

# **INTERFIRM COLLABORATION IN THE SHIPBUILDING INDUSTRY: THE SHIPBUILDING CYCLE PERSPECTIVE**

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# Introduction

- Domestic and international competition in Norwegian shipbuilding industry is significant.
- Proliferation of the number of strategic alliances lead to shift of competition from firm level to alliance level.
- A threat in shipbuilding is industrial cyclicity. This leads to unstable demand for ships; uneven need in resources and competences.

# Research problem

How can shipbuilding firms

- gain and keep sustained competitive advantage?
- smooth negative consequences of cyclicity?

# Research gaps

- Lack of research on shipbuilding cycles.
- Lack of research on interfirm cooperation in shipbuilding related to the phase of the cycle.
- Scarce research on managing cyclicity in industries with the high level of cyclicity.

# Intended contribution

- The study improves existing theories (RBV of the firm and the competence-based view).
- It will help policymakers to develop support programs more effectively.
- Practitioners will get insights on possibilities to smooth cyclicalities in shipbuilding through interfirm cooperation.

# Link to existing debate

The study joins several debates:

- Emerging debate on managing industrial cyclicalities on a firm level.
- Debate on the shipbuilding cycles.
- Debate on the RBV and the competence-based view of the firm.

# Research questions

- (1) Is cooperative strategy selected by a shipbuilding firm related to the phase of the shipbuilding cycle?
- (2) How can cooperative strategy reduce shipbuilding firms' resource and competence gaps related to the phase of the shipbuilding cycle?

# Research focus

- Focus was on Nordic shipbuilding firms and their partner firms in Poland, Ukraine, Japan, South Korea, and the US.

# Research methodology

- Qualitative research
- Theory building study (Eisenhardt, 1989)
- Interpretive case studies
- The firm level of analysis

# Data collection and analysis

- 23 semi-structured face-to-face interviews.
- Theoretical selection of cases.
- The 'snowball method' was used to connect to new participants.
- Data triangulation (interviews, archival and documents studies).
- Within-case and cross-case analysis.

# Results

Case	Countries	Type of collaborative agreement	Number of participants	Goals	Type of shipbuilding firm's strategy	Relation to the shipbuilding cycle	Quadrant
A	Multinational shipbuilding group (Headquarter is in Norway) and Russia	International JV	2	New market entry, securing of new orders	Proactive	Peak	I
B1	Poland Ukraine	International JV	2	To fill a human resource gap	Defensive	Peak	II
B2	Poland Norway	Frame shipbuilding contracts	2	To secure new orders	Proactive	Peak	I
C	Norway	Joint venture (between a shipyard, a ship design firm, and a shipping company)	3 (each party owns one third of equity)	Goals of shipyard and ship designer were to secure new orders. The aim of shipping company was to save costs on newbuildings	Defensive	Trough	II
D	Denmark USA South Korea Japan	Joint R&D between four shipyards	4	To develop new software for computer-aided design	Proactive	Not related to cycle	IV
E	Norway Ukraine	International joint venture	3	Joint venture between a Norwegian and Ukrainian yard to fill the competence gap in painting workshop	Defensive	Not related to cycle	III

# Results

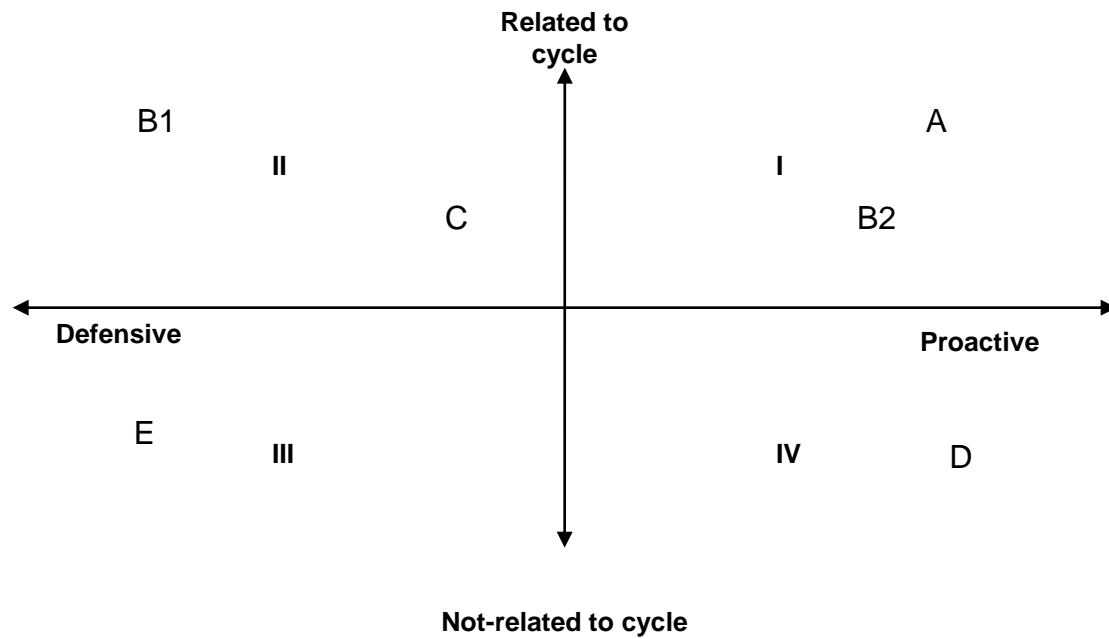


Figure 2. Interfirm collaborative strategies of shipbuilding firms

# Propositions

- *P1: During periods of collapse and trough in shipbuilding cycle, shipbuilding firms will seek to form strategic alliances in order to retain own resources and competences and thus to keep competitive advantage for the future.*
- *P2: During periods of collapse and trough in shipbuilding cycle, shipbuilding firms will seek to form strategic alliances in order to access new product development competences (if necessary) with the aim to propose new innovative vessels to attract newbuilding orders.*
- *P3: During periods of peak and recovery in shipbuilding cycle, shipbuilding firms will seek to form strategic alliances in order to obtain resources of other firms, if necessary, and thus to gain competitive advantage in the present.*
- *P4: The more a firm's resources and competences are necessary for internal deployment in order to secure a competitive advantage in the future, the more likely the firm will get involved in strategic alliances.*

# Conclusions

- This research provides explanation why shipbuilding firms use different strategies of interfirm cooperation related to the phase of shipbuilding cycle.
- Study makes theoretical contribution to the interfirm collaboration literature.
- The study is useful for practitioners and policy makers.

# Future research

- Future research is necessary in different contexts: geographical and industrial.
- Need for a longitudinal study.
- Quantitative research.