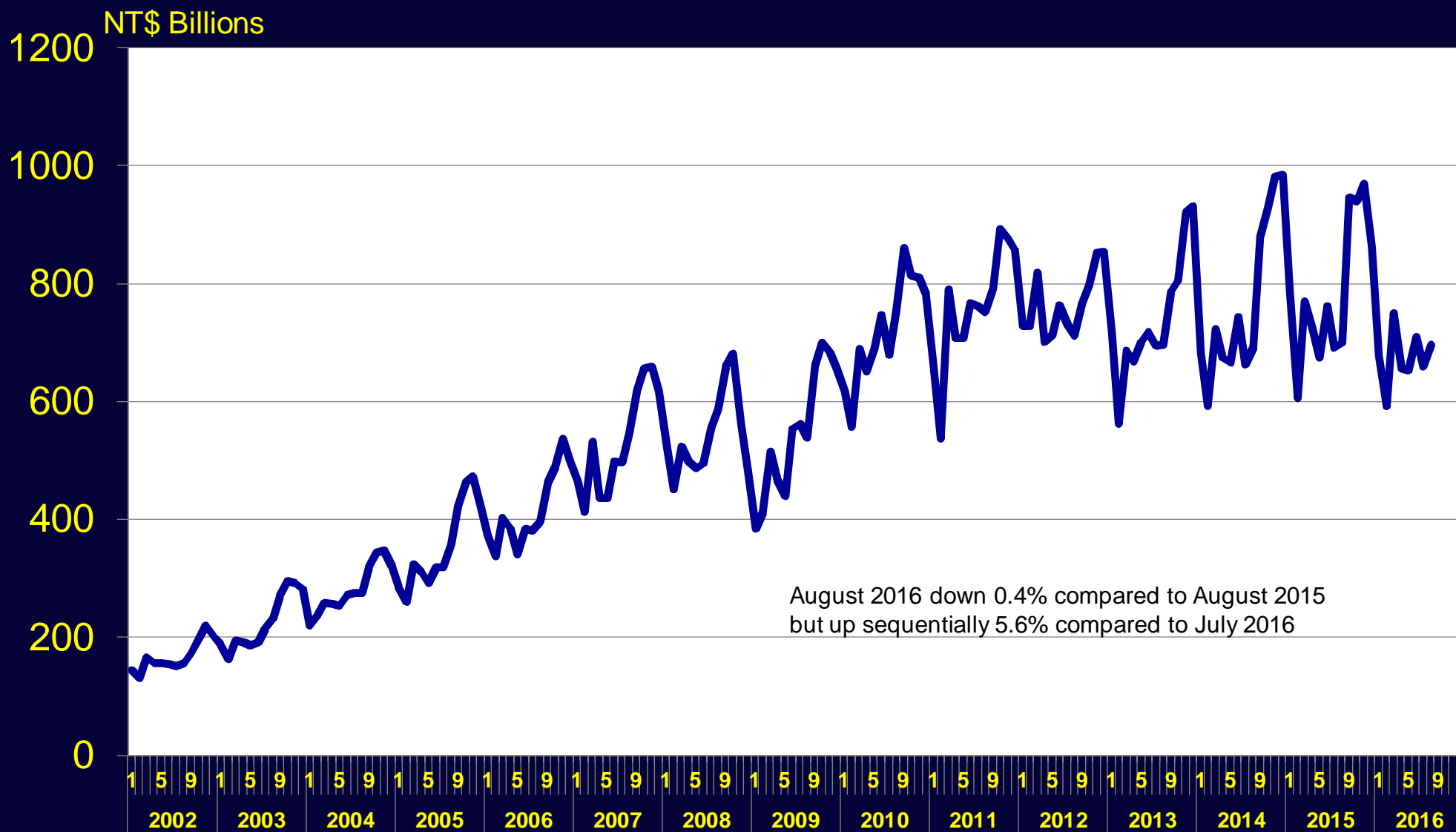


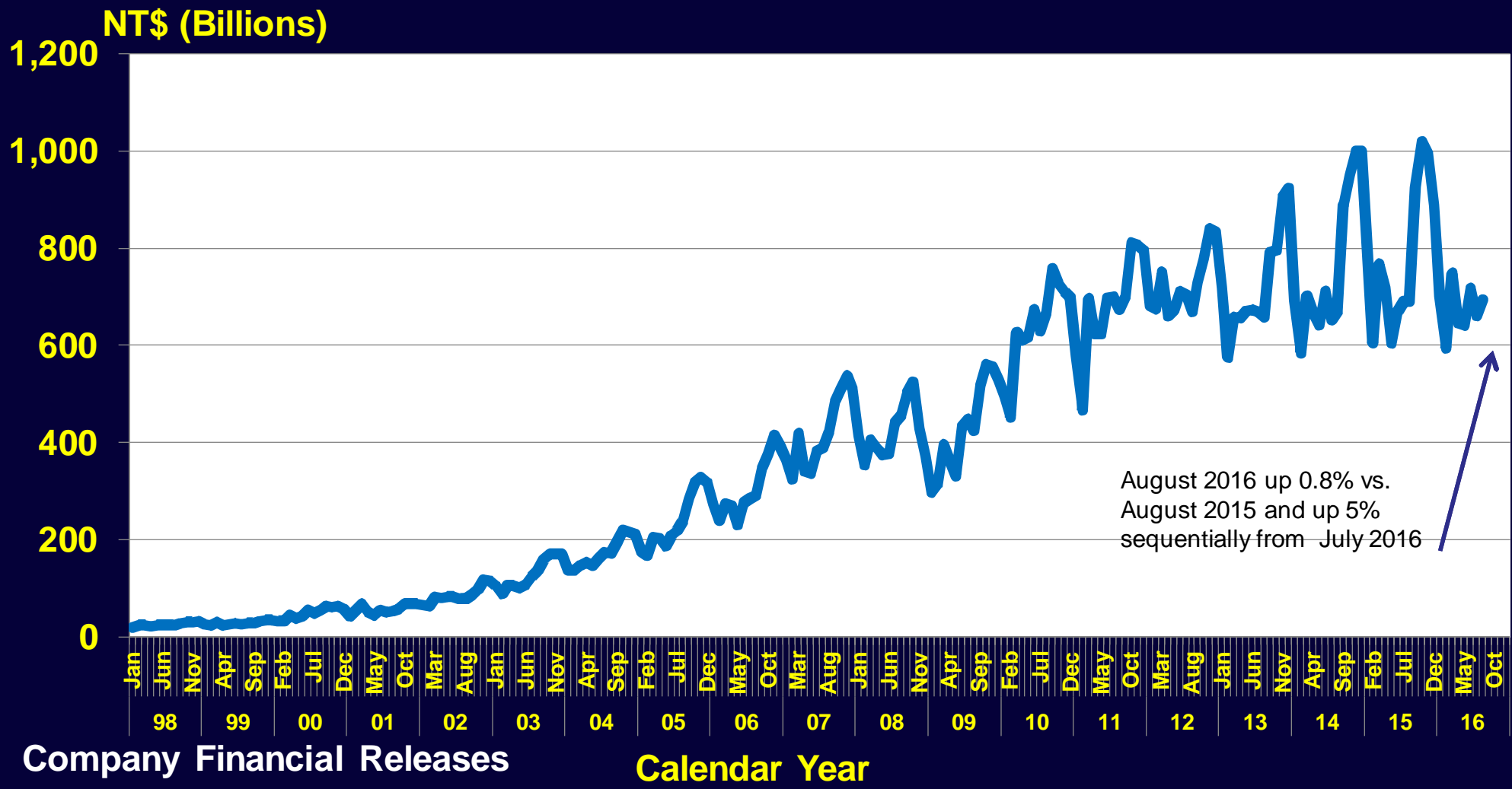
Taiwan/China Electronic Equipment Producers Composite of 101 Manufacturers Consolidated Revenue

Chart 1



Taiwan listed companies, often with significant manufacturing in China

Taiwan ODM Companies Composite Sales of 11 Large Manufacturers



Asustek Computer, Chei Mei, Compal Electronics, Foxconn, Chimei Innolux, Inventec, Inventec Appliance, Lite On Technology, Mitac International, Pegatron, Quanta Computer, Wistron, Chei Mei Display replacing Chei Mei & Innolux Display 3/10 & later

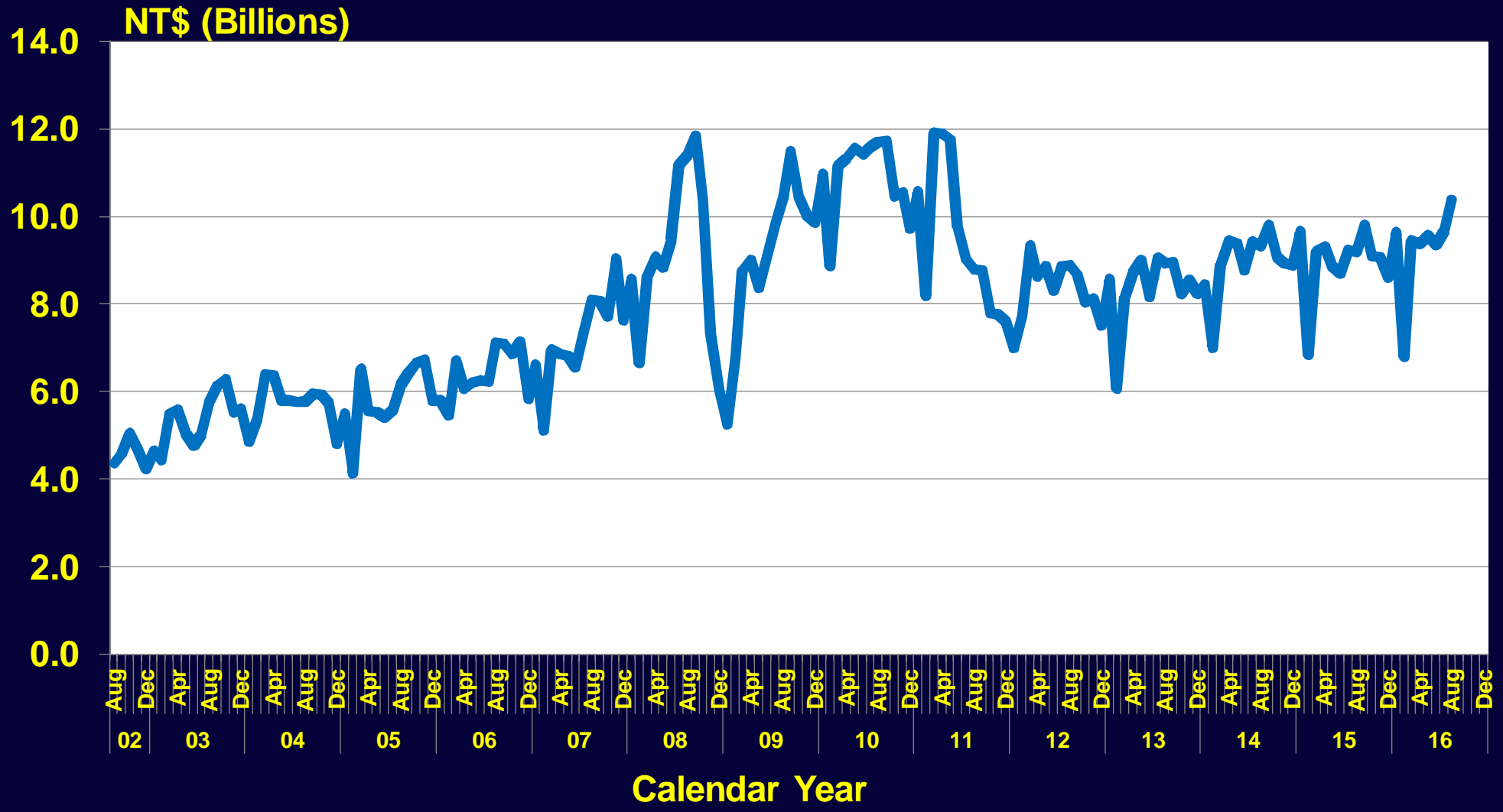
Taiwan Wafer Foundries Composite of 14 Manufacturers



VIA Technologies, Advance Microelectronics, Advance Wireless Semiconductor, Epasil Technologies, Inotera Memories, Macronix Intl, Mosel Vitelic, Powerchip Semi, Precision Silicon, ProMOS Tech, TSMC, United Microelectronics, Vanguard International Semi, Winbond Electronics

Chart 4

Taiwan Passive Component Companies Composite Sales of 25 Manufacturers

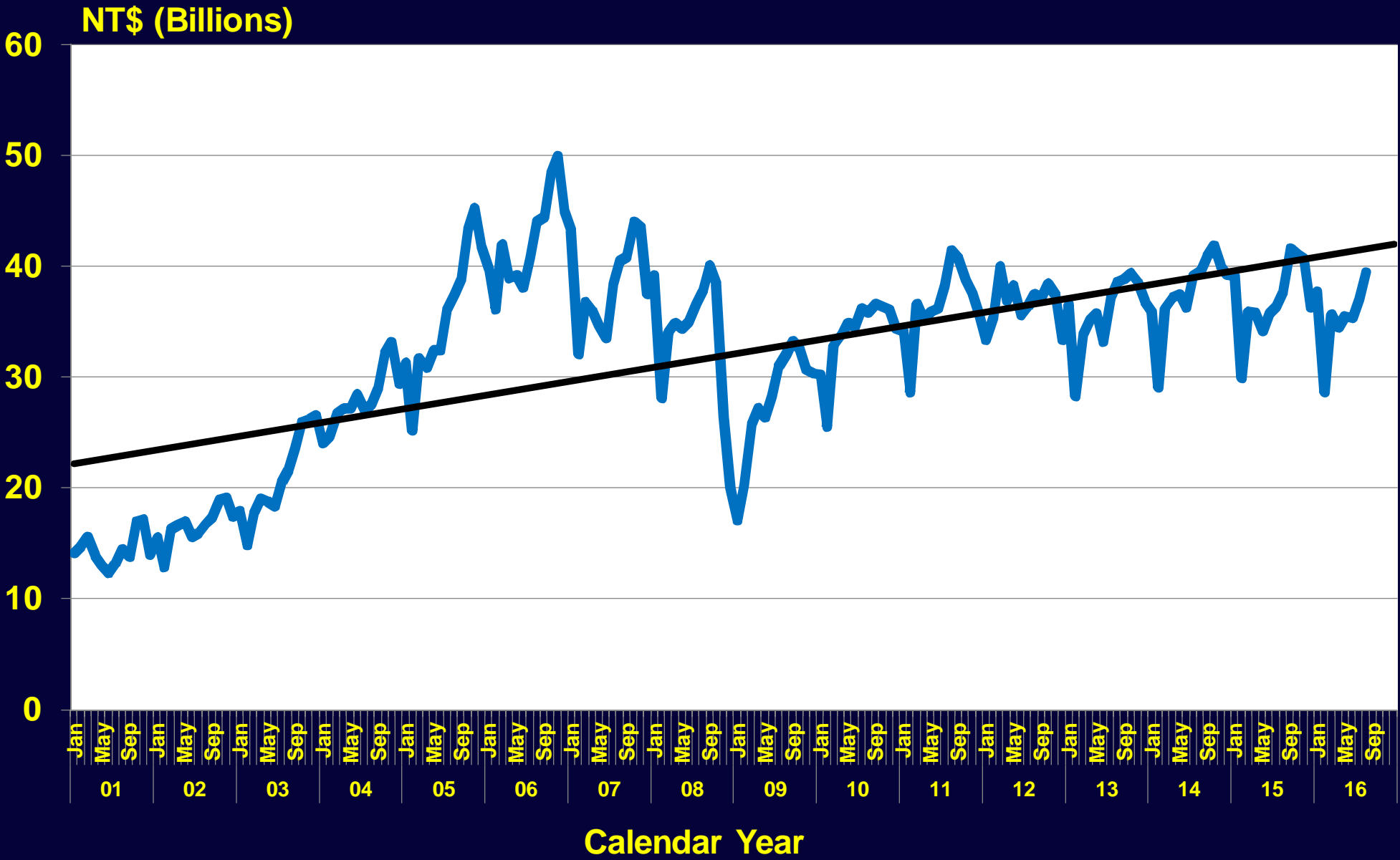


Chilsin Electronics, Cyntec, (FCE) Feei Cheng Enterprise, Holy Stone Enterprise, 3H (Honey Hope Honesty Enterprise), HJC (Hua Jung Components), Inpaq, Jaan Chem Technological, Kaimei Electronic, King Core Electronics, Laser Tek, Leatec Fine Ceramics, Lelon Electronics, Linton Technology, PTTC (Polytronics Technology Corp), PDC (Prosperity Dielectrics Co), Ralec Electronic, Ta-I Technology, Taiwan Alpha Electronic, Team Young Advanced Ceramics, Teapo Electronic, Thinking Electronic Industrial, WTC (Walsin Technology Corp), Yageo, YCTC (Yeh-Chiang Technology Corp)

Chart 5

Taiwan Rigid & Flex PCB Shipments

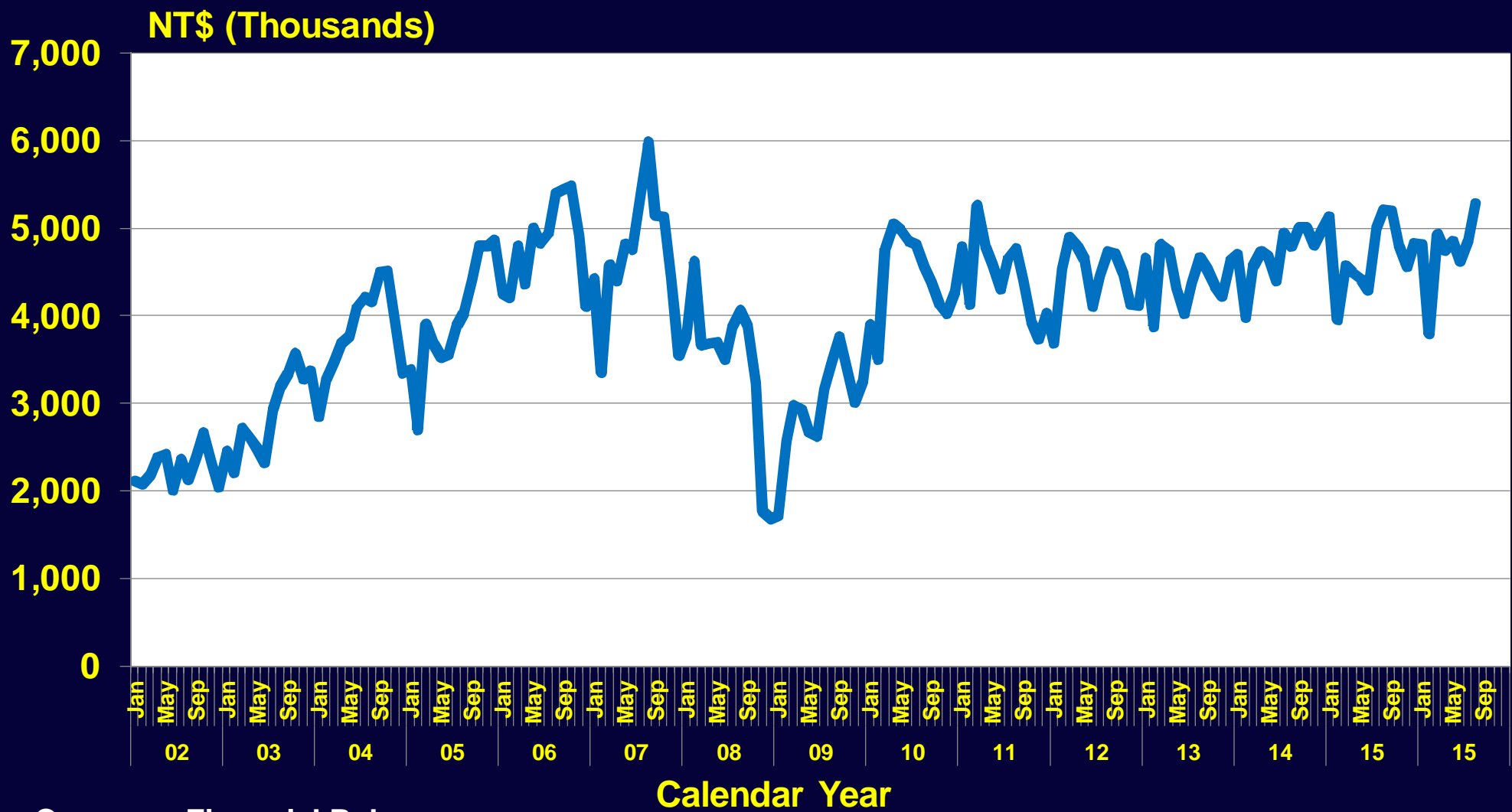
Broad Composite of 46 Taiwan-listed Manufacturers



Company Financial Releases

Chart 6

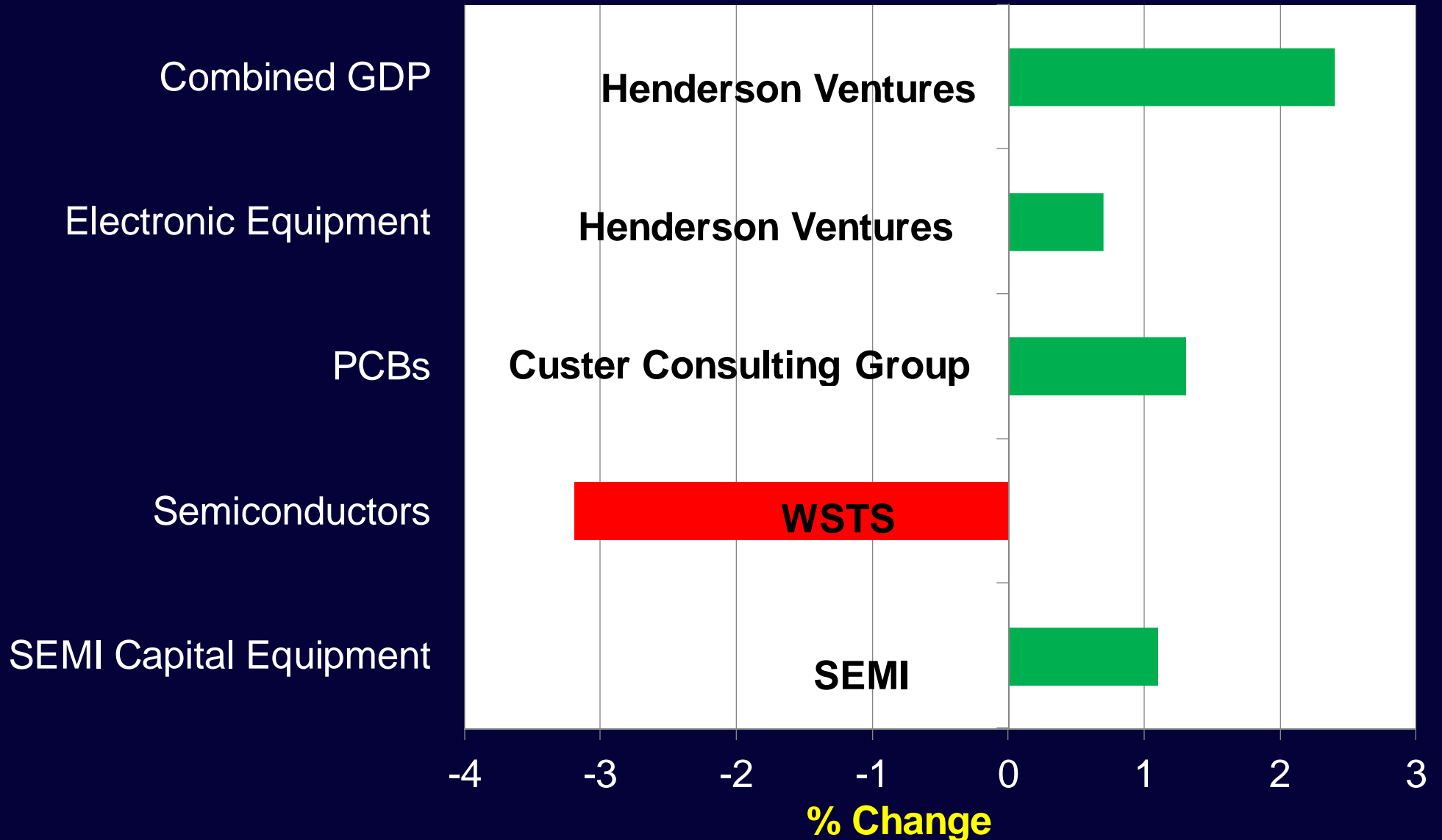
Taiwan Rigid Laminate/Prepreg Vendors Composite of 8 Large Manufacturers



Company Financial Releases

Elite Materials, Top Union Electronics, Taiwan Union Technology, Hwa Woei Laminate, Uniplus Electronics, Iteq, Taiwan Leader Advanced Technology, Shinemore Technology

Global Electronic Supply Chain Forecast 2016 vs. 2015



Global Electronic Supply Chain Forecast

2017 vs. 2016

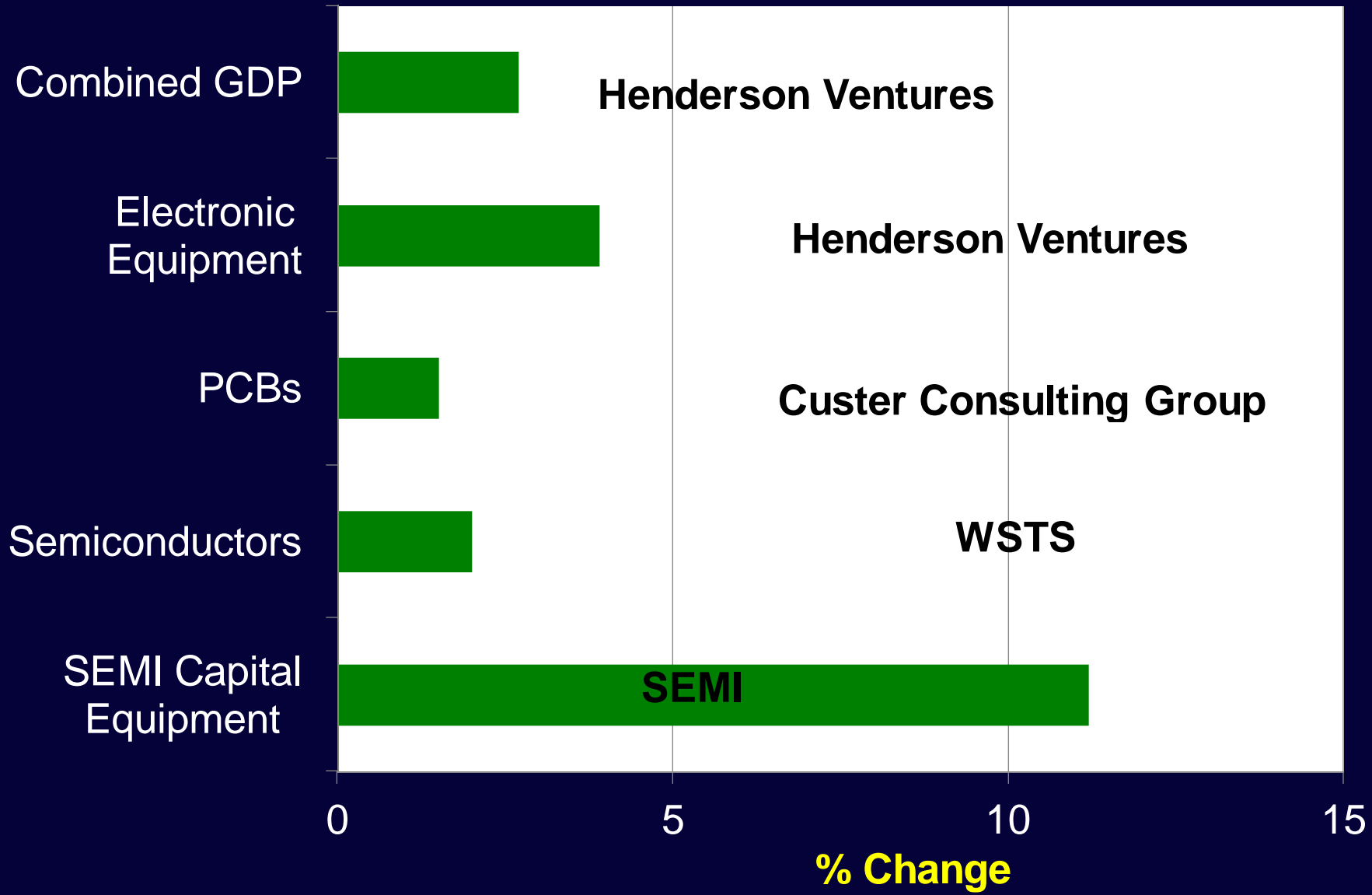


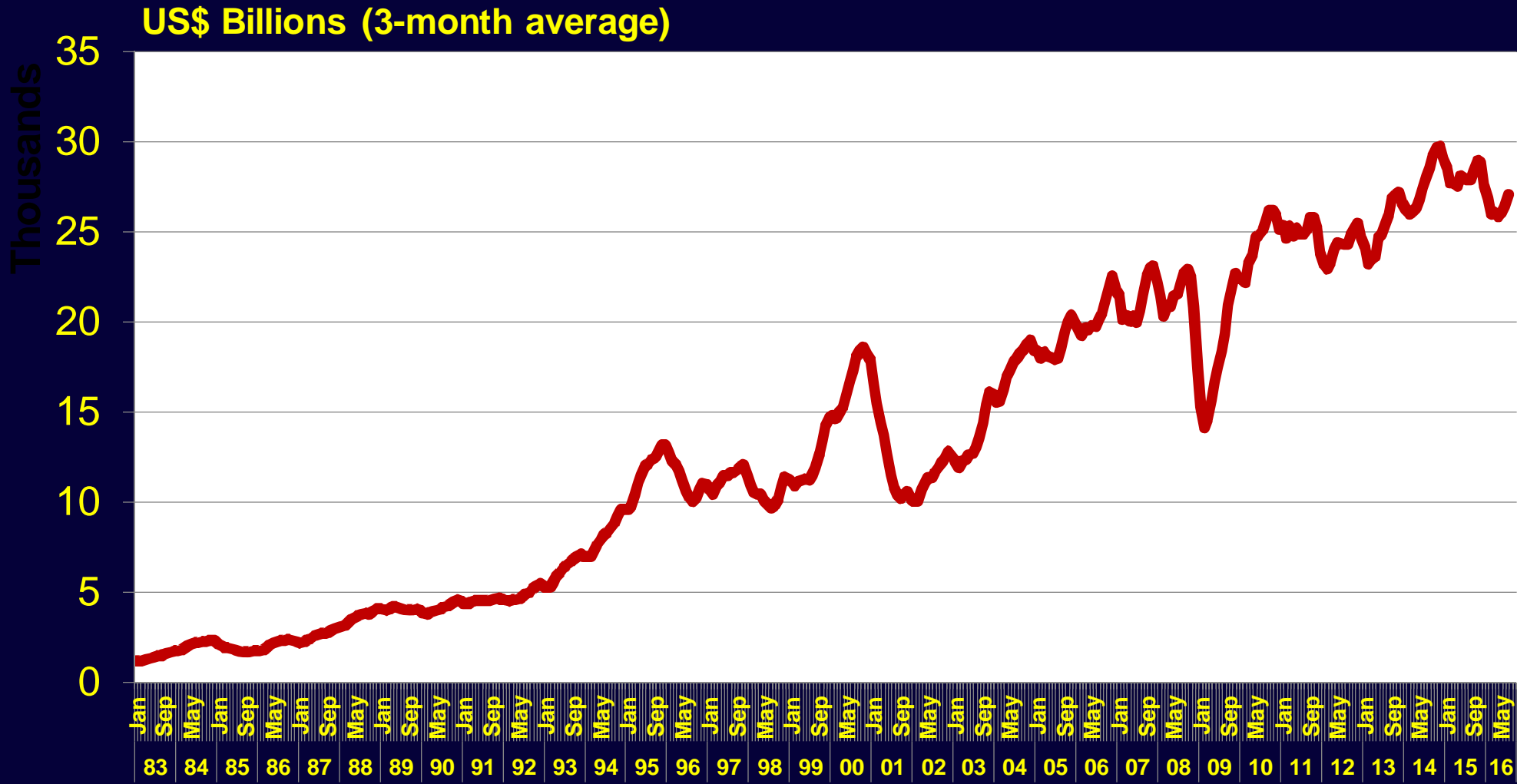
Chart 9

Monthly Semiconductor Shipments \$ Billions (3-month avg in US\$)

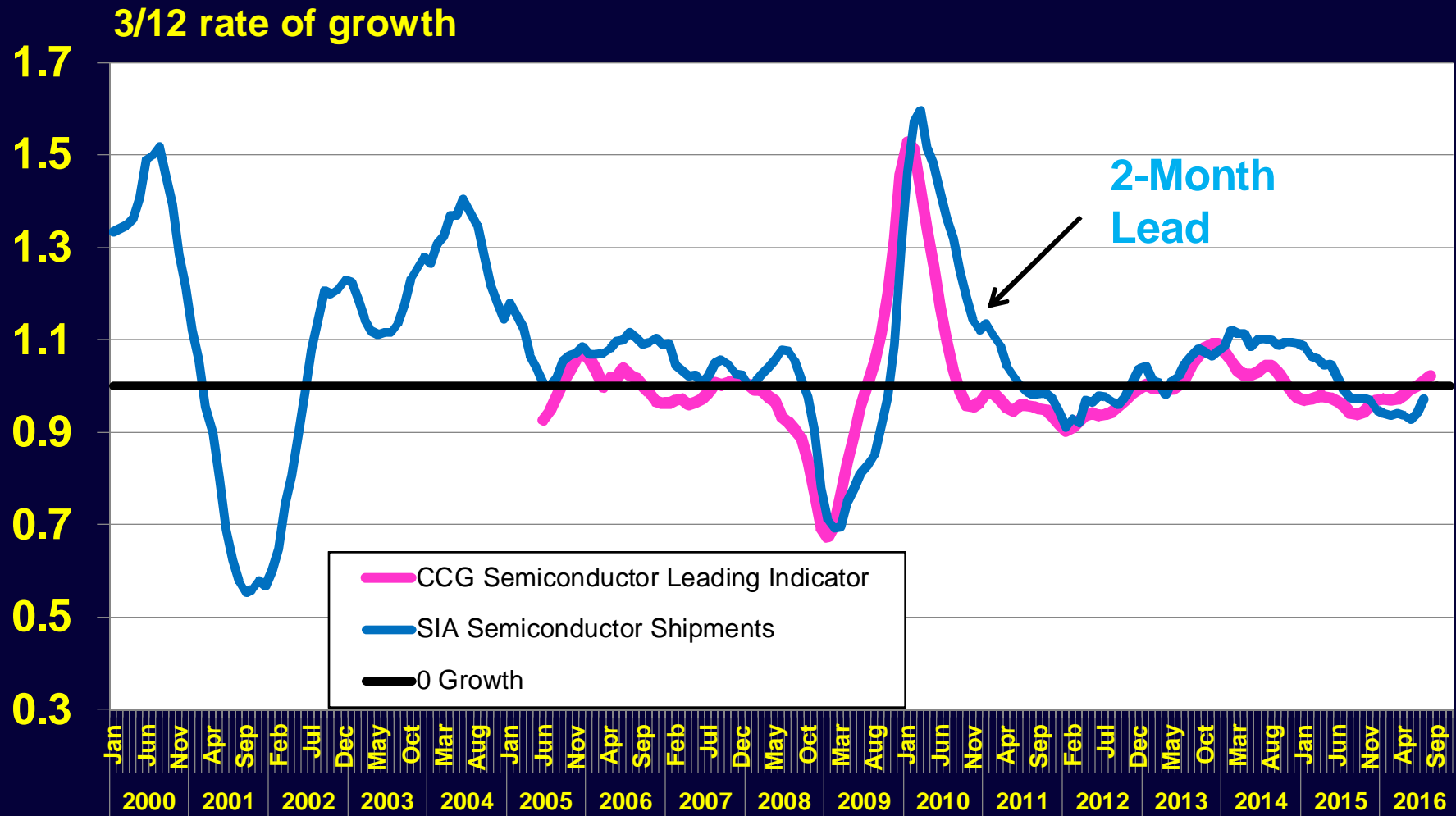
| | <u>7/15</u> | <u>7/16</u> | <u>% CH</u> |
|--------------------------|-------------|-------------|-------------|
| Americas | 5.51 | 5.10 | - 7.5% |
| Europe | 2.83 | 2.70 | - 4.9% |
| Japan | 2.63 | 2.60 | - 1.1% |
| China | 8.18 | 8.56 | + 4.7% |
| Asia Pacific / All Other | 8.71 | 8.12 | - 6.8% |
| Total | 27.87 | 27.08 | - 2.8% |

World Semiconductor Shipments

Monthly US\$



CCG Semiconductor Leading Indicator vs. Global Semiconductor Shipments



Total Semiconductor Shipments to an Area

Monthly Shipments - Reporting Firms

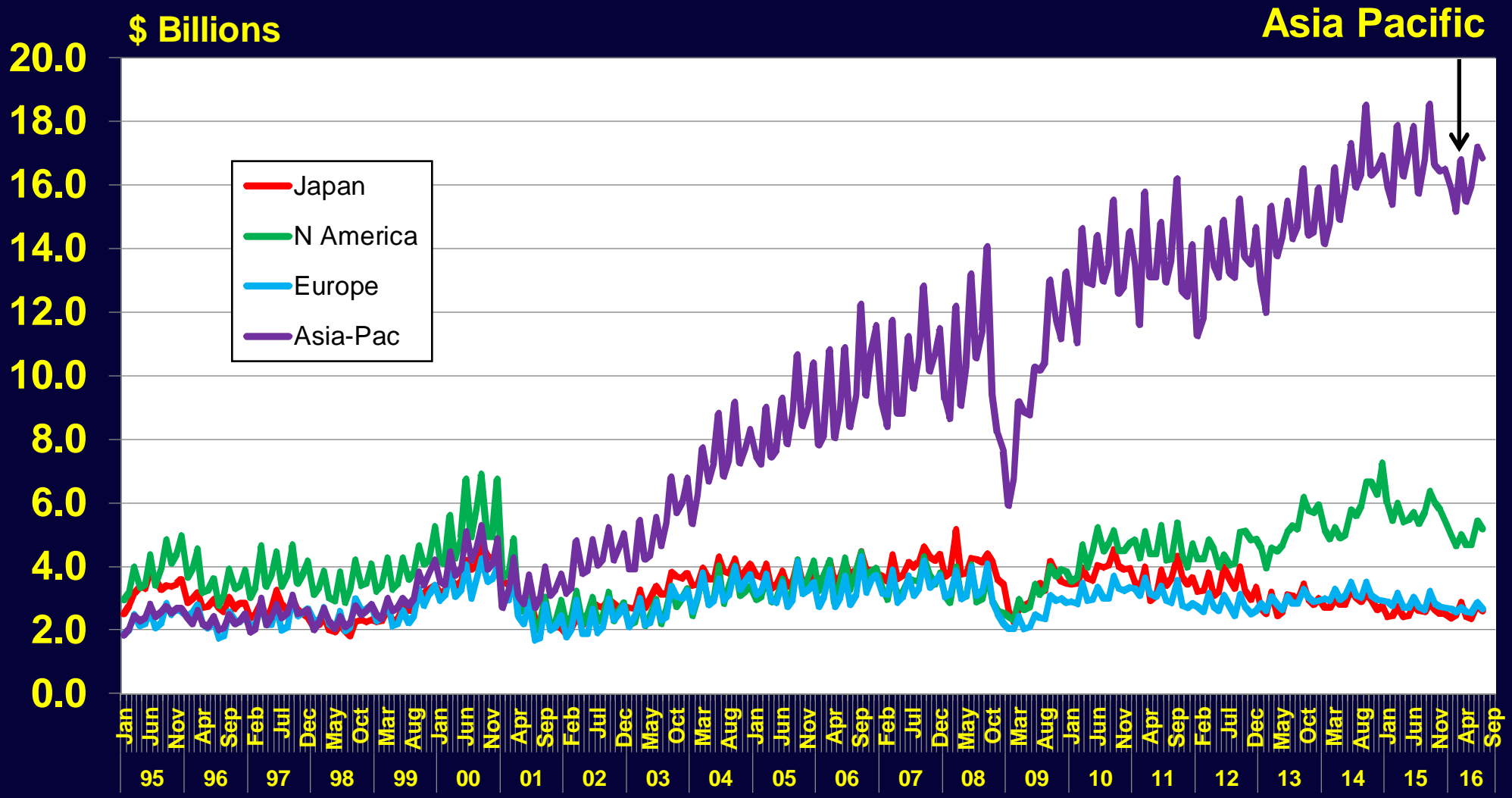
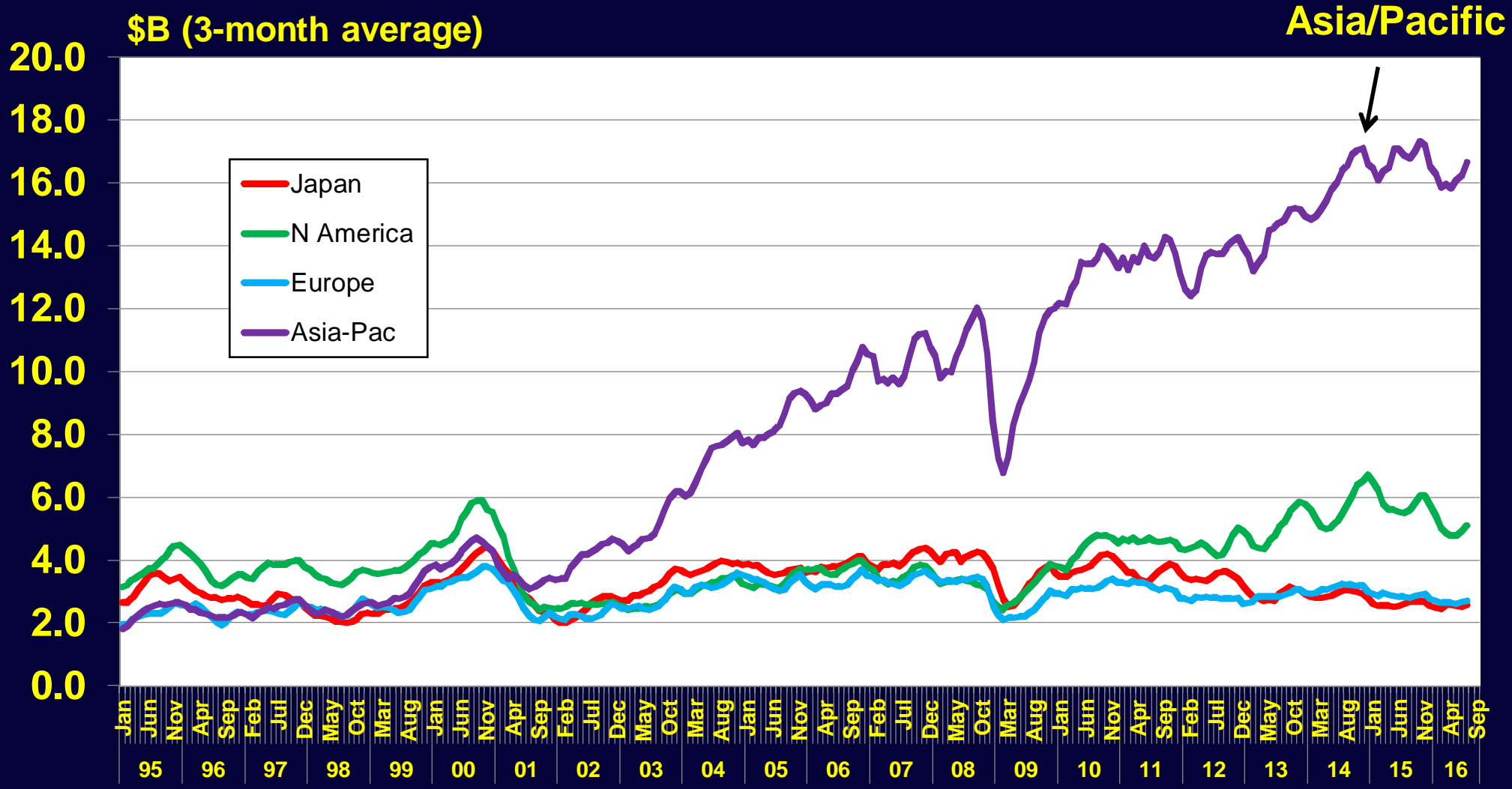


Chart 13

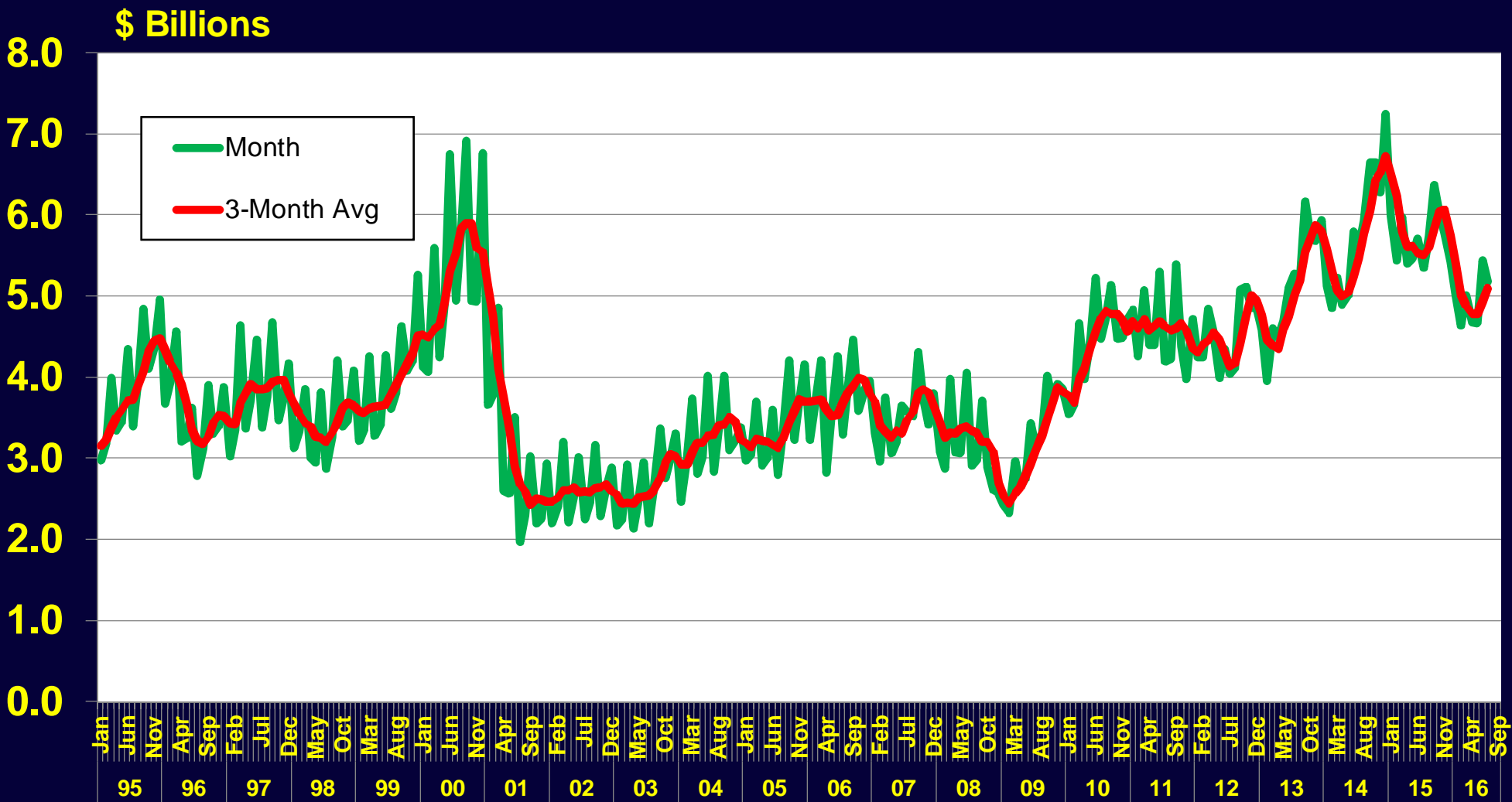
Total Semiconductor Shipments to an Area

Monthly Shipments - Reporting Firms

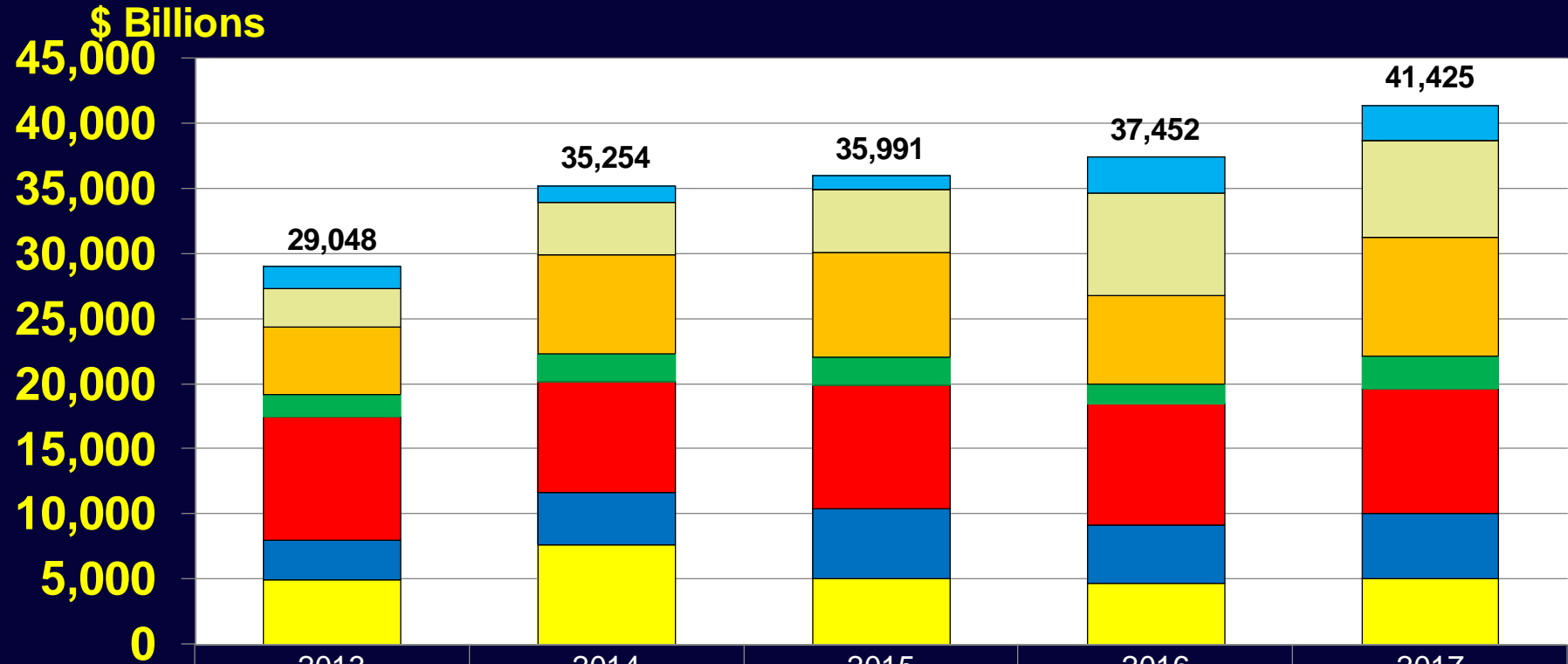


N American Semiconductor Shipments

Monthly & 3-Month Average Shipments



Fab Equipment Spending Front End (including new, used, in-house)

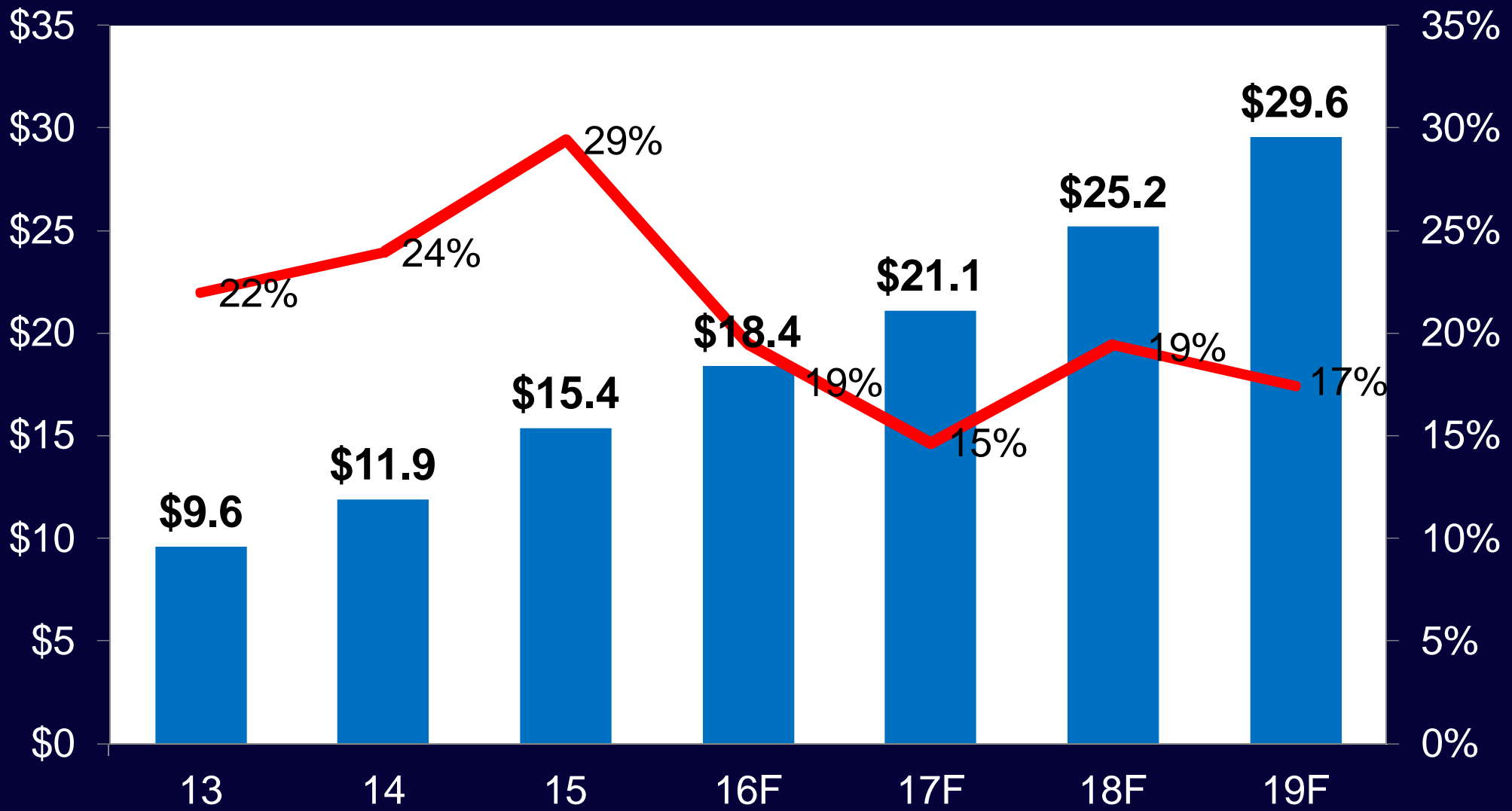


| | 2013 | 2014 | 2015 | 2016 | 2017 |
|-------------------|--------|--------|--------|--------|--------|
| Total | 29,048 | 35,254 | 35,991 | 37,452 | 41,425 |
| SE Asia | 1,695 | 1,286 | 1,079 | 2,778 | 2,746 |
| China | 2,999 | 4,058 | 4,787 | 7,869 | 7,422 |
| S Korea | 5,140 | 7,588 | 8,083 | 6,797 | 9,127 |
| Europe & Mid East | 1,745 | 2,182 | 2,104 | 1,530 | 2,446 |
| Taiwan | 9,472 | 8,478 | 9,505 | 9,268 | 9,584 |
| Japan | 3,055 | 4,023 | 5,402 | 4,496 | 5,059 |
| Americas | 4,942 | 7,639 | 5,031 | 4,714 | 5,041 |

Internet of Things Semiconductor Market

Worldwide Sales (\$B)

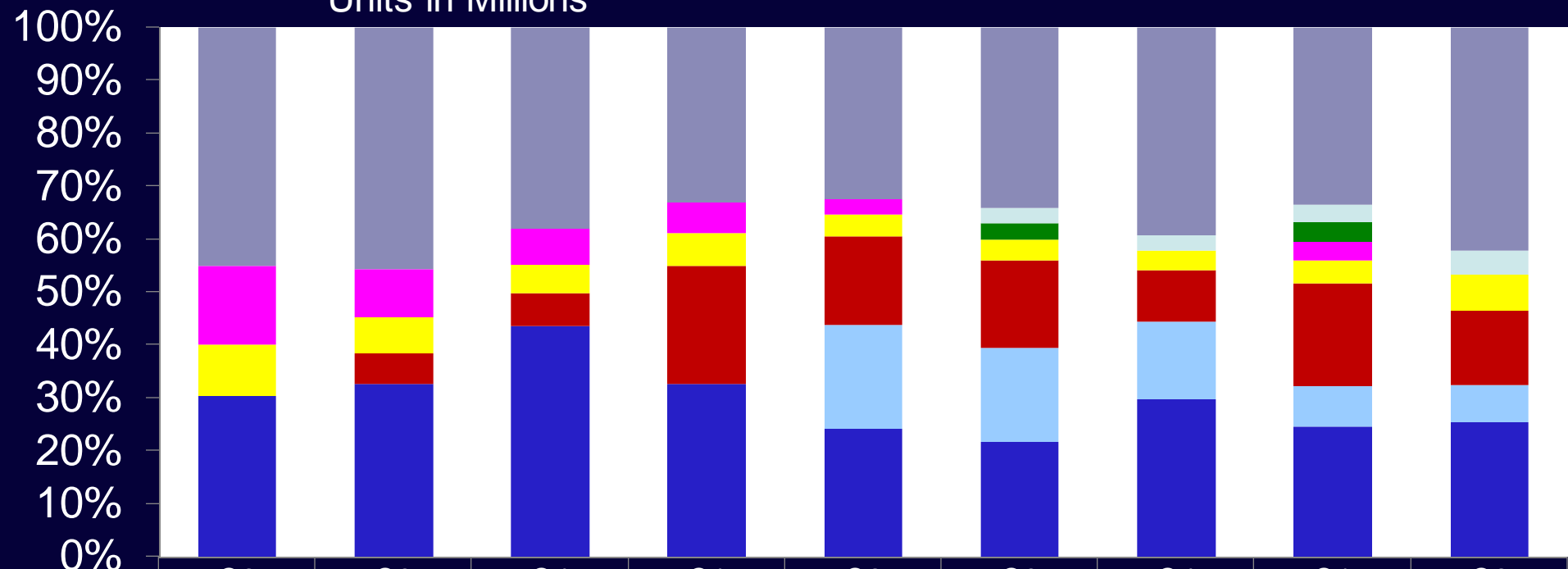
% Change



Wearable Vendors

Global % Share of Largest Suppliers

Units in Millions



| | Q2 | Q3 | Q4 | Q1 | Q2 | Q3 | Q4 | Q1 | Q2 |
|-----------|------|------|------|------|------|------|------|------|------|
| | 2014 | | | 2015 | | | 2016 | | |
| Others | 45.0 | 45.9 | 38.1 | 33.1 | 33.3 | 34.1 | 39.3 | 33.4 | 42.1 |
| Lifesense | | | | | | 2.9 | 2.9 | 3.4 | 4.6 |
| BBK | | | | 0.0 | | 3.1 | | 3.6 | |
| Samsung | 14.9 | 9.0 | 6.7 | 5.8 | 3.1 | | | 3.6 | |
| Garmin | 9.7 | 7.0 | 5.3 | 6.1 | 4.2 | 3.9 | 3.7 | 4.4 | 6.9 |
| Xiaomi | | 5.7 | 6.3 | 22.4 | 17.2 | 16.6 | 9.6 | 19.4 | 14.0 |
| Apple | | | | 0.0 | 20.3 | 17.7 | 14.8 | 7.6 | 7.0 |
| Fitbit | 30.4 | 32.8 | 43.6 | 32.6 | 24.9 | 21.7 | 29.7 | 24.6 | 25.4 |

World's Top 15 Exporters in 2015

