MARAD's MSP Option: Exemplary Innovation in Acquisition Policy?

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Foreword

- Not Proposed Paper: Potential Gains from Wider Use of Real Call Options to Meet Uncertain Demand for Support Assets
- Problem: Motivating Case Study (MARAD) < Exemplary
- Possible Solution: Fixing MARAD may offer guidance on “How to” make effective, efficient use of Call Options
- Result: More on MARAD, Less on General Case

Q: Exemplary Use of Real Call Options to Meet DoD Demand for Emergency Ocean Shipping Services?

Answer: No. May be least-cost means of meeting volatile demand but budget treatment/financing obscures, rather than disclosing, cost.

Maritime Security Program (MSP)'s cost an enduring mystery!

Current Policy: Inconsistent with good budgetary and acquisition policy. Possible ways forward? (Spoiler alert: legislation likely required)

Source of interest and proposal

Federal Budget specialist (not defense) but aware of budget agencies' antipathy… .

NAPA Study: Social cost-benefit analysis and more efficient alignment of budget resources (Title XI loan guarantees for shipbuilding in US)

Quid Pro Quo for restoring funding request for MARAD to Trump 2018 budget proposal

NB: Jones Act (domestic shipping; US shipyards) beyond scope of study; Sen. McCain's and many others' issue

MARAD's Shifting Mission

- "…to foster, promote, and develop the *merchant* maritime industry of US" (1950 Act), i.e. advocate for, provide subsidies. Commerce focus
- Assure shipping capacity (US-owned, flagged, crewed vessels) to meet DoD Emergency Sealift needs (1996 Act). National Defense emphasis
  - Ready Reserve Force, 46 ships. Owned by gov., managed by private contractors (e.g. Maersk), partial crew, berthed, loaded. Budget cost $8 million per year per ship, excluding capital cost (a government financial management tradition).
  - Maritime Security Program, 60 ships. Privately owned and operated in international trade, MARAD cost $5 million "retainer" per ship per year. Fair-value exchange: cash for call option?
    - *Sounds* like an innovative use of real call options

Is it? What’s up w/MSP?

- Research method: deduction from a few clues.
  - Maybe more Chief Inspector Jacques Clouseau than Sherlock Holmes
- Not much useful information disclosed
  - Old
    - Key Operating cost data for US- and foreign-flags from 2010
    - Last MARAD stand alone Annual Report 2013 (2012 data)
  - Not relevant
    - No estimate of total subsidies paid to US flag ships
    - Most recent reported total preference cargo payments (2012)
  - Perhaps not entirely MARAD’s fault: DoD, DoT, Political/legislative constraints

A Few Contextual Numbers

- Currently 81 US-flagged, privately-owned vessels involved in international trade,
  - 60 in MSP
  - 21 not in MSP: niche carriers (dry bulk, DoD charters), all eligible for “preference cargo” (US government “impelled” cargoes, owned or financed). Foreign-flags not eligible
  - Number of US-flags declining steadily since WWII, >1000; US share of international shipping < 2%
- US owned, crewed
  - Most owned by “documentary citizens:” corporate subsidiaries of foreign shippers, e.g. Maersk, Hapag-Lloyd. (container, geared container, roll-on/roll-off)
- Thousands of foreign-flag ships in international trade
  - Over 500 US owned foreign-flag ships: US crews not required

    Registered in Marshall Islands, Singapore, Liberia

Key to Solving MSP Cost Q: US-flag ships not competitive in international shipping market

- Estimated average operating cost 2.7 x higher than foreign flag ships. Crew cost 5 x higher. MARAD's last published estimate for 2010.
- Extrapolating 2010 data, average across US-flag vessels, US-flag ship operating costs about $8 million per year higher than an equivalent foreign flag ship. (Explains US share of international market < 2%)
- To continue operating, US flag ships need $8 million more in annual revenue than foreign flags
  - MSP ships receive $5 million "retainer;" $3 million min. preference cargo "premium" (excess over market rates) Note: Preference cargo premium shows up in budget of shippers, not MARAD
  - Non-MSP must get all $8 million from preference cargo premium
- Total gap = 81 X $8 = $648 – $300 = minimum of $348 million from preference cargo premium

How Big is Actual Cargo Preference Premium?

- MARAD: significant but unknown.
- Minimum value: to cover operating cost gap after MSP payment
  - $348 million/total revenue from preference cargo ($3.7 billion), all US Flags (last MARAD report FY2012)
    - Minimum = 8 - 10% premium
  - Factors keeping it near the minimum
    - Potential entrants
    - DoD Monopsony (90 % of preference cargo)
  - Factors pushing rate up: DoD charter rates about 60% higher; 9 new US flags 2017
    - Concentrated ownership/labor supply: many opportunities for consultation
    - Cost of entry
    - Commercial First
    - Uncertainty and risk

Average Annual Subsidy to Commercial US-Flag Ships (crude estimates)

Minimum: $8 million = about the same as RRF, excluding capital costs

Actual: $8 million plus ? (unknown)

Decisions made without knowledge of price (cost).

- Salient measure for MSP is $5 million, which is understatement.
- Non-MSP US flags appear to be costless

Alternatives to Current Policy

01

Additional potential service providers

- > 500 US Owned, foreign-flag ("seizure" possible in emergency)
- 120 Military Sealift Command (Civ-Mar) But "commercial first"

02

Drop cargo preference; replace with single annual subsidy. Proposed by Eisenhower Administration

03

Auction slots in MSP.

- Open bidding to US owned foreign flags
  - Make cost of commercial reserve transparent
  - Maybe less costly

Implications for Acquisition Policy (I)

In MSP, government is attempting to increase the number of US-flag ships beyond the number the market will support (apparently zero).

At minimum, US opportunity cost is the lost value from diverting US labor and capital from higher valued uses to commercial maritime. In worse case, it is significantly higher.

A cost cannot be avoided by obscuring its total value; but making cost transparent can permit it to be managed more effectively. Better budgetary accounting serves the objectives of good acquisition policy.

Implications for Acquisition Policy (II)

- Potential for Gains from Use of Real Call Options Remains Appealing
- DoD Initiative
  - Analysis of Value
    - Defense requirements
    - Commercial First (two goals, one instrument)
    - US Crew Alternatives, e.g. autonomous, attended vessels; trans-shipment
  - Cash Transaction
  - Competitive, Qualified Bids
    - Alternatives to US Crews
    - Option Length
- Getting Policy-Maker Buy-in! (For further study….)