## ASML <br> Price EUR84.66

Bumpy road ahead
Fair Value EUR81 (-4\%)
SELL

| Bloomberg | ASML NA |
| :--- | ---: |
| Reuters | ASML.AS |
| 12-month High / Low (EUR) | $103.8 / 71.8$ |
| Market Cap (EURm) | 36,686 |
| Ev (BG Estimates) (EURm) | 35,260 |
| Avg. 6m daily volume (000) | 1,276 |
| 3y EPS CAGR | $21.9 \%$ |


|  | 1 M | 3 M | 6 M 31/1 | 31/12/15 |
| :---: | :---: | :---: | :---: | :---: |
| Absolute perf. | -2.7\% | 9.6\% | 9.0\% | 2.6\% |
| Semiconductors | -2.6\% | 6.2\% | 1.0\% | -5.0\% |
| DJ Stoxx 600 | 2.6\% | 8.8\% | -3.3\% | -4.1\% |
| YEnd Dec. (EURm) | 2015 | 2016e | 2017e | 2018e |
| Sales | 6,287 | 6,487 | 7,415 | 8,742 |
| \% change |  | 3.2\% | 14.3\% | \% 17.9\% |
| EBITDA | 1,864 | 1,774 | 2,337 | 3,031 |
| EBIT | 1,565 | 1,469 | 2,017 | 7 2,666 |
| \% change |  | -6.1\% | 37.3\% | \% 32.2\% |
| Net income | 1,387 | 1,266 | 1,758 | 2,353 |
| \% change |  | -8.7\% | 38.8\% | \% 33.8\% |
|  | 2015 | 2016e | 2017e | 2018e |
| Operating margin | 24.9 | 22.7 | 27.2 | 230.5 |
| Net margin | 22.1 | 19.5 | 23.7 | $7 \quad 26.9$ |
| ROE | 16.5 | 15.5 | 20.0 | - 23.8 |
| ROCE | 22.9 | 19.1 | 26.4 | $4 \quad 25.9$ |
| Gearing | -27.2 | -17.5 | -23.6 | $6-7.4$ |


| (EUR) | 2015 | 2016e | 2017e | 2018e |
| :--- | ---: | ---: | ---: | ---: |
| EPS | 3.21 | 3.02 | 4.26 | 5.82 |
| \% change | - | $-6.0 \%$ | $41.2 \%$ | $36.6 \%$ |
| P/E | 26.4 x | 28.1 x | 19.9 x | 14.6 x |
| FCF yield (\%) | $4.0 \%$ | $1.8 \%$ | $5.0 \%$ | NM |
| Dividends (EUR) | 0.70 | 1.05 | 1.21 | 1.39 |
| Div yield (\%) | $0.8 \%$ | $1.2 \%$ | $1.4 \%$ | $1.6 \%$ |
| EV/Sales | 5.5 x | 5.4 x | 4.7 x | 4.1 x |
| EV/EBITDA | 18.5 x | 19.9 x | 14.8 x | 11.9 x |
| EV/EBIT | 22.0 x | 24.0 x | 17.2 x | 13.5 x |



Following yesterday's Q1 results (see our first take) and conference call, we continue to have doubts over mid-term visibility and system demand. Industry habits regarding the new node ramp are changing and we believe they add challenges for ASML to deliver its 2020 plan (targeting FY20e sales of EUR10bn). In addition, upcoming EUV sales recognition will have a negative impact on the group's margin. We have updated our model and are maintaining our Sell recommendation and FV of EUR81.

## ANALYSIS

- Industry habits regarding new node ramp is changing. The group highlighted a change in customer habits regarding new node ramp. Management noted that 28 nm capacity is still increasing and generating orders of DUV systems, while only a few customers plan to adopt 10 nm in the near term. As a result, we believe this should result in a rapid but short increase in orders compared to a longer wave of orders as seen in the past.
- Bookings should improve in Q2. In our first take published yesterday (see here), we highlighted a particularly low level of bookings in Q1 (down 29\% compared to Q4). During the conference call, management reassured on this point, stating that we should expect an improvement in bookings in Q2. We will keep a close eye on this data since it may be a leading indicator of H 2 momentum.
- Compared to H1, H2 should be flat in Memory, up in Logic and Service \& Field options. In 2016, the memory segment should remain under pressure due to high capacity (high price pressure) and generate lower investments than in 2015. As expected, Logic should be driven by 10nm ramp over 2016 but the pace of the ramp is out of ASML's control and depends on customer's momentum and performance in the ramp of this new node. Finally, regarding Service \& field options, it is expected to continue to growth at a $10 \%$ yoy rate in FY16. As a result, we expect to see System sales at about EUR4.23bn (flat compared to FY15 with H2-16 up 6.3\% compared to H1-16) and Services \& field option sales at about EUR2.26bn (+10\% yoy)
- Reuse, a rising concern. From yesterday's conference call, we understand that the group sees higher customer interest in reuse (upgrade of tool to be used for newer node), however management added it has been factored into the 2020 plan by the group (targeting EUR10bn of sales by 2020) and says it is on track with the company's expectations so far. We remind that we highlighted this risk in our previous comment (early April) and we believe the evolution of reuse deserves attention during future publications as it might influence DUV tools sales momentum over the LT, particularly after EUV introduction.
- One more EUV system to be shipped during Q2, then four/five in H2. We believe that EUV revenue recognition should be quicker in 2016 but most of 2016 EUV shipments will be recognised in 2017. Note that EUV sales are recognised only after performance achievement at customer sites which might cause an important delay between EUV system shipment and sales recognition. Depending on contracts signed with customers, performance measures can be achieved earlier or later in the test process impacting negatively the visibility on total group sales.
- Margin pressure is due to EUV. Finally, the group remind that guidance for $42 \% \mathrm{GM}$ is due to partial payment of EUV system in Q2 (EUR110m in Q2 sales guidance). However, we think that the group was unclear regarding changes in the margin over the mid-term with EUV revenue recognition accelerating. As a result, we adopt a more cautious scenario with FY16 GM of 43.6\% compared to $45.6 \%$ used previously. This margin pressure should lower in FY17 thanks to higher efficiency of the production leading to higher margin on EUV systems (we use a 22\%/41\%/45\% gross margin on EUV systems for FY16/17/18e)


## VALUATION

- We have updated our model to include Q1 results and new Q2 2016 guidance. We also adopt a more cautious approach regarding gross margin for 2016 (lowered from $45.6 \%$ to $43.6 \%$ ) given the upcoming EUV revenue recognition. Overall, our changes (see details below) have an average negative impact of $3 \%$ on our EPS estimates for FY16/17/18e.
- With a lack of visibility due to EUV revenue recognition, risks on DUV tools demand during H2, risks regarding LT demand and the timing EUV insertion points, we keep our Sell rating.
- Based on our estimates, ASML's shares trade at a 2016 e P/E ratio of 25.6 x and a 2016e PEG ratio of $1.2 x$.


## NEXT CATALYSTS

- 20th July 2016: FQ2-16 results.


## Detailed P\&L

| [EURm] | 1 Q16 | 2Q16e | 3Q16e | 4Q16e | FY16e | FY17e | FY18e |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Group | 1333 | 1734 | 1652 | 1767 | 6487 | 7415 | 8742 |
| Q/Q growth | -7.0\% | 30.1\% | -4.8\% | 7.0\% | 3.2\% | 14.3\% | 17.9\% |
| Y/Y growth | -19.2\% | 4.9\% | 6.6\% | 23.2\% | 3.2\% | 14.3\% | 17.9\% |
| Cost of goods sold | -765 | -1003 | -912 | -979 | -3658 | -4004 | -4616 |
| Gross margin | 42.6\% | 42.2\% | 44.8\% | 44.6\% | 43.6\% | 46.0\% | 47.2\% |
| R\&D | -275 | -271 | -271 | -269 | -1087 | -1097 | -1162 |
| SG\&A | -89 | -90 | -89 | -89 | -357 | -371 | -376 |
| Other operating income | 23 | 23 | 20 | 18 | 84 | 74 | 79 |
| Adj. EBIT | 228 | 393 | 400 | 448 | 1469 | 2017 | 2666 |
| adj. operating margin | 17.1\% | 22.7\% | 24.2\% | 25.4\% | 22.7\% | 27.2\% | 30.5\% |
| Net financial result | -4 | -3 | -3 | -7 | -17 | -19 | -23 |
| Income tax | -26 | -51 | -52 | -57 | -186 | -240 | -291 |
| tax rate | -11.8\% | -13.0\% | -13.0\% | -13.0\% | -12.8\% | -12.0\% | -11.0\% |
| Adj. Net income | 198 | 339 | 345 | 384 | 1266 | 1758 | 2353 |
| Diluted adjusted EPS | 0.46 | 0.80 | 0.82 | 0.92 | 3.02 | 4.26 | 5.82 |

Source: Bryan Garnier \& Co. ests.

## P\&L changes highlights

\left.| [EURm] | Old |  |  |  |  | New |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Old vs. |  |  |  |  |  |  |  |
| New |  |  |  |  |  |  |  |$\right]$

Source: Bryan Garnier \& Co. ests.

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