



# **POLITICAL ECONOMY OF AGRICULTURAL MODERNIZATION AND TRADE**

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Course : EE 390 Economics of Agricultural and Rural Development



- Trends in agri-food systems

- Increasing coordination and consolidation in the supply-chain both upstream and downstream
- How can we explain this new market arrangement?
- Price theory/ equilibrium/ quantitative analysis →  
Qualitative institutional analysis



- “Transaction Cost Economics” (TCEs)

- Broad definition:

- Transaction cost: “costs of running the economic system”

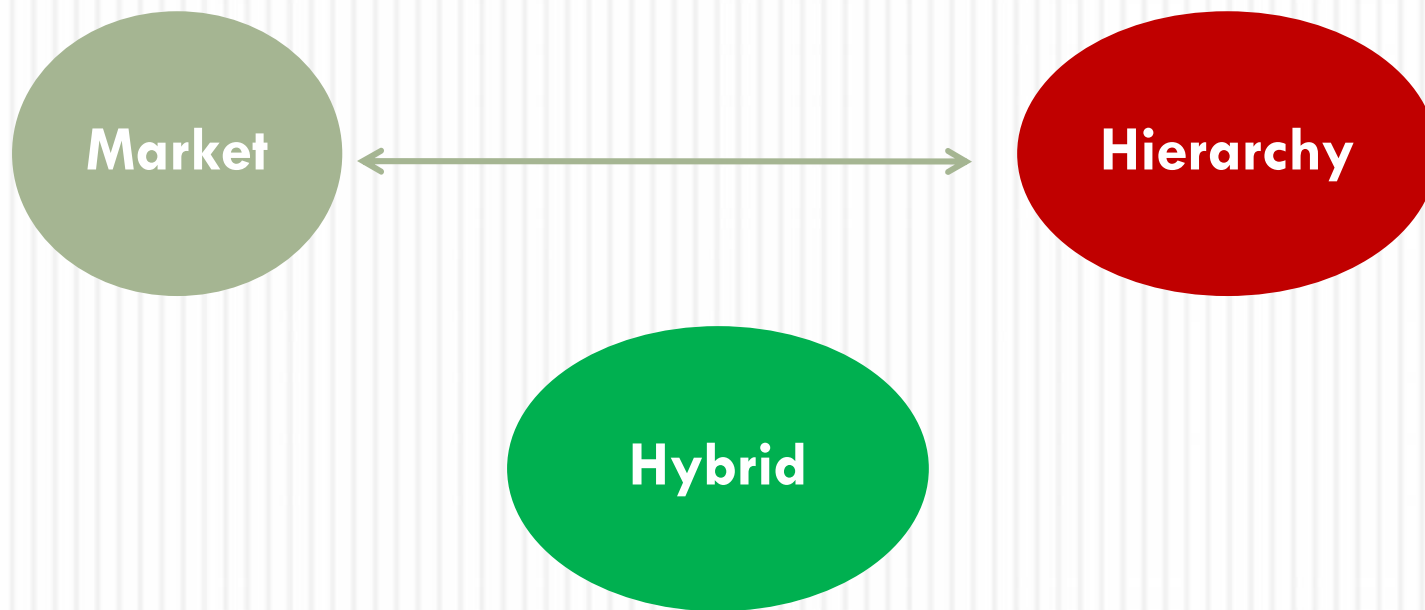
- Institutional Economics: two focuses

- 1. Institutional rules of the game: customs, laws, politics

- 2. Modes of Governance: microanalytic structure of transaction: (Williamson, 1991)

- Market/ Hierarchy/ Hybrids

□ Two polar forms





## Hierarchy

- Many economic activities take place within firms
- “economies of scales”/ “comparative advantage”:  
‘to make’ instead of ‘to buy’
- Employers & Employees contract



## Hybrid

- *Pooling Resources*
- *Reciprocal Returns*
- *Contracting* (to regulate the relationship among partners)
- Cooperatives/ Franchising/ Sub-contracting/  
Contract farming/ Sharecropping

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## Distinguishing Attributes of Market, Hybrid, and Hierarchy Governance Structures\*

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Attributes	Governance structure		
	Market	Hybrid	Hierarchy
Instruments			
Incentive intensity	++	+	0
Administrative controls	0	+	++

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\* ++ = strong; + = semi-strong; 0 = weak.

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**Asset  
Specificity**

**Uncertainty**

**Frequency of  
Transactions**

**Transaction  
Costs**

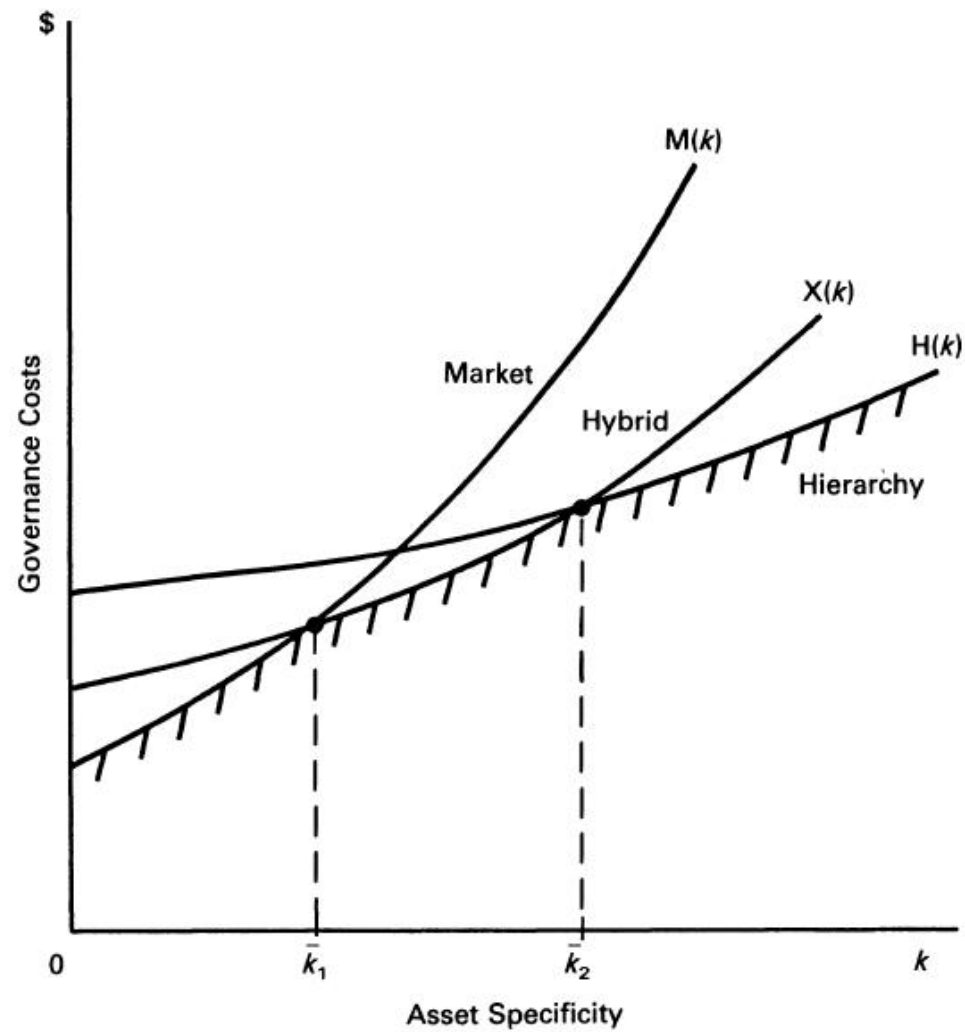
**Governance  
Choice**





## **Asset-specificity**

- Site specificity
  - Physical asset specificity
  - Human-asset specificity that arises in learning by doing
  - Brand name capital;
  - Temporal specificity, which is akin to technological
- Ex. HVFs, Products requiring post-harvest technology, Specificity in farm capitals, Standardization/labelling (HACCP, GAP, IFOAM, etc.)



## Uncertainty: → Choice of 'governance structure'

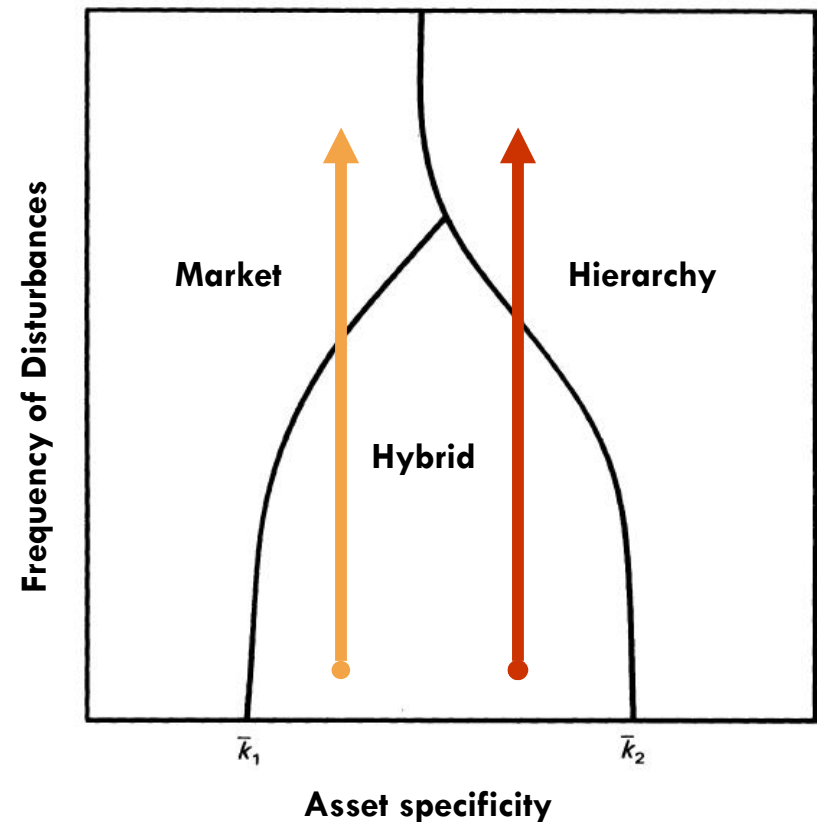
Higher uncertainty  
*costs for carrying out*  
and secure transactions go up (for  
overcoming information deficiency,  
safeguarding against risk).

for low asset specificity:

hybrid → market

for high asset specificity:

hybrid → hierarchy



Mode of governance	Asset Specificity		Uncertainty		Frequency		Examples
	Low	High	Low	High	Low	High	
Market	✓		✓		✓	✓	Meat cows, fishery products, Fruits and vegetables, Rubber, Rice
Contract		✓	✓	✓	✓		Chicken, Pig, Potato, Sugarcane, Cage fish, Fruits and vegetables for export
	✓			✓		✓	
Plantation/ Factory Farm		✓	✓	✓		✓	Chicken, Shrimp, Wine grapes

# Hybrid governance



- more efficient than pure public forms given coordination, incentives, and control advantages.
- Involvement of farmers, beneficiaries and interest groups
  - ▣ increases efficiency
  - ▣ decreases asymmetry of information
  - ▣ restricts opportunisms
  - ▣ increases incentives

# Hybrid governance



- for private
  - costs-sharing
  - reduces management costs
  - quality controls
  - possibilities in enforcement of most labor, animal welfare, environmental standards

# Hybrid governance

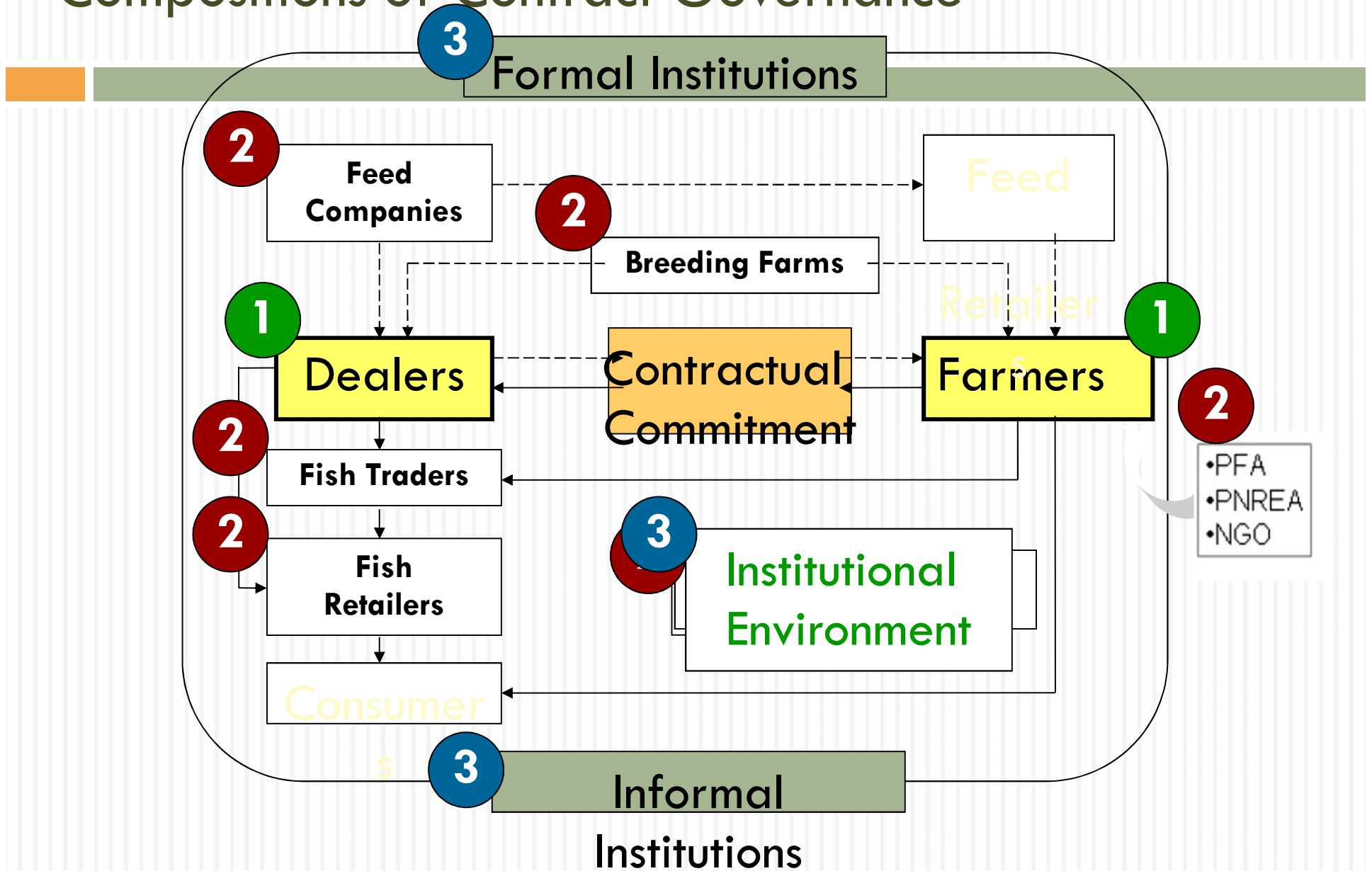


- for farmers
  - certain markets
  - advanced inputs and/or credits
  - technology transfer

# Two major types of contractual arrangement in Thailand

	<b>Outsourcing contract</b>	<b>Price assuring contract</b>
Inputs	<ul style="list-style-type: none"> <li>Property rights of inputs belong to the firms</li> </ul>	<ul style="list-style-type: none"> <li>Farmers purchase inputs by themselves (could be deducted after the production cycle)</li> </ul>
Outputs	<ul style="list-style-type: none"> <li>Firms' property</li> </ul>	<ul style="list-style-type: none"> <li>Farmers' property</li> </ul>
Returns	<ul style="list-style-type: none"> <li>"Wage" depends on the agreed price or at the spot price</li> <li>Formula: e.g. Meat conversion ratio or survival rate</li> </ul>	<ul style="list-style-type: none"> <li><i>Ex ante</i> assured price which could be higher or lower than the spot price</li> <li>In some commodities, no assured price</li> </ul>

# Compositions of Contract Governance



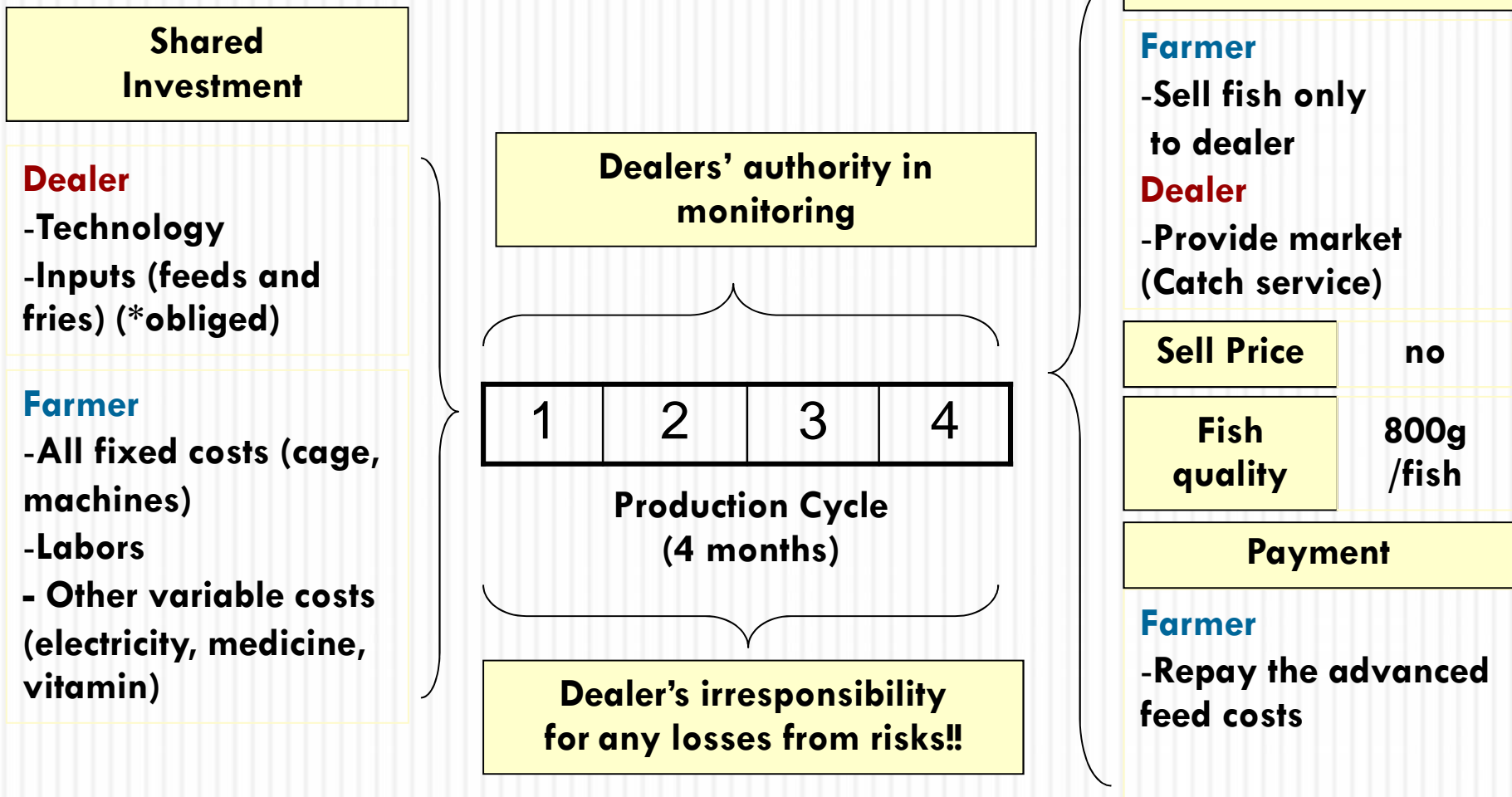
# 3.3 Contractual Arrangement

**Forms of contract:** both “unwritten” (5 dealers) and “written”

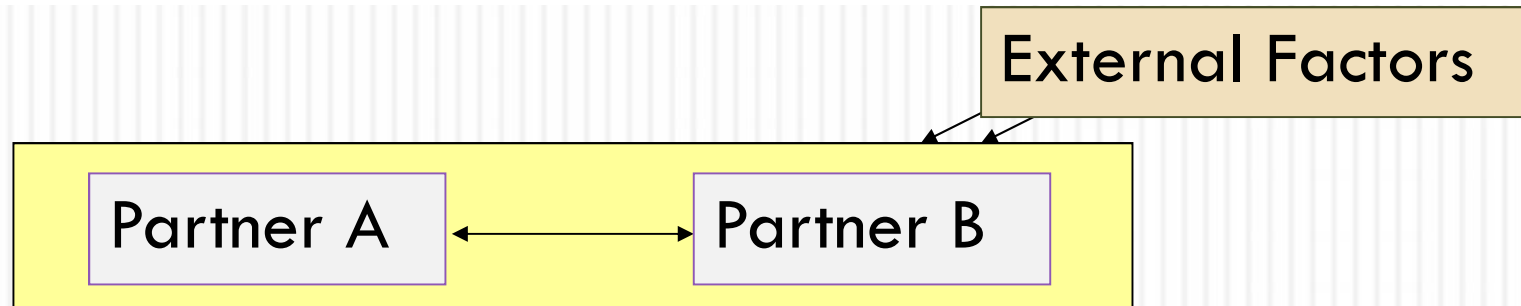
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(1 dealer)

**Duration:** Short-term contract (cycle-to-cycle)



## □ Risks



### 1. 'Contractual Risks'

- Endogenous risks
  - opportunistic behaviorse.g. Free-riding behavior, hidden information/action, contract breaching

### 2. 'External Risk'

- Exogenous risks
  - market, institutional, or natural uncertainties

# Contractual risk

- **Breaching**

Actors' decision functions within hybrid governance

→ Contractual risks (debtors' breach of contracts)

Benefits of breaching > Costs of breaching

$$\pi(f, \tau, \varepsilon) \leq G(\tau, \varepsilon) + P(\tau, \varepsilon, C) + EV(\tau, \varepsilon) + EW(\tau, \varepsilon)$$




## **Incomplete contracts**

- Some contracts are silent on a number of important contingencies and/or have components that are not enforceable by a third party
  - For example, the timing of delivery of a crop from a grower to a processor may be important to both parties, but many agricultural contracts do not include detailed descriptions of how on-time deliveries are to be rewarded or how delays are to be punished
- ‘Signing-without-reading’ problems
- Risk-pooling problems




## □ **Monopsony/bargaining power**

- an imbalance of bargaining power between processors and growers
- may make it 'necessary' for growers to accept take-it-or-leave-it, standard form contracts that leave little room for negotiation

- 
- it threatens to destroy the value of the relationship-specific investment in order to force the grower to make decisions that she would otherwise not make.
  - Exchanges made under duress resemble zero-sum games rather than surplus-creating cooperative games

# Public intervention

## Effective modes for public intervention in agrarian sector

<i>Level of Uncertainty, Frequency, and Assets specificity</i>				
<i>Low</i>				<i>High</i>
New property rights and enforcements	New regulations	New taxation	New assistance and support	New public provision