



**MONOPOLY POWER IN STANDARDS IS A MYTH:  
AN INVESTIGATION OF HOW COOPETITION MITIGATES THE  
THREATS OF A NATURAL MONOPOLY**

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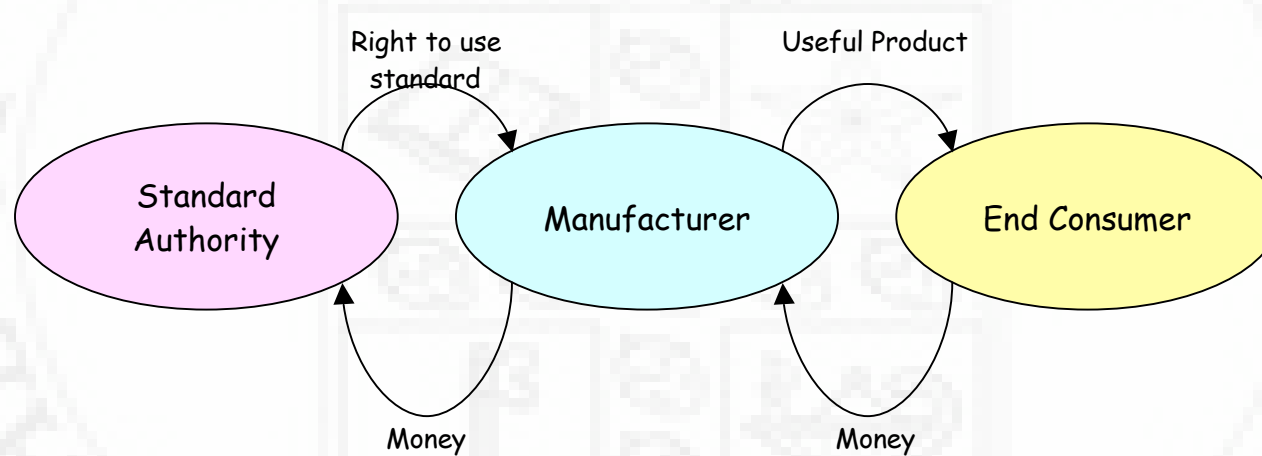
# Problem Statement!

Standards form natural monopoly i.e. economic welfare is maximized by having a single standard.

However, with single standard the customers welfare is dependant on monopolists pricing strategy. There is a conflict for ownership.

What is the optimal organization of market structure for firms using standards as one of the inputs?

# The Process of Standardization



**Figure 1: Conceptualization of Market**

# Theory Development

Standards form natural monopolies

- Falling average cost and high upfront Costs
- Network Externalities
- Lock-ins and Switching Costs

Economic welfare is maximized by having one standard

# Theory Development

Monopoly leads to price premium

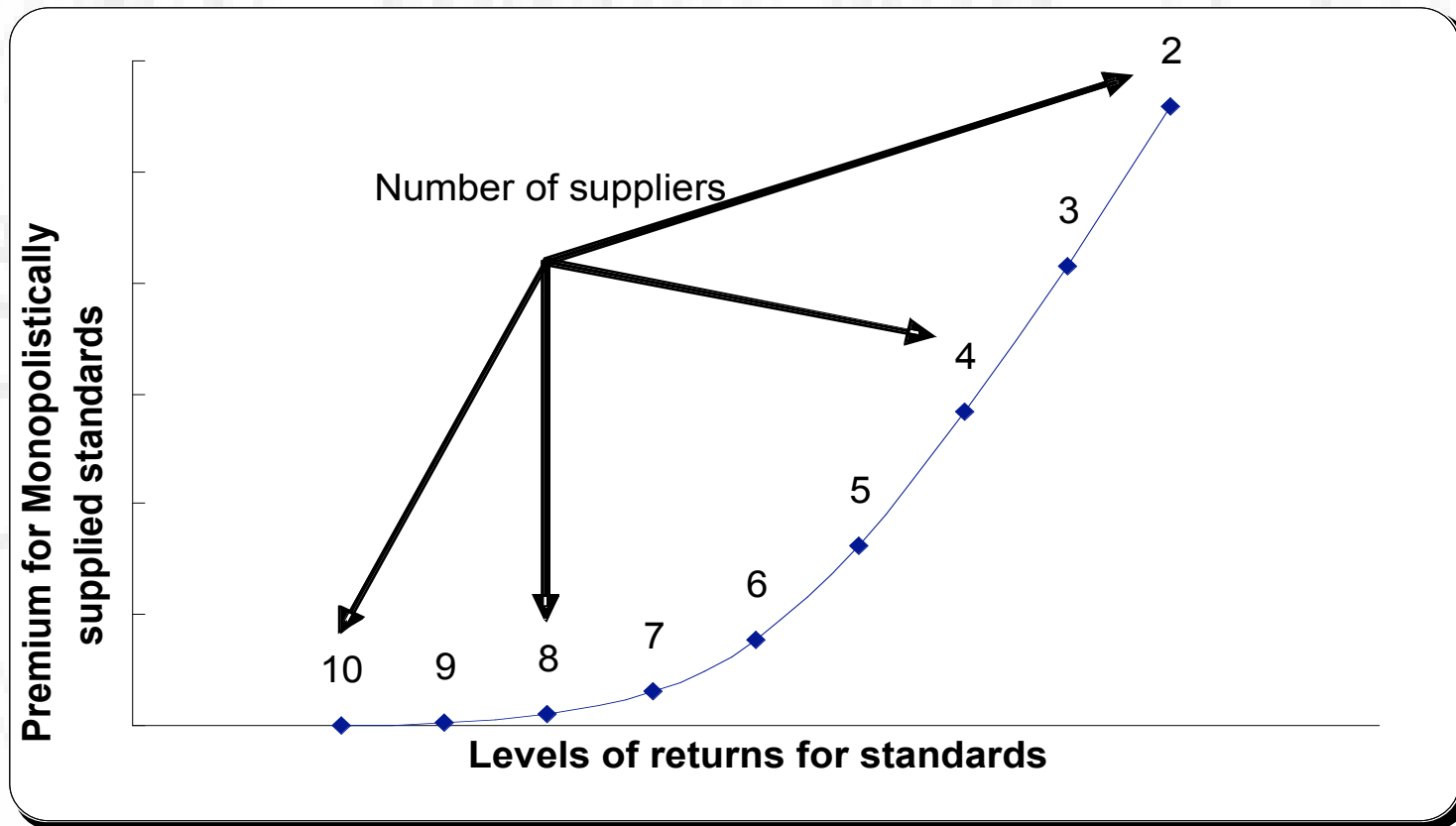


Figure 2: Price premium due to monopolistic supply of standards

# Summary

	External Provision (Monopoly)	Internal Provision (Competition)
Number of Standards	1	Many
Number of Owners	1	Many
Scale Benefits	High	Low
Price Premium	High	Low

# Conflict? We need best of both the worlds

- **Coopetition: Simultaneous Cooperation and Competition**

	<b>External Provision (Monopoly)</b>	<b>Internal Provision (Competition)</b>	<b>Coopetition</b>
<b>Number of Standards</b>	<b>1</b>	<b>Many</b>	<b>1</b>
<b>Number of Owners</b>	<b>1</b> <small><math>n_c = n_s</math></small>	<b>Many</b> <small><math>n_c = n_s</math></small>	<b>Many</b> <small><math>n_c \neq n_s</math></small>
<b>Scale Benefits</b>	<b>High</b>	<b>Low</b>	<b>High</b>
<b>Price Premium</b>	<b>High</b>	<b>Low</b>	<b>Low</b>

- **Joint Multiple Vertical Integration**

One standard but no price premium

# Theory Development

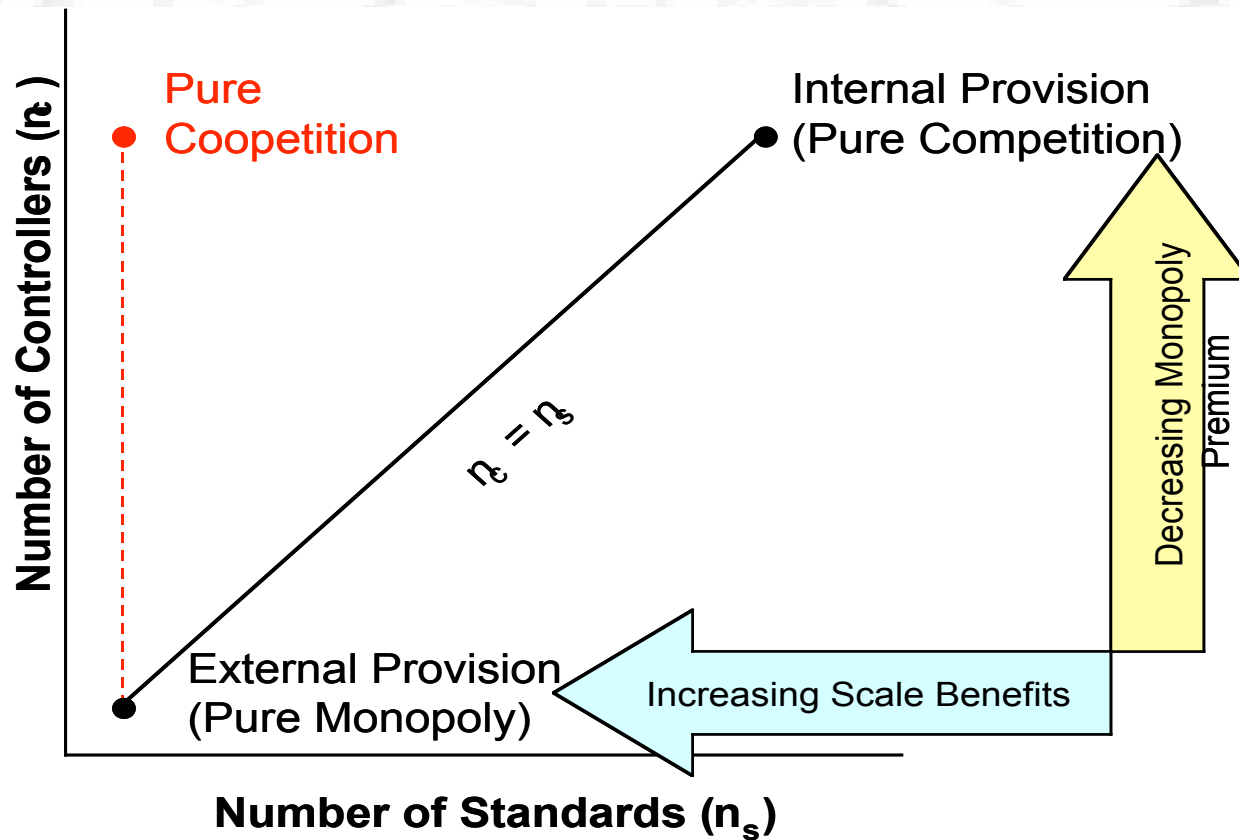


Figure 3: Cooperation as a strategy with one supplier and many owners

## Industry Initiatives...

*Toshiba, Matsushita and their allies shunned Sony's initiative because they were still smarting from their bitter experience with CDs. They have been forced to pay huge sums in royalties for CD technology to Sony, which has an array of key patents shared with Philips. Sony presents its DVD format as an extension of the CD technology, raising the specter of vast royalties being demanded from licensees...*

*--(Newswire June 27, 1995)*

*The aim of setting up the joint company is to help avoid doubling of royalty charges or unnecessary increases in license fees for users of the technologies...*

*--(Newswire December 04, 1995)*



# Thank You!

Questions and Comments?

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