Chart 1

Electronic Equipment Suppliers
Composite of 213 Public Companies
Quarterly Revenue Growth

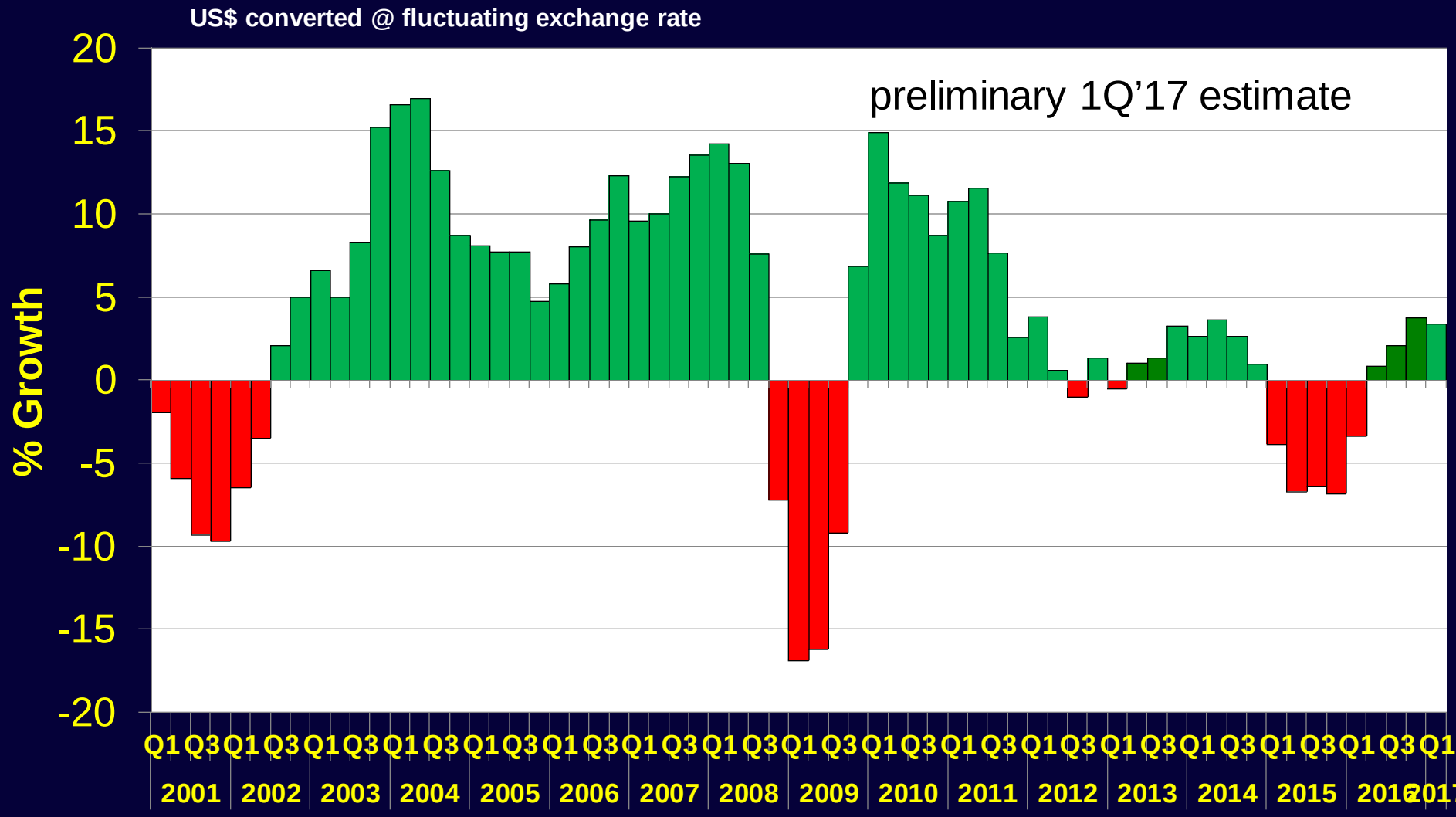
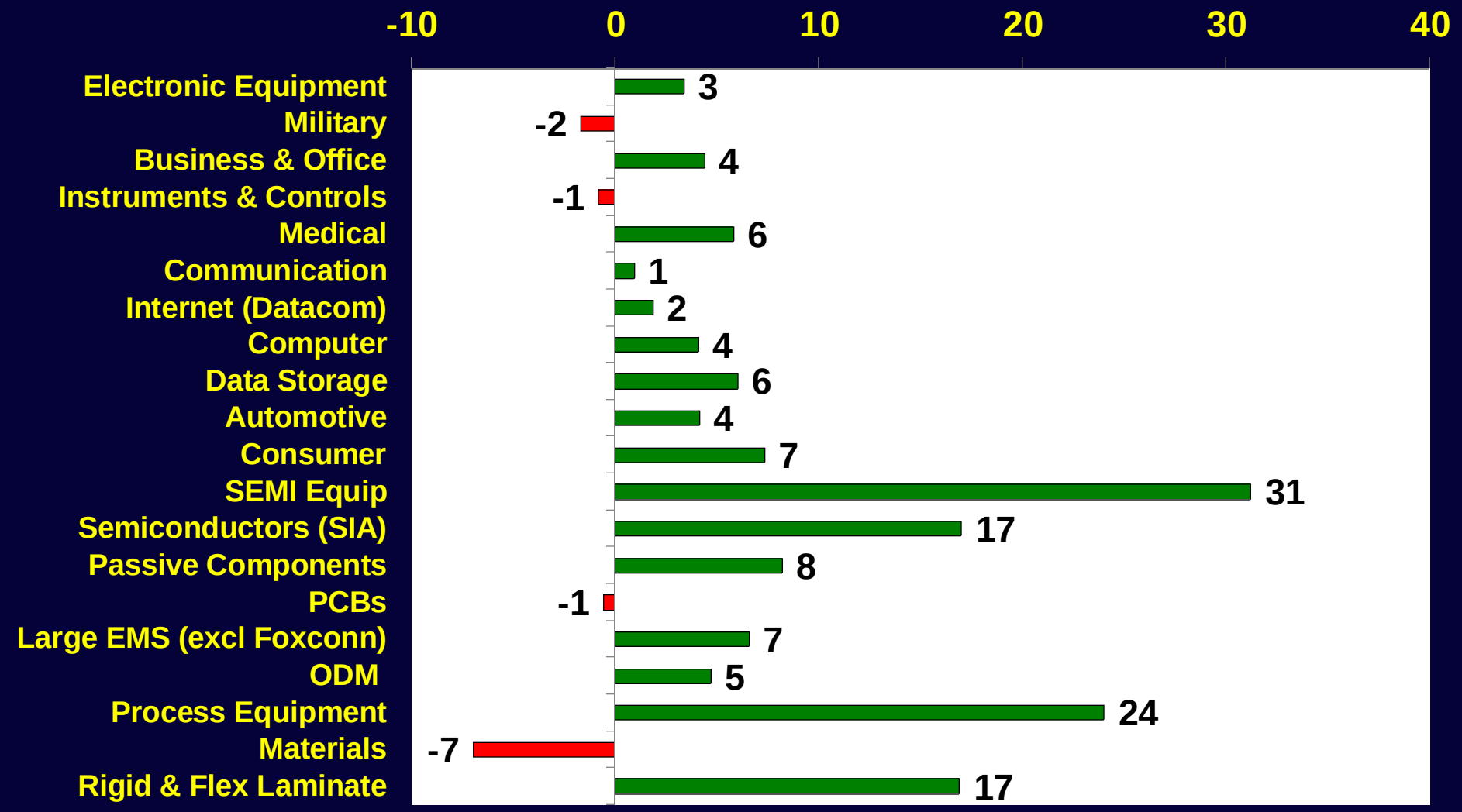


Chart 2

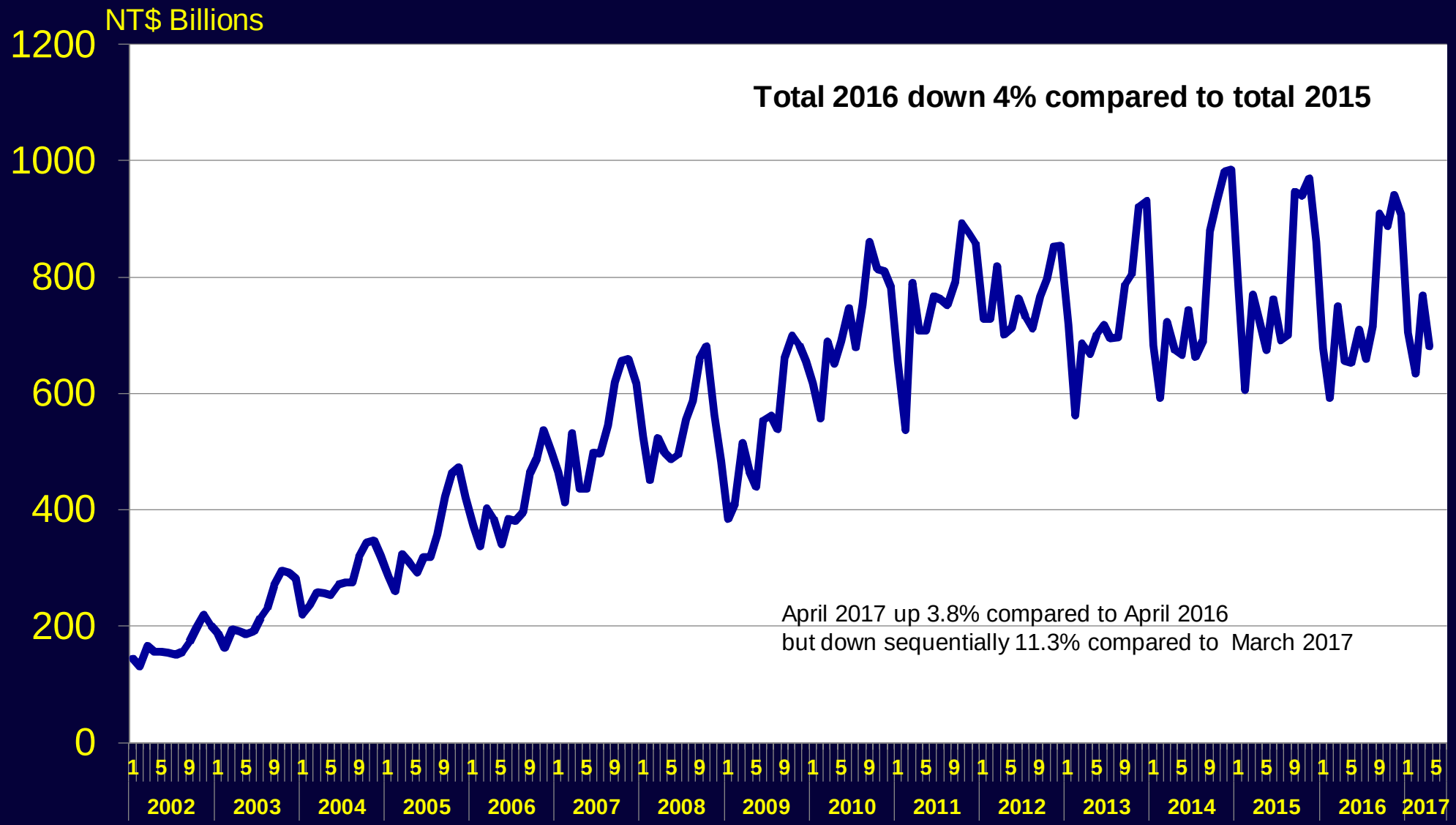
Global Electronic Supply Chain Growth
1Q'17 vs. 1Q'16 (preliminary)



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

Chart 3

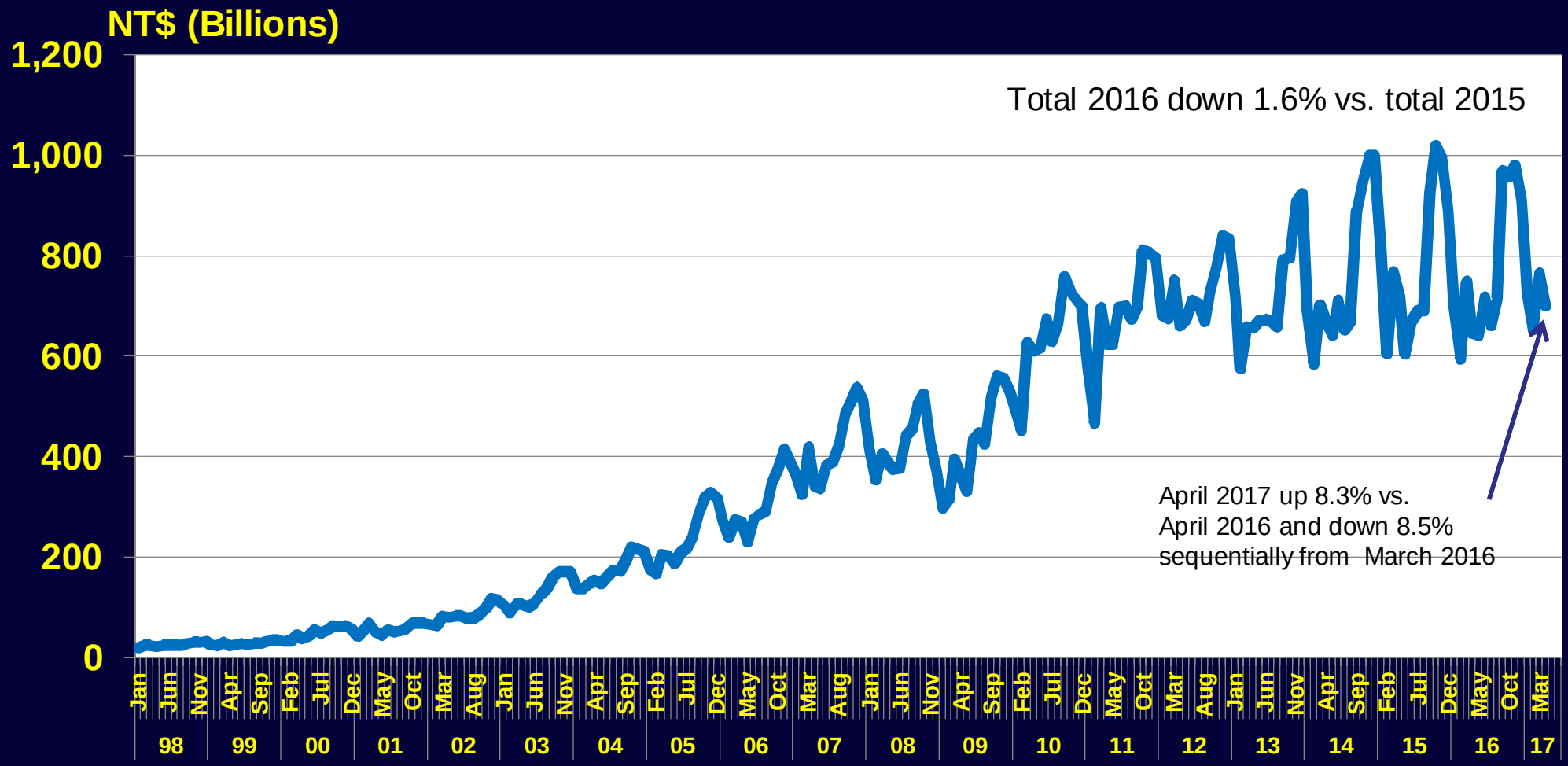
Taiwan/China Electronic Equipment Producers
Composite of 101 Manufacturers
Consolidated Revenue



Taiwan listed companies, often with significant manufacturing in China

Chart 4

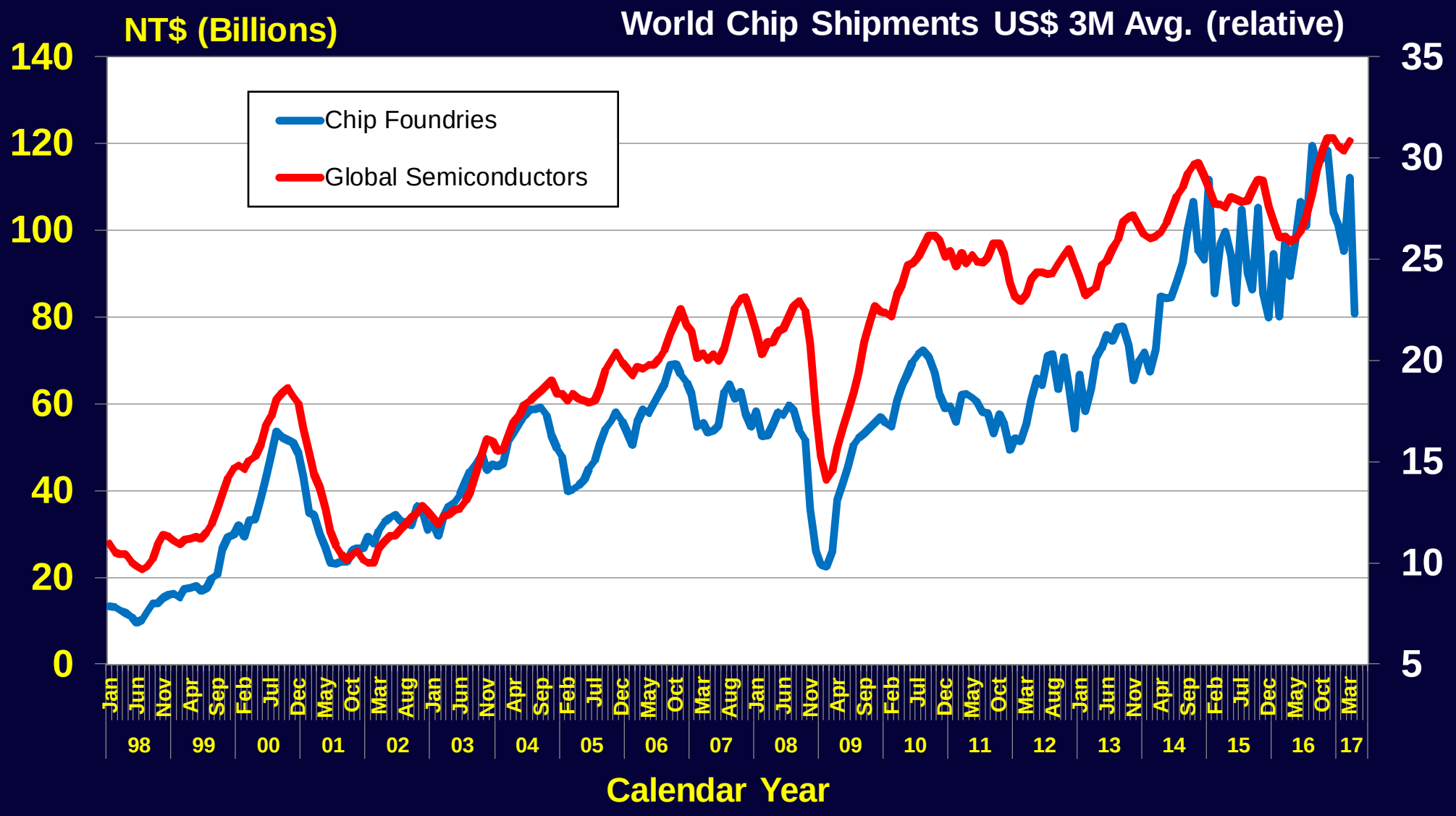
Taiwan ODM Companies
Composite Sales of 11 Large Manufacturers



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 5

Taiwan Wafer Foundry Composite vs. Global Semiconductor Revenues



14 Taiwan Company Financial Releases & SIA

Chart 6

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, Thalin Semiconductor, Vate Tech, Walton Advanced Tech

Chart 7

Taiwan Memory Companies
Composite of 8 Manufacturers



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

Chart 8

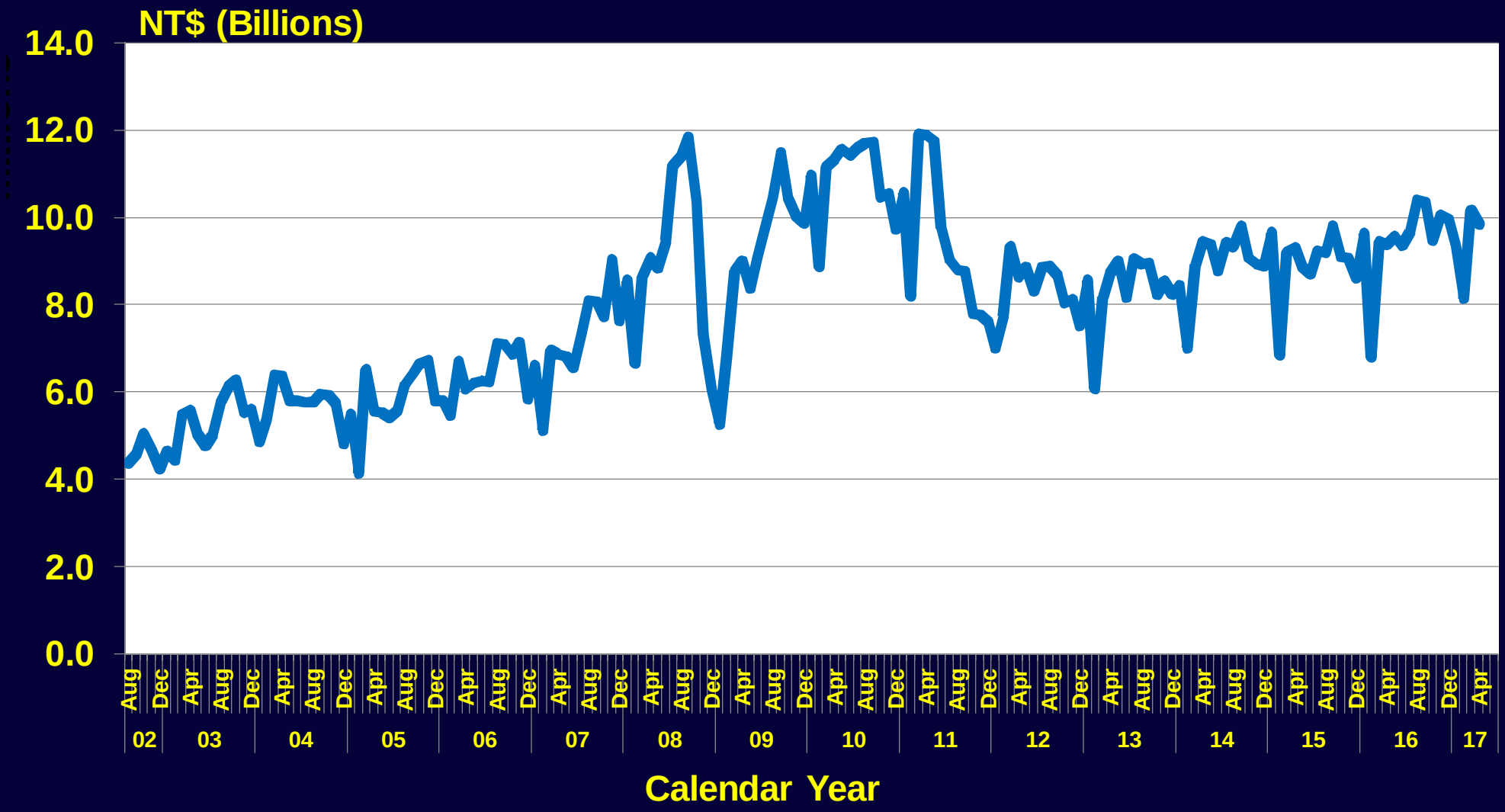
Taiwan Display Producers
Composite of 6 TFT-LCD Panel Manufacturers



Taiwan listed companies, often with significant manufacturing in China

Chart 9

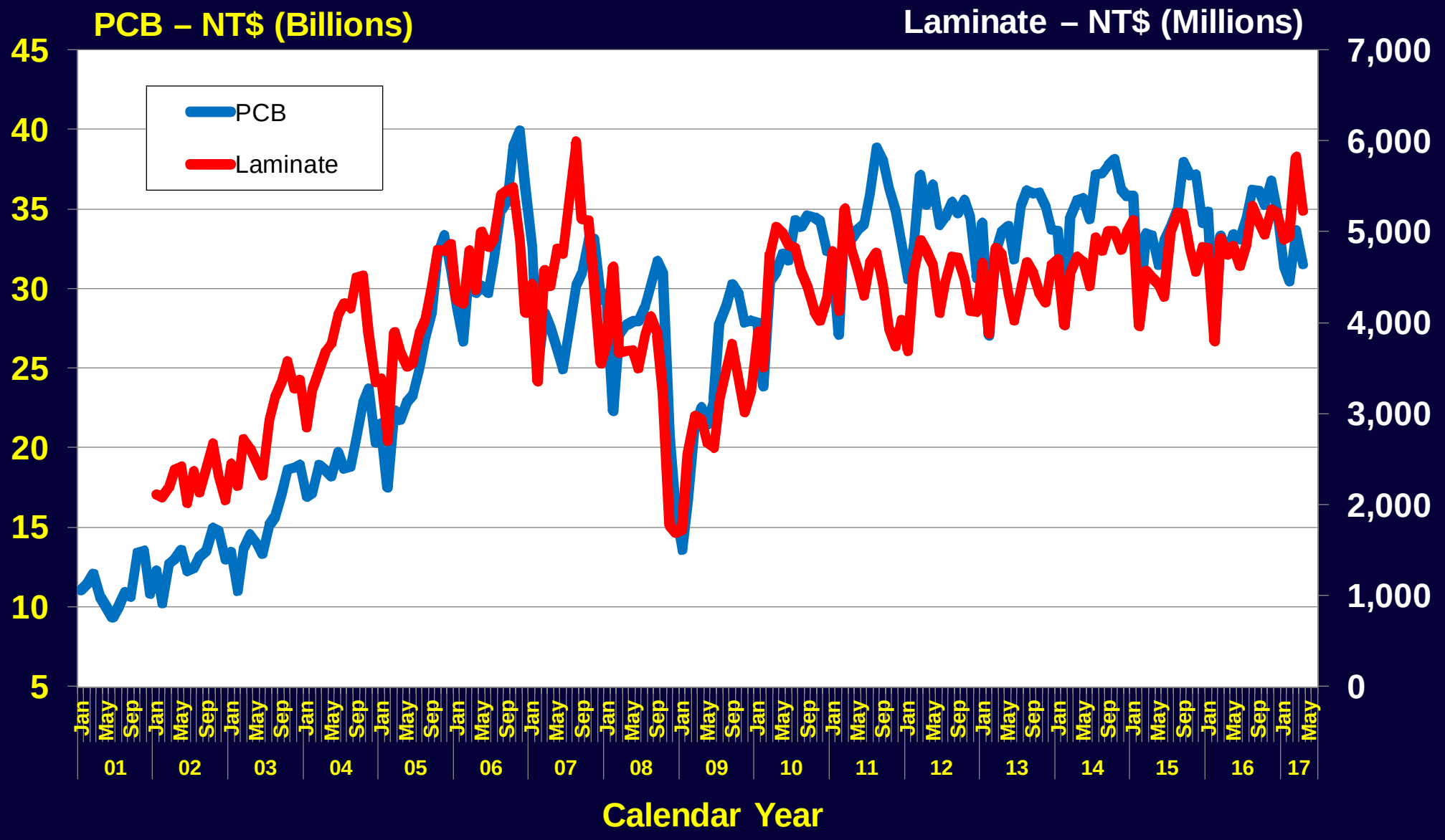
Taiwan Passive Component Companies Composite Sales of 25 Manufacturers



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 10

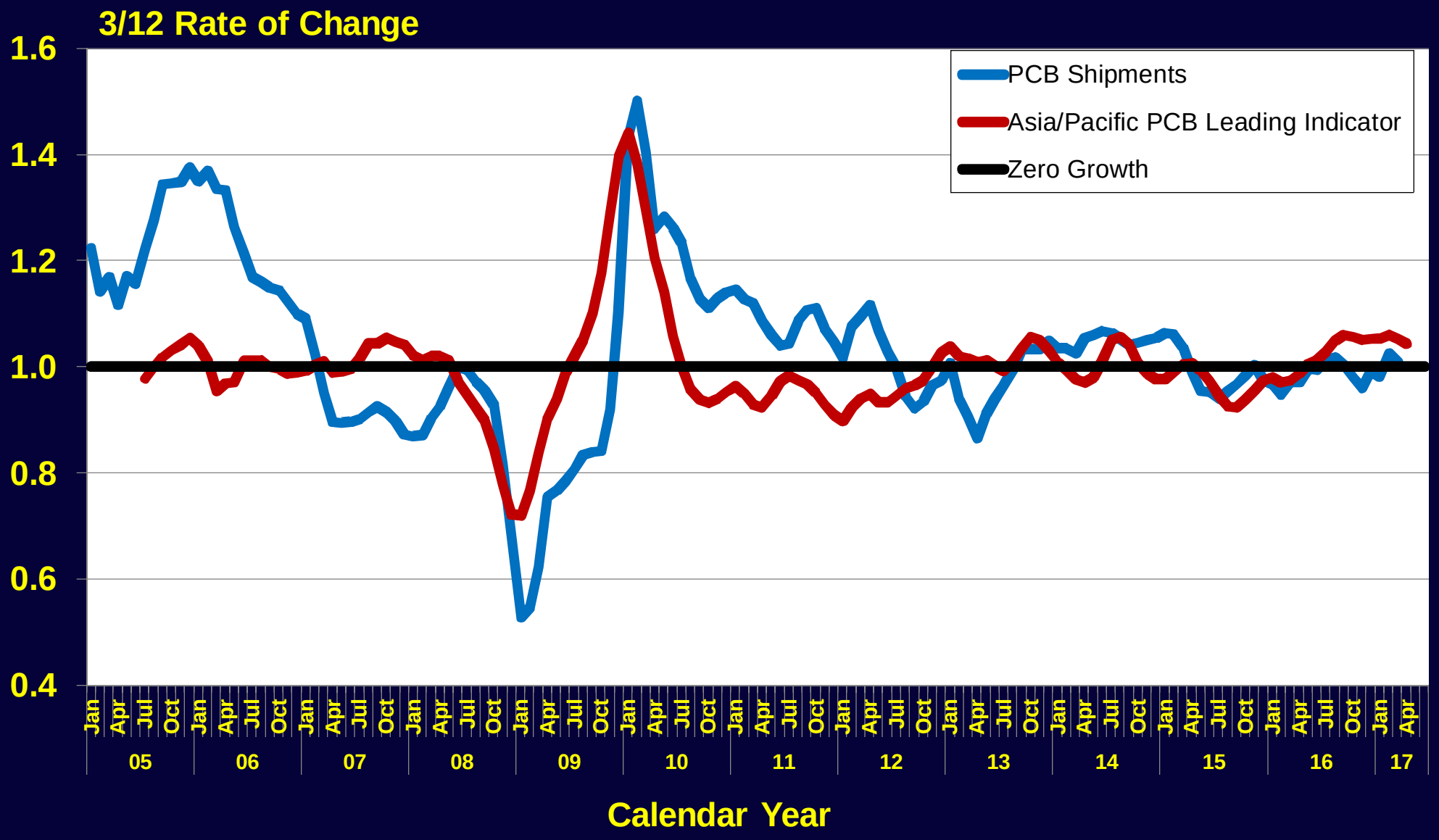
Taiwan Shipments
42 Rigid PCB & 8 Laminate Manufacturers



Company Financial Releases

Chart 11

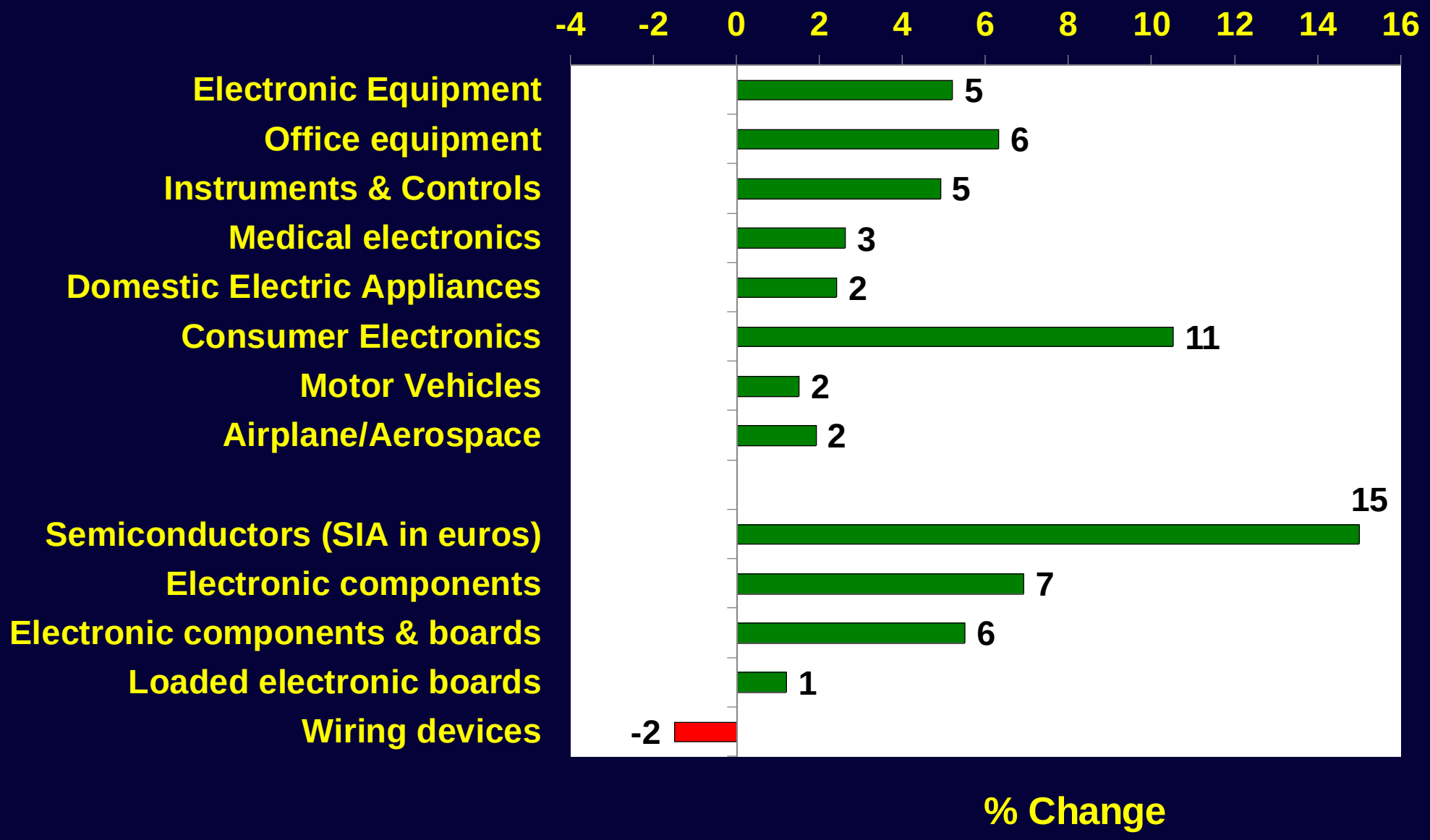
Asia Pacific CCG PCB Leading Indicator vs. China/Taiwan PCB Shipments @ Fluctuating Exchange



Source: Custer Consulting Group

Chart 12

European Electronic Supply Chain Growth 1Q'17 vs 1Q'16

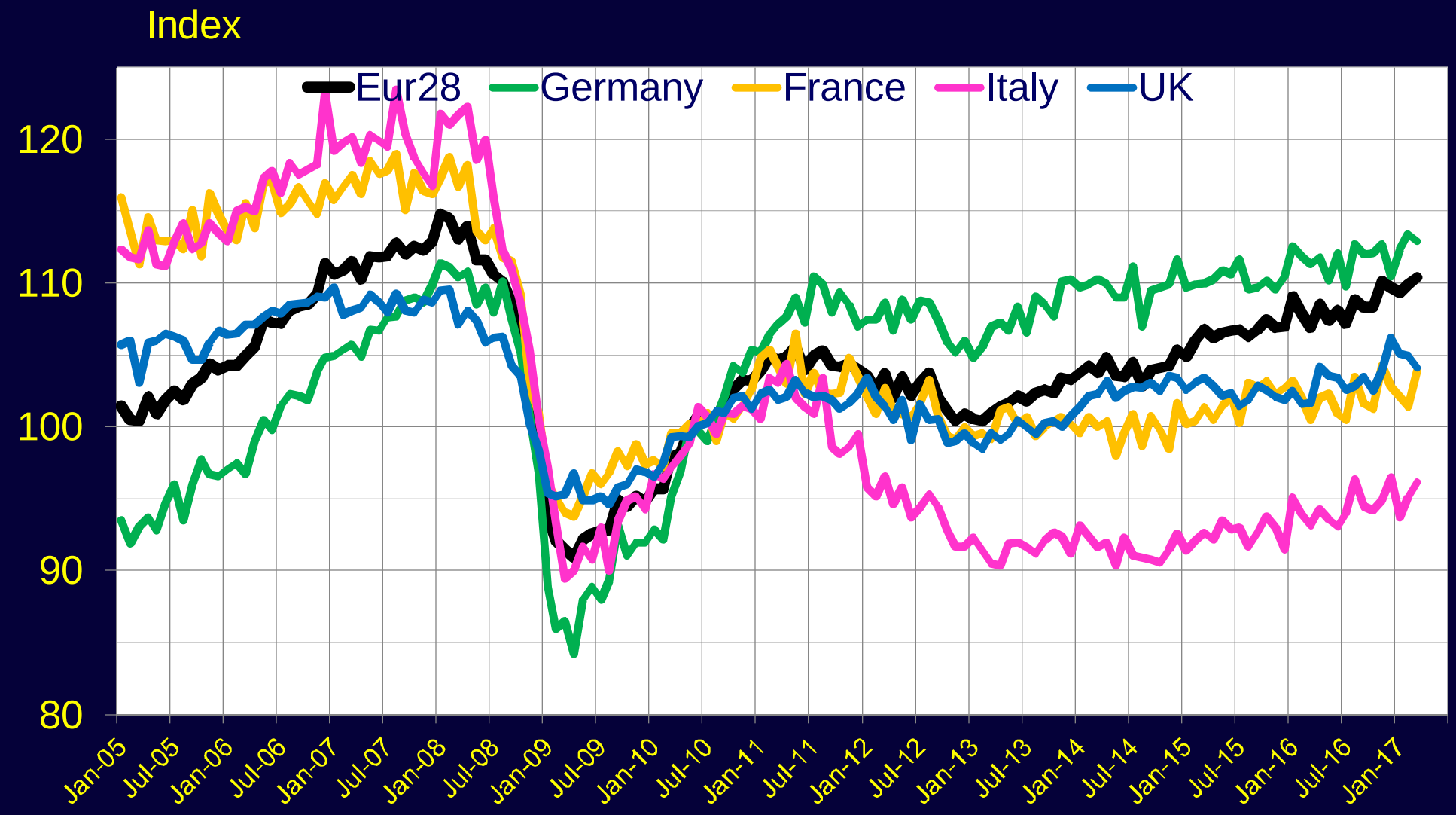


Euro denominated growth rates; Eurostat, SIA & Custer Consulting Group

Chart 13

Industrial Production – Europe Manufacturing

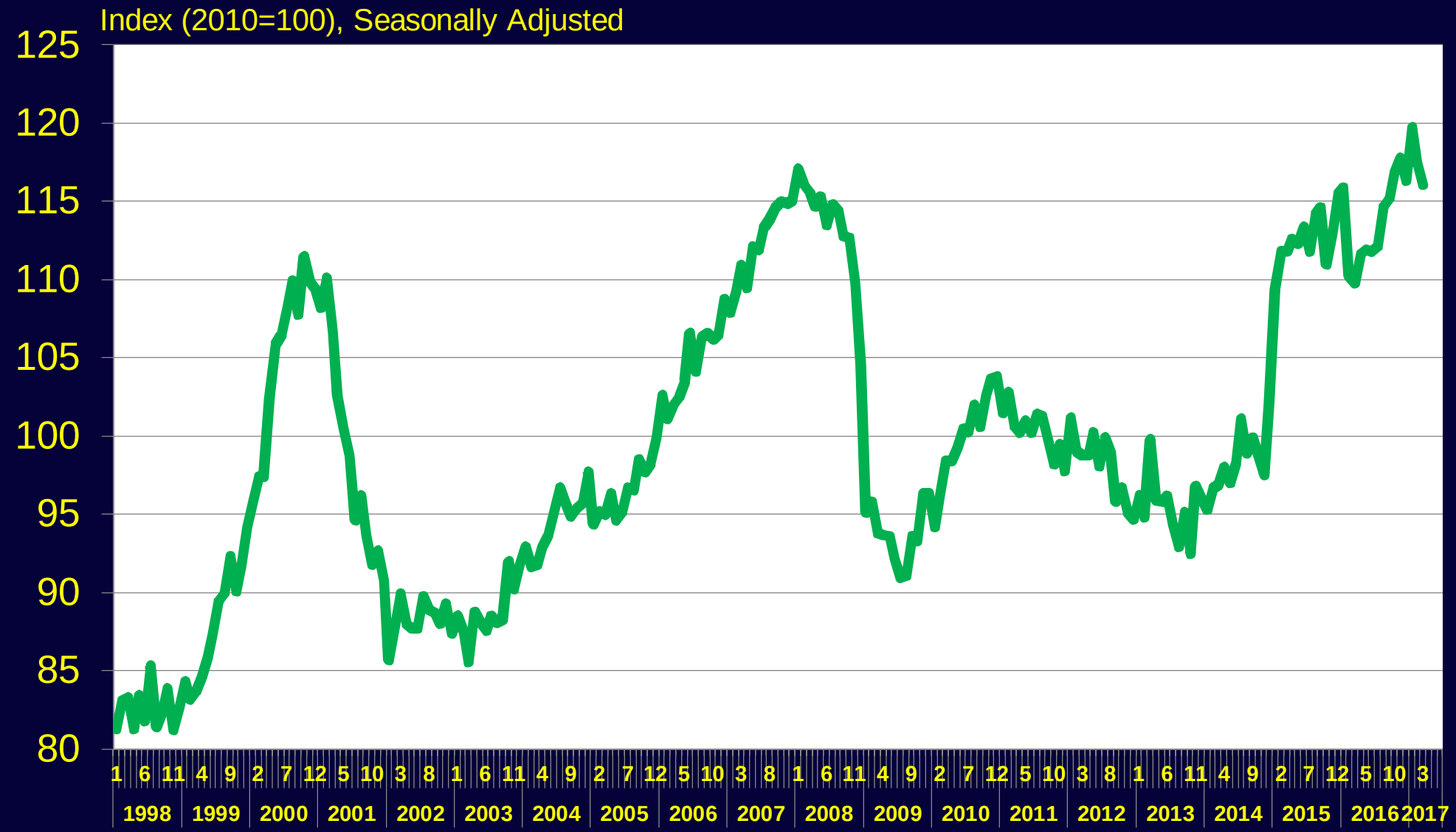
Index (2010 Avg. Month = 100, Seasonally Adjusted)



Eurostat

Chart 14

European Computer, Electronic & Optical Products Production



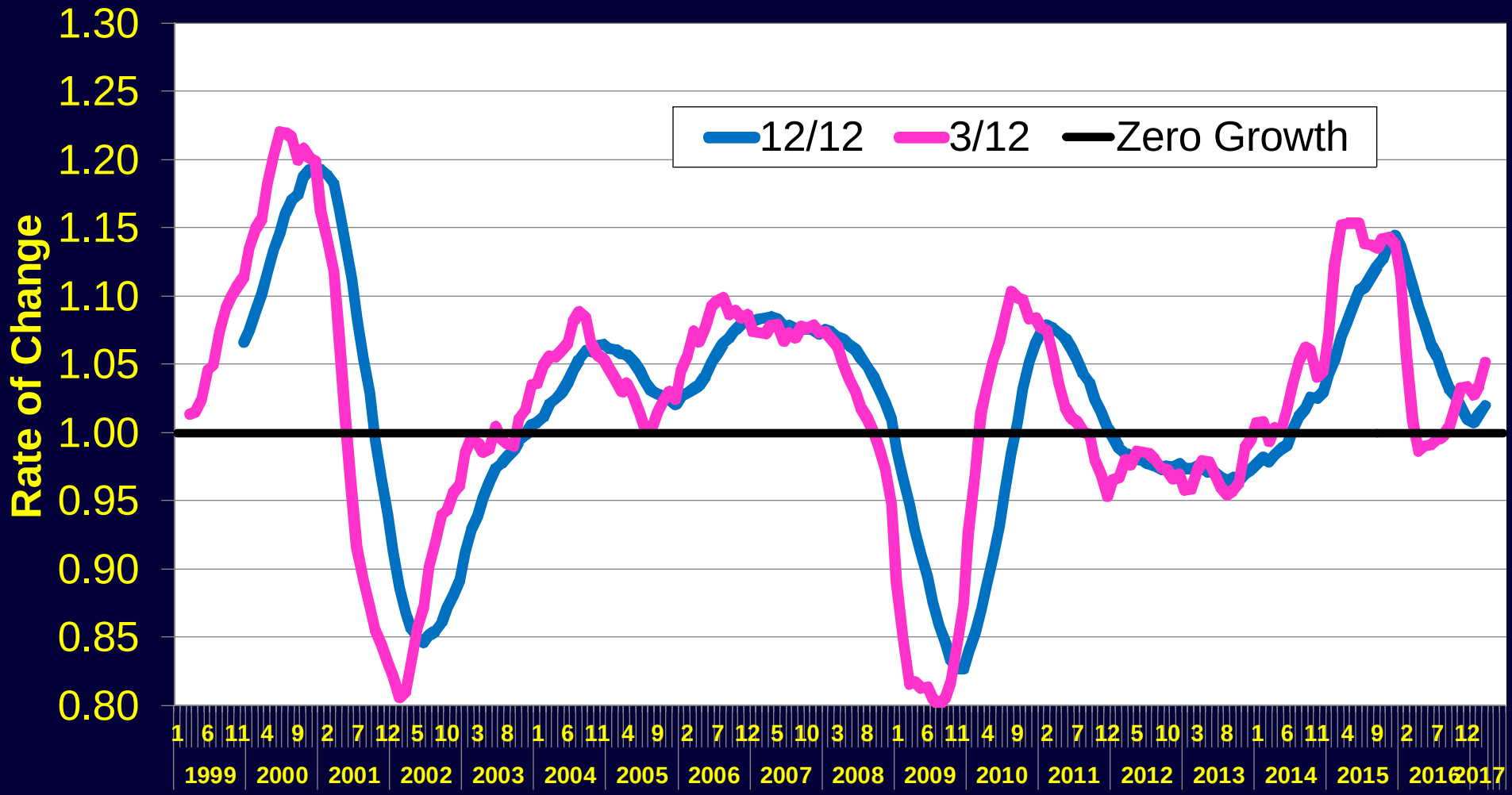
Eurostat, C26 category, EU 28 countries

Chart 15

Europe- EU27

Manufacture of computer, electronic & optical products

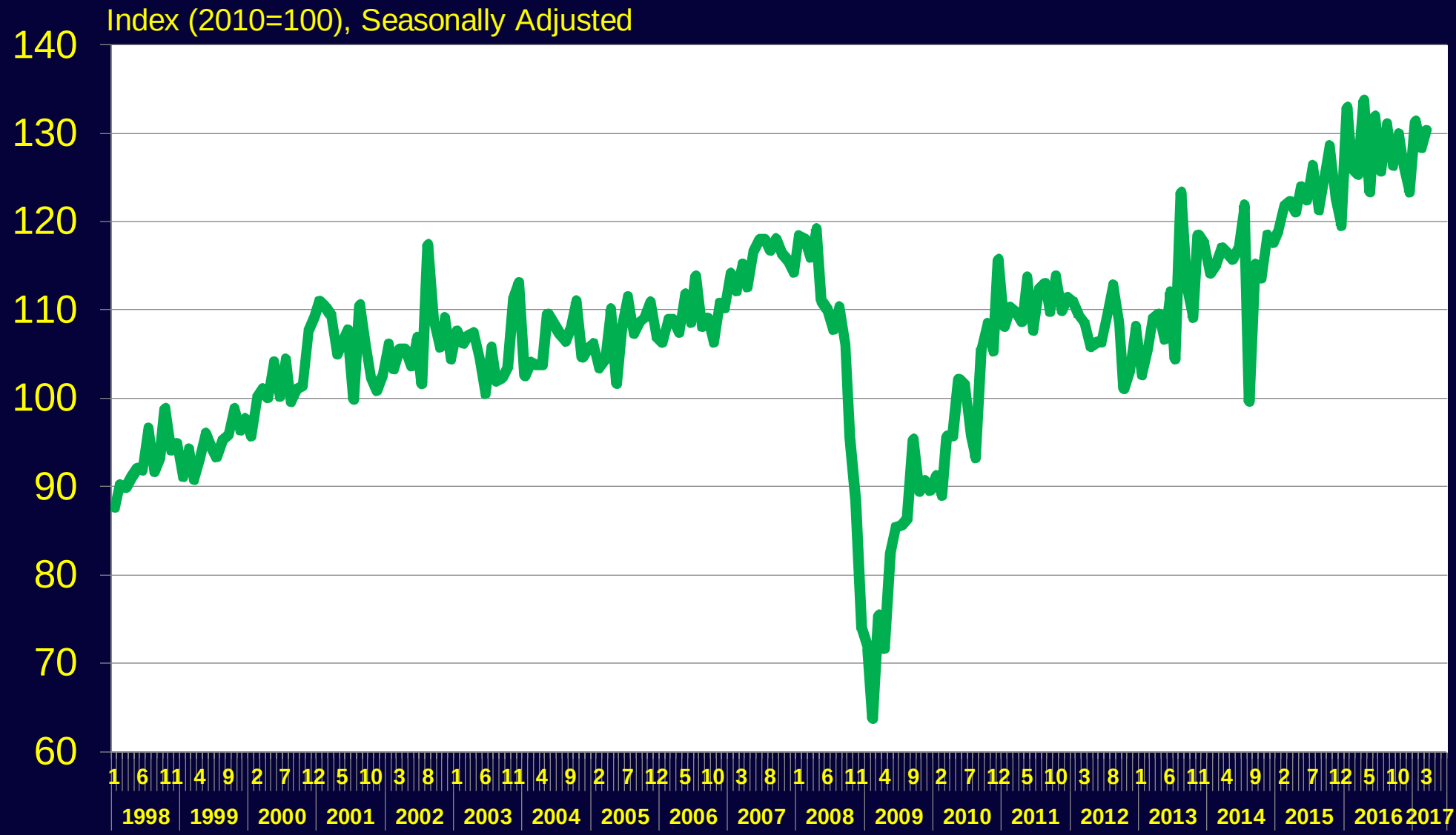
12/12 & 3/12 Rate of Change



Eurostat

Chart 16

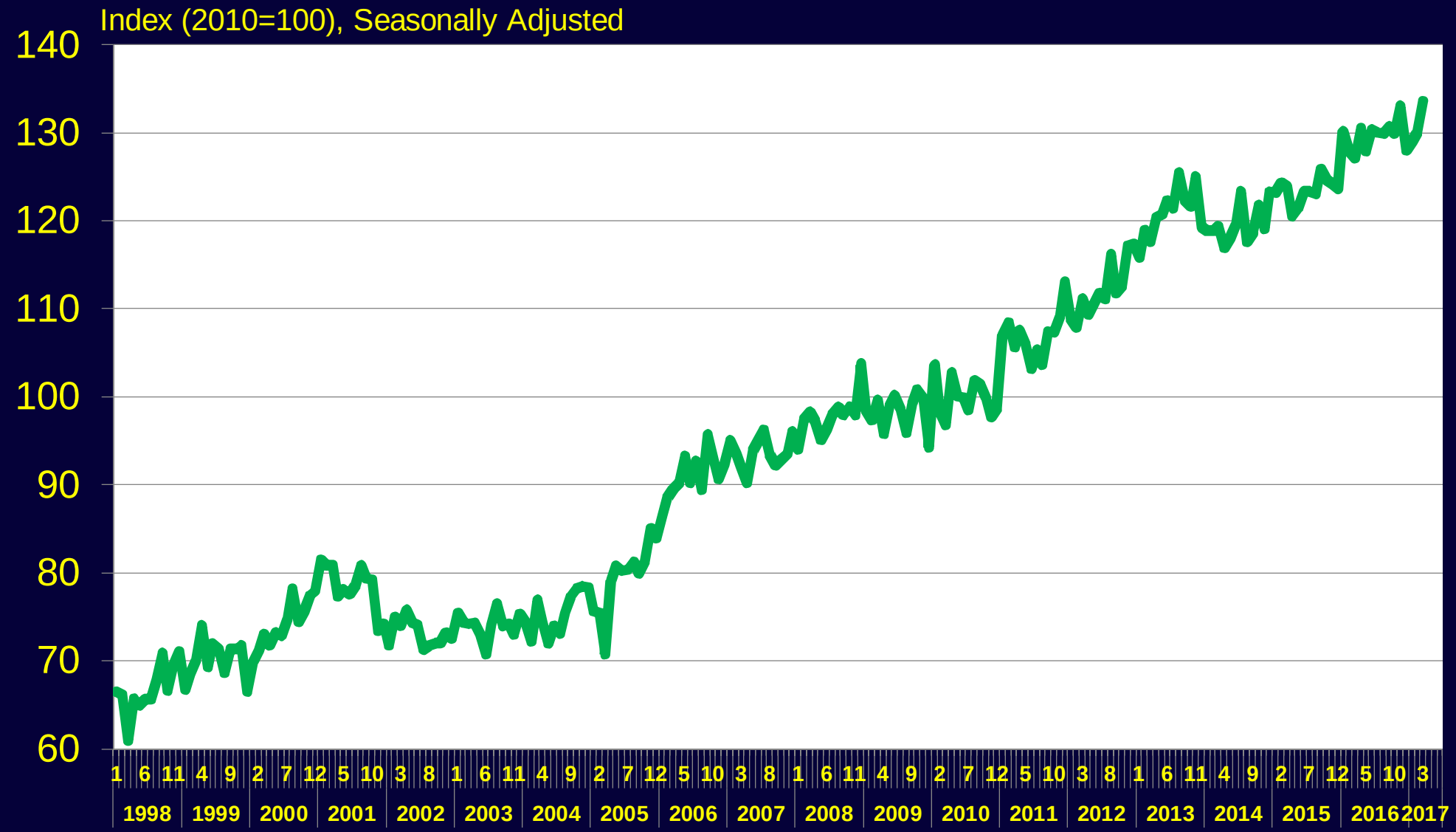
European Motor Vehicle Production



Eurostat, C291 category, EU 27 countries

Chart 17

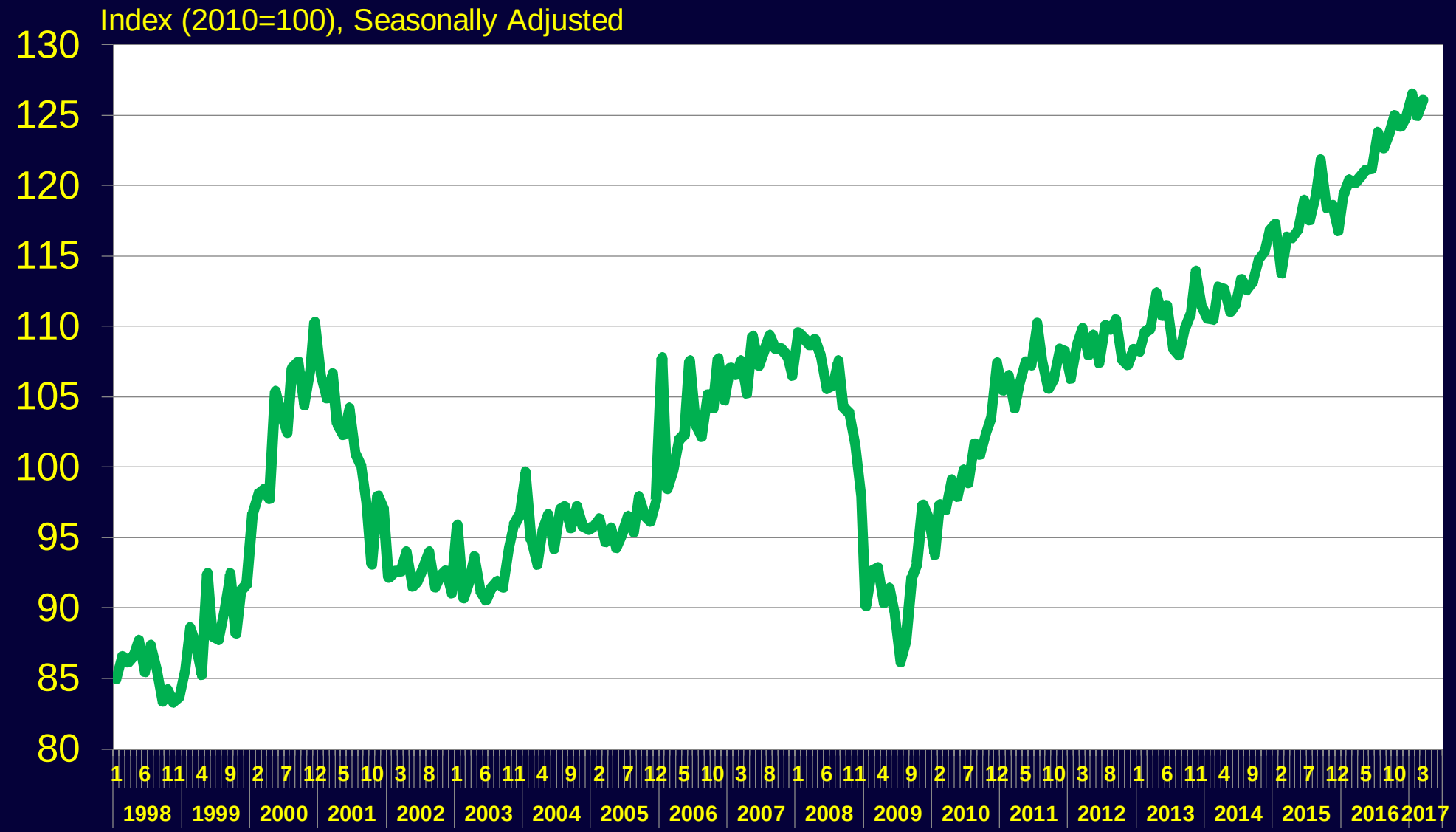
European Production - Aircraft, Spacecraft & Related Equipment



Eurostat, C303 category, EU 27 countries

Chart 18

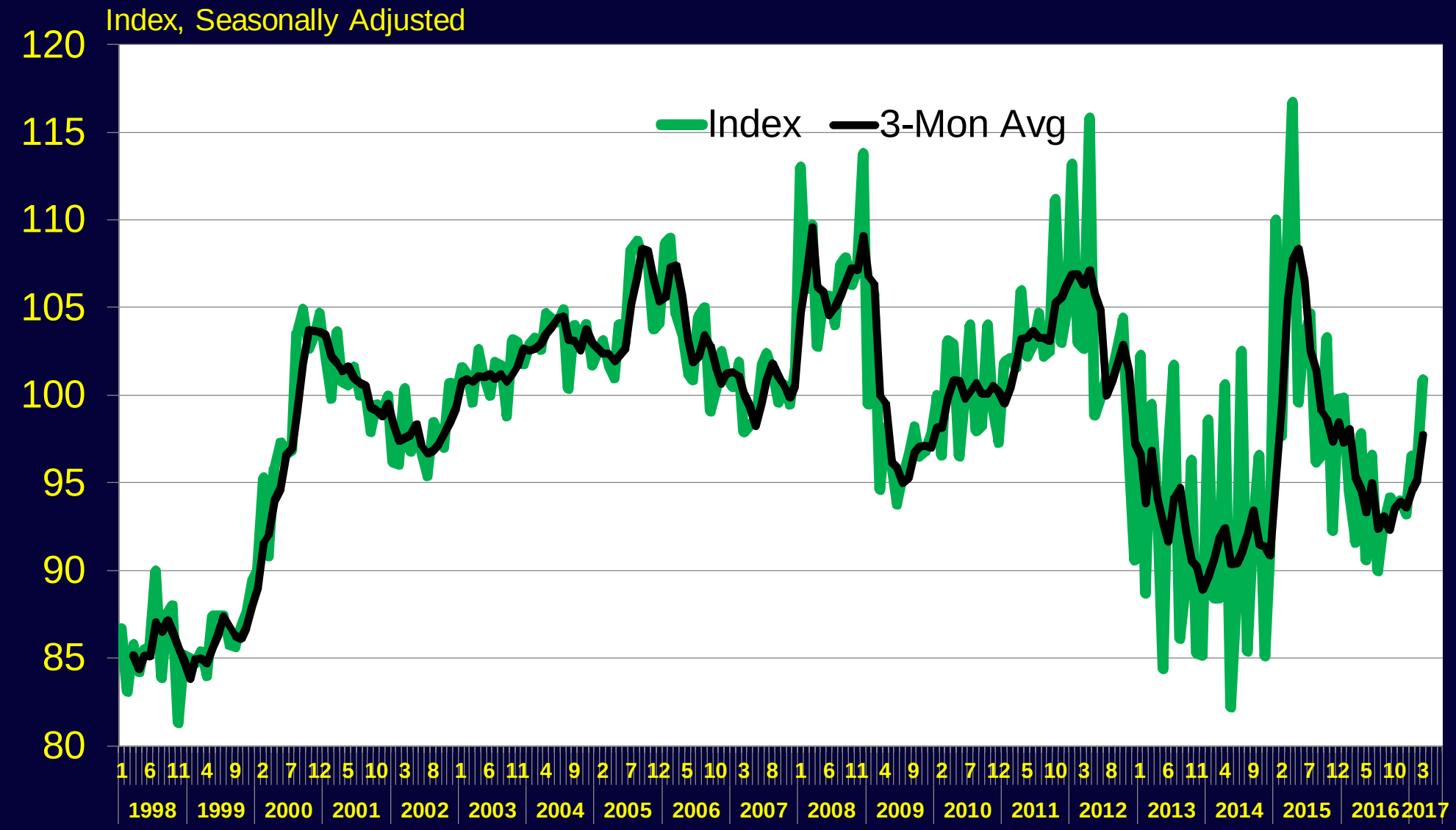
European Production - Instruments & Appliances for Measuring, Testing & Navigation



Eurostat, C2651 category, EU 27 countries

Chart 19

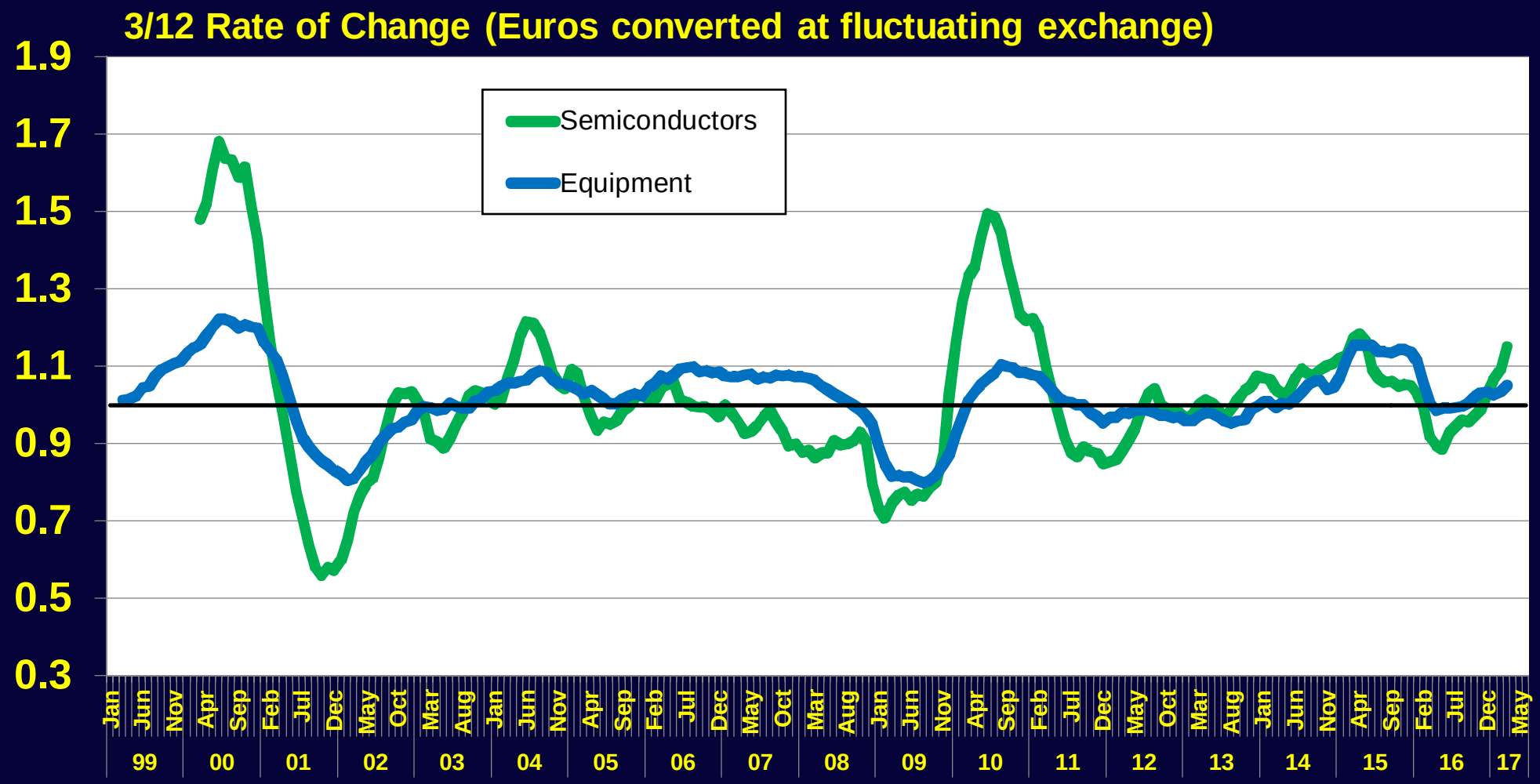
European Production - Irradiation, Electromedical & Electrotherapeutic Equipment



Eurostat, C266 category, EU 27 countries

Chart 20

Semiconductor Shipments to Europe vs. European Electronic Equipment Production



Total $ Semiconductor Shipments from All Countries to Europe www.sia-online.org/,
Eurostat class C26, EU27, European Computer, Electronic & Optical products Production

Chart 21

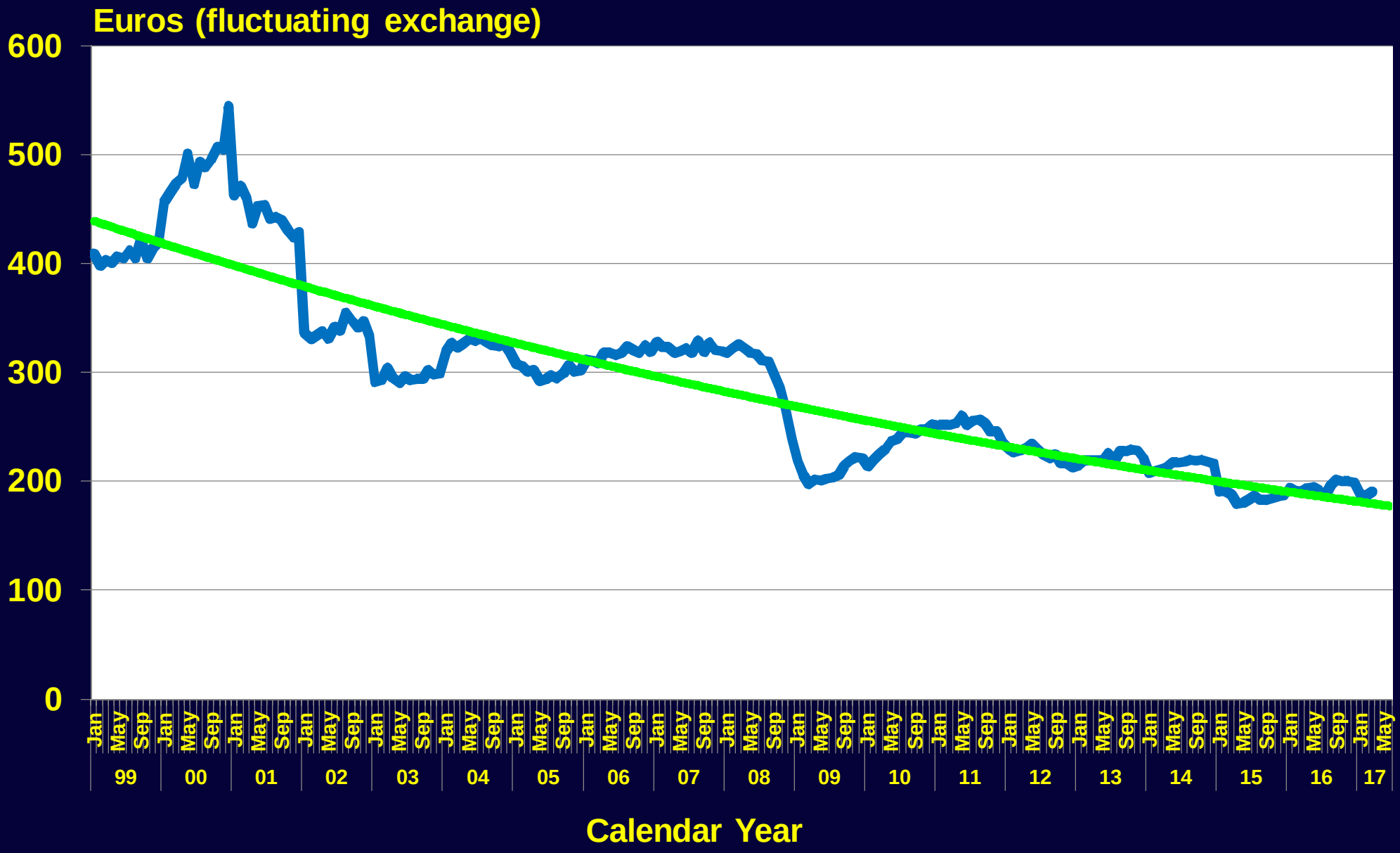
European Loaded Electronic Board Production



Eurostat, C2612

Chart 22

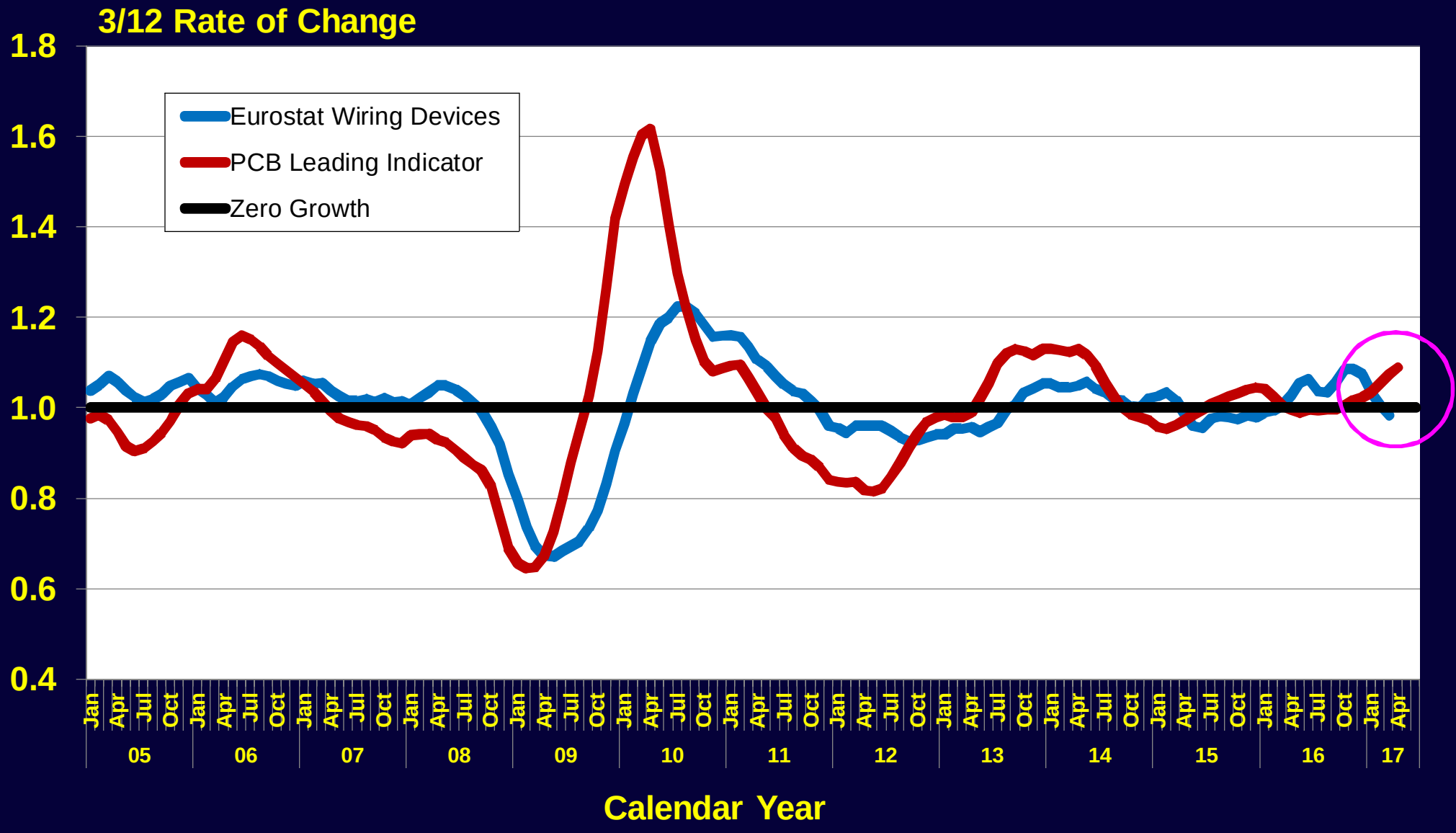
European PCB Monthly Shipments



Source: Custer Consulting Group estimate based upon industry data

Chart 23

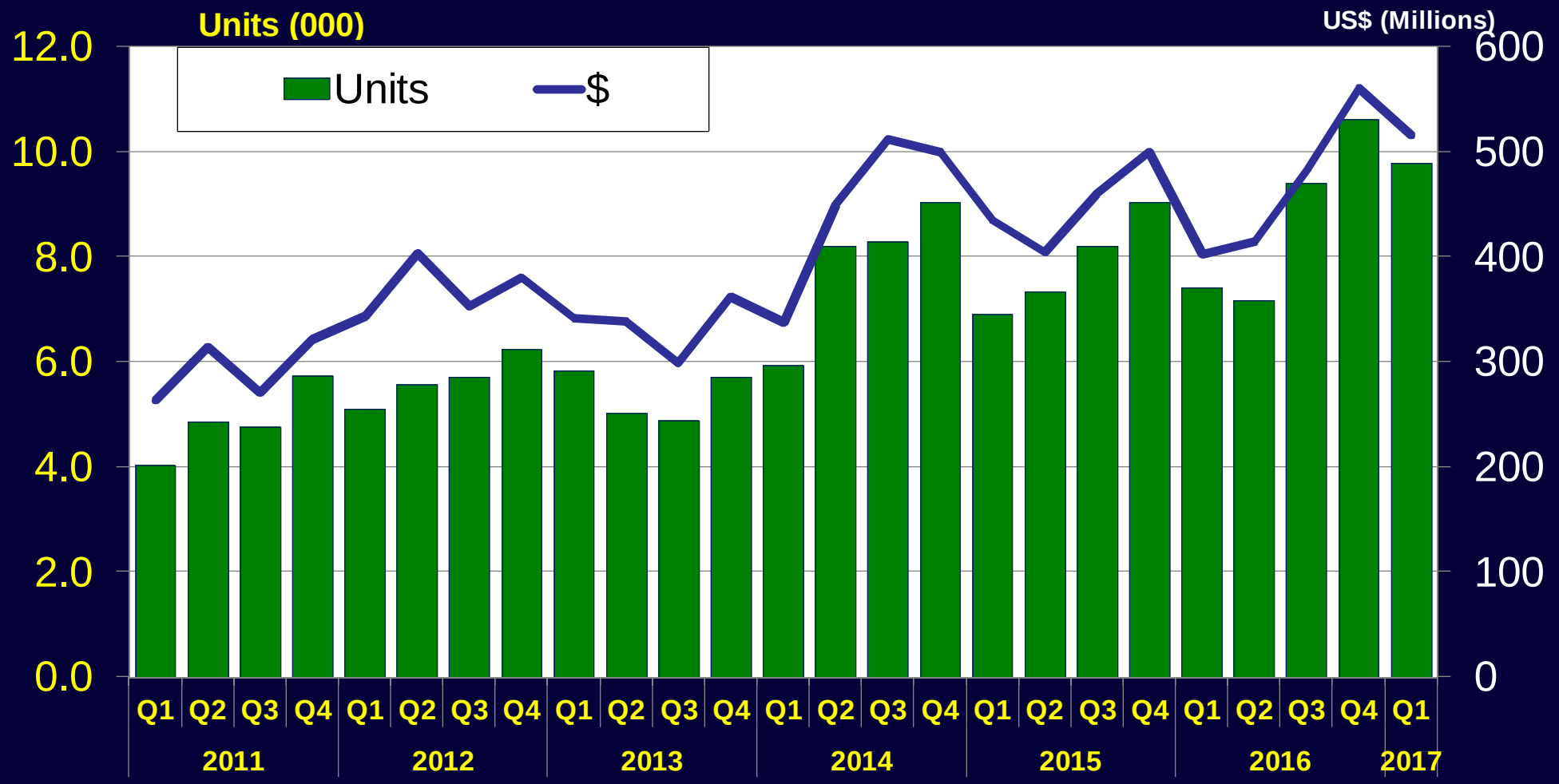
Europe PMI Leading Indicator vs. Europe Wiring Devices



Source: Custer Consulting Group

Chart 24

N American Robot Orders
by N American Companies to N America



Robots ordered by automotive component suppliers were up 53% while orders by automotive OEMs increased 32%. In non-automotive growth included metals (54%), semiconductors/electronics (22%) & food & consumer goods (15%). The biggest increases were in arc welding (102%), coating & dispensing (64%), and spot welding (36%) applications. RIA estimates that 250,000 robots are now in use in the United States, third highest in the world behind Japan and China.

www.robotics.org