Challenging times for the cluster: Impressive ability to adapt – but will the cluster emerge complete?

Ålesund, 30 September 2016
Erik W. Jakobsen, Menon Economics
The cluster has experienced a falling activity level in 2015

**The activity level falls in 2015**

- Turnover: NOK 62 bn -12%
- Value added: NOK 19 bn -15%

**The cluster profitability is falling**

- Net operating margin: 0% -8 pp

**The cluster has experienced low growth the latest years**

The cluster has experienced a falling activity level in 2015

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- **Turnover:** NOK 62 bn  
  -12 %

- **Value added:** NOK 19 bn  
  -15 %

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- **Net operating margin:** 0 %  
  -8 pp

**Activity falls across all segments**

- **Shipping:** NOK 19 bn  
  -8 %

- **Services:** NOK 19 bn  
  -5 %

- **Equipment:** NOK 19 bn  
  -6 %

- **Yards:** NOK 19 bn  
  -25 %

<table>
<thead>
<tr>
<th>Turnover</th>
<th>2014</th>
<th>2015</th>
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<tbody>
<tr>
<td>Shipping</td>
<td>NOK 19 bn</td>
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**Productivity growth has been weak since 2009**

**CLUSTER PERFORMANCE - PRODUCTIVITY**
Profitability falling and below Norwegian Benchmark


Net operating margin (EBIT) for the four sectors in 2014 and 2015. Menon (2016)
Norwegian Benchmark outperformed the Møre cluster since 2011


Shipping companies are struggling in the current market situation

Key financial for the cluster in 2014 and 2015 (Billion NOK). Source: Menon (2016)

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
<th>Development</th>
</tr>
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<tbody>
<tr>
<td>Turnover</td>
<td>17.8</td>
<td>16.4</td>
<td>-8 %</td>
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<tr>
<td>Employment</td>
<td>5206</td>
<td>4561</td>
<td>-12 %</td>
</tr>
<tr>
<td>Net Operating Margin</td>
<td>26 %</td>
<td>3 %</td>
<td>-23 pp</td>
</tr>
<tr>
<td>Value Added</td>
<td>11.8</td>
<td>10.3</td>
<td>-13 %</td>
</tr>
<tr>
<td>Profit Margin (before tax)</td>
<td>27 %</td>
<td>-7 %</td>
<td>-34 pp</td>
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</table>


Shipping, 53 %
Market value falling sharply – reflecting uncertainty and a negative future outlook

Annual growth in turnover for listed GCE Blue Maritime, Norwegian Benchmark and Global shipping companies. Source: Menon (2016)


* Three Møre companies listed: Havila, Farstad and REM
Market value falling sharply – reflecting uncertainty and a negative future outlook

Norwegian shipping companies size of fleet in August 2016. GCE shipping companies colored blue Source: Menon (2016)

Survival will depend on financing: How will the restructuring process end?


* Three Møre companies listed: Havila, Farstad and REM
Equipment manufactures delivering negative profits in 2015

Key financial for the cluster in 2014 and 2015 (Billion NOK). Source: Menon (2016)

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<tbody>
<tr>
<td>Turnover</td>
<td>16.8</td>
<td>15.7</td>
<td>-6 %</td>
</tr>
<tr>
<td>Employment</td>
<td>5130</td>
<td>4961</td>
<td>-3 %</td>
</tr>
<tr>
<td>Net Operating Margin</td>
<td>-1 %</td>
<td>-7 %</td>
<td>-6 pp</td>
</tr>
<tr>
<td>Value Added</td>
<td>4.4</td>
<td>3.7</td>
<td>-16 %</td>
</tr>
</tbody>
</table>


<table>
<thead>
<tr>
<th>Year</th>
<th>Value Added</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>4.4</td>
</tr>
<tr>
<td>2005</td>
<td>3.7</td>
</tr>
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</table>

Dramatic decline, far worse than Norwegian Benchmark


The smaller companies are performing better than the larger ones


The service segment is key for the innovative power in the cluster

Key financial for the cluster in 2014 and 2015 (Billion NOK). Source: Menon (2016)

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<tr>
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<th>Development</th>
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<tbody>
<tr>
<td>Turnover</td>
<td>14.3</td>
<td>13.7</td>
<td>-5 %</td>
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<tr>
<td>Employment</td>
<td>3373</td>
<td>3147</td>
<td>-7 %</td>
</tr>
<tr>
<td>Net Operating Margin</td>
<td>6 %</td>
<td>4 %</td>
<td>-2 pp</td>
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<tr>
<td>Value Added</td>
<td>3.4</td>
<td>3.0</td>
<td>-12 %</td>
</tr>
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</table>


Profitability below Norwegian Benchmark


The yards see the largest decline in activity in 2015

Key financial for the cluster in 2014 and 2015 (Billion NOK). Source: Menon (2016)

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<th>2015</th>
<th>Development</th>
</tr>
</thead>
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<tr>
<td>Turnover</td>
<td>21.0</td>
<td>15.7</td>
<td>-25 %</td>
</tr>
<tr>
<td>Employment</td>
<td>3785</td>
<td>3461</td>
<td>-9 %</td>
</tr>
<tr>
<td>Net Operating Margin</td>
<td>3 %</td>
<td>0 %</td>
<td>-3 pp</td>
</tr>
<tr>
<td>Value Added</td>
<td>3.1</td>
<td>2.3</td>
<td>-24 %</td>
</tr>
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Møre Yards – Order books

Order books at the four largest yard groups for 2015, 2016 and q2 2016

- Has Vard been able to break out of a negative trend?
- Kleven still has a large orderbook, and believe they can deliver positive numbers for 2016
- Ulstein & Havyard seems to struggle
The equipment producers are highly dependent on the offshore oil & gas market.
This holds to a large extent for the entire cluster as well.
MARKET DEVELOPMENT EXPLAINS CLUSTER PERFORMANCE

Demand side:
50 % reduction in oil price → reduction in oil and gas operators spending

C: Brazil: Petrobras-scandal
Russia: EU sanctions after the Ukraine-crisis
Supply side: The size of the offshore fleet has doubled during that last decade
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2017 is expected to be the turning point: Growth is expected to occur in 2018 both in the Norwegian and international market.

Expected change in key markets for the Norwegian oil and gas supply industry. Source: Rystad (2016)

Møre sales are falling faster than the world market and Norwegian competitors

Turnover H1 2015 and H1 2016 (billion NOK). Source: Menon (2016)

Growth in turnover for shipping companies in Møre, Norway and globally in three periods. Source: Menon (2016)
Order books relatively stable measured in number of ships – however composition radically changed
- Offshore vessels: From 80% to 45% in less than two years
- New orders Offshore vessels 0 in 2016 compared to 34 in 2014
- Fishing and Fish Farming vessels soon same number as Offshore
- Cruise and Passenger vessels growing in importance

Two key questions:
1. Can the Yards be profitable in these new segments?
2. Can new markets replace offshore?
FUTURE PROSPECTS: OCEAN BASED MARKET OPPORTUNITIES WILL GROW

New growth opportunities

Size of different ocean industries in 2010 and in 2030 measured in value-added. The numbers are annual growth rate for the period. Source: OCED (2016)

New installed capacity, total installed capacity and expected growth in the offshore wind market 2015-2020. Source: IEA Mid-Term Market Update 2014
Three key challenges

• Productivity
  - Since 2009, productivity in the cluster has stagnated, while the rest of the offshore oriented part of the maritime industry in Norway has improved productivity.
  - Why has productivity stagnated, and how will it impact will the competitiveness in offshore markets when global demand starts to increase?

• Cluster composition
  - The most distinguishing feature of the Møre cluster has been the tight value chain structure, with internationally competitive companies within the local cluster in all steps in the value chain. This vertical structure is under pressure of two reasons: a) The offshore shipping companies will probably consolidate, and ownership and headquarters may be centralized outside Møre. b) The ship designers and yards in Møre show an impressing ability to adapt to market changes by switching to other types of vessels, for example ferries, cruise ships and wellboats.
  - How will cooperation, knowledge flows and cluster based innovation be affected when the buyer-seller linkages in the value chain are broken?

• Standardization and cost-efficient mass production
  - Yesterday’s innovations are today’s standards, because customers will require standardized solutions to reduce their own costs.
  - Will the Møre cluster be find sufficiently large and attractive market opportunities to capitalize on innovation capabilities?