



MARITIME OUTSOURCING

CHALLENGES FOR DENMARK AS MARITIME NATION

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DEVELOPMENT PATH

- Transition from Outsourcing to Offshoring =
Transition from *National Maritime Clusters* to *Global Maritime Production Networks*
 - More maritime nations participate in competition
 - Increasing international division of labor (country specialization)
 - Companies give up some management control and thus become increasingly dependent upon other companies (in other countries)
- Localities (traditional maritime nations) come under pressure

DOES IT MATTER?

- To seafarers (and other maritime professionals) in home country:
 - Need flexible career possibilities
 - BUT land-based maritime activities are outsourced too
- To the national maritime cluster:
 - Need for "maritime competence" to flow from shipping to other maritime industries
 - Maritime knowhow (operations, innovation)
 - Quality shipping
 - Political influence (e.g., in EU, IMO)

PUSH ANALYSIS

— CAREER OUTLOOK FOR SEAFARERS

	Movers 1992-1996		Movers 1997-2001		Movers 2002-2006	
	Percentage of		Percentage of		Percentage of	
	seafarers	all movers	seafarers	all movers	seafarers	all movers
Total seafarers moving	38.6	100.0	44.2	100.0	49.5	100.0
Between jobs	28.2	73.1	34.0	76.9	39.8	80.4
Same shipping industry segment	20.0	51.7	25.3	57.3	30.6	61.8
Other shipping industry segments	2.6	6.7	1.9	4.3	3.9	7.9
Other maritime industries	1.1	2.8	1.0	2.3	1.5	3.0
- <i>Maritime services</i>	0.5	1.4	0.5	1.1	0.9	1.9
- <i>Maritime industry</i>	0.3	0.8	0.3	0.7	0.3	0.6
- <i>Offshore oil & gas</i>	0.1	0.2	0.1	0.1	0.2	0.3
- <i>Fisheries (incl. processing)</i>	0.2	0.4	0.2	0.4	0.1	0.2
- <i>Maritime recreation</i>	0.0	0.0	0.0	0.1	0.0	0.0
Self-employment	0.3	0.7	0.5	1.2	0.3	0.6
Non-maritime industries	4.3	11.2	5.3	11.9	3.6	7.2
Out of job	10.4	26.9	10.2	23.1	9.7	19.6
Unemployment	1.6	4.3	0.4	0.9	0.4	0.8
Other	8.8	22.6	9.8	22.2	9.3	18.8

PERSONEL FLOWS IN MARITIME CLUSTER

- All maritime industries source labor (even people with seafaring background) mainly from within
- The shipping industry is overall an important provider of labor to the maritime service industries in Denmark
- Seafarers are particularly important to shipping and to a few maritime service industries

HIRING OF SEAFARERS' IN OTHER MARITIME INDUSTRIES (ANNUAL AVERAGE, 1992-2006)

- Maritime services:
 - Consistently around 3 percent of total hires, or 160 seafarers a year
 - Seafarers are preferred in maritime services in and around ports (pilots, lights and buoys, tugging, salvage and rescue)
- Maritime Industry:
 - Consistently around 2 percent of total hires, or 78 seafarers a year (but increasing in latest period, 2001-2006)
 - Seafarers are preferred especially in ship engine factories
- Within "the Blue Denmark" there is thus a small maritime cluster built around the SHIP

PULL ANALYSIS

— PEOPLE HIRED IN THE MARITIME SECTOR

A preliminary illustration (average annual hiring, 1992-1996)

	Shipping	Maritime services	Maritime equipment	Shipbuilding	Offshore oil & gas	Fisheries
Total employed	17,104	14,971	22,893	11,680	1,178	13,104
Total hired	6,289	4,552	4,442	2,510	227	4,883
From non-maritime industries	1,292	1,839	1,986	931	94	1,192
From maritime industries	2,972	1,314	860	515	71	1,316
<i>Shipping</i>	2,771	234	22	23	12	24
<i>Maritime services</i>	123	1,006	11	7	1	22
<i>Maritime equipment</i>	10	10	755	74	2	9
<i>Shipbuilding</i>	20	18	65	380	35	15
<i>Offshore oil & gas</i>	9	2	0	2	21	0
<i>Fisheries</i>	38	42	16	28	0	1,246
<i>Maritime recreation</i>	1	2	1	1	0	0
Graduates	2,025	1,399	1,596	1,064	62	2,375

HOW DO WE SUSTAIN "QUALITY SHIPPING" IN DENMARK?

- Maritime education and training (MET) programs
 - Proper incentives for private investments in MET
 - New learning elements (e.g., directly to inspection/survey or specifically for piloting)
- Substitution
 - Technology
 - Alternative Danish labor (e.g., engineers doing surveys or naval seamen doing piloting, rescue etc)
 - Foreign labor (insourcing)
- Transnational/regional cooperation

WHAT MAKES DENMARK A COMPETITIVE MARITIME NATION IN THE LONG RUN?

- The real challenge: to build a maritime activity system that is unique, non-imitable, and valuable in producing either a low-cost or a differentiation advantage over other places
- Such a system is based on talent, professional and trade associations, training programs and interfirm relationships (maritime cluster)
- Maritime focus: from broad to narrow
- Maritime cluster: from local "buzz" (closed) to global "pipelines" (open)