensured that this grab continues. Indeed, of the 53 thousand million cubic feet (TMC) of Godavari water allocated to the Jayakwadi dam, 27 TMC is used up by the upstream sugarcane areas given the government is dragging its feet in forming water-use associations in the downstream areas. To address Maharashtra's water-woes—and now, water-wars—the government must take legacy issues head-on. From discouraging sugarcane farming to fixing water storage and management, tackling drought in the state will need a multi-pronged approach.

## Time Travel

Having been demonstrated in a controlled environment, time travel will have to wait before it is possible in nature

**E**VEN THE SLIGHTEST possibility of time travel exerts such fascination among scientists, sci-fi enthusiasts and even the common person, intriguing many a dream, that many physicists continue to study not only whether it may be possible but also how one might do it. An international team of scientists led by researchers at the Moscow Institute of Physics and Technology might be closer to this aspiration of travelling back in time by demonstrating the possibility of time reversal in a development that contradicts the basic laws of physics, *Newsweek* reported. In physics, systems travelling forward in time evolve from a simple state to a more complicated one—known as the thermodynamic arrow of time. It is like the evolving of complex multiple cell organisms (humans) from unicellular ones that has transpired over millions of years. If time were reversed for a human though, they would, theoretically, become younger.

The study by the Russian scientists and team, published in the journal *Scientific Reports*, involved transforming a 'qubit' (like bits of data, a 'qubit' is the basic unit of quantum information) from a more complicated state to a simpler one, changing the quantum state back in time, against the thermodynamic arrow of time principle. Time travel and time machine aficionados, however, must wait before their dreams are realised. The programme was successful when utilised with a two qubit quantum computer around 85% of the time. But when a third qubit was introduced, more errors occurred and the success rate fell to around 50%. Therefore, developing a system that can reverse time on a large scale is not going to happen any time soon because the findings from the experiment indicate that time reversal in nature is unlikely because it is too complex. Nevertheless, seeing how science has evolved over the years, with a prime example being that of the evolution of quantum physics, we should not put it past scientists to eventually come out with an apparatus that can reverse time.

## Brexit's poison will last for years

Almost 70% of the slowdown in UK investment might be down to Brexit. Whatever path is taken, businesses are going to be left in the fog

**FERDINANDO GIUGLIANO**

Bloomberg

**NOT SINCE THE 'Great Smog'** of 1952 has London been shrouded in such dismal gloom. British politics are in disarray, as lawmakers can't agree when and under what conditions they'd like to leave the EU. The "deal" Theresa May has been negotiating for two years has been rejected by the House of Commons not once, but twice. Most politicians favour a negotiated Brexit, allowing for a transition period, but Brussels is unwilling to go further than what it offered May.

A delay to the March 29th departure date looks inevitable as the options of a second referendum or general election become ever more tempting. And yet, the risk of a disorderly Brexit remains (even after Members of Parliament voted against that possibility on Wednesday night), as the chief EU negotiator Michel Barnier has warned.

Whatever the political outcome, there are no good options for the UK economy. Were Brexit to occur without a deal, it would plunge Britain into chaos and send ripples across the world's financial markets. But even in the more likely outcome of an orderly departure—perhaps after a postponement—the uncertainty that has held back British output in recent months would simply continue. Businesses probably won't get the answers they crave for several years yet.

There is mounting evidence that the country's economy has slowed since the Brexit vote. National income rebounded somewhat in January, but this followed a string of weak data toward the end of last year. Growth was a poor 0.2% in the three months to January, according to the Office for National Statistics. The composite purchasing managers' index, a measure of economic activity, points to growth of 0.1% in the first quarter of 2019. The Office for Budget Responsibility (OBR), Britain's fiscal watchdog, predicts that the economy will expand by 1.2% this year, down from a 1.6% forecast five months ago.

One negative force is the decline in investment. Jonathan Haskel, the newest member of the Bank of Eng-

land's Monetary Policy Committee, said in a speech this week that post-referendum business investment had fallen relative to its historic trend and compared to the other G-7 economies. Had it grown at the same pace as the median G-7 country (excluding the UK), it would have risen 2.9%. Instead, it fell 0.4%. This suggests Brexit accounts for nearly 70% of the investment slowdown.

Anecdotal evidence backs this up, showing the impact on people's livelihoods. Nissan Motor Co Ltd. is shifting the production of some cars—the X-Trail sport utility vehicle and two Infiniti models—away from Sunderland in northern England. Honda Motor Co Ltd. is to close down its flagship UK plant in Swindon. While the companies insist these decisions aren't purely down to Brexit, it is ludicrous to think that Britain's attempt to leave not just the EU, but also the single market, isn't affecting foreign investors. One hope is that this is temporary. Once Britain actually leaves, so the optimists' tale goes, business will know what to expect and will resume buying equipment and machinery. Indeed, the OBR has lifted its forecasts for economic growth in the next two years, assuming a deal is done. The economy is now expected to expand by 1.4% in 2020 and 1.6% the year after. That optimism is misplaced. There are three scenarios for companies in the UK, and none look pretty.

First is a catastrophic exit, whereby Britain leaves the EU without a withdrawal agreement. From pharmaceuticals to aviation, it is hard to think of a sector that would not suffer. Companies may need to spend to deal with the disruptions, but this will pale by comparison with the reduction in domestic and foreign demand. The Bank of England may relax monetary policy to deal with the slump, but a collapse in sterling and supply constraints could cause inflation to spike, which would require a monetary tightening. How do you square that circle?

The Bank has also asked lenders to triple their holdings of liquid assets,

according to the *Financial Times*, but weaker banks would still be vulnerable. In a no-deal Brexit, a credit crunch would be a near certainty.

The second scenario is an orderly exit, with some form of withdrawal agreement. Yet this won't answer the fundamental question about the future EU relationship. With the dominant Conservative and Labour parties riven by in-fighting, who knows what they want Brexit to be like? And, anyway, which party will be in power? How much will the EU concede? And what will Britain's trade deals with the rest of the world look like?

Even if Britain asks for more time to make up its mind, that won't clarify anything for British business. The same could be said for a second referendum—the third scenario—which might take a year to arrange and could end up with the same result or inflict even greater political division on the country.

Haskel found that investment in intellectual property products has held up reasonably well since the vote, probably because they suffer less risk of holdups at the border. But a stricter immigration policy post-Brexit, as favoured by May and Labour leader Jeremy Corbyn, would probably force companies in these sectors overseas too. Similarly, many finance firms have set up shop in other EU countries now, and they may start competing with those still located in the UK. Divestment away from Britain may have only just started.

The Brexit referendum was meant to settle the issue of Britain's relationship with the EU for a generation. But for companies investing in the UK, all it has done is open up an era of uncertainty that contrasts vividly with Britain's hard-won reputation for boring predictability. The 'Great Smog' of London killed thousands, but waned in less than a week. It will take years for the poison of Brexit to clear.

*This column does not necessarily reflect the opinion of the editorial board or Bloomberg LP and its owners.*

## LETTERS TO THE EDITOR

### Designating Azhar as a terrorist

The decision of China to put the brakes once again on the efforts to designate Masood Azhar as a global terrorist by the United Nations (UN) is unfortunate. It was widely expected that China would join others to label Masood Azhar a global terrorist given the strong condemnation from the international community over the Pulwama terror strike for which Jaish-e-Mohammed (JeM) had claimed responsibility. While the UN had already designated JeM as a global terrorist organisation, the efforts of its member countries to designate its founder Masood Azhar as a global terrorist had not yielded the desired results with the continuous blocking from China. It should be noted here that China, too, faces the threat of terrorism from its Xinjiang province. Terrorism is a global phenomenon and afflicts almost every major country across the globe. Supporting Pakistan which nurtures, supports and harbours terror elements for its strategic purposes does not befit the status of China as a global super power — M Jeyaram, Madurai

### Record high bazaar

Capital markets continue to hover near the high-end of the range and exhibit resilience as IIP and inflation numbers, uncertainty clouding Brexit and a pre-poll phase in the economy are being closely eyed. Targetted job growth and implementation of the development-oriented vision, backed by public welfare schemes, is the need of the hour. Friendly trade policies and advancement in niche technologies are much-needed to sustain the healthy growth rate in the longer-run. Enforcing regulations in letter-and-spirit can enhance transparency, improve disclosures, curb sectoral volatility and promote business ethics. Over the next few quarters, market movement is expected to be governed by lead indicators, recommendations by CRAs and geopolitical stability — Girish Lalwani, Delhi

Write to us at feletters@expressindia.com