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Delivered by

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On

FROM Fixing Points of InStability TO Setting a State of Resilience
Making Financial Entities “Distress-Immune” & “Future-Ready”²

THE PAST AND THE PRESENT

There were important lessons learnt from the Global Financial Crisis (GFC) 2008-09. Many jurisdictions, including India had undertaken lots of reforms thereafter to ensure that the associated fault lines are fixed so that Crisis of that magnitude and intensity does not recur.

The following lessons were taken up seriously to be addressed in India in particular.

- **Stability Breeds Financial Instability**
A sustained state of macro-financial stability makes the stakeholders complacent enough to dilute standards of business related decision making, thus, creating scope for instability showing up at different points of the entities and the economy.
- **Novel Innovations in Financial Sector**
With rapid growth and use of technology, path breaking innovations were observed in the financial space but those were not well-tested for their long-term utility.
- **Mushrooming Growth of Financial Products**
Innovations were oriented towards creating structured products for rising pace of business growth while circumventing on requirements of risk capital there against.
- **Impact of Systemic Risk on Individual Entities & Vice Versa**
There was observed perceptible impact of the state of macroeconomic system on the health of individual financial entities and vice versa.
- **Interconnectedness – Spillover Effects**
There were inter-sectoral, intra-sectoral and inter-economy interconnectedness resulting in spillover effects all over. This enabled problem in a small and new entity snowballing into a world-wide distress.

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Views expressed are personal

² An abridged version of the Transcript of the Lecture

- **Fragile Framework of Crisis Management**
Systems to handle surfacing of crisis in entities as well as the entire financial space were either not existing or were observed to be inadequate.
- **Lax Financial Sector Regulation**
With the use of new financial products by financial entities, their regulation was required to be stringent. But that was not the case in USA, UK and Europe.
- **Poor Enforcement Actions**
While regulatory violations were rampant, regulatory actions, including enforcement-oriented punishments were not in vogue.
- **Less Intense Financial Sector Supervision**
Worst of it, with all these happening all around the financial space, instead of intensifying the rigours of supervision, supervisors did not rise of the need of the hour.

Fixing the Fault Lines

Based on the understanding of each of such lessons, a menu of Post-GFC reforms measures were spelt out by international organisations like Bank for International Settlements (BIS) and the Financial Stability Board. India, as usual, remained acutely conscious and active in their implementation and execution.

Some of those reforms are as under:

Reconfiguring Regulatory Philosophy

From Sector Agnostic to Sector Specific Regulation:

- Regulations tailored to unique sectoral characteristics.

Addressing Pro-Cyclical Features:

- Control risks such as shifts in **loan-to-value ratios** in housing markets.

Addressing Too Complex to Fail:

- Focus on **Size + Complexity + Interconnectedness** of institutions.

Migration of Risks:

- Prevent risks from migrating to poorly regulated or unregulated areas.

Ensuring more capital and less leverage.

Maintain high-quality liquid assets and stable funding sources.

Understanding Systemic Risk and Interconnectedness:

- Recognize how systemic risks propagate.

Macroprudential Regulations:

- Strengthen regulations to address systemic risks.

Re-Tooling Supervisory Armory

Relook at Supervision:

- Holistic, all-pervasive and ongoing supervision.

More Intensified Off-Site Surveillance (OSS) and On-Site Examination tailored to look at

- Bank-specific risks
- Risk-specific issues
- Portfolio-specific exposures

Measuring Interconnectedness:

- Inter-Sectoral, Intra-Sectoral and Inter-Economy linkages.

Identifying Vulnerable Institutions:

- Pinpointing institutions with high exposure to risks.

Early Warning Mechanism:

- Systems to detect vulnerabilities early and intervene effectively.

Forward-Looking Stress Testing Framework:

- Simulations to identify future risks under adverse scenarios.

Understanding Global Policy/Crisis Spillovers:

- Assess spillover effects of global financial policies.

Global Coordination Architecture:

- Collaborative framework for monetary and financial stability policymaking.

THE FUTURE

With this background on the Past and Present, it is appropriate to flag off important issues for the Future.

‘Stability’ is good, but ‘Resilience’ is the Goal

Absence of instability is stability. Points of distress in any corner of the financial system; macro economy, financial entities, financial markets & financial infrastructure are viewed as precursors to instability in the system. Each of these units within a system being interconnected, distress anywhere could snowball into instability everywhere (or in the whole system).

Distress is an aberration from historical performance manifested in malfunction. Instability is a continued state of distress crying for redressal. Steps are taken to redress state of instability by overhauling the perceived fault lines by virtue of using cutting edge tools & techniques. A state of stability is thus achieved. If the tools & techniques are intelligently used to ensure that the same fault lines do not recur and the associated difficulties are identified & solutions found; it could bring about a sustained state of stability, which can be defined as achieving resilience.

Hence, making macroeconomy, individual entities, market & infrastructure resilient and the system resilient is THE solution.

Time to Redefine Resilience

1. Operational Resilience - OR.2

Risks out of critical operations, products and processes are the most-fickle. Each of these should be identified afresh at each and every business units and be re-categorised as known-known, known-unknown and unknown-unknown risks.

The fickleness of each of these risks-emitting items of processes & products should warrant the intensity of management attention and proactive action. Possible points of distress should be smelt and be nipped in the bud. Simulation exercises as pilots would reinforce integrity of the mechanics of NewGen OR.2.

Most importantly, this reengineering should be jointly shouldered by Chief Risk Officer (CRO), Chief Compliance Officer (CCO) & Head of Internal Audit and be operationalised by the members of the senior management based on a codified board approved policy document.

2. Functional Resilience - FR.2

Functional resilience refers to recognising and addressing the risks embodied in the way a financial entity functions.

Institutional culture of the way of functioning by its personnel at the levels of junior/middle management, senior management and top management including the Board and its Committees is the nucleus of a Functional Resilience Framework.

How synchronised are the Tone from the Top, the Whispers in the Middle and the Rumbblings at the Bottom is a very crucial variable that can make or mar decision making towards resilience. That too is a building block for such a Framework.

Quality and Loyalty of Leadership, Culture of Ethical Business Conduct, Corner Rooms' Professional & Attitudinal Symphony - all these are cornerstones of an Effective Functional Resilience Framework.

Quality of Risks & Assurance Standards, Deep Dedication for Compliance of Regulatory, Supervisory & Internal Control Stipulations, Empathetic Employees Engagement Stipulations, Gender Inclusivity etc. are the other facets.

That all these are not static but need to constantly change in sync with dynamics of the economy
Must not be forgotten.

The mechanics & Tools to achieve Functional Resilience is the Challenge that needs to be addressed as fast as possible. Those too would change with time.

After all, Dynamic Resilience is the buzzword.

3. Financial Resilience - Fin R.2

The third leg of a resilient financial entity is Financial Resilience. Traditionally, it means having adequate liquidity & capital to meet any episode of distress.

Liquidity should be adequate enough to meet projected & some of unanticipated outflows.

Capital should be enough to keep the entity far away of any possibility of insolvency. The realisable value of assets should hence be more than those of liabilities at any point of time.

To be sure about a state of financial resilience, there are other important considerations to evaluate.

(a) Illiquidity can snowball into insolvency very fast. Rumours in social media have indeed hastened this process.

(b) There should be sufficient capital cushion available to meet unforeseen distress out of 'known unknown' and 'unknown unknown' risks as well.

The extant resilience exercise, however, remains limited to evaluating capital provisions for 'known known' risks only. That means, in the absence of measuring & allocating capital to all possible risks, the entity remains prone to distress and hence, definitionally should not be thought to be "resilient".

This lay bare another interesting facet of running entities. That is, without being clear about how far the entity is from the real quantum of deficit of risk capital which is the reflection on the reality on its state of resilience, 'compensation' is calculated and distributed as an expenditure and net profit is announced.

That 'number of net profit' is illusory since the entity is still to achieve 'financial resilience' in the truest sense of the term.

Time to Appreciate: Risk and Uncertainty – Two Sides of the Same Coin?

The game of finance is characteristically quite tricky as Napoleon Bonaparte had said "Money has no motherland; financiers are without patriotism and without decency; their sole object is gain". In this game, Risk is the raw material. Any potential uncertainty that could materialize into an 'issue' in the foreseeable future is branded as "Risk" and the best way to handle it would be to have a knack for smelling or sixth-sensing their possible occurrence.

Warren Buffet has very rightly described risk saying - "Risk comes from not knowing what you are doing". So, the knowledge of "Risk" and sensitiveness to their occurrence are the minimum "basics" that everyone in the game of finance must learn. Though risks follow

rewards in terms of higher interest margins, the tendency to carry a level of risk that could jeopardize the ability to meet the liabilities to depositors and other stakeholders needs to be shunned. Interestingly, as has been mentioned earlier, Stability breeds instability as there is a tendency to increase risk exposure during stable times to earn a higher margin and get off-guard when a crisis hit.

Distress, instability and Crisis are the various stages of a downhill trip in the Game of Finance. Post-COVID-19, the regular world of VUCA - "Volatility, Uncertainty, Complexity and Ambiguity" – found itself in a much worse situation. With fear and uncertainty on the rise, people tended to overreact and refrained from initiating or following through even routine transactions and economic activities. "Unknown unknown risk" amidst a kind of "Knightian uncertainty"³ attempted to overpower business sentiments. "Catastrophizing"⁴ - which contribute to the worsening of the intensity of such uncertainty became the popular narrative.

This resulted in a Rooseveltian fear of fear itself. A fear to the power of infinity. The risks facing individuals, businesses and the economy, at present are, at least to some degree, within our control, collectively if not individually. All these risks can be mitigated, if not eliminated entirely, by the actions of individuals, businesses and policymakers if they opt to stay with the troika of Adaptability, Agility & Sustainability. There is an acute need hence, to avoid the economics of 'Chicken Licken'⁵. We must learn to create a balanced narrative while describing the outlook on the financial landscape.

Preparing for Uncertainty - Scenario Planning – Boosting Self-immunity to distress

Financial Entities should use Scenario planning as a tool to address uncertainty. Realistic and sensible assumptions will need to be made on 'what the future could look like, how the business environment might change and how the organization could respond to those changes'. Right Tone from the Top will encourage such planning and thus could result in tangible action plan that demonstrates value rather than potentially becoming just another compliance activity to check-off.

Benefits from the conduct of rigorous scenario would accrue more if done on a structured format – say once a year – and should be undertaken in sync with updated risk-related inventories and concurrently with dynamically redefined strategic plans. This way, the exercise could be made forward-looking while keeping on identifying strategic opportunities and the associated incremental risk appetite. Such planning could also be used as useful tool for long-term strategic plan as it would use the stream of short-term decisions, tactical plans and intelligent learning outcomes as the parts of day-to-day running of businesses.

³ Risks those are impossible to measure & hence manage.

⁴ Psychologists define "catastrophizing" as – discounting the best and fixating on the worst, whatever the balance of risks.

⁵ 'Chicken Licken' fears anything and everything. One day, while he was sitting under a tree, an acorn fell on his head. Chicken Licken did see the acorn and started thinking that the sky must be falling. He decided that he must warn the King about such fall.

This way, besides improving the design of Early Warning System (EWS) and Stress Testing Mechanisms, the institutions should learn to improve their individual institutional immunity from shocks of course with the hand-holding of Supervisors.

Need to Remain Risk-Conscious and its “know-how” – Automated Sophisticated Risk Management Systems might play havoc

To understand this aspect, let me remind you of the tragic Aeroplane crash on May 31, 2009. 216 passengers, three pilots and nine flight attendants boarded Air France Flight 447 from Rio De Janeiro to Paris. Few hours into the flight, its autopilot suddenly disengaged itself. The pilots, unaware of the stalled plane coupled with lack of manual flying experience, made elementary but important errors in flying the plane.

The result was that plane crashed into the sea and everyone on board died.

In the aviation industry, there is a phrase used for pilots “Children of the Magenta” signifying that they have become over dependent on the magenta coloured guiding lines of automated flight systems for a safe flight and they may have difficulty flying without such assistance. The autopilot invention of course, has substantially reduced the incidence of plane accidents, but absence of basic knowledge can still play havoc.

In the same vein, increased sophistication in the game of finance especially in risk management systems, means greater complexity (and therefore greater scope for error) less transparency (making errors harder to detect) and greater dependence on underlying assumptions (any one of which could be wrong). A simple system might look primitive but is usually transparent and risk managers can easily get a sense of its strengths and weaknesses and can pay more attention to qualitative factors, to apply common sense over models while solving the judgmental questions surrounding them.

We need to believe that Risk Management Models are not enough - Managerial Application of Mind is also essential.

There was an important lesson from GFC-2008-09. Despite the use of the sophisticated models, the rigours of stress testing, and the vagaries of bottom line numbers, those who could come out unscathed were those having agile management, not those who relied on models to do the management's job. Risk models do have a valuable function in the risk management process so long as their limitations are recognized. They are useful in managing the risk in a trading desk, but not in capturing the risk of large divisions, not to mention the entire institution.

Managing systemic risk which reflects the aggregation of risks across the financial system relying solely on statistical models could prove to be a folly. We can of course get some numbers, but the numbers carry no understandable meaning. The global financial crisis provided a perfect example of emergent risks and the challenges of getting prepared for them. More broadly, dealing with emergent phenomena requires attention to what is possible, rather than the probabilities of possibilities and strategies of resilience, robustness and responsiveness.

There is a need hence to ensure that the risk impact of the pandemic is fully analysed and understood by the organisations and they opt to Redesign their Risk Management Architecture.

Colour, Contour & Characteristics of Risk are Fast Changing

The way specific risk management activities have been performed over the past 25 years is now almost redundant. While it is culturally challenging to accept this, the need to re-tool and take a different approach to risk management while responsibly leading employees through the change.

TOP RISKS FOR 2030	
1.	Adoption of digital technologies may require new skills that are in short supply
2.	Impact of regulatory change and scrutiny on operational resilience, products and services
3.	Rapid speed of disruptive innovation may outpace the ability to compete
4.	Leadership succession challenges; ability to attract and retain talent
5.	Privacy, identity management and information security challenges
6.	Substitute products or services may arise that affect our business model
7.	Sustaining customer loyalty and retention may be difficult as preferences and demographic shifts evolve
8.	Ability to compete with “born digital” and other competitors
9.	Ability to utilize data analytics and “big data” to achieve market intelligence and increase efficiency
10.	Cyber threats

Four risks on the top 10 list for 2030 were not on the top 10 list for the last decade.

More significantly, the risk which was ranked 18 in 2021, jumped to the third-ranked risk for 2030.

The rapid speed of disruptive innovations enabled by new and emerging technologies (e.g., Artificial Intelligence (AI), automation, machine learning, hyper-scalable platforms and increasing bandwidth through 5G data transmission) and/or other market forces are outpacing an organization’s ability to compete without making significant changes to its business model.

The overarching theme is the unprecedented, accelerated changes in disruptive innovations over the next 10 years. This may drastically alter customer behaviour. Customer loyalty is likely to prove fleeting as preferences and demographic shifts evolve. New markets and competitors offering alternative products and services are expected to expand customer choice in ways that could affect the viability of current business models and planned strategic initiatives. In sync with these, the architecture of risk Management must also change.

The current way of doing things had to change.

Quick Suggestion from my side –

- Getting the first line of defense more involved in risk identification should be the priority. To a Survey question “how many of your firms see more than 50% of your issues or risks identified by the first line of defense”? Approximately 20% of attendees raised their hands.

To improve this position there is a need to remove associated cultural and technological impediments which will require creative solutions.

- Risk Management is a menu of a few activities – Risk Identification, Risk Measurement and Creative Solutions to Manage Risk effectively. These are embryonically inter-linked.

Risk Managers should be Masters in all these together - not one or the other.

Of course, Redesigning or reconfiguring Risk Management Architecture is a Journey - not a destination. The Risk Managers should, however, not lose sight of the exact route to be taken at the right point of time.

Planning for “Known Unknowns” is necessary But Smelling “Unknown Unknowns” will be the Winners’ Traits.

“There are known knowns; there are things we know we know. We also know there are known unknowns; we know there are some things we do not know. But there are also unknown unknowns – the ones we don’t know we don’t know.”

Former United States Secretary of Defense, Donald Rumsfeld made this complex statement at a press conference on 12 February 2002 when he announced that there was no evidence that Iraq was supplying weapons of mass destruction to terrorist groups.

In risk management too, Risk Managers will need to deal with the “known unknowns” and the “unknown unknowns”.

‘Known Knowns’ are assumptions that have been validated and are now facts. But, Known knowns are not necessarily static. They could change over even a short span of time – possibly even during the period when the project is still live – scenarios might change – compulsions might raise their head - significant change in the scope, cost, or schedule may happen. Such potential risks might require attention, identification, re-measurement and careful monitoring.

Unknown unknowns are true surprises. They follow Murphey’s Law. These are “silent assassins” because we don’t recognize them until it’s too late. These are usually shared through lessons learned for future risk consideration for projects as a Known Unknown. Assumptions are important in such cases. Risk Managers should be able to visualize them, smell them, if

possible, see them, rate them, and resolve them so much so that the conclusions drawn and the policy making that follows don't turn out to be non-sense as they pan out.

The big job hence is to ensure that all the staff are engaged with what is required from a risk management perspective and that their actions are being monitored. This means that a Culture of Risk Awareness in the last mile needs to be inculcated.

Risk-Acculturation measures should enable each member to smell the risk in advance and alert the Risk Marshalls. This will ensure the Organisation to remain "Risk Intelligent" not just "Risk Aware/Conscious". All should remain clear about the company's risk strategy and governance.

The role of Risk Managers should thus be expanded from being Business Silos to Holistic Balance Sheet Management.

Risk Intelligence should flow from the Top. Discussion on Risk should be a fixed agenda for any Top Management Meetings on strategic decision making. There should be complete transparency on the kinds and levels risk underlying the business activities – small or big. Each worker should be a risk manager for his job responsibilities with clear accountability provisions. In short, Risk Intelligence should be a part of the DNA of the Organisation.

Rigours of Risk management should be symmetric across all the Business Units – Be it Enterprise Wide and not Silo-based with a narrow focus. Interconnectedness of Risks are difficult to anticipate or perceive but there should be ways to be able to measure them and include them as a part of the Risk Evaluation exercise. Without this, potential Threats to the business will be perennially there as a Damocles' Sword hanging around.

The role of risk management should shift from an 'offensive type' to a 'defensive type'. Offensive risk management aims to leverage risk to raise profits and hence shareholders value, whereas Defensive risk management professes to create a 'crisis-prepared' environment which would reduce the probabilities of distress so much so that the direction of profits would remain positive on a sustained basis and so are the confidence of the shareholders on their value.

The former is short-term while the latter is for the long-term.

As such, Disconnected risk management based on 'returns from the Silos' may have other negative externalities in the nature of regulatory fines, unforeseen liabilities and even the failure of that Silo business which can get the whole organisation on its knees.

Plan to create a resilient financial entity? Neither 100-meter race nor a marathon should be the strategy.

Creating a financial entity is not a destination but a journey. That is well understood. But the strategy to be adopted to start creating a resilient one is viewed differently by different experts. Some go with 'slow and steady' while few others believe in a 'Big Bang approach'.

It should however be best to follow a sweet hybrid framework.

A tight timeline should be framed and followed to start working while dealing with teething problems. Each year starting with the maiden one should end with tangible performance milestones. Provision of years or months of working should not be kept for to ‘test the waters’ but every day should lead to few hours of performance. There shouldn’t be any leisure time to ‘stand and stare’.

Every hour should be a race for ‘100 meters’ towards a ‘marathon race for 100 years’.

Building an Institution could be a child’s play for ‘some’ but creating a resilient institution that too a financial one is a complex job that warrants lots of efforts ‘for everyone’.

Let me pepper the THOUGHTS FOR FUTURE with some practical suggestions to achieve them.

1. Chief Risk Officers (CROs) should be able to develop a collaborative relationship with business line leaders. They should be very strong in their interpersonal skills to achieve effective relationships and motivating others. For that to happen they must be Cool under fire.
2. They should gain free access to the board for conveyance and reporting. Not providing such access would cause disconnect in communication and the loss of resolutions to various strategic problems.
3. They should be skilled at Strategic thinking, effective analysis of data and the ability to disaggregate business plans into component risks.
4. They should have a strong understanding of processes and core management activities.
5. Risk Appetite should be clearly understood and be codified.

While so doing, three points should be carefully considered.

- (a) the capability to incubate new products which can trace the potentials for possible opportunity gains. These are the incremental strategic alternatives which could be considered at a particular point of time.
- (b) the finesse with which those could be executed with lowest possible gestation periods. This can thus control cost.
- (c) These are in accordance with the avowed character and devised goals of the organization as crafted by the Board members and the Heads of various Business Units.

6. Boosting Self-Resilience by the Entities
 - Identify brewing Risks – Known Unknowns
 - Have a Measurable Index
 - Discuss with the concerned Business Head
 - Escalate it to CEO-Risk Management Committee (RMC)
 - Have a Contingency Plan
 - Create Organisation-wide awareness

7. Configure entity-specific Empirical Models
 - Risk Dossiers for each Business
 - Early warning Indicators
 - Forward Looking Stress Test framework
8. Identification of Vulnerable Businesses & Borrowers/Counterparties through quantifiable institution-specific models
9. Measuring Interconnected Risk
10. Managing ‘Similar Models Risks’
11. Recognising and working on measures to handle Newer Risks
 - Climate Risk
 - Vendors’ Risk
 - Digital Platform/Business Model Risk
 - Conduct Risk
 - Moral Hazard Risk
 - Reputation Risk
 - Technology Risk
 - Out-Sourcing Risk
12. Keeping ready an effective “Operational Resilience” Plan
13. Preserving Reserves for the Rainy days

It will be worthwhile to end with the following with two quotes.

1. James Lam - a global expert on Enterprise Risk Management (ERM) – “The only alternative to risk management is crisis management—and crisis management is much more expensive, time consuming and embarrassing”.
2. Robert Heinlein: “People don't learn from the mistakes of others. They seldom learn from their own mistakes. Never underestimate the power of human stupidity”.