

## Sector View

## Semiconductors

December data well below seasonal figure but January sales should be back in line

	1 M	3 M	6 M	31/12/15
Semiconductors	-6.5%	-6.4%	-9.6%	-6.5%
DJ Stoxx 600	-8.5%	-11.2%	-15.6%	-8.5%

\*Stoxx Sector Indices

## Companies covered

<b>ARM HOLDINGS</b>	<b>BUY</b>	<b>1310p</b>
Last Price	981p	Market Cap. GBP13,785m
<b>ASML</b>	<b>BUY</b>	<b>EUR85</b>
Last Price	EUR82.25	Market Cap. EUR35,642m
<b>DIALOG</b>	<b>NEUTRAL</b>	<b>EUR38</b>
Last Price	EUR27.625	Market Cap. EUR2,151m
<b>INFINEON</b>	<b>BUY</b>	<b>EUR15</b>
Last Price	EUR11.725	Market Cap. EUR13,261m
<b>SOITEC</b>	<b>NEUTRAL</b>	<b>EUR0.8</b>
Last Price	EUR0.52	Market Cap. EUR120m
<b>STMICROELECTRONICS</b>	<b>NEUTRAL</b>	<b>EUR7</b>
Last Price	EUR5.484	Market Cap. EUR4,996m

For December, preliminary WSTS data points to an overall global semiconductor market of USD27.2bn, down 1.0% sequentially and 9.0% yoy. This was in line with our previous comments but significantly below our 5-y historical benchmark pointing to a usual sequential increase of 7.8% in December. As a result, 2015 global semiconductor sales ended at USD335bn, flat compared to 2014 as expected. Despite, the current weak spot in the smartphone sector, we expect to see January sales in line with the historical benchmark thanks to a recent sharp rebound in automotive production in Asia (clearing of excess inventories coming to the end). In this environment, we continue to favour stocks with solid fundamentals compared to value stocks, namely ASML, ARM and Infineon.

## ANALYSIS

- **Global semiconductor sales continued to decrease on a yoy basis with December sales at USD27.2bn, down 9.0% yoy.** On a sequential basis, December's global sales were down 1.0% compared to November's sales. This was well below our benchmark based on 5-y historical data showing an historical seasonal increase of 7.8% in December vs. November. As a result, 2015 global semiconductor sales ended at USD335bn, USD1bn down compared to 2014, broadly flat as expected. Based on the visibility we now have, we anticipate a tough environment in smartphones while we see signs of recovery in the automotive sector impacted by inventory adjustments so far. The macro economy index is stabilising despite remaining at a very low level (US and Chinese January. PMI index <50).
- **As for November, all regions, including Asia, showed a yoy decrease in sales.** Indeed, December's sales in Asia, which represent 60.0% of semiconductor billings (of which ~50% are made in China), were down by 2.4% yoy. This was the third time in 2015 that Asian sales were down (July and November before). US momentum was particularly weak with a yoy decrease of 25.1% in December 2015. European and Japanese sales were down by 7.6% and 8.4% respectively.
- **January and beyond: January sales expected to be weak, 2015 to be flat.** We expected global December sales to be weak but the figures were worse than expected. This was due to the recent slowdown in the smartphone market, especially for the Apple supply chain which benefited from strong resistance so far. We believe the environment will remain tough in this segment over H1 2016 (at least). We also expected the end of the inventory adjustments in the automotive and Industrial sectors during Q1 2016 and we now believe that the automotive sector will benefit from a sharp rebound in production in China. Finally, we continue to see the PC segment at the bottom with no signs of improvement. January ISM data was stable with the US PMI Manufacturing index at 48.2 but below the 50 level indicating that economic conditions remain fragile. January's production index however was higher at 50.2 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 improved slightly with Markit PMI Manufacturing at 48.4 vs 48.2 (and 51.3 in April 2015). For 2016, we expect limited growth for the semiconductor industry at 2-3% or WW sales of USD343bn at mid-point.

## VALUATION

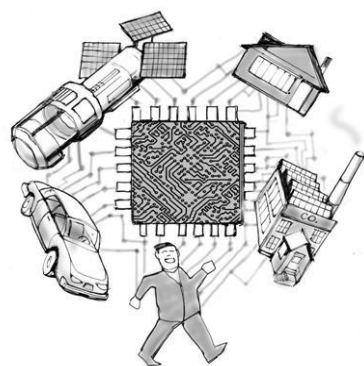
- **2016e P/E valuation lowered in January.** Our semiconductor valuation table highlights the valuation differences between the six sub-sectors of the industry. On average, IP & EDA vendors, and IDMs have the highest valuation metrics with an average 2016e P/E ratio of 16.9x and 15.2x respectively (down from 19.6x and 16.4x a month ago). Conversely, Memory makers have the lowest valuation with an average 2016e P/E ratio of 9.1x (down from 13.4x a month ago).

## BG semiconductor sub-sectors valuation table

Subsector avg. (# of comp.)	YTD stocks perf.		2016e			
	Avg. / Med.	High / Low	EV/Sales	EV/EBITDA	EV/EBIT	P/E
Fabless (14)	-5.8% / -8.7%	17.6% / -24.9%	2.4x	8.4x	10.3x	15.1x
Logic & Analog IDM (16)	-6.8% / -5.1%	1.9% / -19.9%	2.5x	7.8x	11.0x	15.2x
Memory IDM (4)	-15.6% / -15.8%	-8.7% / -22.1%	0.8x	2.7x	6.5x	9.1x
Foundry (5)	-5.9% / -8.7%	6.2% / -15.2%	1.4x	3.8x	10.3x	11.6x
Semi Equip. & Materials (11)	-4.7% / -5.5%	8.4% / -19.6%	1.9x	8.6x	15.9x	14.6x
IP & EDA (10)	-2.8% / -4.2%	7.0% / -8.2%	4.2x	13.4x	17.0x	16.9x

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

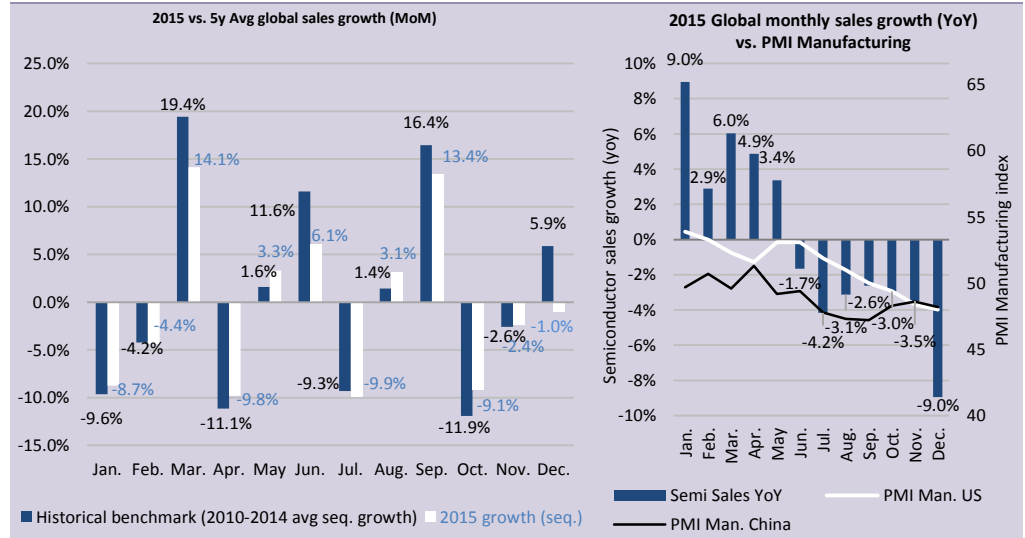
Sources: Thomson Reuters I.B.E.S.; Bryan Garnier & Co.



**NEXT CATALYSTS**

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

**December sales are well below seasonal, January is expected to be in line**



Sources: WSTS; Bryan Garnier & Co.

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**Analyst :**  
 Dorian Terral  
 33(0) 1.56.68.75.92  
 dterral@bryangarnier.com

**Sector Team :**  
 Richard-Maxime Beaudoux  
 Thomas Coudry  
 Gregory Ramirez

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Beaufort House	26 Avenue des Champs Elysées	750 Lexington Avenue	rue de Grenus 7	The Imperial Hotel
15 St. Botolph Street	75008 Paris	New York, NY 10022	CP 2113	Janpath
London EC3A 7BB	Tel: +33 (0) 1 56 68 75 00	Tel: +1 (0) 212 337 7000	Genève 1, CH 1211	New Delhi 110 001
Tel: +44 (0) 207 332 2500	Fax: +33 (0) 1 56 68 75 01	Fax: +1 (0) 212 337 7002	Tel +4122 731 3263	Tel +91 11 4132 6062
Fax: +44 (0) 207 332 2559	Regulated by the	FINRA and SIPC member	Fax+4122731 3243	+91 98 1111 5119
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