An Examination of Private Oil Company Growth

Rob Arnott
OIES Internal Seminar

25th November 2003
Private oil company growth

- Overview of global industry trends
  - Regional costs and capital migration

- Industry costs and implications
  - Why is further consolidation likely?

- Company specific growth
  - Where will growth come from?

- Conclusions
  - How much more risk are companies taking on?
Capital growth is key to equity investors

Source: LSE, NYSE
Reserve growth influences share price

Correlation Between Relative Changes in Key Variables and Share Price

<table>
<thead>
<tr>
<th>Illustration</th>
<th>Reserve base</th>
<th>ROCE</th>
<th>Production</th>
<th>CFPS</th>
<th>Peers</th>
<th>Oil Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation</td>
<td>0.55</td>
<td>0.50</td>
<td>0.32</td>
<td>0.18</td>
<td>0.57</td>
<td>0.12</td>
</tr>
</tbody>
</table>

Source: LSE, NYSE, Morgan Stanley
Replacement figures are deceptive

Source: Company data, JS Herold

3/23/2004
Acquisitions a cheaper route to growth

Consistent pattern explains industry consolidation

Source: Company data, JS Herold
US, Canada and Europe overheated

Companies overpaying to achieve growth

Proved Acquisition Cost ($/boe)  Finding and Development Cost ($/boe)

Source: Company data, JS Herold
Migration of capital away from US

Spending changes 2000-2002

<table>
<thead>
<tr>
<th>Region</th>
<th>Percentage Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>-24%</td>
</tr>
<tr>
<td>Canada</td>
<td>-8%</td>
</tr>
<tr>
<td>Europe</td>
<td>47%</td>
</tr>
<tr>
<td>Africa/Middle East</td>
<td>69%</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>40%</td>
</tr>
</tbody>
</table>

Source: Company data, Harrison Lovegrove
Private oil company growth targets

- **ENI**: Growth targets to 2008
- **Total**: Growth targets to 2007
- **Royal Dutch Shell**: Growth targets to 2008
- **ExxonMobil**: Growth targets to 2008
- **ConocoPhillips**: Growth targets to 2008
- **BP**: Growth targets to 2008
- **Chevron Texaco**: Growth targets 2002-2008

Source: Company data
The real cost of growth

Smaller companies chase growth at shareholders expense

Source: Company data, JS Herold
Growth without acquisitions unrealistic

Even revised targets are unlikely to be achieved

Source: Company data, JS Herold, OIES
Decline versus growth

More and more growth projects are needed to infill decline

Source: Company data, OIES
BP’s oil production growth 2002-2007

Reliance on Russia a high risk strategy?

Source: Company data, OIES
Shell’s oil production growth 2002-2007

Growth reliant on Nigeria (Bonga, NLNG liquids)

Production mboe/d

Europe North America Africa Latin America Asia-Pacific Middle East Russia Total

Source: Company data, OIES
Exxon’s oil production growth 2002-2007

Growth from Bonga (Nigeria) + Kizomba/Dalia (Angola)

Production mboe/d

Europe  North America  Africa  Latin America  Asia-Pacific  Middle East  Other  Total

Source: Company data, OIES
Total’s oil production growth 2002-2007

Deepwater Africa the key (Nigeria: BongaMain, Congo: Moho, Angola: Dalia)

Source: Company data, OIES
BP’s gas production growth 2002-2007

A switch from Europe and North America to Egypt, Algeria and Trinidad LNG

Source: Company data, OIES
Shell’s gas production growth 2002-2007

NW shelf Australia and Nigeria LNG the drivers

Source: Company data, OIES
Exxon’s oil production growth 2002-2007

Middle East gas project (RasGas LNG trains 3 and 4 + Qatar) driving growth

Source: Company data, OIES
Total’s gas production growth 2002-2007

A more even spread from Indonesia, Venezuela (Yucal), Argentina (Carina/Aries),

Source: Company data, OIES
Oil is still driving production growth

Targets will only be met if ‘oil’ developments proceed as planned

[Bar chart showing CAGR for different companies, with red for Oil Growth and blue for Gas Growth. Source: Company data, OIES]
Oil regaining share of production mix

Only in Total does gas increase proportionately

Source: Company data, OIES
OPEC exposure is increasing

3.6 million b/d out of 15.8 million b/d will come from OPEC in 2007

Figure show oil production mb/d

Source: Company data, OIES
The equity market expects growth but delivery is at risk

Source: Morgan Stanley
More access on easier terms please!

- Further consolidation inevitable
  - US, Canada and Europe are ex-growth
  - Acquisition costs still below FD costs

- Oil continues to drive POC production growth
  - Companies are not shifting to gas
  - Increasing differentiation between companies

- Capital flowing from low risk to high risk
  - OPEC exposure increasing
  - Technical and political risk increasing
An Examination of Private Oil Company Growth

Rob Arnott
OIES Internal Seminar

25th November 2003