Better resource allocation through commodity futures markets

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Presentation Structure

- The economic purpose
- A strategic picture for the commodity futures ecosystem
- Translating into tangible public administration
The economic purpose
June

October
(*Harvest*)

March
(*Peak price*)
Decision:
Land for
p1 vs. p2

June			October
(Harvest)

Decision:
Storage for
p1 vs. p2

March
(Peak price)
Decision: Land for p1 vs. p2

Futures price

June (Harvest)

October

March (Peak price)

Decision: Storage for p1 vs. p2
Decision: Land for p1 vs. p2  
Futures price  

Decision: Storage for p1 vs. p2  
Futures price  

June  
October (Harvest)  
March (Peak price)
Who makes these two decisions?

- Who allocates land (and labour and water and ...)?
  The farmer.

- Who allocates storage?
  The hoarders: Storage specialists or cash-and-carry arbitrageurs.
The prime function of the futures price: To guide resource allocation

- These two impacts upon allocative decisions ride through the price
- This is visible in the newspaper
- Even if no farmer and no arbitrageur directly uses futures markets, their actions are shaped by them!
- The futures price is a public good
The economic purpose

Auxiliary functions

- Support risk management by farmers
- Support risk management by lenders.
What do we require in order to achieve sound prices?

1. *Speculative price discovery*: The price formation should be dominated by people who look into the future and speculate about what the price might be.

2. *Arbitrage*: Pricing efficiency results when there is ample skill and capital doing frictionless arbitrage.
Can we please leave some myths behind

- There is something bad if farmers are not using futures markets.
- There is something bad if the dominant use of futures markets are not hedgers.
- Hoarding is evil.
- Speculation is evil.
- Arbitrage is evil.
- There is something morally wrong when a speculator in Taiwan is trading in futures on Guar Gum that's made in Bikaner.
A strategic picture
Identifying and addressing the market failures

**Market abuse**  Market abuse is the falsification of information emanating from the futures market about prices or liquidity.

**Micro-prudential regulation**  Exchanges / clearinghouses must work correctly when taking in and giving out money or goods.

**Consumer protection**  All users of the market should be entitled to certain protections; unsophisticated users should be entitled to more protection.
How to achieve a liquid and efficient market?

1. A government that identifies and addresses the three market failures.
2. Low entry barriers through which speculators and arbitrageurs from all over the world can easily get started with participation.
3. Identify and repeal all rules/laws that interfere with the above.
Building up organisational capital

- Speculation and arbitrage can be done by lone individuals.
- It is done better by organised teams of individuals: Firms.
- *What we require most in India is for formal, sophisticated firms that build up organisational capital.*
- Every ban kills organisational capital, and then we have to start all over again. Therefore: Do not ban things.
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- How to create an environment where there is leaning-by-doing?
- How to create an environment where managers invest in IT systems, process maturation, and a complex web of contracts that interlink firms of various kinds?
- We must give owners and managers of firms a long-term perspective.
- They should have the confidence that they are in a stable business, where government will not shut them down or mess up their business.
- When the private sector anticipates weird actions by the government in the future, they will hold back on investment.
Convergence between securities and commodities

- There are enormous economies of scale and scope between the mainstream securities business and one subset of it, the commodity futures business.
- Organisational capital will get built by harnessing the commonalities.
- Every sophisticated securities practitioner or firm is a potential commodity futures practitioner or firm.
- Towards this:
  1. Remove artificial barriers.
  2. Harmonise policy between SEBI and FMC
  3. Harmonise operations (standardise software, data formats) to reduce costs
With many agricultural commodities, India is one of the top producers or suppliers.

The world price can be made on Indian commodity futures markets.
Applications

Retail financial products

1. An agricultural loan that bundles a futures contract
2. A retail financial product that judiciously blends weather derivatives and commodity derivatives and debt.

For government

1. In most cases, society does not need the government to do agricultural risk management.
2. If this has to be done, the lowest cost strategy is for the government to hold commodity derivatives.
Translating into tangible public administration
Setting: The existing FC(R)A

- We live in a world of the FC(R)A and not the Indian Financial Code.
- FCRA is not SCRA
- There is a real economy connection
- There are two levels of exchanges:
  1. Recognised Association
  2. Registered Association
- There are two kinds of commodities:
  1. Commodities that have been notified
  2. Other commodities
Building FMC

- Re-work organisational design as per powers and functions under FC(R)A
- Implement regulatory governance principles from IFC and *FSLRC Handbook*
Mandate: More powers, capacity

1. FMC should have additional regulatory powers
2. FC(R)A permits Central Government to delegate most powers to FMC - S.26, FC(R)A
3. Additional powers to be delegated:
   - Grant of recognition and registration
   - Superseding governing body of recognised associations
   - Withdrawal of recognition
4. Start building capacity - presently less than 80 staff
Bound by Regulatory Governance Principles

Regulator is a “Mini-state” - requires clear demarcation of functions

1. Legislative function: process of making regulations
2. Executive functions: business permissions, inspections, investigations, prosecution
3. Judicial function: Suspension of members, withdrawing recognition
Legal functions/powers dictate organisation design

One function = one department:

- Regulation-making: Framing regulations to be approved by the Commission
- Supervision: Approvals, inspections and investigation
- Enforcement: Recommendations for prosecution, suspension orders, withdrawal of recognitions
- Information management: collection and collation of all information required to be collected
Performance measures against legal functions/powers to be clearly stated in rules

Examples:
- Regulation-making
  - Ex-post cost-benefit analysis as far as possible
  - Ex-post estimation of extent to which regulation addressed market failure
- Business permissions and supervision
  - Time taken to process applications
- Inspections and investigations
  - Number of inspections
  - Number of violations detected per inspection
  - Number of adjudicatory decisions on basis of investigative reports

Accountability measures also be clearly reflected in RFD of FMC
Regulatory Governance

Commission

1. IFC mechanisms for selection and appointment of members - rules required
2. One member with legal expertise to oversee only prosecution proceedings and judicial functions.
3. IFC mechanisms to be followed for all Board meetings.

Legislative Functions

1. Initiation and finalization of regulations at Board level.
2. Effective public participation - IFC mechanisms for regulation-making.
Regulatory Governance

Executive Functions

1. Business permissions
   - All conditions to be in regulations
   - All rejection of applications to be reasoned
   - All decisions to be time bound

2. Inspections and investigations:
   - Duty of regulator to inspect based on risk and oversight
   - Recording of reason for special investigation
   - Requirement to keep investigation private
   - Legal member to sign off on furthering findings of investigation to appropriate authorities
Regulatory Governance

Judicial Functions

1. Judicial functions: Suspension/withdrawal of recognition
   - Based on result of investigation process
   - Legal member on Commission to be supervisory authority signing off on all judicial matters
   - Affected party to be heard before final decision on prosecution
   - Detailed reasons to be recorded for final decision

Outcome

1. FMC performs clear statutory functions effectively
2. Capacity and resources to match/exceed SEBI
3. Uses IFC principles on regulatory governance
4. Implements rule of law and prevents fraud and abuse
Tangible steps

- Step 1: Fix procedures related to Board.
- Step 2: Frame detailed objectives and strategies for every function.
- Step 3: Re-engineer internal organization.
- Step 4: Strategic resourcing: Identify priorities, determine required capacity and existing strengths.
- Step 5: Simultaneously, frame and publish Handbook compliant internal bye-laws on:
  - Regulation-making;
  - Registration and recognition processes;
  - Issuing notices;
  - Investigations;
  - Collection of information;
  - Enforcement
- Step 6: Create staff performance measures.
- Step 7: Strengthen accountability through better reporting
Step 1: FMC Board related procedures

Pass resolution to adopt IFC mechanisms for Board meetings (*inter alia*):
- Pre-publish detailed agenda of Board meeting along with decisions to be taken;
- Record and publish immediately after the meeting:
  - List of attendees;
  - Quorum;
  - Voting records.
  - Resolutions.
  - Legal instruments FMC will prepare pursuant to the Board meeting, if any.
- Release minutes within 6 weeks of meeting. Minutes to contain details of deliberations.
Step 2: Framing Objectives and Strategy

- 2.1 Map functions from FC(R)A: Regulation-making, Supervision, Enforcement, Information management.
- 2.2 For each, FMC to define measurable objectives for short-term and long-term.
- 2.3 Identification of method by which FMC will achieve its objectives with resources, including measures to augment resources in short and long-term.
Step 3: Re-engineer internal organization

- Internal organization has to follow legal mandate.
- Present organization: 9 Departments/Divisions
  - 2 Market Divisions
  - 1 Monitoring and surveillance division
  - 1 Intermediary division
  - 1 Planning and Co-ordination division
  - 1 IT division
  - 1 Legal Affairs Division
  - 1 Vigilance and enforcement division
  - 1 Administrative division
Step 3: Re-engineer internal organization

- Many divisions do not flow from legal mandate
- Displays lack of clarity on organisational priorities.
- Re-organize as:
  - 1 Regulation - making division
  - 1 Supervision division
  - 1 Enforcement division (Prosecution + Adjudication)
  - 1 Information-gathering division
  - 1 Administrative division (include vigilance, IT, HR)
- Assess skills required within each division - starting point for assessing capacity requirements.
4.1 FMC, like any regulator, has multiple objectives to pursue - Trick is to prioritise and balance. For example,
- Increasing information collected may be a long-term objective
- Has to be balanced in short-term with necessity to investigate complaints and regulation-making.

FMC Board has to decide what functions to prioritise.

4.2 Determine kinds of skills required: legal drafting, record keeping, market research, data management etc.
Step 4: Strategic resourcing - Measure strengths

- 4.3 Measure skill sets and strengths of existing staff.
  - Current workforce is 80.
  - Identify, on a per-person basis, skills and strengths of existing staff.
- 4.4 Assess gap between skills and capacity required and existing skills and capacity.
- 4.5 Augment capacity - Develop independent hiring policies.
- 4.6 Incorporate strategic workforce planning practices.
Step 4: Strategic resourcing - Augment capacity

- Other regulators do it - U.S. Commodity Futures Trading Commission (65,370 registrants)
  - No. of employees: 435 (FY 2006)
  - Expected usage of staff-years: 710 (FY 2012)
  - Requested budget to cover 1015 staff years. (FY 2013)

- FMC should also compute capacity required in terms of man-hours.
Step 5: Frame Handbook compliant bye-laws

- Internal bye-laws set internal rule of law.
- Regulator becomes transparent, predictable, by minimising discretion.

5.1 Regulation-making: Board should pass resolution adopting IFC regulation-making process for regulations, guidelines, bye-law approvals.

5.2 Transparency: Board should pass resolution stating all past and present regulations, and also all records of Board meetings to be published on FMC website.

5.3 Other bye-laws/internal manuals: FMC Board should approve the following manuals:
Step 5: Frame Handbook compliant bye-laws

- **Notices**: Incorporate IFC provisions on circumstances and types of notices, and minimum content of notices.

- **Investigations**: Incorporate IFC provisions on prior notice before investigations (with exceptions), information that can be sought etc. e.g. SEC has detailed enforcement manual also covering investigative procedures.

- **Enforcement**: Incorporate IFC provisions on administrative law members, decision orders, information-sharing obligations, and proportionality while imposing penalties.

- **Information collection**: Incorporate IFC provisions on how information should be collected, what information may be collected, confidentiality obligations, etc.
Step 6: Staff Performance measures

- How to incentivise performance while increasing accountability.
- FMC should have power to hire independently and set individual goals in line with its own objectives.
- This will give FMC flexibility to hire the best talent and ensure that employees aid FMC in meeting its objectives.
Step 7: Reporting

- Reporting should measure performance against defined objectives
- MoF should write reporting rules as per IFC
- FMC Board should mandate that staff collect performance data on ongoing basis
  - Data/ knowledge management systems should enable easy aggregation and extraction of data
Conclusion

- The futures market is essential to sound allocation of scarce resources in production and in storage.
- This shapes a strategic picture about how we create an efficient commodity futures ecosystem.
- The tangible tool for achieving these objectives is: A properly structured Forward Markets Commission with the right:
  - Organisation chart
  - Process manuals
  - Staff training.
- We can go 75% of the way without requiring the IFC enacted as law, by voluntarily living by the IFC.
Thank you