

## Sector View

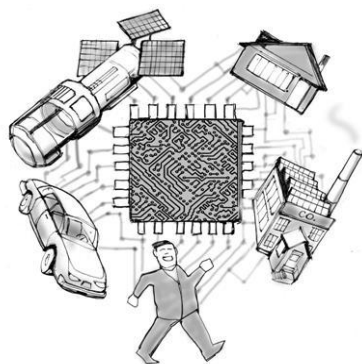
## Semiconductors

|                | 1 M   | 3 M   | 6 M    | 31/12/14 |
|----------------|-------|-------|--------|----------|
| Semiconductors | -9.5% | -4.2% | -14.7% | -17.0%   |
| DJ Stoxx 600   | -4.4% | -6.2% | -12.5% | -0.7%    |

\*Stoxx Sector Indices

## Companies covered

|                           |                |                        |
|---------------------------|----------------|------------------------|
| <b>ARM HOLDINGS</b>       | <b>BUY</b>     | <b>1310p</b>           |
| Last Price                | 953p           | Market Cap. GBP13,392m |
| <b>ASML</b>               | <b>NEUTRAL</b> | <b>EUR76</b>           |
| Last Price                | EUR75.69       | Market Cap. EUR32,799m |
| <b>DIALOG</b>             | <b>NEUTRAL</b> | <b>EUR34</b>           |
| Last Price                | EUR26.654      | Market Cap. EUR2,075m  |
| <b>INFINEON</b>           | <b>BUY</b>     | <b>EUR15</b>           |
| Last Price                | EUR12          | Market Cap. EUR13,551m |
| <b>SOITEC</b>             | <b>NEUTRAL</b> | <b>EUR0.8</b>          |
| Last Price                | EUR0.63        | Market Cap. EUR146m    |
| <b>STMICROELECTRONICS</b> | <b>SELL</b>    | <b>EUR6.8</b>          |
| Last Price                | EUR5.73        | Market Cap. EUR5,220m  |



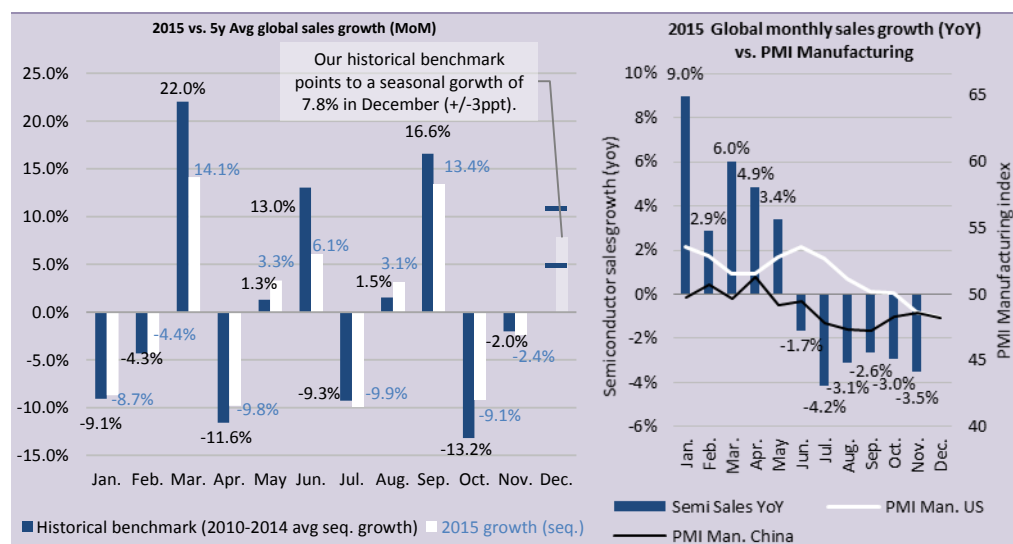
## November global semi sales in line but poor macro index points to weak December data

November WSTS data points to overall global semiconductor sales of USD27.5bn, down 2.4% sequentially (-3.5% YoY). This is broadly in line with our benchmark based on 5-y historical data of -2.0% MoM. We continue to expect a flat year of growth, i.e. 2015 global sales at USD336bn. December's PMI index remains weak in both the US and China. As a result, we would recommend a cautious stock-picking until the economic index points to an improving macro-economic situation. In other words, we would prefer stock with solid fundamentals rather than value stocks.

## ANALYSIS

- Global semiconductor sales continue to decrease on a yoy basis with November sales at USD27.5bn, down 3.5% yoy.** On a sequential basis, November's global sales came out at USD27.5bn, down 2.4% compared to October's sales. This is broadly in line with our benchmark based on 5-y historical data showing a historical seasonal decline of 2.0% in November vs. October. Based on the visibility we now have, our feeling is similar to the one we had a month ago, i.e. the short-term momentum will remain weak for the semi industry. In addition, the current poor macro economy index puts pressure on our expectation of a rebound during Q1-16.
- All regions, including Asia, show a decrease in sales on a yearly basis.** Indeed, November's sales in Asia, which represent c. 60% of semiconductor sales (of which ~50% are made in China), were down by 0.7% yoy. This was the second time in 2015 that Asian sales were down (July's sales in Asia were down by 1.1% yoy). US and European sales were both down by 7.9% and 8.4% yoy in November respectively. On a more positive note, Japanese sales were down by "only" 5.1% yoy in November while monthly down by more than 11% yoy on average since the start of 2015.
- December and beyond: December expected to be weak, 2015 to be flat.** We expect global December sales to be close to USD28.7bn, up +4.3% sequentially (vs. historical data pointing to a growth of +7.8% seq. in December) but down 4.0% on a yearly basis. As a result, 2015e sales should end at USD336.2bn, up +0.1% yoy. Recently, smartphone market momentum has proven to be particularly weak, especially for the Apple supply chain which had benefited from a strong resistance so far. We continue to foresee the end of the inventory adjustments impacting Q4-15 momentum in the Automotive and Industrial sectors during Q1-16. Finally, we do not expect a further decrease for the PC segment. December ISM data were negative with the US PMI Manufacturing index indicating a continuous slowdown to 48.2 from 48.6 in November (12m high at 53.5 in June). December's production index bounced back to 49.8 after a sharp decrease from 52.9 to 49.2 in October, and the Inventories Index stuck at a very low level of 43.5. Chinese data were also disappointing with Markit PMI Manufacturing down to 48.2 from 48.6 (was at 51.3 in April 2015). Overall, we keep our November comment: macro data are not particularly supportive and our feeling is that the short-term momentum remains weak.

## November sales are in line with seasonal but macro indices remain weak.



Sources: WSTS; Bryan Garnier &amp; Co.

## VALUATION

**Standard deviation on 2016e P/E valuation between different sectors have been reduced during December.** Our semiconductor valuation table highlights the valuation differences of the 6 sub-sectors of the industry. On average, IP & EDA vendors, and Semiconductor Equipment makers have the highest valuation metrics with an average 2016e P/E ratio of 19.6x and 17.8x respectively (down from 21.8x and 19.6x a month ago). Conversely, Foundries have the lowest valuation with an average 2016e P/E ratio of 11.9x (down from 13.1x a month ago).

### BG semiconductor sub-sectors valuation table

|  | 2016e    |           |         |       |
|--|----------|-----------|---------|-------|
|  | EV/Sales | EV/EBITDA | EV/EBIT | P/E   |
| Fabless (15) average                             | 2.8x     | 9.8x      | 12.4x   | 16.2x |
| Logic & Analog IDM (17) average                  | 3.0x     | 9.9x      | 14.6x   | 16.4x |
| Memory IDM (4) average                           | 0.9x     | 3.5x      | 11.8x   | 13.4x |
| Foundry (5) average                              | 1.5x     | 4.2x      | 12.4x   | 11.9x |
| Semiconductor Equipment & Materials (11) average | 2.3x     | 2.2x      | 8.0x    | 17.8x |
| Intellectual Property & EDA (10) average         | 4.7x     | 15.5x     | 19.7x   | 19.6x |

*Numbers between brackets represent the number of companies in each category; green/red numbers are higher/lower data per ratio.*

*Sources: Thomson Reuters I.B.E.S.; Bryan Garnier & Co.*

## NEXT CATALYSTS

- December 2015 SIA global billing reports, expected for early February.

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|         |  |
|---------|--|
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