

Check financial fraud

Psychologists can spot deviant behaviour early

K SRINIVASA RAO

The RBI unveiled a new unified structure of supervision and regulations for banks, non-banks and cooperative banks for more effective control.

It has been observed that despite heightened regulation and enhanced surveillance, the financial system has been marred by repeated frauds and corrupt activities eroding the wealth of millions of innocent stakeholders.

Even the best written regulations, robust systemic controls, transparency and disclosure standards are unable to detect the frauds, more importantly the tacit connivance and nexus between top management and fraudsters in some of the financial entities. Most of the high-value frauds are due to insider collaboration with fraudsters.

Selective sharing of data

With markets maturing fast and technology empowering financial entities to selectively dissect data and share only that part of information with regulators which suit them instead of sharing the big picture restricts the scope of reach of regulators to the root of the deceit. Another formidable challenge could be the ability of financial entities to set data access levels and share only limited part of the business information that can pass regulatory test creating a continued false oasis of compli-



ance. Such opaqueness in sharing information and obscuring business intelligence helps organisations or a part of disgruntled people in the organisation to continue fraudulent practices siphoning precious funds of stakeholders till such time that the whistle-blowers are able to break the barriers to expose the malady.

But going by the experience of irregularity that has surfaced in the financial sector, it clearly transpires that the collateral damage caused by the impact of the spread of fraud is more dangerous than

the loss due to fraud *per se*.

It is difficult to contain the spread of contagion. Hence, it might be the right time to introspect if the present standard of data-driven regulations and risk-based supervision is enough to cap bad intentions of perpetrators.

While the journey of progressive up-gradation of regulatory controls is good, it may not be enough to guard against protracted ill-willed governance. Business losses can be assessed with stress tests but not intentions to defraud stakeholders.

Hence there is a need to be innovative in regulating financial entities going much beyond the relationship between regulated and regulator exchanging data and information. Here comes the role of psychologists in regulatory teams to interact with regulated entities to be able to read fraudulent pulse.

A research-based report of the Advisory Committee on the Auditing Profession, United States Department of the Treasury, Wash-

ington, is interesting. It highlights the need to "develop a framework that identifies three psychological pathways to fraud, supported by multiple theories relating to moral

intuition and disengagement, rationalisation, and the role played by negative effect. The purpose of developing such a framework is two-fold: (i) to draw attention to important yet under-researched aspects of ethical decision-making, and (ii) to increase our understanding of the psychology of committing fraud."

The paper will be useful to regulators to create 'psychological red flags' that can predict fraudulent behaviour. When the autonomy in operations of regulated entities becomes complex, normal tools of regulations may not necessarily be able to capture incipient fraud.

The writer is Director, National Institute of Banking Studies and Corporate Management. The views are personal.

A scheme that can score over PM-Kisan

What's needed is a package, determined on the basis of actual income, that incentivises work while addressing poverty

BISWAJIT MANDAL
SASWATI CHAUDHURI

The popularity of the Pradhan Mantri Kisan Samman Nidhi, widely known as PM-Kisan, cannot be denied. The scheme, in brief, promises an annual income support of ₹6,000 to nearly 12 crore small and marginal farmers with landholding of maximum two hectares (approximately five acres).

However, the income transfer under PM-Kisan is not absolutely 'unconditional'. The family would be entitled to receive such transfer only on production of landholding record. However, there's a "no strings attached" flavour to this scheme too, as without performing any productive activity the families can register themselves for such government dole, and would receive ₹6,000 in a year in three equal instalments.

Like other comparable income transfer schemes in different parts of the globe, PM-Kisan also suffers from some nagging issues. Critics have been crying hoarse on the "inflationary" dimension of the scheme. An increase in disposable income due to income transfer can indeed be inflationary if it is not appropriately assisted by sufficient increase in supply of goods. Income without work may essentially encourage a state of idleness.

This has two ill-effects: a drop in supply of goods and services, and an upsurge in overall unemployment level of the economy. Once production is thwarted, producer would cut back employment additionally in the next period inducing lower income for all segments of workers as well. Therefore, instead of moving towards virtuous cycle we may be revert to vicious cycle. So, the scheme faces a huge problem in the form of disincentivising production and related increase in unemployment.

Dole economics has never been perceived as a formidable long-run solution for the people suffer-

ing from economic feebleness. Instead it provides a kind of momentary relief to arrange for two square meals for a family deprived of any stable source of income. In view of this short-term solution, a better structure of income transfer to the selected poor may be devised that would not disincentivise entrepreneurship and work effort while providing a first round respite from abject poverty.

We propose a framework where the subsidy amount would have to be determined on the basis of actual income. The more the individual or the family earn, the subsidy amount given to him must increase as a reward for higher work effort. But it should increase at a decreasing rate signifying that a maximum percentage subsidy is apportioned for the poorest of the poor. Alongside we must also ensure that income ranking of the people should remain same even after transfer of subsidy.

The prerequisites

Before moving to other components of this proposed scheme by us, let's look at the prerequisites for such policy. Only a single authenticated document would be enough in this context — a family income certificate. This can be supplied by government officials at either the district or panchayat level. However, we do recognise that this process would naturally beget corruption given our socio-economic structure.

Another alternative is to get everything digitised in order to simultaneously empower both the government and the person concerned to confirm the authenticity of the income of the person and the resultant income certificate. Provision of income certificate addresses another lacuna that the PM-Kisan fails to disentangle.

Since PM-Kisan is based on landholding, a sizeable amount of landless workers, who equally require this benefit, are left outside the purview of the said income

Alternative income transfer scheme

Actual income (in ₹)	Rate of transfer (% of actual income)	Total government transfer (in ₹)	Total income (actual income + government transfer) (in ₹)
3,000	100	3,000	3,000 + 3,000 = 6,000
5,000	100	5,000	5,000 + 5,000 = 10,000
6,000	100	6,000	6,000 + 6,000 = 12,000
6,500	95	6,175	6,500 + 6,175 = 12,675
7,000	90	6,300	7,000 + 6,300 = 13,300
7,500	85	6,375	7,500 + 6,375 = 13,875
8,500	80	6,800	8,500 + 6,800 = 15,300
10,000	70	7,000	10,000 + 7,000 = 17,000
12,000	60	7,200	12,000 + 7,200 = 19,200



transfer plan. Income comes through two major channels: from sale of produce that serves the purpose of farmers with landholding of maximum two hectares; and from the sale of labour that fits well with landless workers. So, a list of eligible beneficiaries based on income is capable of bringing in all the hapless underprivileged people irrespective of their nature of employment and endowment.

Such a scheme may concurrently address three other pertinent concerns as well. The first is related with the process of sale of produce. Produce, especially of rural people, principally may be of two types — agricultural and non-agricultural. Whenever the process of sale is digitised, income received by agricultural farmers, landless labourers, and non-farm workers are recorded.

This obviously minimises chances of tax evasion, though it is not very prudent to think of the earnings of the poor as more than what is considered as the maximum limit for tax exemption. The issue, however, takes an interesting turn when we take up the

policy of minimum support price (MSP) for agricultural output.

One should also recollect that the present government had pledged to double farmers' income. One anticipated avenue to ensure such an enormous increase in farmers' income is to effect agricultural sale through different *kisan mandis* at a prefixed MSP which is higher than what the market could guarantee. And, official buying of agricultural goods from farmers would automatically register the name of the farmers, the head of the family, and their incomes.

Therefore, total income of a family can easily be traced out from government accounts. This is a step forward towards bringing agriculture under the tax net.

The second one is the sale of labour by rural workers, be it agricultural or non-agricultural. The government may contemplate setting up an agency and entrusting it with the responsibility of enlisting prospective labour suppliers for any predetermined dates and days. The buyers would contact the agency with their choice of work and get the re-

quired amount of labour directly supplied by the agency. In exchange the buyer would pay the agency, and the agency would transfer the money to the actual recipient. In a healthy democracy, the panchayats may also be assigned the task. This method would essentially help to maintain a digitised record of income of workers and their families.

A more systematic record of such transactions and income would immensely assist the policymakers to partially identify the nature of vulnerability and the sources of their income. Depending on this information a more precise target group may be identified for other specific benefits.

Larger transfers

From the Table it becomes apparent that the amount of government transfer increases with actual earned income. This would encourage people to work more. In an unemployment-ridden economy motivating more activities not only helps reduce poverty, but also leads to higher production, further investment, and more employment. The percentage of government transfer we have considered here is merely arbitrary and shows how the alternative transfer amount could have been calculated.

Another important phenomenon of the alternative mechanism is that the original ranking of the individual or family in respect of income does not change after receiving subsidy. This non-changing income ranking is important for society in general. If subsidy makes the poor relatively richer than those who were richer before, it would invite stiff resistance, and make the income subsidy scheme politically unviable.

Mandal is Associate Professor of Economics at Visva Bharati University, Santiniketan, and Chaudhuri is Associate Professor of Economics at St. Xavier's College (Autonomous), Kolkata

5 THINGS to WATCH OUT for TODAY

Lenders of Jaypee Infratech will meet to discuss the bids submitted by state-owned NBCC and Mumbai-based Suraksha Realty to acquire the debt-laden realty firm in the ongoing insolvency process. In the November 18 meeting, senior officials of NBCC and Suraksha Realty highlighted before the CoC the main features of their resolution plan to revive Jaypee Infratech.

After numerous ups and downs, Uddhav Thackeray is likely to be sworn-in as Maharashtra Chief Minister. He is the nominee of the Shiv Sena-NCP-Congress combine for the post. The rest of the Cabinet will be sworn in later. The three-party swearing-in will take place on December 1.

Workers of Bharat Petroleum may go on strike. This is to protest the government's decision to privatise the company. There is fear among the employees about job loss and change in working conditions. The strike, however, will not affect the daily production. The Madras High Court has issued restraining orders on the strike by employees in Tamil Nadu.

Chandrababu Naidu is set to tour Amaravati. He will inspect the construction work on the capital city project. This comes in the

wake of the Singapore consortium pulling out of the government project to develop a start-up area in the State. He will also meet the farmers who gave away their lands for building the capital city.

The Telangana Cabinet will begin its two-day meeting to discuss, among other things, the Telangana State Road Transport Corporation (TSRTC) employees' issue. This comes after the TSRTC employees union called off its two-month-old strike on Monday.

AI on song and look who's facing the music!

JINOY JOSE P

THE CHEAT SHEET

Attempting hip-hop lyrics?

How I wish! But I'm not cut out for the job. And the headline was my feeble attempt to capture your attention so I can talk to you about Yona.

Who's Yona?

Yona is a young writer. A report in *Bloomberg* told me she loves reading Margaret Atwood and articles about teen life. She sings about loneliness and relationships on her newly released track.

Sounds like a K-Pop star; I hope she won't hurt herself as many of them do these days.
Oh dear, no. Yona is a robot.

Robot, and a writer?

You heard me. Yona writes songs. She has been created by London-based company Auxuman, which has trained the artificially intelligent machine to enjoy music, literature and write songs and more. Yona, the report says, can even read comments from her fans on her music posted online and learn from the feedback.

Well, I don't know if I should be happy or be worried...
Well, that's a debate we can reserve for a rainy day. Now, the arrival of robots and artificially intelligent programs such as Yona or Sony's FlowMachines poses interesting questions around the way AI disrupts creativity and how the process can impact industries that deal with creative content, such as music, literature and painting.

That reminds me of a painter robot I read about some time ago.
Yes, Ai-Da, arguably the world's first robot artist to stage an exhibition. The humanoid can do a portrait of a person just by looking at her face, can paint abstract works loaded with ideology and can even sculpt a bit.

Her creators claim that her works are as good as most human painters of today.

Impressive!
Clearly, programs such as Yona or Ai-Da are pointers towards a future where AI could pose interesting challenges to creativity and art. For instance, how would you be enjoying or reacting to a novel that is written by a robot?

This is getting crazy!

Indeed. Take Yona from Auxuman (stands for auxiliary human). The company, which has also created similar programs such as Mony, Zoya, Hexe and Gemini, is aiming to extend the frontiers of AI music far and wide by introducing serious works that can match human talent. Auxuman released its debut album on September 27. According to Ash Koosha, an Iranian electronic composer and co-founder of Auxuman, the company is planning to present virtual entities that "give to you, what many humans, in many cases, go through a lot of mental turmoil to create."

Wow!

Well, that statement is tricky. In fact, in the world of creative works, one of the most defining factors that determined the quality of artwork was the physical and mental troubles the artist would have undergone before s/he produced the said work. For instance, many suggest that Leonardo da Vinci took anywhere between four and 12 years to paint Mona Lisa.

Interesting!

Now, the moot philosophical question about an AI painter is

how will you appreciate and even price an artwork that can match the artistic brilliance and production quality of a Mona Lisa, or any similar great piece of art, if it has been produced by an AI program or a humanoid powered by machine intelligence.

That's a big ask!

Indeed. Also, there lurks a danger. If you remember, when the likes of Elon Musk (of Tesla) openly toyed with the fancy idea of robot authors a few years ago, as part of the non-profit lab OpenAI, many authors had warned that the language model OpenAI was developing (called GPT-2) was too dangerous for them "to release into the wild" because they feared it could create "deepfakes for text". Evidently, a world where AI could write like George Orwell or Ernest Hemingway or a hybrid of 100 such authors, or create satisfyingly original fakes of such creative writing, the stakes are high not only for publishers or content creators but for connoisseurs of art as well because such phenomena questions the very idea of originality.

A weekly column that helps you ask the right questions

EASY

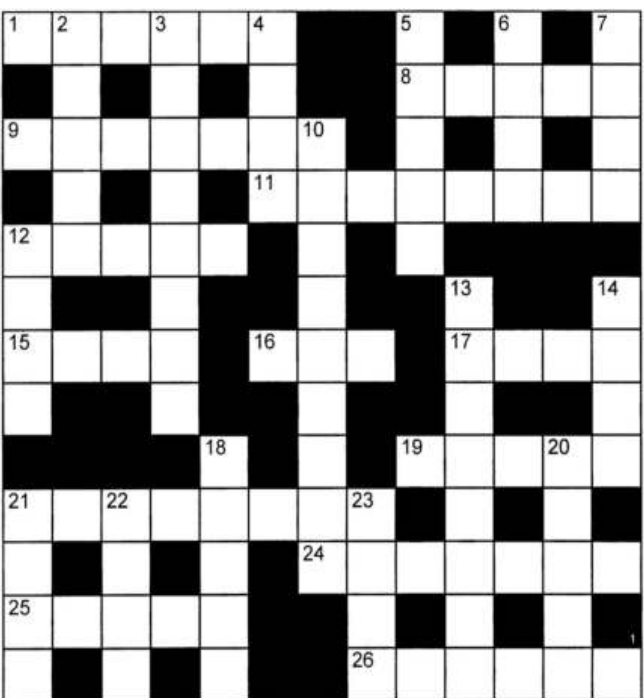
ACROSS
01. Track of country, area (6)
08. Command (5)
09. Species of wild primrose (7)
11. Insincere praise (8)
12. Something gelatinous (5)
15. Room for pigeons (4)
16. Pen for pigs (3)
17. Inland body of water (4)
19. Stick carried as prop (5)
21. Ready to take offence, peevish (8)
24. Using whip (7)
25. Zodiac sign (5)
26. Burlesque imitation (6)

DOWN
02. Run off to marry (5)
03. Cut off from connection (8)
04. Artless, ingenuous (in) (4)
05. Loudly (mus) (5)
06. Not doing anything (4)
07. Ass's sound (4)
10. Copious, abundant (9)
12. Shake with a sudden shock (4)
13. Maker of arrows (8)
14. The ego (4)
18. Lesser (5)
20. Punished monetarily (5)
21. Hollowed-out place in rock (4)
22. Role; some, not all (4)
23. Coarsely ground maize, porridge (4)

SOLUTION: BL Two-way Crossword 1495

ACROSS 01. Humiliation 08. Opulence 09. Ease 10. Storm 13. Tour 16. Calm 17. Less 18. Trap 20. Psalm 24. Vein 25. Stallion 26. Betting shop
DOWN 02. Urus 03. Inept 04. Incur 05. Inert 06. Consecutive 07. Refreshment 11. Orlop 12. Mania 14. Obey 15. Flea 19. Pinot 21. Satin 22. Lulls 23. Kilo

BL TWO-WAY CROSSWORD 1496



NOT SO EASY

ACROSS
01. Ignore redevelopment in this area (6)
08. Tidiness shown by a religious fraternity (5)
09. Jersey is, by error, to come into flower (7)
11. Soft soap is not so elevated by your leader (8)
12. It wobbles with a little explosive (5)
15. Strike up some space under the roof (4)
16. Starts swilling the yard, the place being filthy (3)
17. The reddish colour of a stretch of water (4)
19. The people in a firm may come to the support of a pilgrim (5)
21. Peevish suit a cop makes up (8)
24. Whipping it with a rope for making things fast (7)
25. Sign it's right to leave after six (5)
26. A skit about a fisherman will be profitable (6)

DOWN
02. Pen not needed by girl to run off and get hitched (5)
03. Let us, in a way, separate it with a non-conductor (8)
04. He's an unsophisticated fan who turns up holding one (4)
05. Excel, one is told - this being what one excels at (5)
06. Do nothing that might have led one astray (4)
07. Where a vicar was to pound it in a mortar (4)
10. Abundant fuel about pint (Latin) (9)
12. Stimulating shock is lot different after 1st July (4)
13. Arrow-maker joined Beaumont to write plays (8)
14. The ego of the Spanish in Sinn Fein (4)
18. Small brother at school is given a sort of key (5)
20. Made to pay if turning up at the wrong end (5)
21. Schoolboy warning of a hollow in the rock (4)
22. Come away with it after successful audition? (4)
23. Maize porridge US Uncle makes with phosphorus (4)