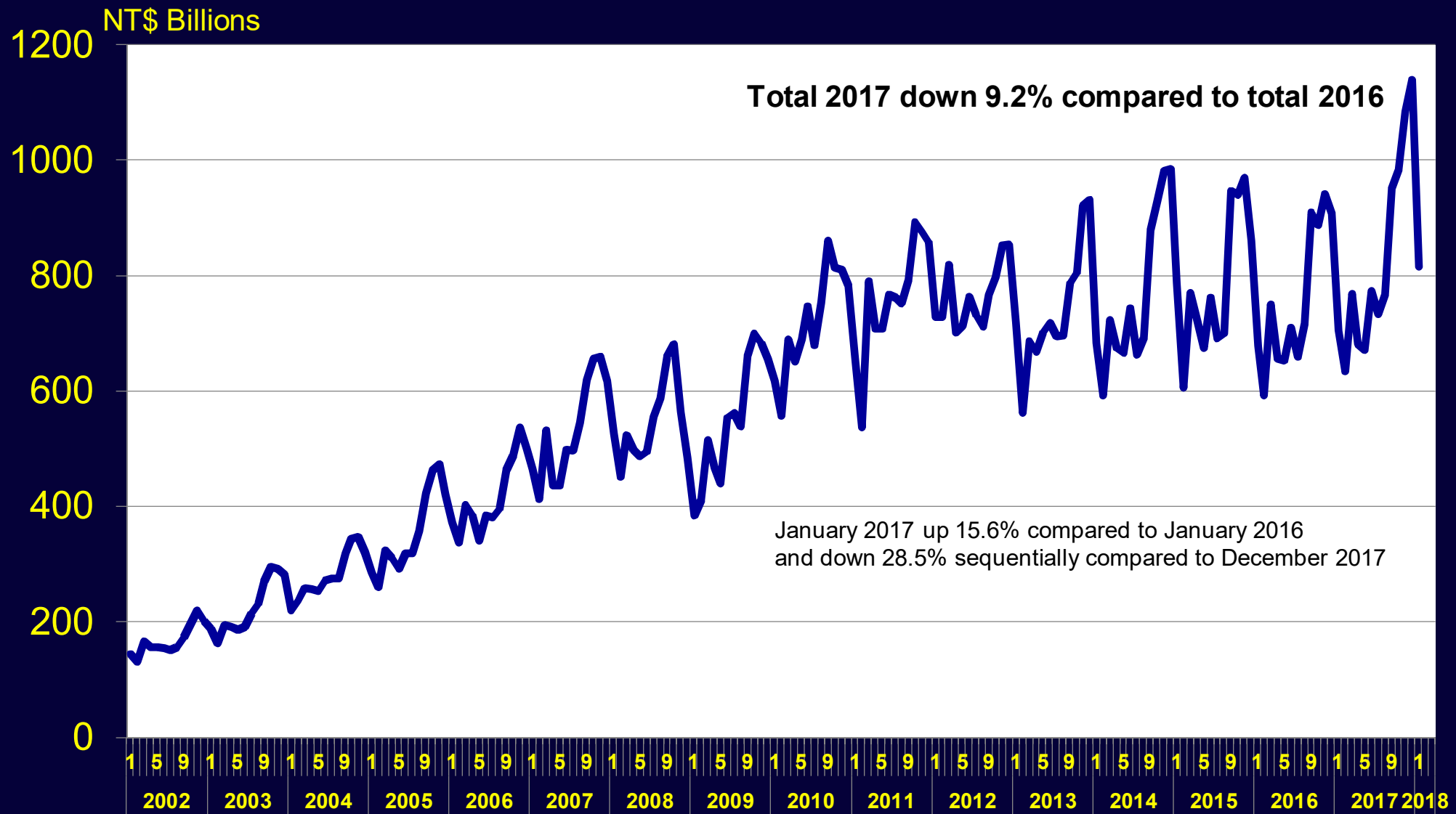


Chart 1

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

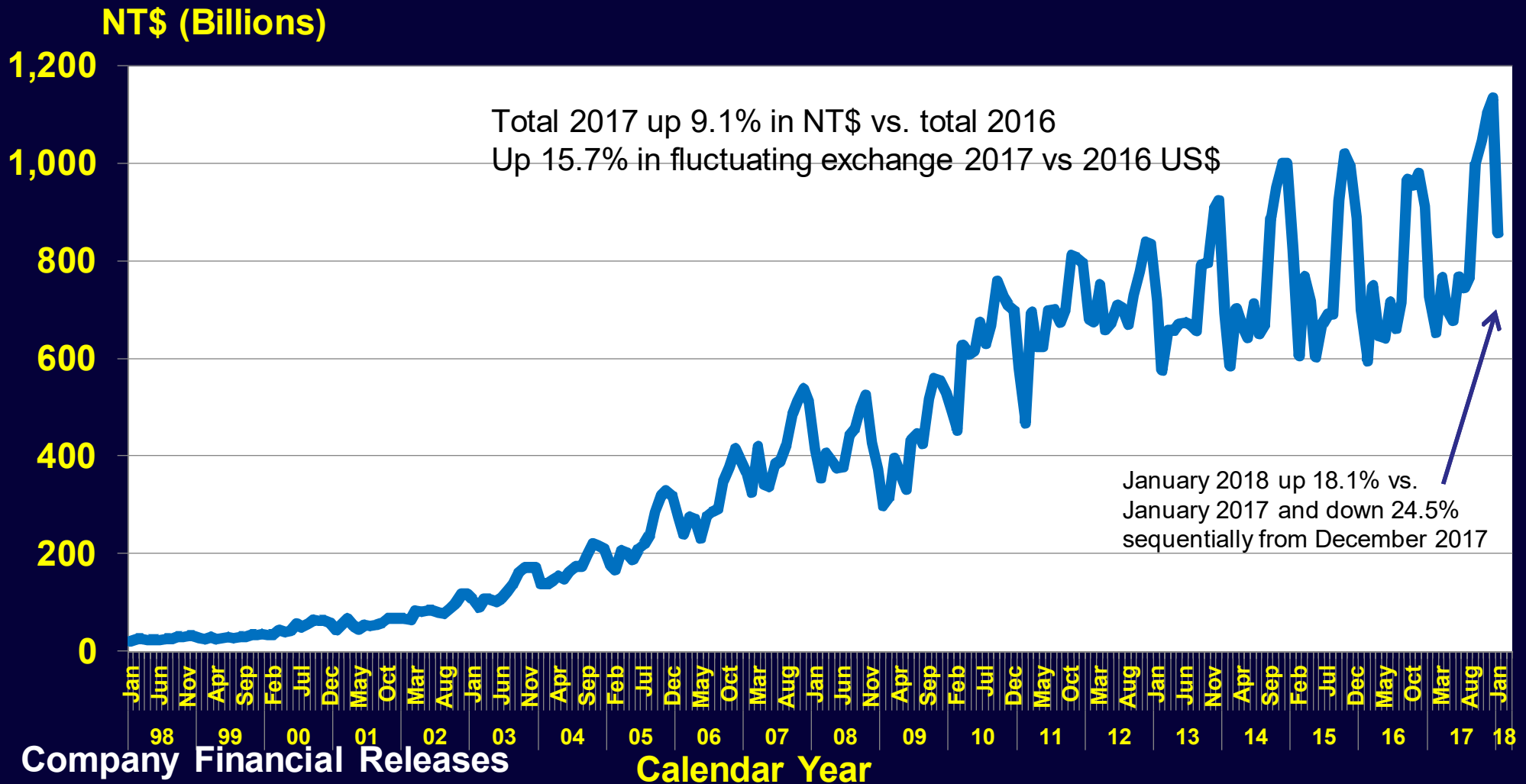


Taiwan listed companies, often with significant manufacturing in China

Chart 2

Taiwan ODM Companies

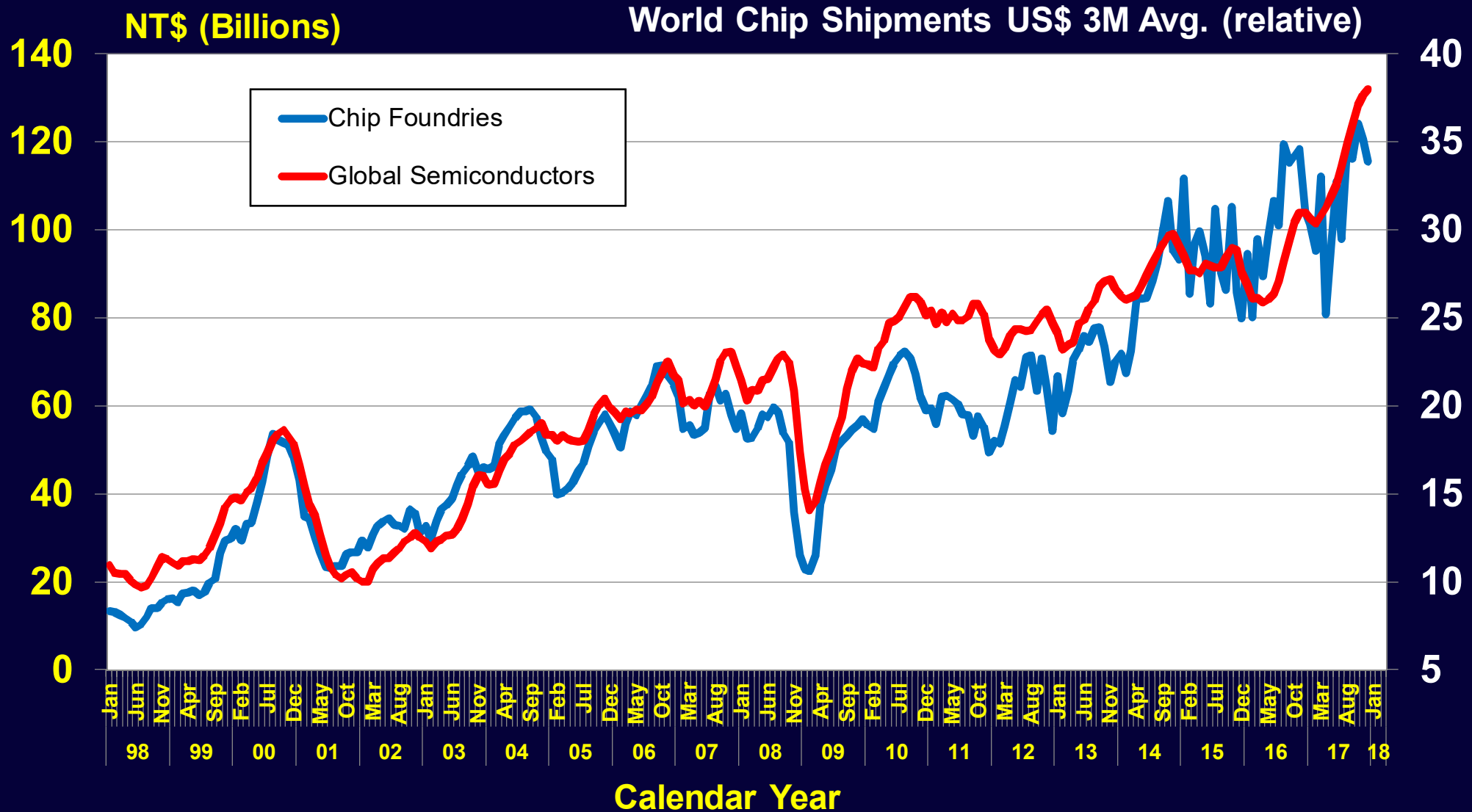
Composite Sales of 11 Large Manufacturers



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

Chart 3

Taiwan Wafer Foundry Composite vs. Global Semiconductor Revenues



14 Taiwan Company Financial Releases & SIA

Chart 4

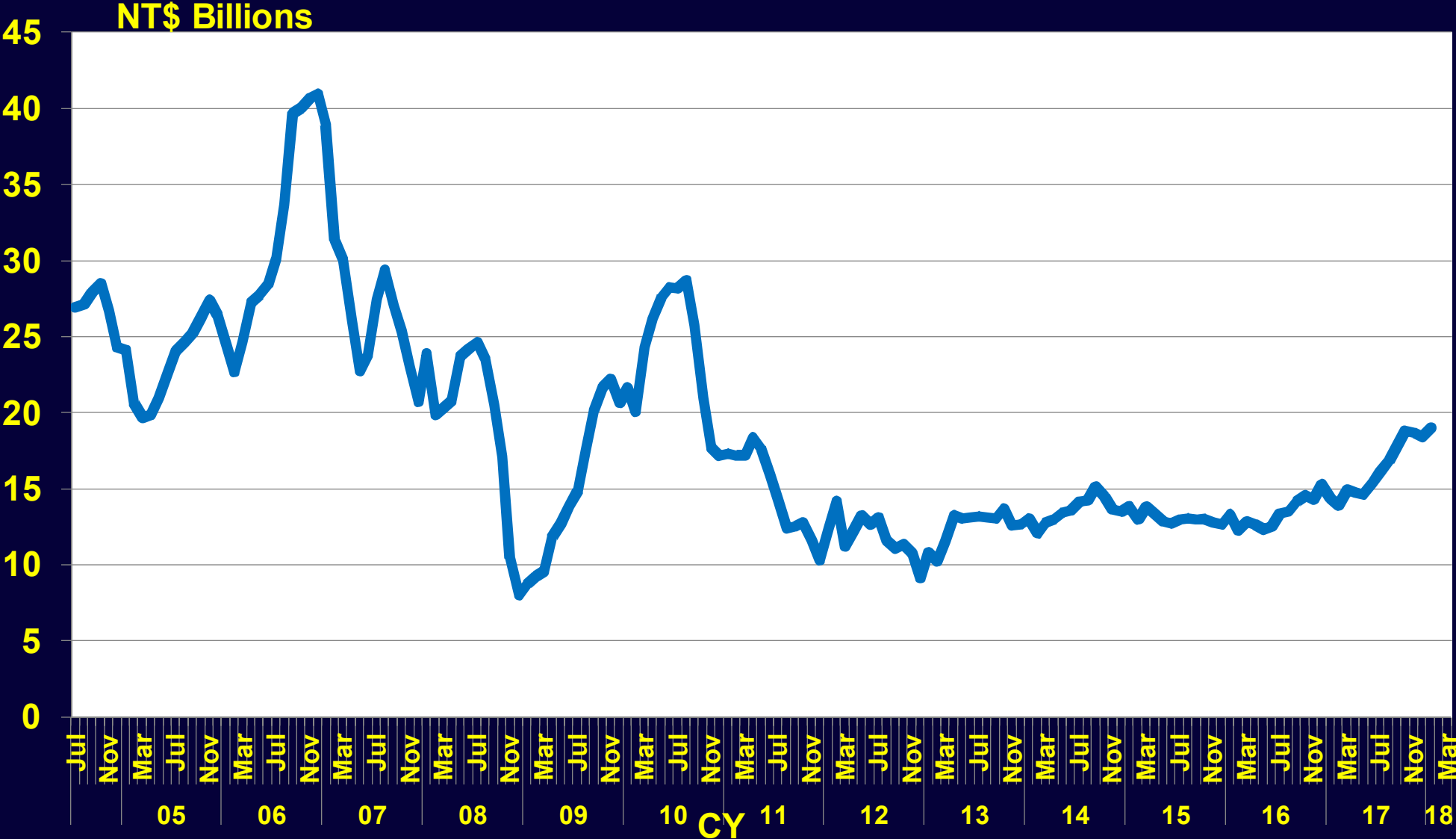
Taiwan Package & Test Companies Composite of 20 Manufacturers



ASE, Ardentec, ChipMOS Tech, Chipbond Tech, E'dale Tech, Formosa, Advance Tech, Fupo Elec, Greatek Elec, International Semiconductor Tech, King Yuan Elec, Lingsen Precision, Orient Semiconductor, Powertech Tech, Signality System, Sigurg Microelectronics, SPIL, Thalín Semiconductor, Vate Tech, Walton Advanced Tech

Chart 5

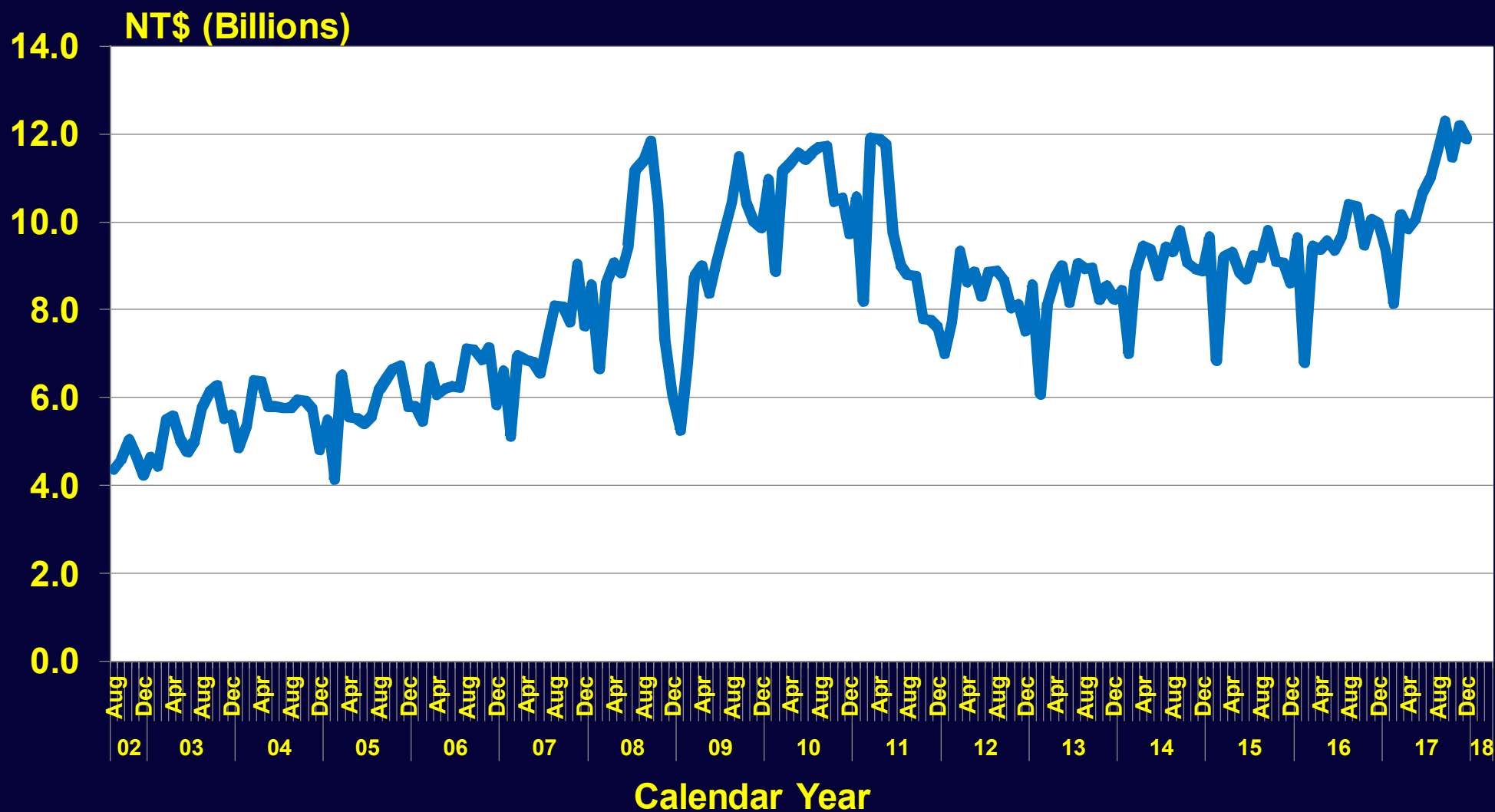
Taiwan Memory Companies Composite of 7 Manufacturers



Silicon Integrated Systems, Macronix Intl, Mosel Vitelic, NanYa Tech, Powerchip Semiconductor, ProMOS, Winbond Elec

Chart 6

Taiwan Passive Component Companies Composite Sales of 25 Manufacturers



Chilsin Electronics, Cyntec, (FCE) Feei Cheng Enterprise, Holy Stone Enterprise, 3H (Honey Hope Honest 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 7

Taiwan Rigid & Flex PCB Shipments

Broad Composite of 46 Taiwan-listed Manufacturers

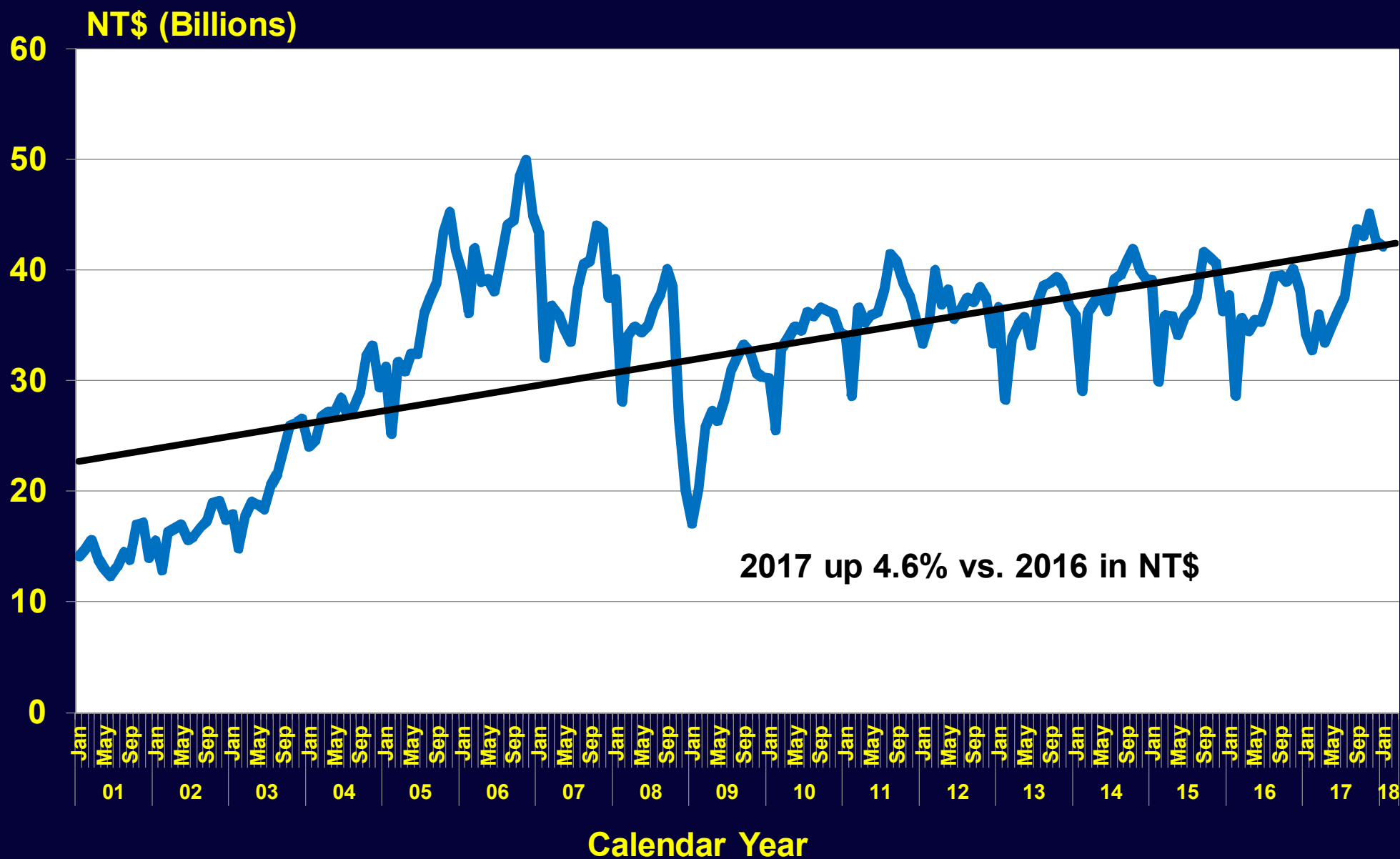


Chart 8

Taiwan Shipments

42 Rigid PCB & 8 Laminate Manufacturers

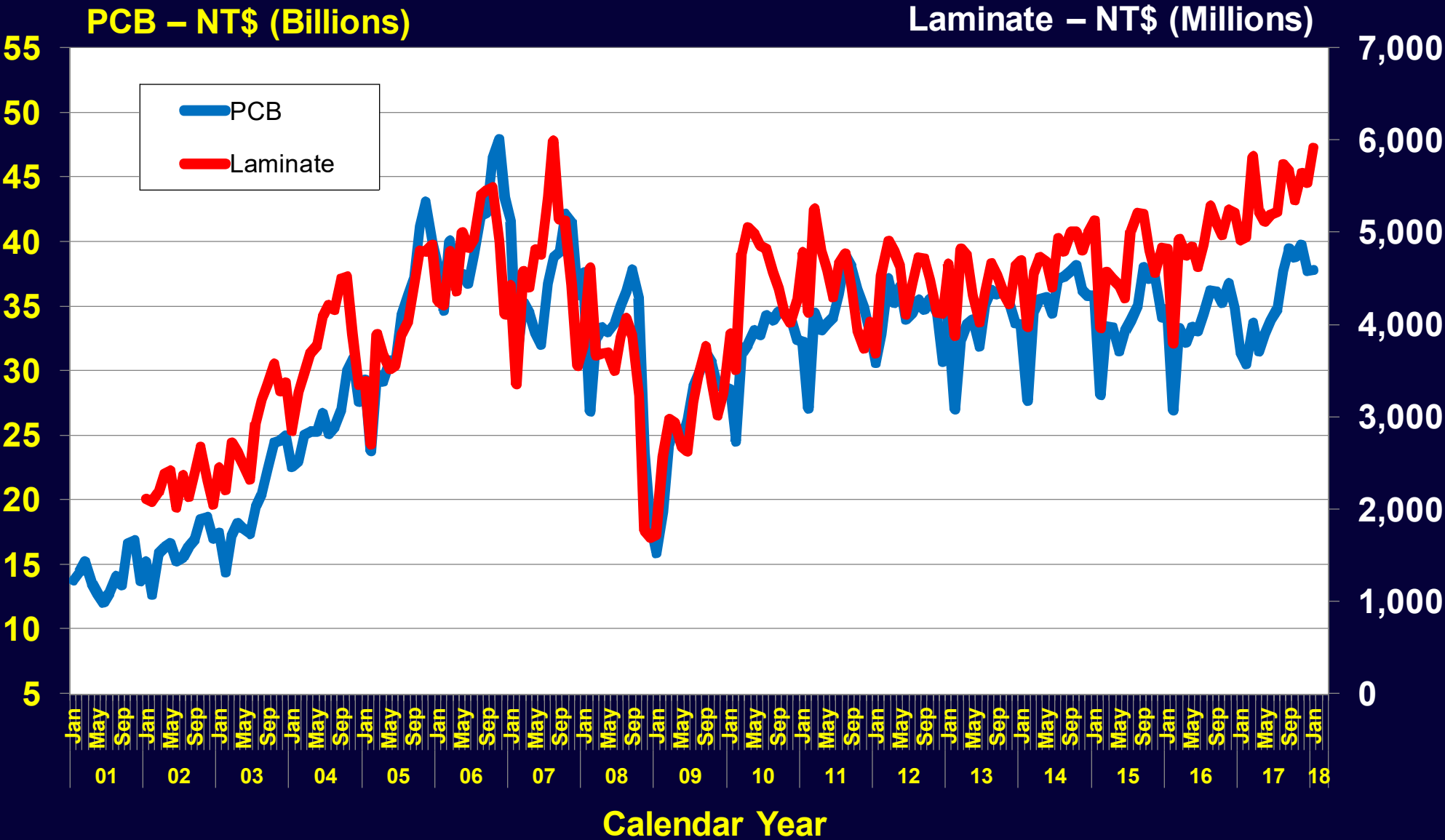
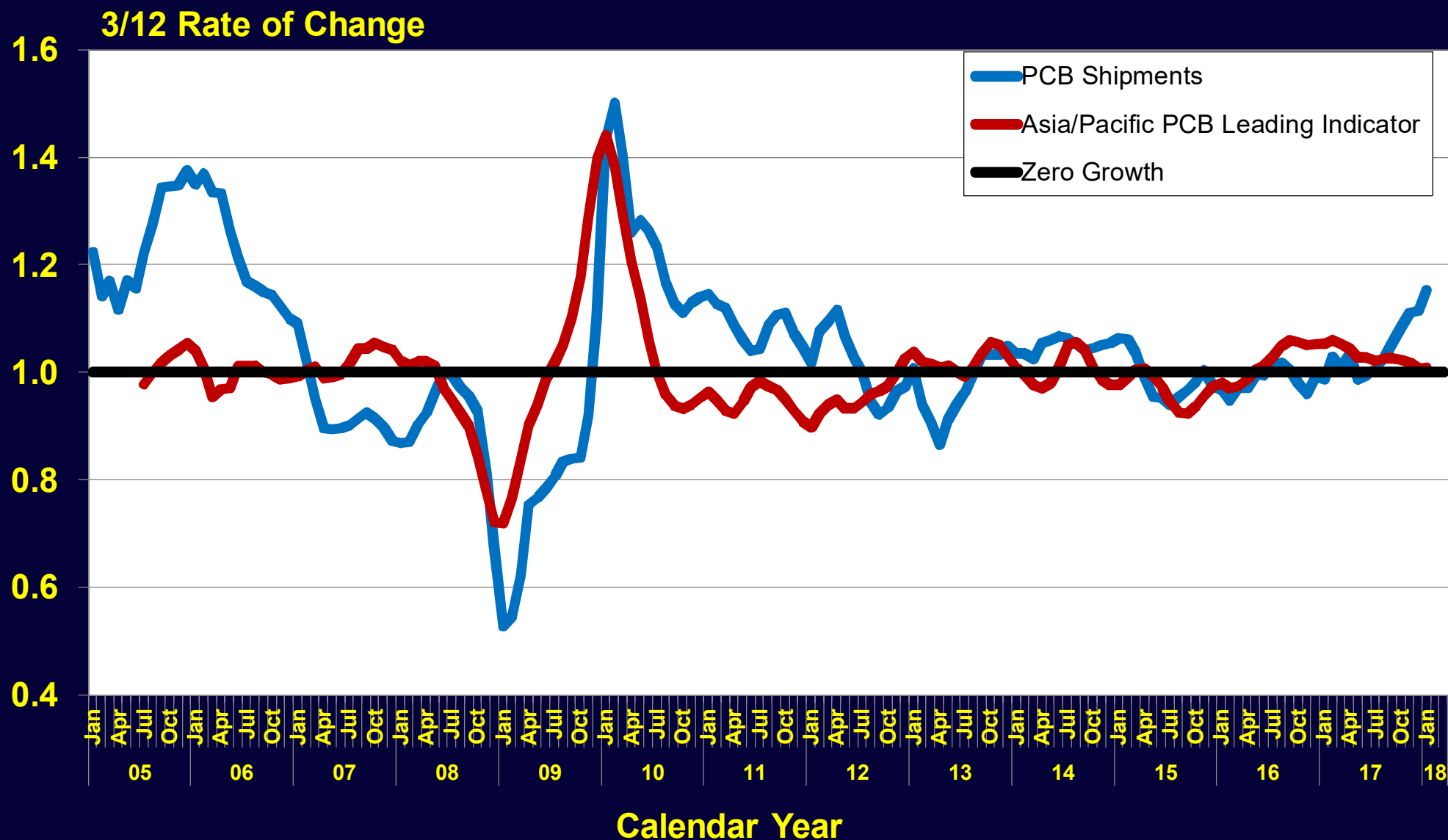


Chart 9

Asia Pacific CCG PCB Leading Indicator vs. China/Taiwan PCB Shipments @ Fluctuating Exchange

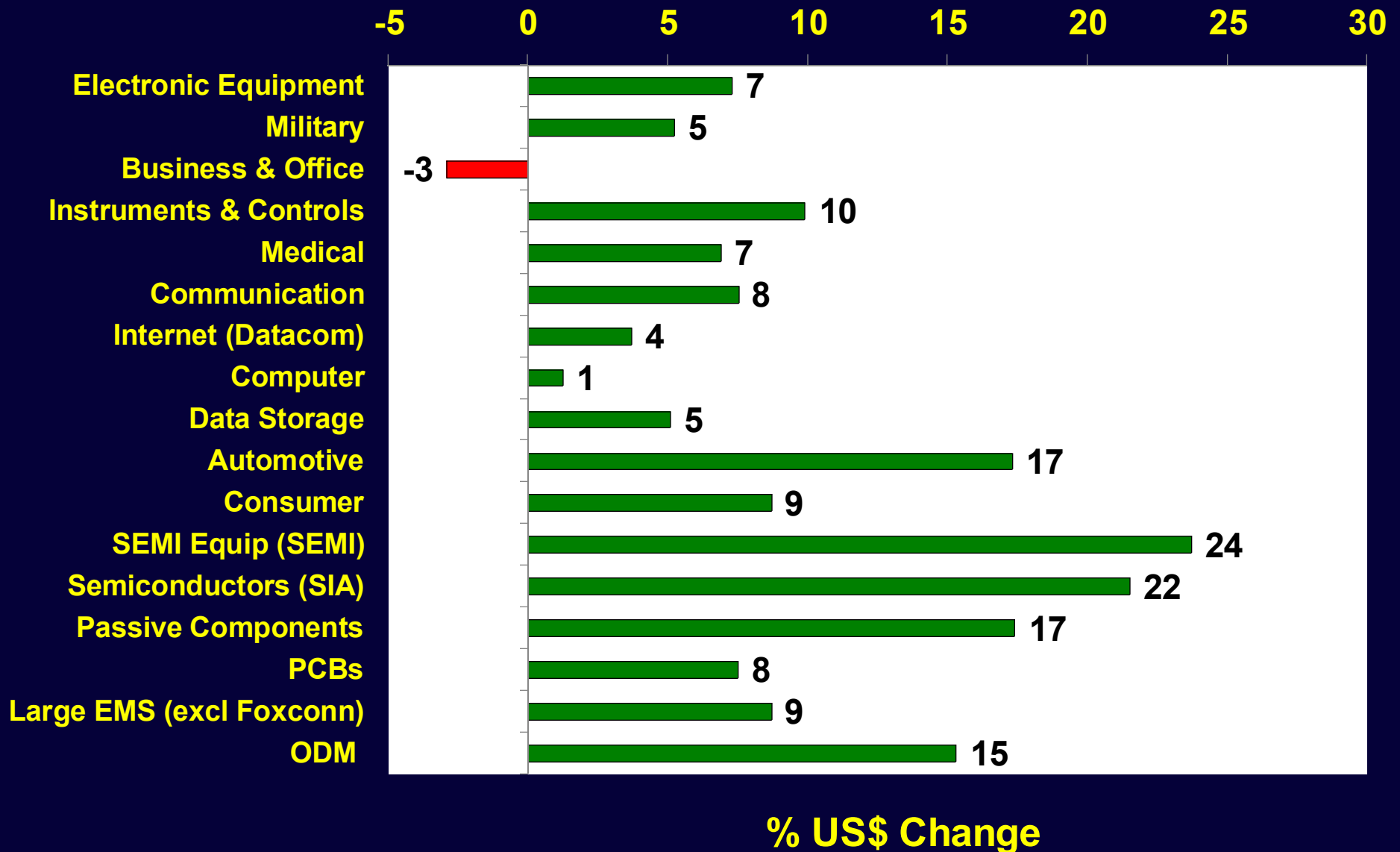


Source: Custer Consulting Group

Global Electronic Supply Chain Growth

Chart 10

4Q'17 vs. 4Q'16 (very preliminary)



US\$ equivalent at fluctuating exchange; based upon industry composites including acquisitions

Electronic Equipment Suppliers

Composite of 213 Public Companies

Quarterly Revenue Growth

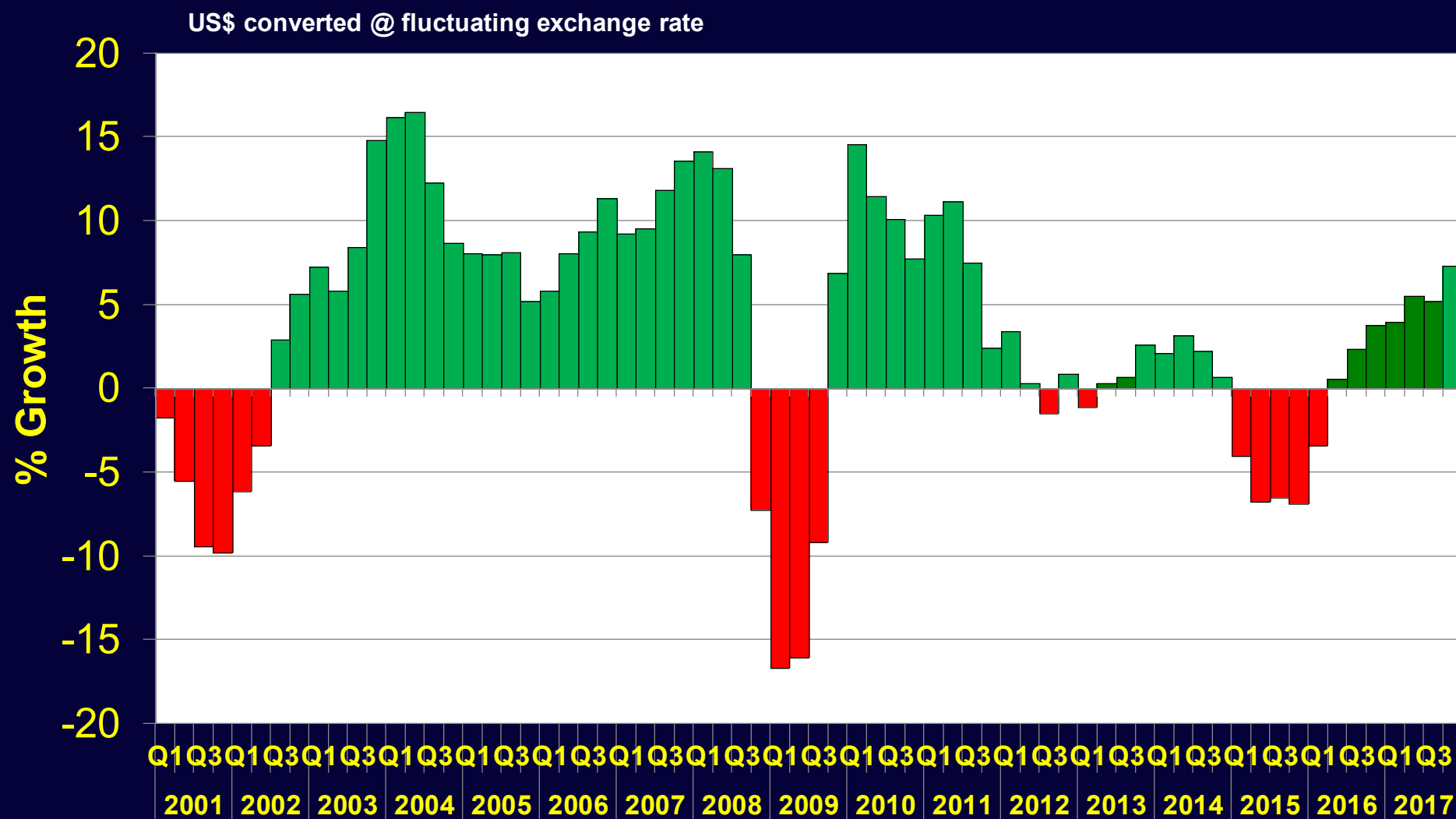


Chart 12

Monthly Semiconductor Shipments

\$ Billions (3-month avg in US\$)

	<u>12/16</u>	<u>12/17</u>	<u>% CH</u>
Americas	6.33	8.95	+ 41.4%
Europe	2.80	3.37	+ 20.2%
Japan	2.84	3.24	+ 14.0%
China	10.17	12.01	+ 18.1%
Asia Pacific / All Other	8.86	10.41	+17.4%
Total	31.01	37.99	+ 22.5%

Chart 13

World Semiconductor Shipments

Monthly US\$

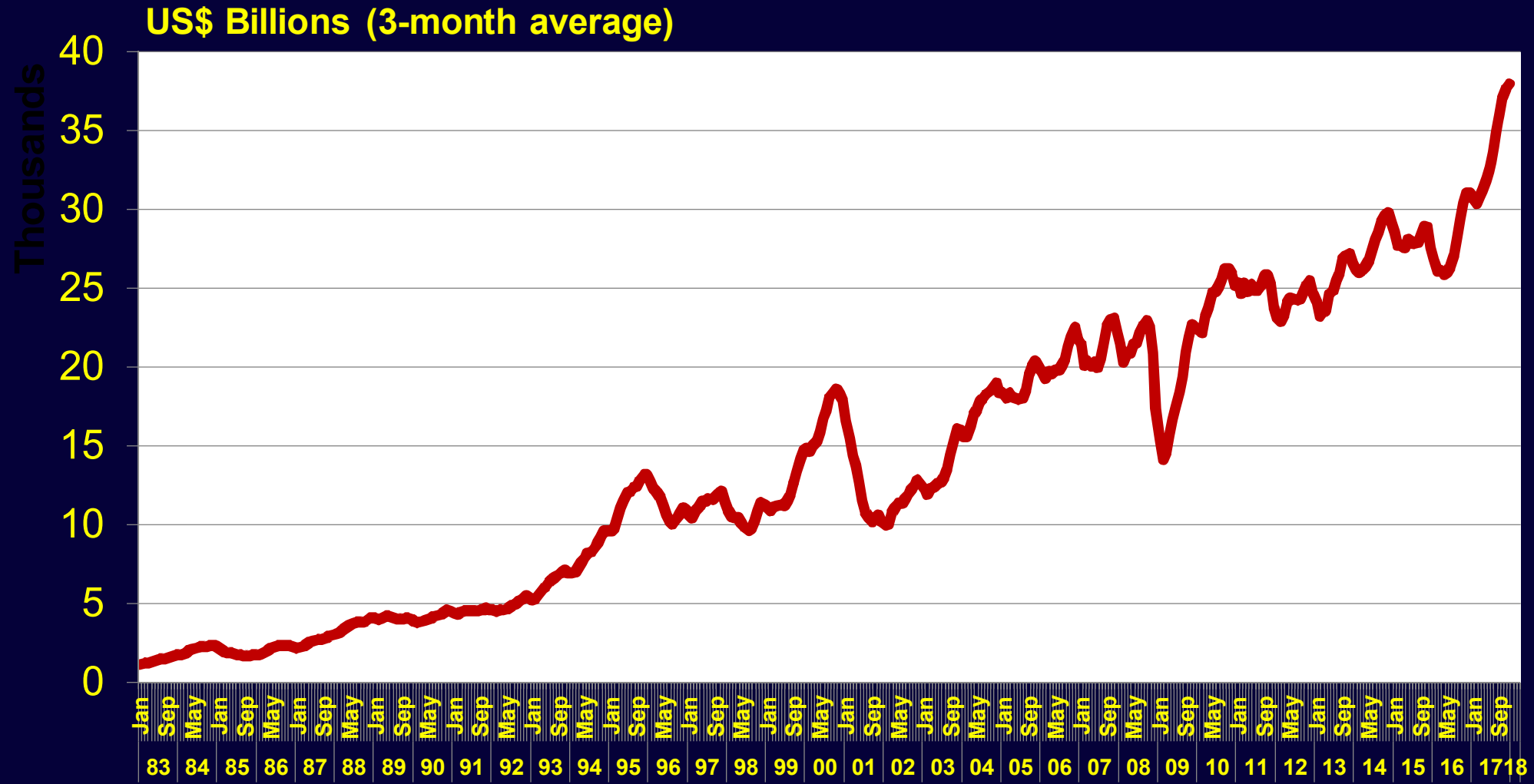
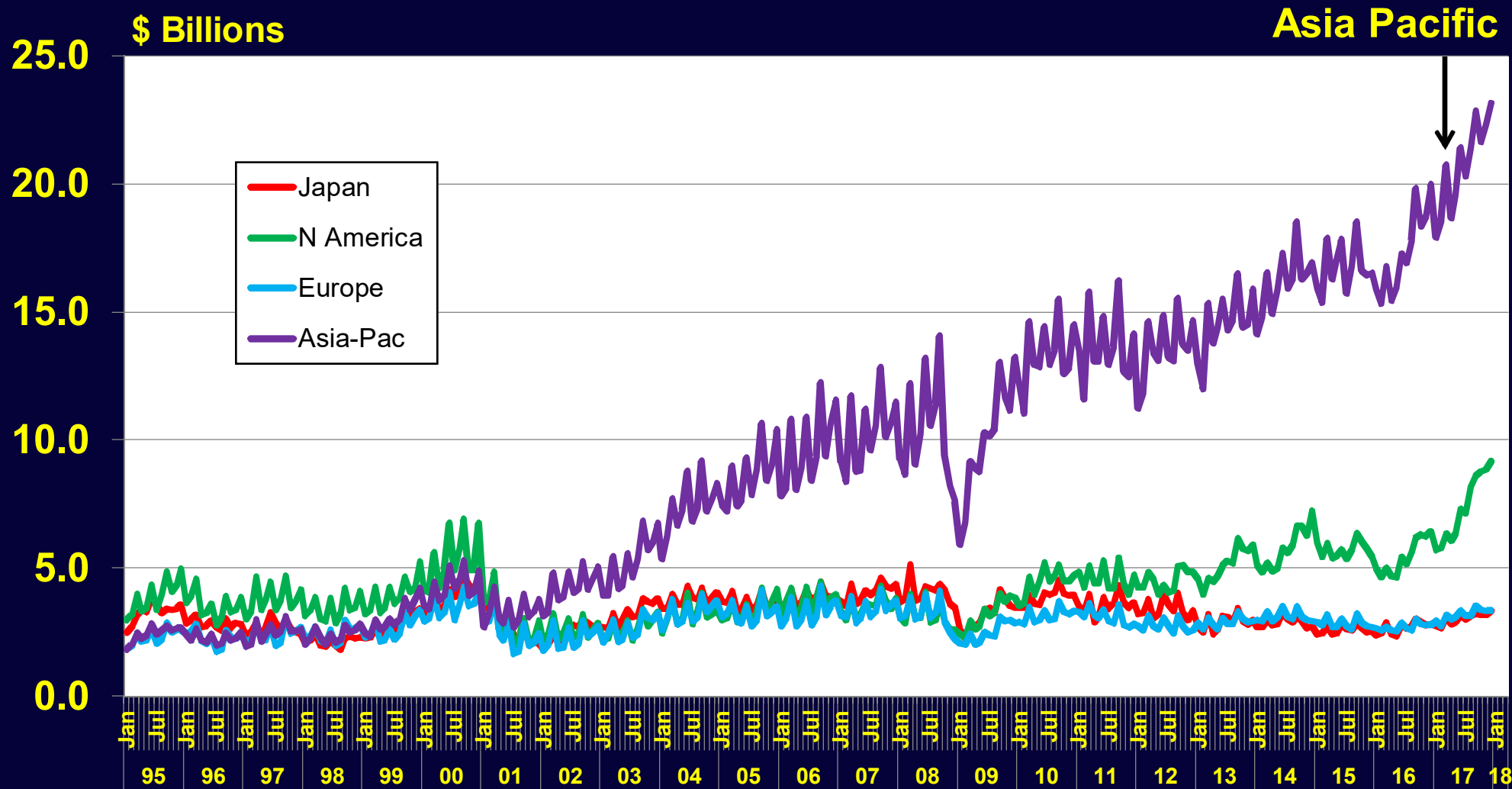


Chart 14

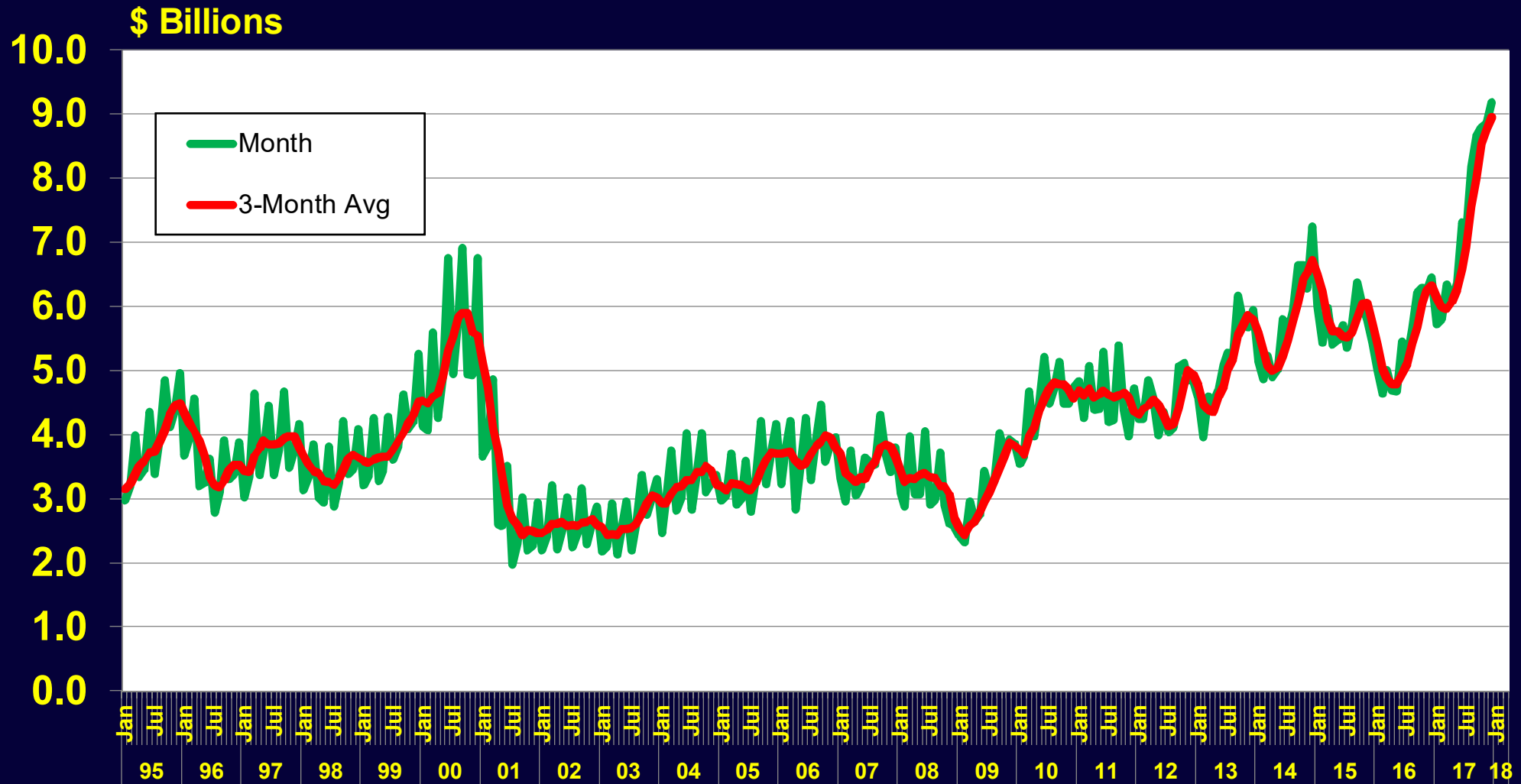
Total Semiconductor Shipments to an Area

Monthly Shipments - Reporting Firms



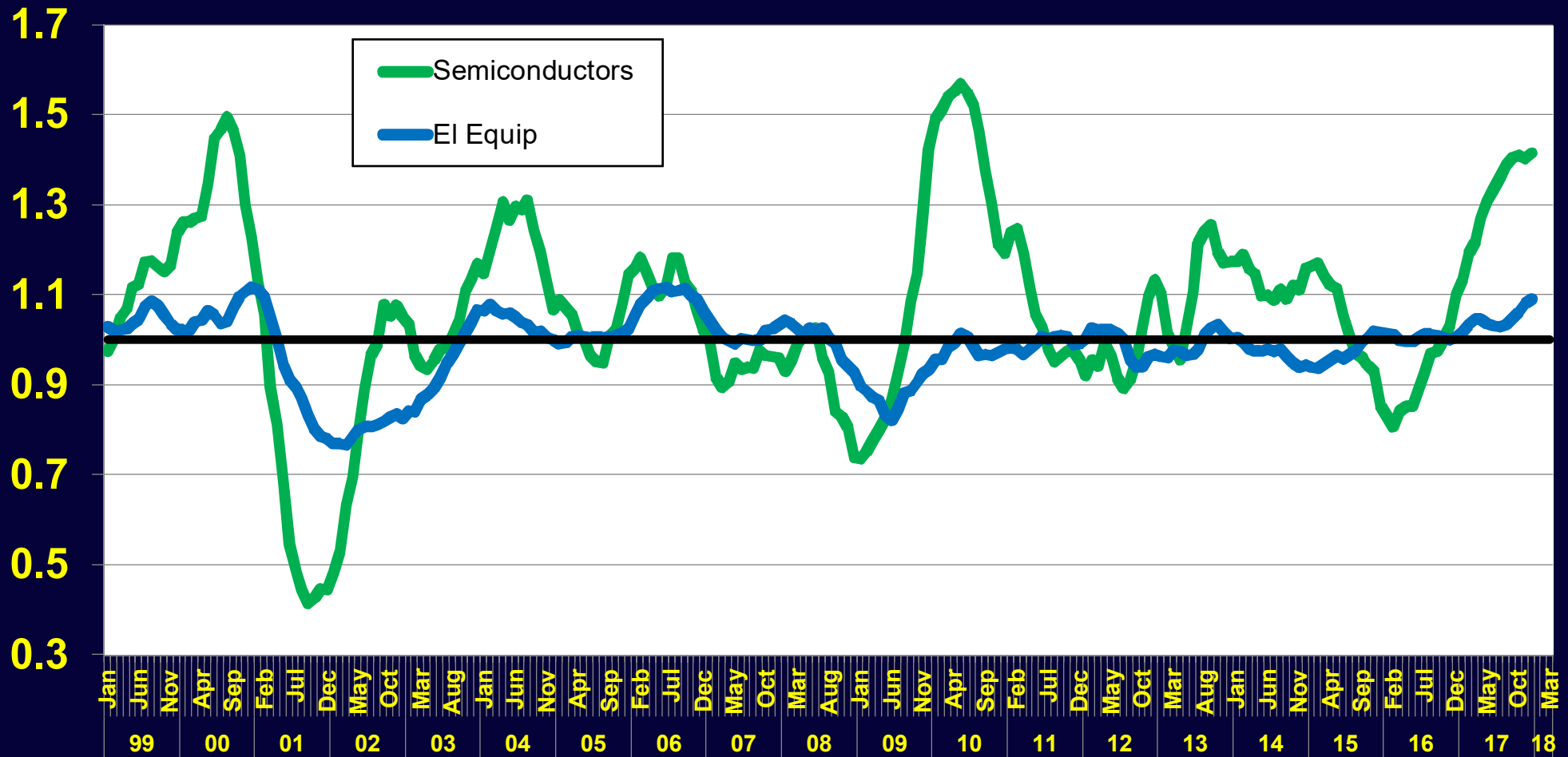
N American Semiconductor Shipments

Monthly & 3-Month Average Shipments



Semiconductor Shipments to N. America vs. U.S. Electronic Equipment Production

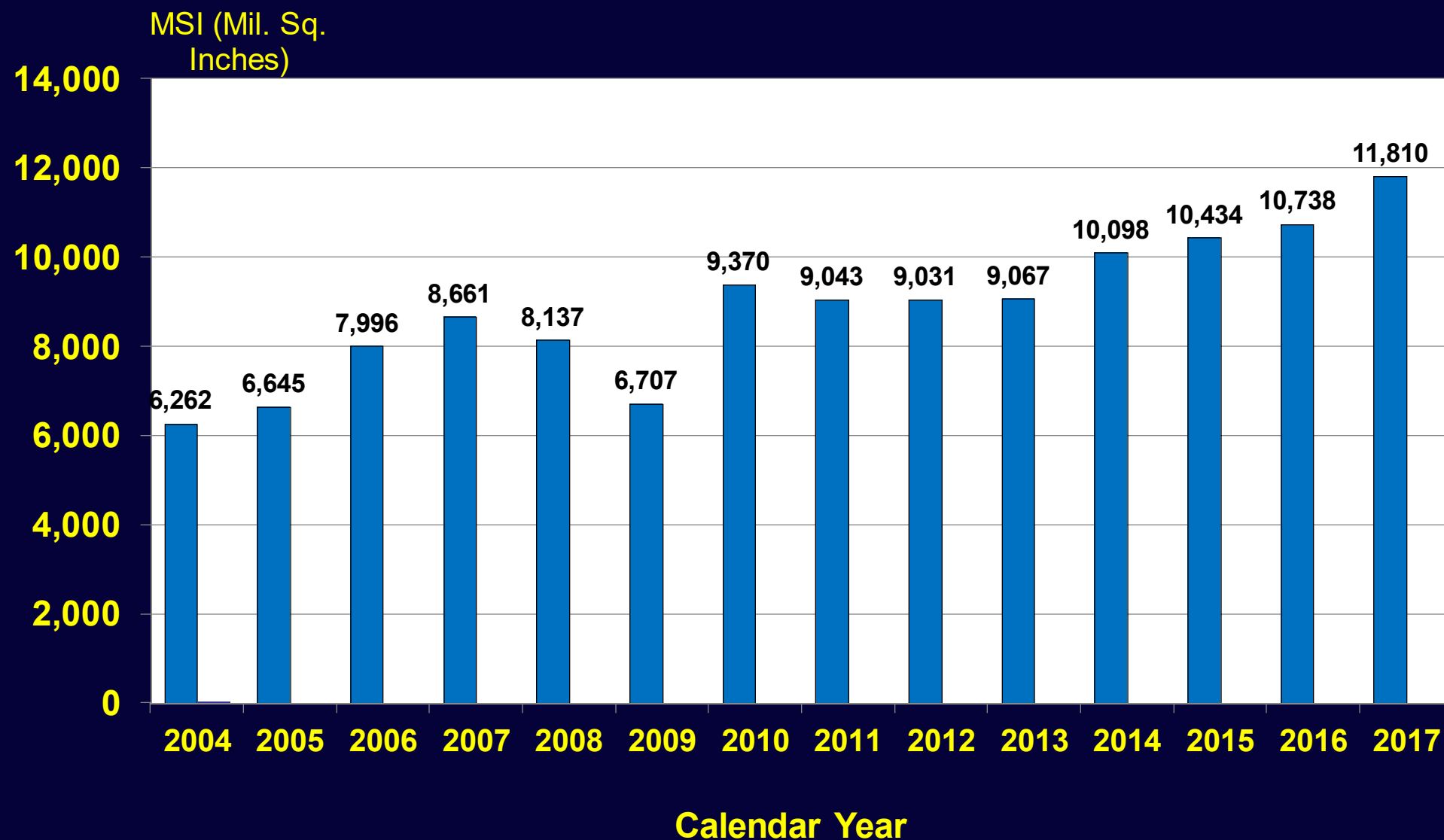
3/12 Rate of Change(US\$)



Total \$ Semiconductor Shipments from All Countries to N. America www.sia-online.org/
U.S. Electronic Equipment Shipments www.census.gov/indicator/www/m3/

Chart 17

Silicon Wafer Shipments



SEMI 2/2018; non-polished wafers not included, semiconductors only, does not include solar applications

Chart 18

Global Silicon Wafer vs. Semiconductor Shipments (excluding solar applications for wafers)

