Cyclical Investing:
Mr. Market Goes to Rehab

Bob Robotti
Robotti & Company Advisors

Ben Graham Centre's 2019 Value Investing Conference
April 2, 2019
• Valuation is the foundation of our investment process.

• We believe that market prices of securities do not necessarily indicate their true economic worth.
“To me, value investing is a big tent that accommodates many different people. At one end of the tent there is Ben Graham, and at the other end of the tent there is Warren Buffett, who worked with Graham and then went out on his own and made adjustments to the teachings of Ben Graham.”

- Jean-Marie Eveillard (Graham and Dodsville – Winter 2007 Ed.)
Common Themes

**Ugly Ducklings**

- Many value investors say they look for companies or industries that are beaten-up, out of favor, or out of fashion - ugly ducklings.
- However, we find it most common for investors to avoid near-term uncertainty at all cost and only invest once the dust has settled.
- We concentrate on understanding the long-term normalized earning power of a business well before it turns into a swan.

**Long Runways**

- Industries facing significant short-term headwinds / “unknowns.”
- Individual companies that are certainly not immune to the industry-wide issues and may even have more serious complications.
- The dynamics are in place for very long runways of growth once headwinds dissipate.
Understanding the Value of Economic Cycles

- Statistically Cheap
- Differentiated business / Competitive advantage
- Large inside ownership
- Ability to be opportunistic through the downturn

→ Improved earning power

Economic cycles resemble Schumpeter’s process of creative destruction:

- New entrants attracted by prospect of high returns: Investors Optimistic
- Improving supply side causes returns to rise above cost of capital: Share Price Outperforms
- Rising competition causes returns to fall below cost of capital: Share Price Underperforms
- Business investment declines, industry consolidation, firms exit: Investors Pessimistic

Hunting ground for value investors

Source: Capital Returns, Edward Chancellor, editor (2015)
“A business which sells at a premium does so because it earns a large return upon its capital; this large return attracts competition; and generally speaking, it is not likely to continue indefinitely. Conversely in the case of a business selling at a large discount because of abnormally low earnings. The absence of new competition, the withdrawal of old competition from the field, and other natural economic forces should tend eventually to improve the situation and restore normal rate of profit on the investment.”

*Security Analysis* (1934 Edition)
Benjamin Graham and David Dodd
“If you want to have a better performance than the crowd, you must do things differently from the crowd.”

- Sir John Templeton
What Makes Robotti Different

**Behavioral Edge**
We take a longer-term view and have the ability to tolerate market swings.

**Analytical Edge**
Within the context of a longer-term perspective and 30+ years of experience, we have the ability to develop a different conclusion than that of the market.

**Informational Edge**
Our network of industry relationships, focus on deep primary research, and experience serving on company boards, provides us with more pieces for building our information mosaic.

Our behavioral edge comes from our ability to tolerate market volatility. As a result, our investment process concentrates on understanding the long-term normalized earning power of a business well before the “investing herd” gains interest.
Stolt-Nielsen Limited (OB:SNI)

- Stolt-Nielsen, the world’s largest provider of transportation and storage for bulk liquid chemicals, was founded in 1959 by Jacob Stolt-Nielsen, a pioneer of the parcel tanker industry.

- Stolt’s three main business segments include: (1) Stolt Tankers, (2) Stolthaven Terminals, and (3) Stolt Tank Containers.

- Other segments include Sea Farm, and Stolt-Nielsen Gas where the company holds equity investments in Golar LNG & Avance Gas.

- At roughly 50% of book value we believe shares of the stock are cheap.

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<table>
<thead>
<tr>
<th>Financials</th>
<th>FY '17</th>
<th>FY '18</th>
<th>FY '19E</th>
<th>FY '20E</th>
</tr>
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<tbody>
<tr>
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<td>2,125.5</td>
<td>2,159.6</td>
<td>2,240.0</td>
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<tr>
<td>growth</td>
<td>6.2%</td>
<td>6.4%</td>
<td>1.6%</td>
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<tr>
<td>ev/sales</td>
<td>1.5x</td>
<td>1.4x</td>
<td>1.4x</td>
<td>1.3x</td>
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<tr>
<td>EBITDA</td>
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<td>435.3</td>
<td>494.9</td>
<td>544.1</td>
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<tr>
<td>margin</td>
<td>22.4%</td>
<td>20.5%</td>
<td>22.9%</td>
<td>24.3%</td>
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<tr>
<td>ev/EBITDA</td>
<td>6.7x</td>
<td>6.9x</td>
<td>6.1x</td>
<td>5.5x</td>
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<tr>
<td>Diluted EPS</td>
<td>$0.81</td>
<td>$0.89</td>
<td>$1.79</td>
<td>$3.01</td>
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<tr>
<td>p/e</td>
<td>15.4x</td>
<td>14.1x</td>
<td>7.0x</td>
<td>4.2x</td>
</tr>
</tbody>
</table>

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1 In 11/2016, 7mm treasury shares were used as collateral for a $60mm revolver. To comply with Bermuda law, ownership of these shares was transferred to Stolt-Nielsen Finance Ltd, a wholly owned subsidiary, which holds these shares on behalf of the lender. These shares are no longer included in Treasury shares and are included within Paid-In Surplus. For the purposes of IFRS EPS, these shares are considered as outstanding. Robotti Advisors adjusts for these shares when calculating market cap & enterprise value.

Stolt-Nielsen Summary

- Stolt-Nielsen is the world leader of a niche oligopoly.
- The chemical tanker business has certain dynamics that differentiate it from other segments of the shipping industry.
- Complex assets necessary for segregated cargo limit the ease of industry entrance.
- New build activity for chemical tankers is relatively limited.
- Headwinds over the past ten years cloud underlying structural changes – creating an opportunity.
- The terminal segment and container segment continue to provide high ROCE growth opportunities while creating strong synergies between the three primary segments.
Strong Synergies Between the Three Main Segments

Stolt-Nielsen Limited is a worldwide leading provider of integrated transportation, storage and distribution of bulk liquid chemical products and veg. oils through its three largest business divisions.

**Shipping**
- Deep sea and regional fleets provide global coverage
- Sophisticated stainless steel specialty tonnage with high number of segregations

**Bulk Liquid Storage**
- Storage facilities in main distribution locations serving as hubs for tankers

**Door-to-door Transportation**
- Worldwide door-to-door logistics service
- Operations supported by 14 depots globally

Source: Stolt-Nielsen Investor Roadshow Presentation (5/8/2013)
Chemical Tankers: An Industry Niche

- Specialized chemical tankers are complex and often purpose-built differentiating them from other more commoditized ships.

- Historically, fragmentation created a very competitive environment while the industry’s inherent cyclicality led to volatile earnings.

Specialized Products Fleet Market Segmentation

**Order book**

- **1,213 (18 mdwt)** Stainless steel: 13%
- **1,788 (28 mdwt)** Coated chemical (Epoxy, Adv. Polymer, Zinc, Hyland): 3%
- **3,163 (52 mdwt)** Chemical fleet (IMO I/II/III): 7%
- **162 (5 mdwt)** Coated products (IMO III): 7%
- **300 (5 mdwt)** Stainless Parcel: 8%
- **913 (12 mdwt)** Stainless Non-Parcel: 15%

Source: Clarksons Platou “Good, awesome and mega” (2/18), Stolt-Nielsen Investor Presentation (4/2013)
Super-Segregated Niche

Tankers: Sinochem transaction represented another milestone in renewing and growing our core super segregator fleet

- Odfjell announced a framework agreement with Sinochem Shipping in November. Final completion expected in 1Q 18
- Odfjell will bareboat 4 vessels (super segregators) from Sinochem and form a pool with Sinochem’s 4 vessels
- The pool will be exclusively managed by Odfjell and acts as a capital efficient way of growing/renewing our fleet and at the same time consolidate our core markets
- With all our tonnage initiatives in 2017 we have reached our growth and renewal ambitions and have made good strategic progress
- Consolidation in the chemical tanker segment remains high on the agenda
  - Odfjell/Sinochem (Q4 17)
  - Odfjell/CTG (Q2 17)
  - Jo Tankers/Stolt-Nielsen (Q4 16)
  - Crystal Nordic/Essberger Tankers (Q4 17)

* Not accounting for scrapping, except Stolt Vestland and Stolt Vintland and 3 NCC Kvarner vessels

Source: Odfjell Q4 2017 Earnings Presentation
Chemical Tanker Fleet Utilization

**Chemical tanker fleet utilization vs. 12 month TC rates for 19,900 dwt IMO2 stainless steel**

- **Higher lows but also lower highs**
- **Overbuild due to PE entry**

Asia Financial Crisis: Overbuild leads to oversupply

Price fixing in response to oversupply

Favorable supply/demand creates conditions for strong pricing – mitigated due to price fixing

Source: Clarksons Platou Specialized Projects, Clarksons Platou Securities
Chemical Tankers: Demand Outlook

**Significant Planned Chemical Plant Capacity Additions**

*Annual capacity additions*

- Oceania: On stream, 2016-2021 Base case
- Southeast Asia: On stream, 2016-2021 Base case
- India/Pakistan: On stream, 2016-2021 Base case
- China: On stream, 2016-2021 Base case
- Northeast Asia: On stream, 2016-2021 Base case
- Middle East: On stream, 2016-2021 Base case
- Africa: On stream, 2016-2021 Base case
- Europe: On stream, 2016-2021 Base case
- Latin America: On stream, 2016-2021 Base case
- North America: On stream, 2016-2021 Base case

**Leading to Strong Export Growth in the US...**

*US chemicals exports*

- 2007: Base case
- 2008: Base case
- 2009: Base case
- 2010: Base case
- 2011: Base case
- 2012: Base case
- 2013: Base case
- 2014: Base case
- 2015: Base case
- 2016: Base case
- 2017: Base case
- 2018: Base case
- 2019: Base case
- 2020: Base case
- 2021: Base case
- 2022: Base case

- 75% basis = high case
- 25% basis = low case
- 50% basis = base case
- Historical chemical exports

**...and Middle East**

*Middle Eastern seaward chemicals exports*

- 2007: Base case
- 2008: Base case
- 2009: Base case
- 2010: Base case
- 2011: Base case
- 2012: Base case
- 2013: Base case
- 2014: Base case
- 2015: Base case
- 2016: Base case
- 2017: Base case
- 2018: Base case
- 2019: Base case
- 2020: Base case
- 2021: Base case
- 2022: Base case

**Shifting feedstocks and chemical plant capacity:** Continual shift to cheap gas feedstock (ethane) over next 5+ years, with majority of new capacity additions in the U.S. and Middle East

**Incremental chemicals exports primarily going to Asia (long-haul trade) supporting ton-mile demand**

**MEG-ASIA and USG-ASIA trade lanes are ~2-3x the average chemical tanker voyage length**

Source: Chermbulk Investor Presentation (1/16/18)
Demand Tailwinds: Increasing Chemical Trade Flows

Increasing chemical trade flows will not only benefit the tanker business but will also provide a boost to the terminals and containers segments.

Source: Royal Vopak Q4 2017 Investor Roadshow Presentation
Stolthaven Terminals is a global provider of high quality storage services for bulk-liquid chemicals, edible oils, acids and clean petroleum products.

- Stolthaven Terminals operates 17 owned & JV terminals with 4.7 million m³ of capacity.
- With a similar global reach, customer base and handling expertise Stolthaven Terminals benefits from synergies with Stolt Tankers and Stolt Containers.
- Over $1 billion has been invested in terminals since 2010 adding >800,000 cbm, almost doubling capacity.

Stolt Tank Containers operates the world’s largest fleet of intermodal tanks designed to transport shipments of bulk-liquid chemicals and food-grade products door-to-door by road, rail and containership.

- Stolt Tank Containers operates 39,000 tank containers across a global network of 21 owned & JV depots.
- The tank containers segment has consistently earned double digit returns on capital employed.

Stolt Tank Containers: Drivers and Key Metrics

- This has been Stolt-Nielsen’s fastest growing segment and still has significant potential for further growth with limited capital investment.
- Growth drivers include the conversion of drums, flexibility and economical pricing.
- Focused on increasing utilization, turns per tank and improving margins to maintain & grow already high returns on capital employed.
- Systems development and implementation of global platforms will increase efficiency and scale, while reducing overhead.

Source: Stolt-Nielsen Q4 2017 Earnings Presentation
Risks To Our Thesis

• ROIC weakness may continue for longer than expected.
• Balance sheet leverage increases liquidity risk.
• Rising interest rates could lead to refinancing risk.
• Corporate governance issues may arise due to family control.
• Entry into the LNG business has hallmarks of prior missteps: An excellent business model but difficult operational execution and insufficient capital lead to the inability to realize profits and increase the risk of over-leveraging the entire enterprise.
Subsea 7 S.A. (OB:SUBC)

- Subsea 7 (OB:SUBC) is a global leader in seabed-to-surface engineering connecting seabed wellhead structures to surface production facilities.

- Industry headwinds, revenue declines and margin compression in recent years have led to an oligopolistic market with barriers to entry that continue to increase over time.

- Current energy prices are below the long-term sustainable price needed and will likely result in increased project sanctions as the impact of production decline manifests.

- The inventory of deep and ultra-deep water discoveries not yet sanctioned continues to grow creating the potential for significant revenue growth and increased returns on capital.

<table>
<thead>
<tr>
<th>Market Capitalization</th>
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<tbody>
<tr>
<td><strong>Price</strong></td>
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<tr>
<td>Dil Shrs</td>
</tr>
<tr>
<td><strong>Market Cap</strong></td>
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<tr>
<td>LT Debt</td>
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<td>Minority Interest</td>
</tr>
<tr>
<td>Cash</td>
</tr>
<tr>
<td><strong>Enterprise Value</strong></td>
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</table>

$US as of March 28, 2019

<table>
<thead>
<tr>
<th>Consensus Est.</th>
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<tbody>
<tr>
<td>(Annual) FY '17 FY '18 FY '19E FY '20E</td>
</tr>
<tr>
<td>Revenue</td>
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<tr>
<td>p/e</td>
</tr>
</tbody>
</table>

Subsea 7 is our highest conviction energy investment idea. With a durable competitive advantage, long-term dynamics are in place for significant growth.

Source: Subsea 7 Financial Statements, S&P Capital IQ
Core Business Segments

Subsea 7 provides technical solutions for projects at all water depths and in challenging environments.

**SURF and Conventional**
Engineering, construction, installation and procurement of subsea umbilicals, risers and flowlines (SURF). Most SURF projects involve fixed price EPIC services agreements. Conventional includes the fabrication and installation of fixed platforms and associated pipelines.

**Renewables & Heavy Lifting**
Services over the life of a field’s production, including inspection, repair & maintenance.

**i-Tech Services**
Inspection, maintenance and repair (IMR) services, integrity management and remote intervention.

Source: Subsea 7 2015 Annual Report
Offshore Spending Fell Before Oil Prices Did

**Offshore project spending by FID year**

- 2011: 202 USDbn
- 2012: 202 USDbn
- 2013: 239 USDbn
- 2014: 88 USDbn
- 2015: 74 USDbn
- 2016: 38 USDbn
- 2017: 88 USDbn
- 2018: 121 USDbn
- 2019E: 163 USDbn

- $37/bbl weighted average breakeven

**Number of offshore projects by FID year**

- 2011: 112
- 2012: 109
- 2013: 122
- 2014: 72
- 2015: 50
- 2016: 43
- 2017: 62
- 2018: 96
- 2019E: 127

Number of offshore projects receiving FID getting back to more normal levels in historical perspective, suggesting improving activity going forward.

Higher FID levels suggest rising offshore activity levels as projects move to offshore execution phase.

Source: Offshore Support Vessels: 2019 OSV Outlook and Macro Update, Clarksons Platou, 1/4/19
Competitive Landscape Shifts as Industry Dwindles

Competitors that have gone into administration or exited offshore oil services:

- Ceona
- Petrofac (exited SURF)
- Reef Subsea
- Harkand
- Hallin Marine
- Specialist Subsea Svc
- Red7 Marine
- Cal Dive
- Cecon
- Swiber
- EMAS
- Sea Trucks

Source: Subsea 7 February 2019 Investor Presentation
Subsea 7: Actively Navigating the Downturn

Maintaining cost discipline as the activity levels recover

Since 2014 Subsea 7 has:

- Reduced workforce by ~40%
- Returned six chartered vessels
- Stacked four owned vessels
- Retired two owned vessels with two more due to leave in 2017

Source: Subsea 7 Q4 2018 Presentation
Full Life Cycle Integrated Solutions Drive Lower Costs

- Integrated optimized design of entire subsea facility
- Lower cost, reduced risk and shorter schedule improves EIPC economics
- Integrated technologies to extend tieback distance and improve recovery

Actively adapt to industry conditions without losing focus on long term strategic priorities

Enable projects to progress in a lower oil price environment

Reduced Total Cost of Ownership

Source: Subsea 7 Investor Presentation
## Expanding Already Wide Moat

<table>
<thead>
<tr>
<th>Type</th>
<th>Source</th>
<th>Evidence</th>
</tr>
</thead>
</table>
| **Supply Advantage:** | • Proprietary Technology  
• Engineering and Project Management Process  
• Vessels (especially in certain ultra-deepwater and arctic areas) | History of increasingly complex engineering needs in deeper water requires a demonstrated track record of successful and safe execution. |
| **Demand Advantage:** | • Market Position  
• Skilled Engineers  
• Local Content (Africa, Brazil) | In this case, the resource is skilled engineering talent.                                                                                   |
| **Economies of Scale:** | • Size  
• Geographic Reach | The tangible and intangible costs of searching for someone who can complete a major ultra-deepwater project at or above the standard of “the big three” are very high. |
Proven Capital Allocation / Balance Sheet Strength

As of December 31, 2018 Subsea 7 had $507 million in *net-cash* and an investment grade rating.

A 5-year $650 million revolving credit facility provides further flexibility.

The board had paid:
- Paid a $200 million (NOK 5.00 / $0.60 per share) special dividend in April 2017
- Paid a $200 million (NOK 5.00 / $0.62 per share) dividend in May 2018
- Declared a ~$55 million (NOK 1.50 / $0.17 per share) special dividend will be payable in May 2019

Subsea 7 has returned over $1.7 billion to shareholders in the form of cash dividends and share repurchases since the 2011 merger with Acergy.

Kristian Siem, and other family members own 20% of Subsea 7’s shares through Siem Industries holdings.

Source: Subsea 7 Financial Reports
Subsea 7’s Addressable Market

$151 billion\(^{(4)}\)
Global Offshore E&P CAPEX

Seismic
Floating Platform Fabrication, Maintenance, Modification and Operational Expenditure
SPS\(^{(2)}\)
Drilling

$40 billion\(^{(1)}\)
Addressable Market

Early Engineering
ROV’s
Heavy Lift
Conventional Renewables
Trunklines\(^{(3)}\)
LOF
SURF

50% growth 2017 - 2022

$60 billion
Addressable Market
Forecast to return to 2014 size by 2022\(^{(1)}\)

\(^{(1)}\) Rystad August 2018
\(^{(2)}\) Access via Alliances and Partnerships
\(^{(3)}\) Trunklines up to 46”

Source: Subsea 7 February 2019 Investor Presentation
Long-Term Earning Power Valuation

**Implied EBITDA minus Maintenance Capex** (assumes $200mm maintenance capex)

<table>
<thead>
<tr>
<th>Revenue (USD)</th>
<th>4,000</th>
<th>5,000</th>
<th>6,000</th>
<th>7,000</th>
<th>8,000</th>
<th>9,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>18%</td>
<td>520</td>
<td>700</td>
<td>880</td>
<td>1,060</td>
<td>1,240</td>
<td>1,420</td>
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<td>20%</td>
<td>600</td>
<td>800</td>
<td>1,000</td>
<td>1,200</td>
<td>1,400</td>
<td>1,600</td>
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<td>22%</td>
<td>680</td>
<td>900</td>
<td>1,120</td>
<td>1,340</td>
<td>1,560</td>
<td>1,780</td>
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<tr>
<td>24%</td>
<td>760</td>
<td>1,000</td>
<td>1,240</td>
<td>1,480</td>
<td>1,720</td>
<td>1,960</td>
</tr>
<tr>
<td>26%</td>
<td>840</td>
<td>1,100</td>
<td>1,360</td>
<td>1,620</td>
<td>1,880</td>
<td>2,140</td>
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<tr>
<td>28%</td>
<td>920</td>
<td>1,200</td>
<td>1,480</td>
<td>1,760</td>
<td>2,040</td>
<td>2,320</td>
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</table>

**Implied Stock Price at 8x EBITDA minus Maintenance Capex**

<table>
<thead>
<tr>
<th>Revenue (USD)</th>
<th>4,000</th>
<th>5,000</th>
<th>6,000</th>
<th>7,000</th>
<th>8,000</th>
<th>9,000</th>
<th>15%</th>
<th>20%</th>
<th>22%</th>
<th>24%</th>
<th>26%</th>
<th>28%</th>
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<tbody>
<tr>
<td>18%</td>
<td>$14.15</td>
<td>$18.55</td>
<td>$22.95</td>
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<td>$31.75</td>
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<td>28%</td>
</tr>
<tr>
<td>20%</td>
<td>$16.10</td>
<td>$20.99</td>
<td>$25.88</td>
<td>$30.77</td>
<td>$35.66</td>
<td>$40.55</td>
<td>31%</td>
<td>31%</td>
<td>47%</td>
<td>63%</td>
<td>79%</td>
<td>95%</td>
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<td>$23.44</td>
<td>$28.82</td>
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<td>$39.57</td>
<td>$44.95</td>
<td>47%</td>
<td>91%</td>
<td>135%</td>
<td>159%</td>
<td>223%</td>
<td>267%</td>
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<tr>
<td>24%</td>
<td>$20.01</td>
<td>$25.88</td>
<td>$31.75</td>
<td>$37.62</td>
<td>$43.49</td>
<td>$49.35</td>
<td>63%</td>
<td>111%</td>
<td>159%</td>
<td>207%</td>
<td>255%</td>
<td>302%</td>
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<tr>
<td>26%</td>
<td>$21.97</td>
<td>$28.33</td>
<td>$34.68</td>
<td>$41.04</td>
<td>$47.40</td>
<td>$53.76</td>
<td>79%</td>
<td>131%</td>
<td>183%</td>
<td>235%</td>
<td>287%</td>
<td>338%</td>
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<tr>
<td>28%</td>
<td>$23.93</td>
<td>$30.77</td>
<td>$37.62</td>
<td>$44.46</td>
<td>$51.31</td>
<td>$58.16</td>
<td>95%</td>
<td>151%</td>
<td>207%</td>
<td>263%</td>
<td>318%</td>
<td>374%</td>
</tr>
</tbody>
</table>

**Implied Margin of Safety**

<table>
<thead>
<tr>
<th>Revenue (USD)</th>
<th>4,000</th>
<th>5,000</th>
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<th>8,000</th>
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</thead>
<tbody>
<tr>
<td>18%</td>
<td>15%</td>
<td>51%</td>
<td>87%</td>
<td>123%</td>
<td>159%</td>
<td>195%</td>
</tr>
<tr>
<td>20%</td>
<td>31%</td>
<td>71%</td>
<td>111%</td>
<td>151%</td>
<td>191%</td>
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</tr>
</tbody>
</table>

Source: Robotti & Company Calculations
Risks To Our Thesis

• Oil prices could fall further or remain at current levels for an extended period leading major oil companies to defer capital expenditures and delay deepwater developments.

• Increasing competition in shallower water could result in decreased profitability should well depth not continue to increase.

• The safe and successful execution of large, complex EPIC projects is a primary risk. Supply chain delays can reverberate throughout the entire project.

• Operations in deep water are subject to unpredictable events such as severe weather or harsh ocean environments.
Norbord is the world’s largest producer of oriented strand board (OSB) with 14 mills in North America and 3 mills in the UK and Europe.

As the leading low cost producer Norbord is well positioned to take advantage of the North America’s continued housing recovery.

A focus on value-added and specialty products, favorable geographic exposure and a history of prudent capital allocation.

A period of industry consolidation has created favorable supply / demand dynamics that will allow for a period of above average free cash flow generation.

### Market Capitalization

<table>
<thead>
<tr>
<th></th>
<th>Price</th>
<th>Net Debt</th>
<th>Net Debt/EBITDA</th>
<th>Interest Coverage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dil Shrs</td>
<td>86.9</td>
<td></td>
<td>0.6x</td>
<td>15.8x</td>
</tr>
<tr>
<td>Market Cap</td>
<td>2,345</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LT Debt</td>
<td>584</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cash</td>
<td>128</td>
<td>52 Week Hi</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enterprise Value</td>
<td>2,801</td>
<td>52 Week Lo</td>
<td>$45.45</td>
<td>$24.18</td>
</tr>
</tbody>
</table>

$US as of March 28, 2019

### Consensus Est.

<table>
<thead>
<tr>
<th></th>
<th>FY '16</th>
<th>FY '17</th>
<th>FY '18</th>
<th>FY '19E</th>
<th>FY '20E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenue</td>
<td>1,766.0</td>
<td>2,177</td>
<td>2,424</td>
<td>2,151</td>
<td>2,285</td>
</tr>
<tr>
<td>growth</td>
<td>17.0%</td>
<td>23.3%</td>
<td>11.3%</td>
<td>(11.3%)</td>
<td>6.2%</td>
</tr>
<tr>
<td>ev/sales</td>
<td>1.6x</td>
<td>1.3x</td>
<td>1.2x</td>
<td>1.3x</td>
<td>1.2x</td>
</tr>
<tr>
<td>EBITDA</td>
<td>373.0</td>
<td>667</td>
<td>719</td>
<td>433</td>
<td>495</td>
</tr>
<tr>
<td>margin</td>
<td>21.1%</td>
<td>30.6%</td>
<td>29.7%</td>
<td>20.1%</td>
<td>21.7%</td>
</tr>
<tr>
<td>ev/EBITDA</td>
<td>7.5x</td>
<td>4.2x</td>
<td>3.9x</td>
<td>6.5x</td>
<td>5.7x</td>
</tr>
<tr>
<td>Diluted EPS</td>
<td>$2.13</td>
<td>$5.03</td>
<td>$4.27</td>
<td>$2.26</td>
<td>$2.86</td>
</tr>
<tr>
<td>p/e</td>
<td>12.7x</td>
<td>5.4x</td>
<td>6.3x</td>
<td>11.9x</td>
<td>9.4x</td>
</tr>
</tbody>
</table>

Source: Norbord Financial Statements, S&P Capital IQ
Capital Cycle Case Study: The U.S. Housing Market

U.S. Single Family Home Starts
January 1970 to Present

Average = 1.1 million SFH Starts

Overbuild

Underbuild

Source: Federal Reserve Bank of St. Louis, Robotti & Company Advisors Estimates
A Map of the Homebuilding Industry

Materials Manufacturer

- Engineered Wood Panel / OSB
- Cabinetry & Fixtures
- Flooring & Carpets
- Structural Board
- Windows & Doors
- Architectural Paint
- Roofing, Siding & Insulation
- HVAC
- Molding & Trim
- Plumbing
- Lighting
- Wallboard

Distributors

- Pro-Segment
- ABC Supply Co. Inc.
- BMC (Builders FirstSource)
- Lumber
- Specialty
- Beacon Roofing Supply, Inc.
- IBP
- Pool Corp.
- Boise Cascade
- Big Box Retail

Homebuilders

- National Homebuilder
- Regional Homebuilders
- Contractor

Source: Robotti & Company Advisors
Industry Consolidation

In 2002 the top 5 North American Producers accounted for 69% of North American Capacity.

Pre-Housing Crisis (~2006):
- 11 OSB producers in North America
- Top 5 = 74% market share

Today:
- 9 OSB producers in North America
- Top 5 = 81% market share
- (Top 6 = 89% market share)

Source: Norbord February 2019 Investor Presentation, Norbord Annual Reports, Robotti & Company Advisors Calculations
Top Quartile ROCE Among Peers Over Cycle

15 Year Average ROCE % (Peak/Mean/Trough) (1)

(1) Return on capital employed (ROCE) is a measure of financial performance focusing on cash generation and the effective use of capital. ROCE is calculated as Adjusted EBITDA divided by average capital employed (operating working capital, PP&E, goodwill, intangibles, timberlands & licences).

Source: Norbord Q2 2017 Investor Presentation
Opportunity to Drive Further Substitution

- Reduced dependence on new home construction
- More predictable, stable margins over business cycle

Source: Norbord February 2019 Investor Presentation
Long-Term OSB Supply/Demand Analysis

North American OSB Demand and Capacity

- Effective Capacity
- Mothballed Capacity
- Effective Demand / Capacity

Source: Norbord February 2019 Investor Presentation
Relentless Focus on Cost: “Control the Controllables”

MIP has delivered $319 million of margin improvements over the past 13 years.

- Margin Improvement Program (MIP) gains help offset impact of industry-wide rising input costs:
  - Increased productivity
  - Reduced overhead costs
  - Reduced raw material usage
  - Improved product mix

- MIP has delivered $331 million of margin improvements over the past 15 years

Source: Norbord February 2019 Investor Presentation
Disciplined Capital Expenditures

- 2018 Capex = $204 million
- 2019 Capex Budget = $150 million
  - Includes investments to restart Chambord (when warranted by customer demand) and Phase 2 of Inverness, Scotland project.

<table>
<thead>
<tr>
<th>Countercyclical M&amp;A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quebec mill exchange (2016)</td>
</tr>
<tr>
<td>Ainsworth merger (2015)</td>
</tr>
<tr>
<td>Acquired Genk, Belgium mill (2004)</td>
</tr>
<tr>
<td>Acquired remaining 50% of Bemidji, Minnesota mill (2004)</td>
</tr>
<tr>
<td>Acquired Texas and Georgia mills (2002)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Investment in capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modernization / expansion of Inverness mill (2016-17)</td>
</tr>
<tr>
<td>Twinned Cordele, Georgia line (2006)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disciplined capital expenditure</th>
</tr>
</thead>
<tbody>
<tr>
<td>$25 million annual maintenance capex</td>
</tr>
<tr>
<td>Additional investment to debottleneck capacity and lower manufacturing costs</td>
</tr>
</tbody>
</table>

Total Adjusted EBITDA Over the Cycle

Source: Norbord Q4 2018 Investor Presentation, S&P Capital IQ

Norbord Sensitivity to Realized North American OSB Price Changes:

$10/Msf 7/16” = ±$64 million Adjusted EBITDA

15-year average OSB price: $236
Risks To Our Thesis

• The housing recovery could stall or reverse causing liquidity issues as high interest debt is repaid and free cash flow falls.

• Management teams are unable to realize merger synergies.

• Commodity prices could fall for an extended period of time and pressure cash flow.

• Supply / Demand assumptions could be poorly timed or wrong.
“To me, value investing is a big tent that accommodates many different people. At one end of the tent there is Ben Graham, and at the other end of the tent there is Warren Buffett, who worked with Graham and then went out on his own and made adjustments to the teachings of Ben Graham.”

- Jean-Marie Eveillard (Graham and Dodsville – Winter 2007 Ed.)
<table>
<thead>
<tr>
<th>Disclosures</th>
<th>Norbord (NYSE:OSB)</th>
<th>Subsea 7 (OB:SUBC)</th>
<th>Stolt-Nielsen (OB:SNI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robert Robotti and/or members of his household has a financial interest in</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>the following securities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robotti &amp; Company or its affiliates beneficially own common equity of the</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>following securities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robotti &amp; Company or its affiliates beneficially own 1% or more of any class</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>of common equity of the following securities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Robert Robotti serves as a Director or Officer or Advisory Board Member of</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>the following securities</td>
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<td></td>
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</tbody>
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Questions

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