



**NEW ZEALAND INSTITUTE FOR THE STUDY  
OF COMPETITION AND REGULATION INC.**

---

# **Cooperatives and Regulation**

**Lewis Evans**

**NZ Government Officials**

**Industrial Organisation and Competition Policy Course**

**26 January 2011**



**Victoria University  
of Wellington, New Zealand**  
*Te Whare Wananga o te  
Upoko o te Ika a Maui  
Aotearoa*

# Outline

---

- Organisational Forms
- Organisational forms and the economic environment
- Competition and Cooperation
- Cooperatives
- Regulation and Cooperatives



# Organisational forms are infinite in number

---

## 1. Investor firms

- listed on NZX
- listed on UNLISTED
- privately held

## 2. “Pure” cooperatives (may be corporations)

- Suppliers own & operate downstream intermediate demand
- Consumers own & operate upstream supply

## 3. Hybrid cooperatives

- “Pure” cooperatives are rare
- Most cooperatives are coop/investor hybrid

## 4. Not-for-profit



# Cooperative forms are prevalent

---

1. In NZ they are present in
  1. Agriculture: widespread
  2. Banking: very common, e.g. PSIS
  3. Insurance: AMI, FMG
  4. Local services: e.g. electricity lines companies
  5. Consumer services: self-regulation



# Determination of Organisational Forms

---

## 1. Given transactions costs (narrow definition)

- Information acquisition
- Negotiation
- Monitoring
- Enforcement

## 2. Organisational forms evolve over time to

- minimise (narrow) transaction costs,
- limit opportunism by incentive mechanisms & monitoring,
- allocate risk;
- facilitate investment in specific assets; and
- allocate property rights.

Sometimes referred to as minimise ( a broad definition of) transaction costs



# Why So Many Organisational forms?

Why does the difference between investor and cooperative firms matter?

---

1. Without transactions costs performance would not differ

1. Perfect market economic models have no transactions costs
2. Complete market model is the financial economics equivalent: it is perfect market with treatment of risk

In these settings organisational form would not matter

2. Where there are incomplete markets, transactions costs economies of scale etc., organisational forms do matter and differ across circumstances to solve transaction issues



# Nature of the industry matters for organisational form and cooperation/competition

---

- Dairy supplier cooperatives form about 80% of the dairy industry worldwide
- The cooperative model addresses
  - contracting issues of timely repeated milk collection when there is variable supply (due to climatic conditions)
  - The possibility of monopsony market power by milk processing plants (monopsony being the flip side of monopoly)
- But agglomeration of milk processing in a nationwide cooperative may imply market power in the output processed milk market
  - In the UK where domestic demand dominates, the large cooperative was deemed to facilitate output price setting/affiliated actions and broken up
  - In NZ where some 95% of supply is exported the nationwide cooperative is permitted (subject to open entry/exit of suppliers)



# The cooperative model

---

1. Works best where a common undifferentiated service is supplied/demand. Facilitates governance enabling

1. Common treatment of cooperative members,
2. Easier determination of a strategic direction
3. A more straightforward internal governance (board) selection process

Often results in standardised service/product focus

2. Has issues of

1. Separation of management from control
2. Heterogeneity: e.g. the time horizon problem
3. Capital access

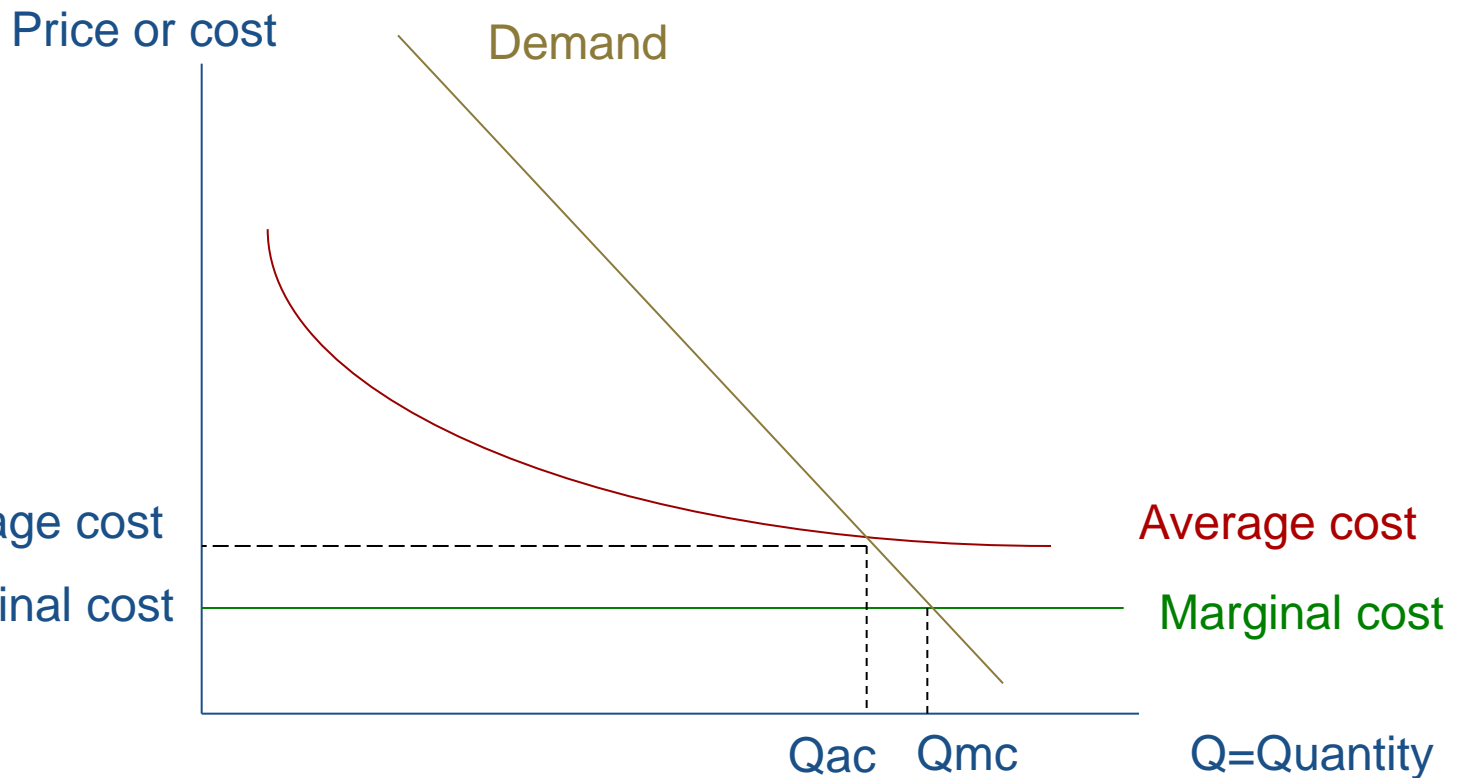
That are affected by cooperative size





# Natural Monopoly

From Yesterday's Risk Session



# Industry-specific regulation and investor firms

---

- The firm makes normal profits when price equals average cost (greater than or equal marginal cost)
- A profit maximising natural monopoly
  - has the *ability* to raise price above average cost,
  - has the *incentive* to raise price from average cost whenever the increase in revenue exceeds the increase in costs. If this will occur when demand is relatively unresponsive to price
  - Produces too little output at too high a price



# Industry-specific regulation and consumer cooperatives

---

- A consumer cooperative rebates profit to its owners (and no one else) by
  - Discounted price
  - Dividends paid separately  
(In proportion to consumption of services)
- A consumer cooperative natural monopoly
  - has the *ability* to raise price above average cost,
  - has no *incentive* to raise price from average cost
  - Has an incentive to set price at average cost. Because, this is the lowest price possible for a viable firm. Since a high price discount is equivalent to a high dividend, the highest dividend to its owners is produced at price equals average cost.
- Produces the “right” level of output at the “right” price



# Industry-specific regulation and consumer cooperatives

## elaboration

---

- One way to view it is: if you were the sole owner and sole consumer of the product would you charge yourself a higher than minimally viable price (and produce and consume less as a consequence)?
- Higher prices in dividend-paying firms than in non dividend firms does not mean that consumers are worse off in the former



# Industry-specific regulation and consumer cooperatives elaboration

---

- There are issues
  - Are electricity lines services homogeneous?
  - Potential differentiation among heterogeneous consumers (e.g. firms and households) leave open some choice to the (elected) firm managers that may affect relative prices/dividends.
  - Some differentiation in price across consumers is likely to be efficient
  - The cooperative structure
    - Does not have competition in the ownership market
    - May have governance/operational efficiency issues



# Industry-specific regulation and consumer cooperatives: what of externally administered price control?

---

- The “monopoly-rent” control purpose is absent in a consumer cooperative.
- Administered price control is often revenue control leaving relative price discretion to the firm: as in cooperatives
- Other purposes for price control
  - It can improve the operational efficiency of the firm: can it?
  - administrators of price control make better investment decisions than local boards of cooperatives: would they?but the monopoly rationale has gone
- Regulation: a) form of incentive/(approved cost) plus? b) the cost?



# Local Electricity Lines Companies

---

- Characteristics
  - Small
  - Natural monopoly elements
  - Almost homogeneous services
- Implies cooperative structure might be relatively efficient
- In NZ
  - Most are cooperatives; 1 investor and 2 hybrid coop.
  - Some are municipally owned (e.g. ChCh.)
  - Cooperatives below a certain size are not regulated.



# Local Electricity Lines Companies Question

---

- Worldwide there is a mix of investor, municipal and cooperative ownership of electricity distribution: cooperative and municipal ownership are common in some countries
- Question: should municipally owned lines corporations be subject to administered price regulation?





# Organisations (Cooperatives) Summary

---

- They reflect industry/product/service characteristics and have myriad forms:
- They signal market behaviour that is relevant for competition law and regulation and may be quite different from the the profit maximising investor model.
- Organisational structures
  - “solve” contract issues
  - may “solve” and be designed to “solve” market power issues.
- Application of regulation and competition law can shape organisations.



# References

---

- Evans Lewis and Richard Meade, (2005) *The Role and Significance of Cooperatives in New Zealand Agriculture: A Comparative Institutional Analysis*, prepared for the NZ Ministry of Agriculture, (available at [iscr.org.nz](http://iscr.org.nz)), 141p.
- Hansmann, H. H. (1996). *The Ownership of Enterprise* . The Belknap Press of Harvard University Press.

