

09 June 2016 | Sector Update

Semiconductor Sector

Maintain NEUTRAL

Sales came in below the USD26b level

- **Softer demand and a range of macroeconomic headwinds impact April 2016 GSS**
- **WSTS revised downwards its 2016 sales projection, with an expectation of a modest rebound in 2017**
- **On the contrary, local export of semiconductor products grew by +5.6%yoy**
- **Strong investment in China supported BTB ratio for the month of April 2016**
- **Maintain NEUTRAL stance on the sector amid lack of catalysts**

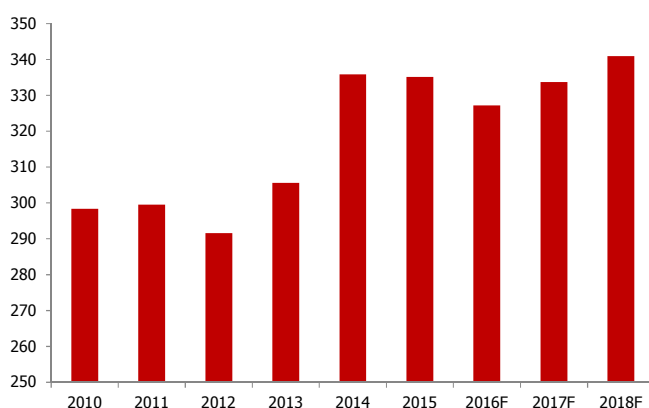
A. STATE OF GLOBAL SEMICONDUCTOR INDUSTRY

i. Global Semiconductor Sales (April 2016)

Weaker sales. Global semiconductor sales (GSS) contracted by -6.2%yoy in April 2016 to USD25.8b from USD27.6b in April 2015. Sales figure failed to sustain above the USD26b level for the first time in 31 months since September 2013. This also represents the tenth month of year-on-year contraction since July 2015. This is a continuation of the recent sluggish market trend which has been brought about by soft demand and a range of macroeconomic headwinds. However, certain product categories such as microprocessors and analog products posted modest increase in sales. Regionally, only Japan and China showed positive sales trajectory.

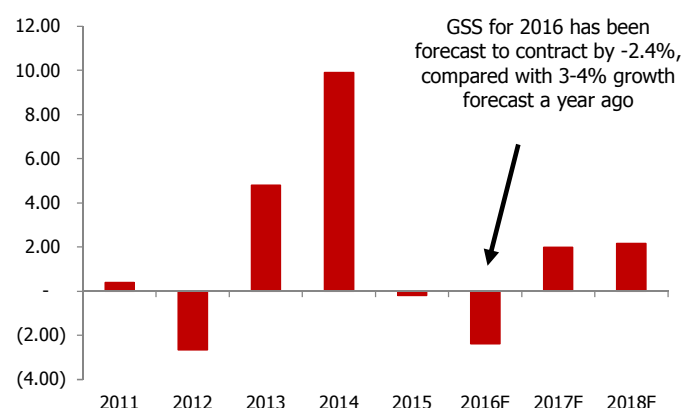
Downward revision in 2016 sales forecast. The World Semiconductor Trade Statistics (WSTS) organisation has made a significant revision in its forecast. GSS in 2016 is now projected to contract by -2.4%yoy to USD327.2b, compared with a forecast of 1.8% growth made early this year. Following the revision, 2016 sales growths in Optoelectronics, Sensors and Analog are expected to be offset by the decline in Memory and Logic. On a geographical basis, all the regions are expected to experience lower sales. The Americas region is expected to record the largest decline as compared to the other regions. On a positive note, WSTS expects sales are expected to rebound in 2017 and 2018 by +2.0%yoy and +2.2%yoy respectively.

Chart 1: Annual global semiconductor sales (USDb)



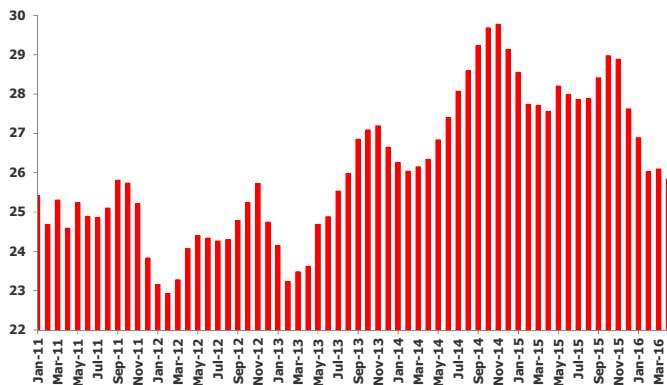
Sources: WSTS, MIDFR

Chart 2: Annual global semiconductor sales growth (%yoy)



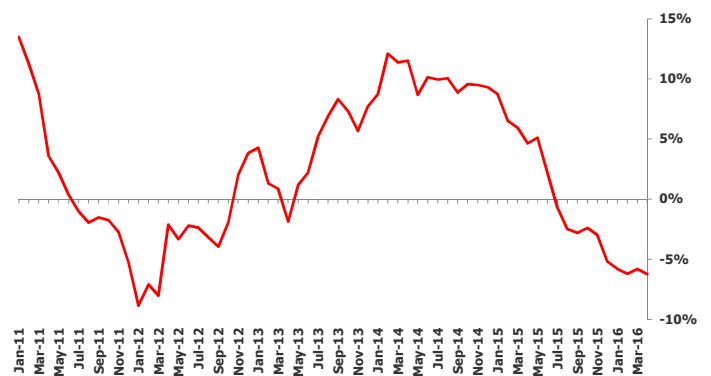
Sources: WSTS, MIDFR

Chart 3: Monthly global semiconductor sales (USDb)



Sources: SIA, MIDFR

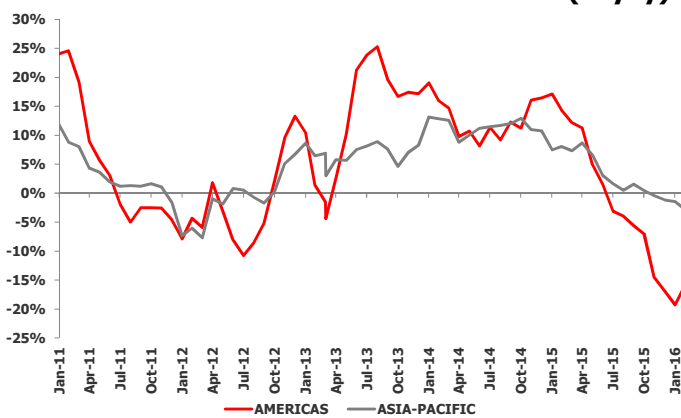
Chart 4: Global semiconductor sales (%yoy)



Sources: SIA, MIDFR

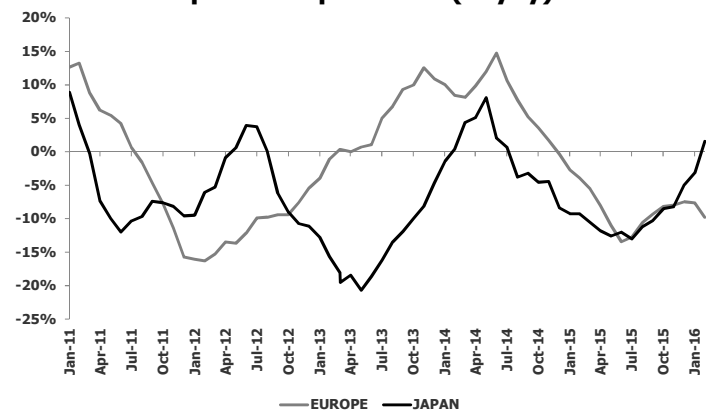
Mixed regional performance. For the month in review, only China and Japan showed positive growth of +0.3%yoy and +2.2%yoy respectively. Japan recorded its second month of year-over-year growth after experiencing sales decline for the past 18 consecutive months. On the other hand, sales from the Americas dropped to a 33 month low of USD4.8b. This represents a decline of -14.8%yoy. Sales from the European and Asia Pacific regions also decreased by -8.6%yoy and -8.2%yoy respectively.

Chart 5: Americas and Asia Pacific sales (%yoy)



Sources: SIA, MIDFR

Chart 6: Europe and Japan sales (%yoy)



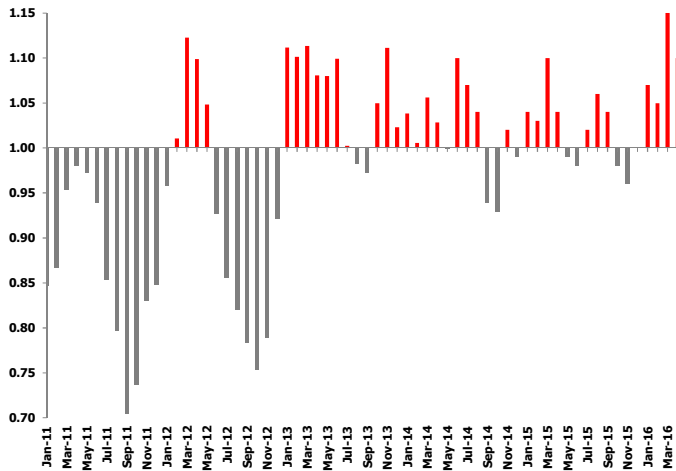
Sources: SIA, MIDFR

ii. Capital Spending: Book-To-Bill Ratio (April 2016)

Book-to-Bill (BTB) ratio remains in the positive territory. The North America-based manufacturers of semiconductor equipment posted a BTB ratio of 1.10x for the month of April 2016. A BTB ratio of 1.10x indicates that USD110 worth of orders were received for every USD100 of products billed for the month. Inclusive of April 2016, the BTB ratio has remained at or above parity for the fifth consecutive month. The positive BTB ratio was mainly attributable to the strong investments in China.

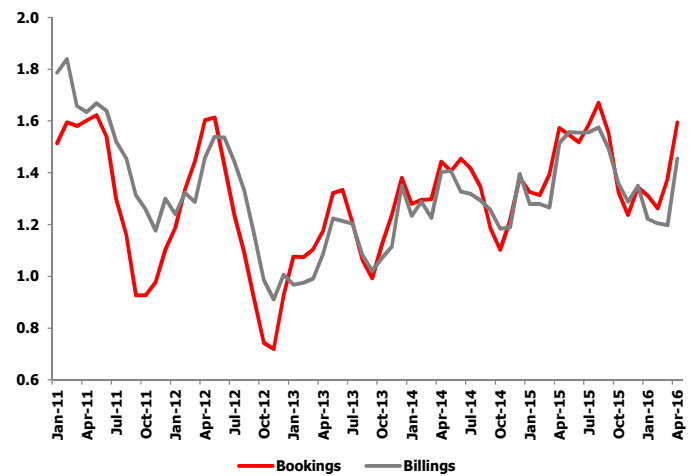
Bookings continue to pick up pace. Semiconductor equipment bookings for the month of April 2016 came in marginally higher (+1.3%yoy) at USD1,594.6m. This represents the highest bookings seen for the past eight months since August 2015. The higher bookings were mainly attributable to strong investments in 3D NAND segment.

Chart 7: BTB ratio (x)



Sources: SEMI, MIDFR

Chart 8: Bookings & billings (USD b)



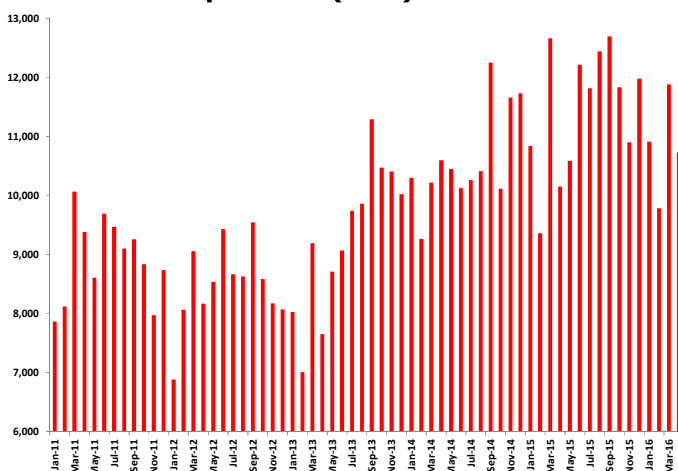
Sources: SEMI, MIDFR

Billings showing signs of improvement. Billings for the month of April 2016 decreased by -4.0%yoy to USD1,455.0m. However, as expected, billings have improved by +21.5mom on a monthly sequential basis. We expect the trend to continue as long as bookings come in sequentially higher.

B. MALAYSIA SEMICONDUCTOR EXPORT (April 2016)

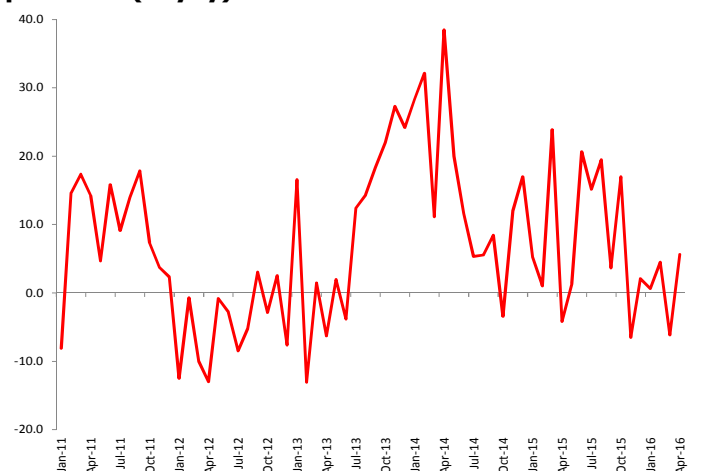
Exports improved in April 2016. Malaysia's export of semiconductor products for the month of April 2016 improved by +5.6%yoy to RM1.07b. This is in contrast with GSS' sales performance in the same month. Moving forward, we expect export of semiconductor products to remain lacklustre. This is in view of the weak global economic outlook, especially the slowdown in the U.S. and China economies. There is a high correlation between the semiconductor industry and the global economy.

Chart 9: Sales figures for local export of semiconductor products (RMb)



Sources: DOS, MIDFR

Chart 10: Growth of local export of semiconductor products (%yoy)



Sources: DOS, MIDFR

C. INDUSTRY VIEW – MIDF RESEARCH

1. We expect smartphone shipment growth to remain lacklustre due to the **absence of flagship killer products**. The upcoming iPhone 7 is expected to incorporate minimal upgrades. This would be insufficient to entice Apple followers to upgrade their existing smartphone to a new handset. In addition, **limited distribution** of new smartphone models would further dampen the shipment of smartphones.
2. **Much of the excitement would be seen next year** where Apple is expected to make a major overhaul of the iPhone which may include a dual curve display. In addition, the market is speculating that Samsung may be offering two new smartphones with bendable screens early next year. According to online sources, one of the smartphones will be able to be folded in half while another will have the ability to be furled to become a handset or a tablet.
3. Nonetheless, the **long-term outlook of the industry is still healthy**, supported by the Internet of Things (IOT).
 - a. Demand for communication devices will continue to be supported by the low-to-middle class consumers seeking to stay connected and to be at the forefront of the latest cutting edge technological product offering. This will be in favour of electronic companies which are able to offer end-products at competitive prices, thus, advocating a high volume business strategy.
 - b. Similarly, there are stable and growing demands stemming from the automotive industry as more vehicles are required to be embedded with more sensors and high-tech gadgets.
4. All factors considered, we maintain our **NEUTRAL** stance on the sector.



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MIDF AMANAH INVESTMENT BANK : GUIDE TO RECOMMENDATIONS

STOCK RECOMMENDATIONS

BUY	Total return is expected to be >15% over the next 12 months.
TRADING BUY	Stock price is expected to <i>rise</i> by >15% within 3-months after a Trading Buy rating has been assigned due to positive newsflow.
NEUTRAL	Total return is expected to be between -15% and +15% over the next 12 months.
SELL	Total return is expected to be <-15% over the next 12 months.
TRADING SELL	Stock price is expected to <i>fall</i> by >15% within 3-months after a Trading Sell rating has been assigned due to negative newsflow.

SECTOR RECOMMENDATIONS

POSITIVE	The sector is expected to outperform the overall market over the next 12 months.
NEUTRAL	The sector is to perform in line with the overall market over the next 12 months.
NEGATIVE	The sector is expected to underperform the overall market over the next 12 months.