

# Major Revision in U.S. Historical Data

Revised historical data for Manufacturers' Shipments, Inventories, and Orders were issued on May 14, 2015. These revisions reflect benchmarking the shipments and inventories data to the 2012 Economic Census and 2013 Annual Survey of Manufactures (ASM) data on a 2012 NAICS basis, as well as revised ASM benchmarks for prior years on a 2007 NAICS basis; incorporating the unfilled orders to shipments ratios obtained from the 2013/2012 and 2012/2011 Manufacturers' Unfilled Orders Survey by applying these ratios to the respective Census or ASM shipments data, as well as incorporating revised unfilled orders to shipments ratios for prior years; adjusting the new orders data to be consistent with the benchmarked shipments and unfilled orders data; correcting monthly data for late receipts, reclassifications of reported data, and revisions to previously reported data; and updating the seasonally adjusted data based on the results of benchmarking and the recent annual review of the seasonal adjustment models. These revisions spanned the seasonally adjusted data for January 1997 through March 2015 and the data not seasonally adjusted for January 2001 through March 2015. An updated Press Release contains revised monthly tables for January 2015 through March 2015 on a 2012 North American Industry Classification System (NAICS) basis, which will be the new basis for publishing data from the M3 Survey starting with the April 2015 Advance Report on Durable Goods. Please call M3 staff on (301) 763-4832 with any questions.

[www.census.gov/manufacturing/m3/index.html](http://www.census.gov/manufacturing/m3/index.html)

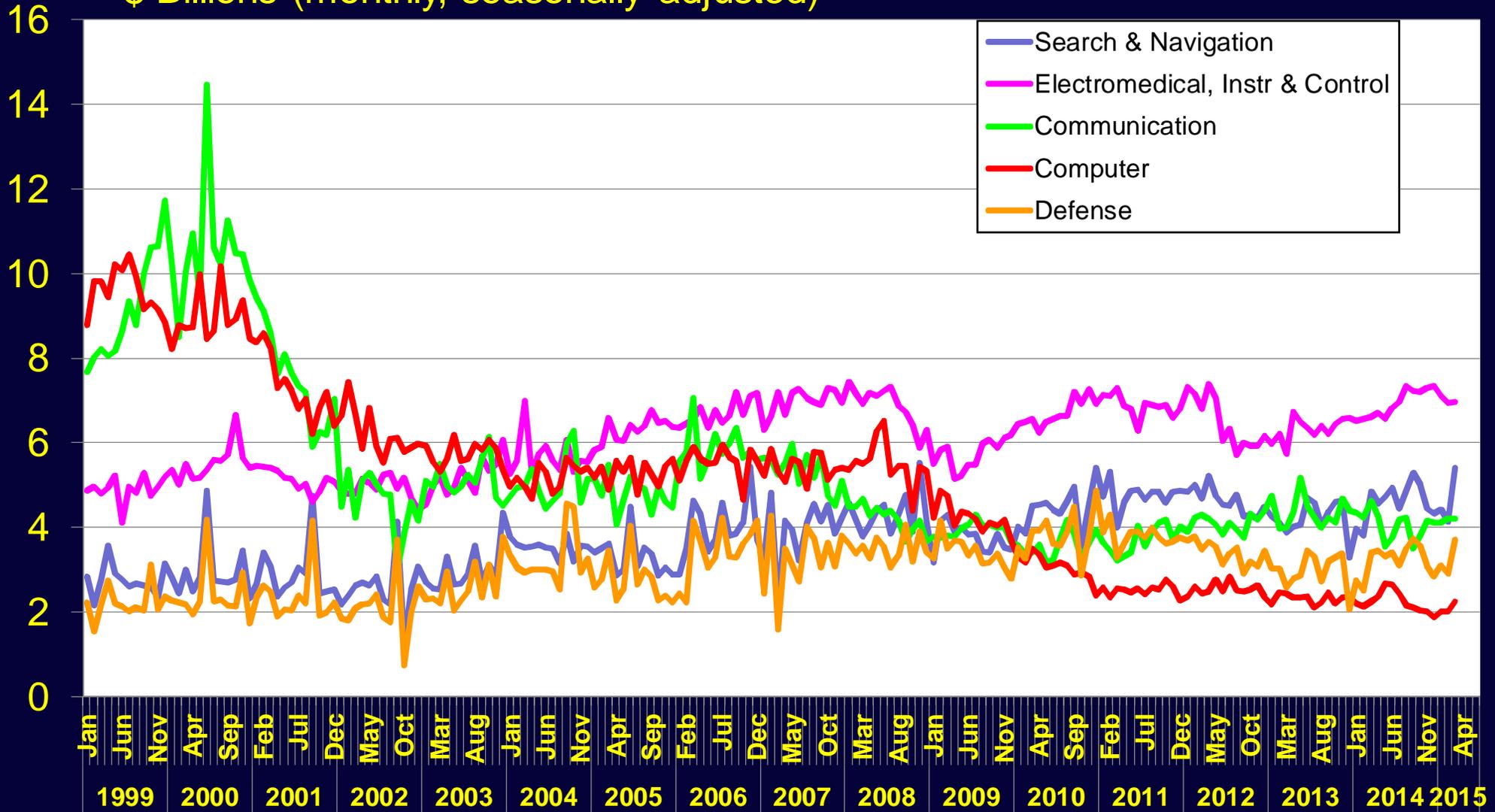
Note that these revisions were especially large for electromedical, measurement & control, defense and search & navigation equipment historical data. Comparison charts with prior and revised data follow this chart.

# Before May 14, Revision

## U.S. Electronic Equipment Orders

### Monthly Data

\$ Billions (monthly, seasonally adjusted)



# After May 14, 2015 Revision

## U.S. Electronic Equipment Orders

### Monthly Data

\$ Billions (monthly, seasonally adjusted)

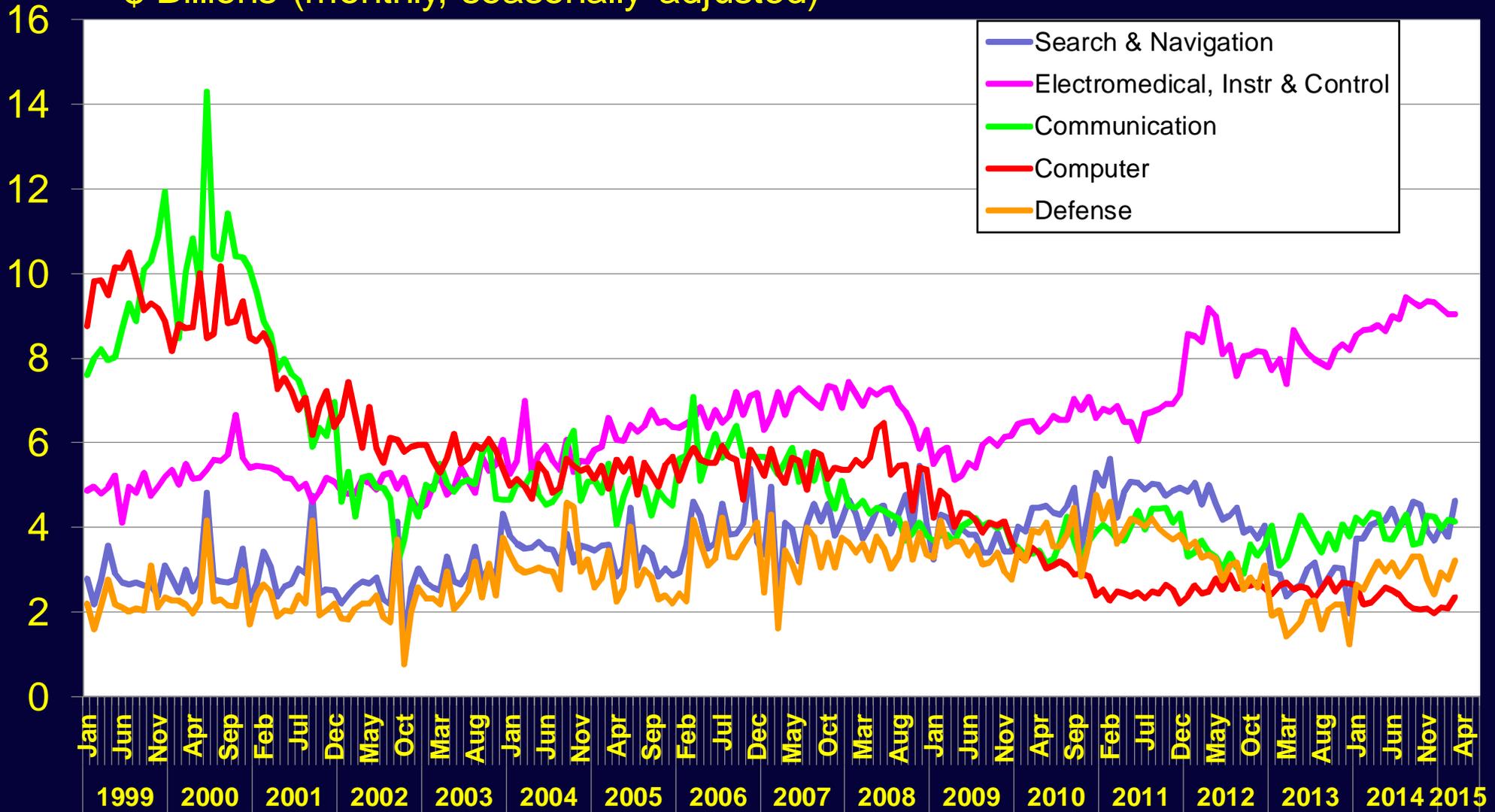


Chart 4

# Before & After May 14, 2015 Revision U.S. Electronic Equipment Shipments

Computer, Communications, Measurement & Control and Military

\$ Billions (monthly, seasonally adjusted)

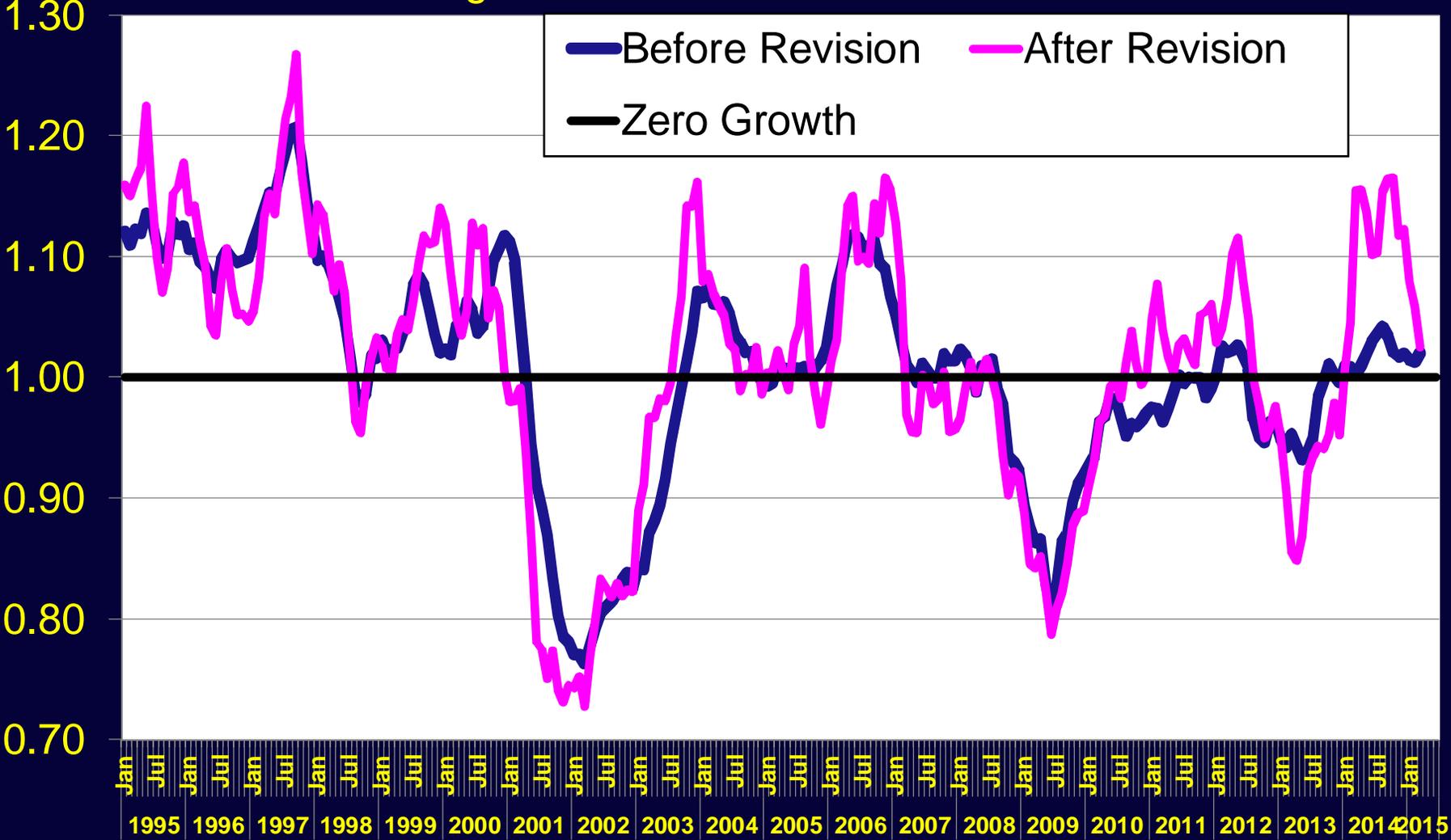


Chart 5

# Before & After May 14, 2015 Revision U.S. Electronic Equipment Order Growth

Computer, Communications, Measurement & Control and Military

3/12 Rate of Change



# **U.S. Electronic Equipment - Orders, Shipments & Inventories**

**(all following U.S. electronic equipment supply chain  
charts are based on May 14, 2015 U.S. Dept. of  
Commerce M3 revision)**

Chart 7

# U.S. Electronic Equipment Book/Bill Ratio

## 3-Month Average

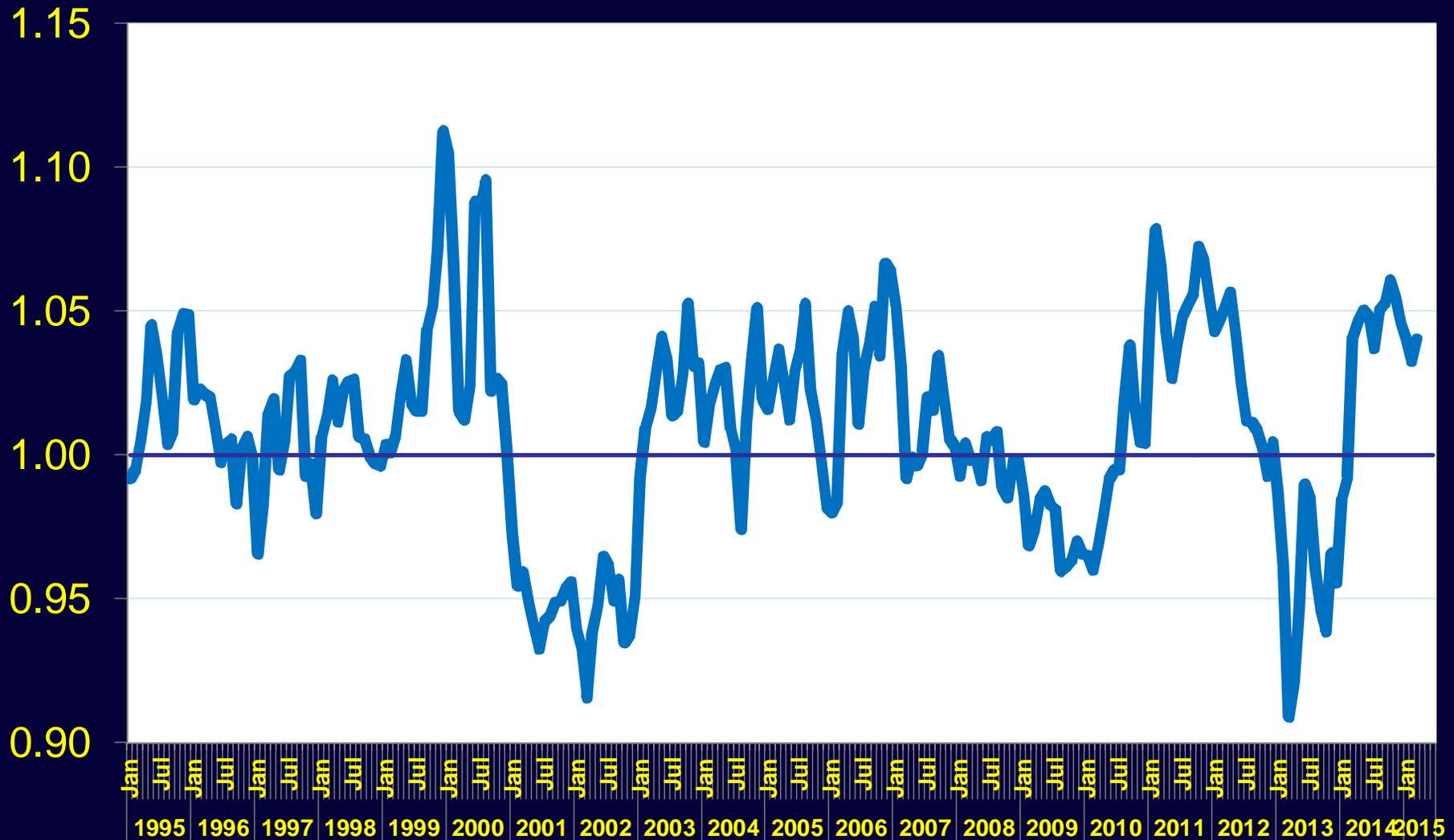


Chart 8

# U.S. Electronic Equipment Order & Shipment Growth

Computer, Communications, Measurement & Control and Military

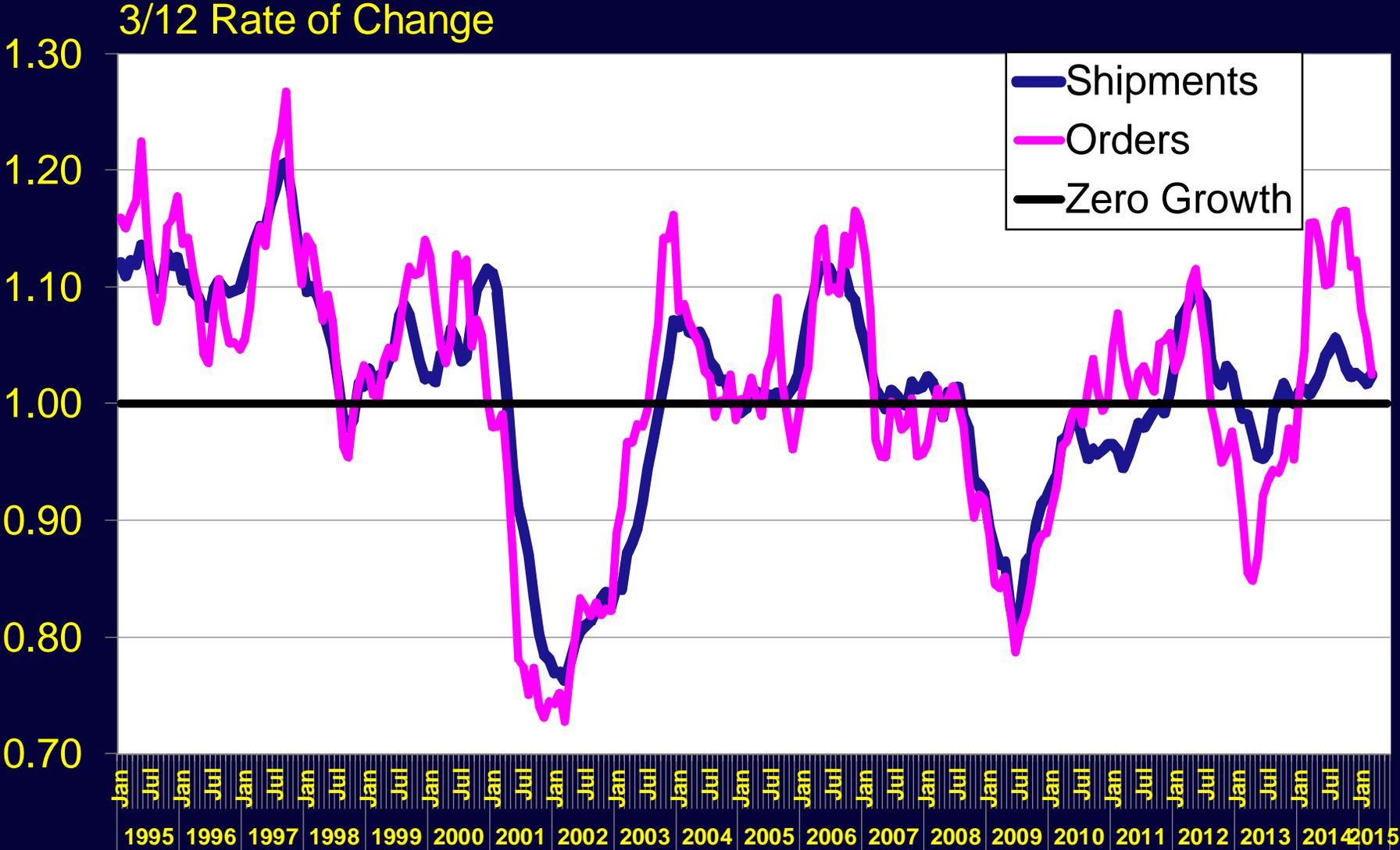
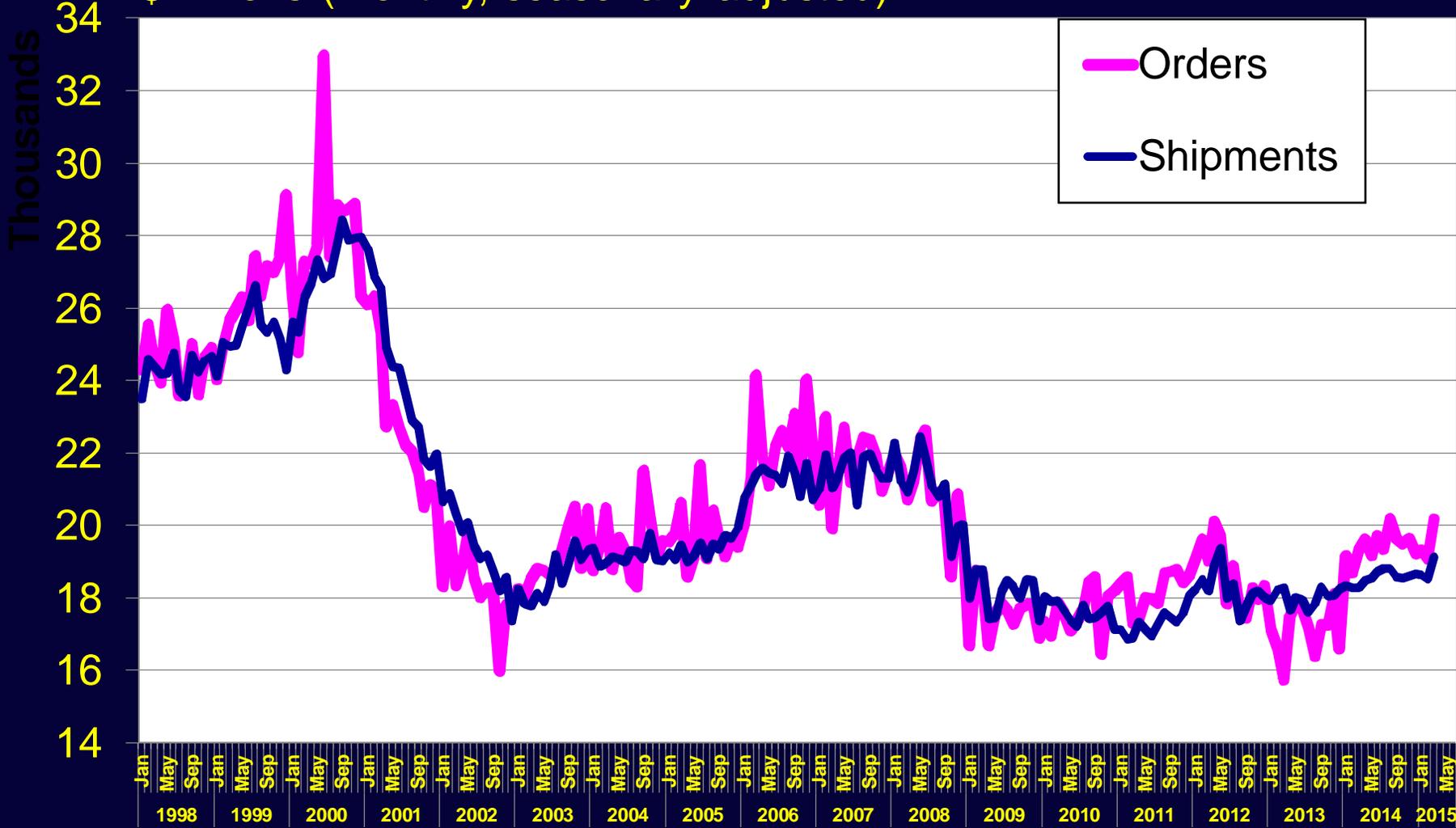


Chart 9

# U.S. Electronic Equipment Orders & Shipments

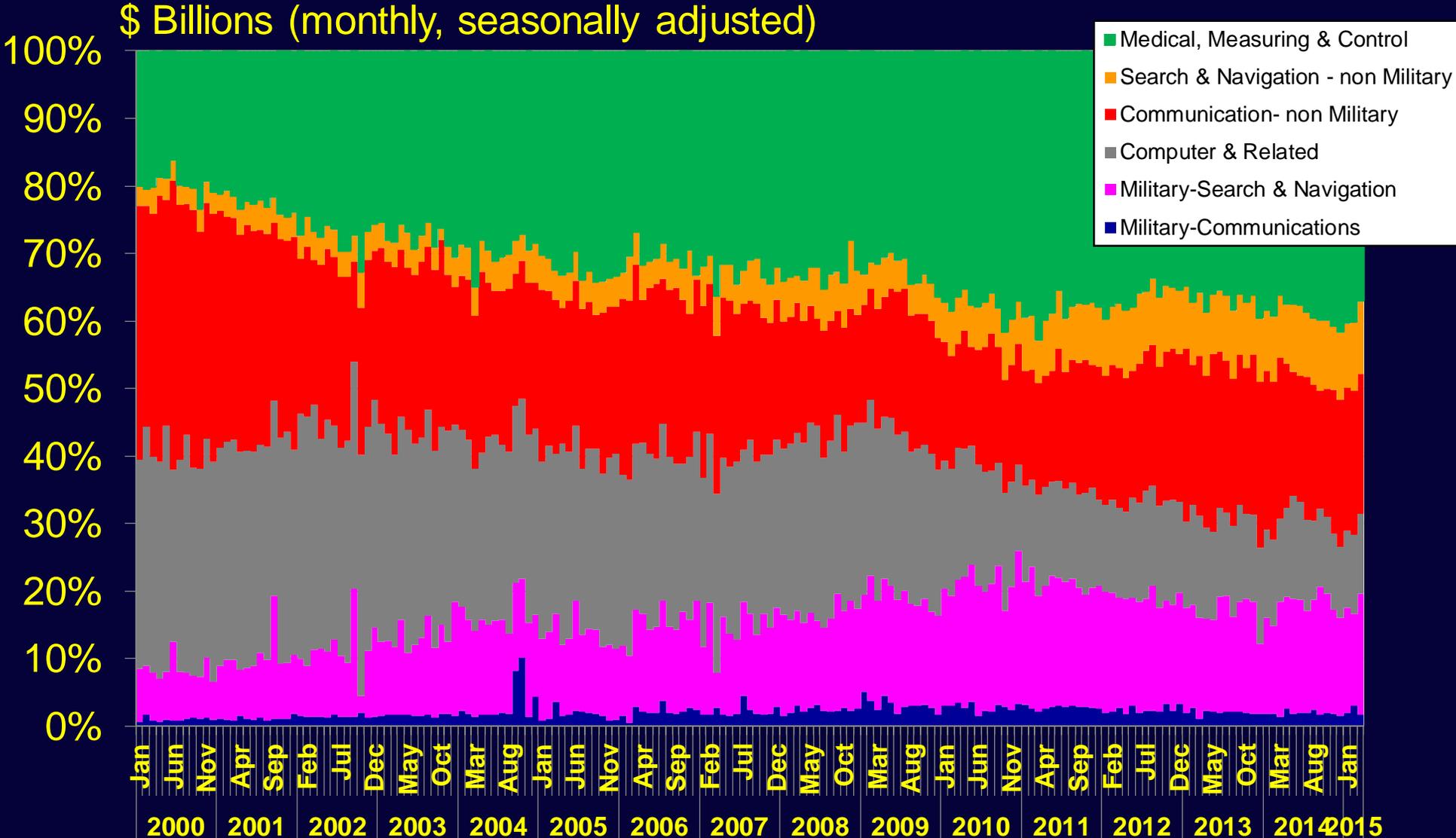
Computer, Communications, Measurement & Control and Military

\$ Billions (monthly, seasonally adjusted)

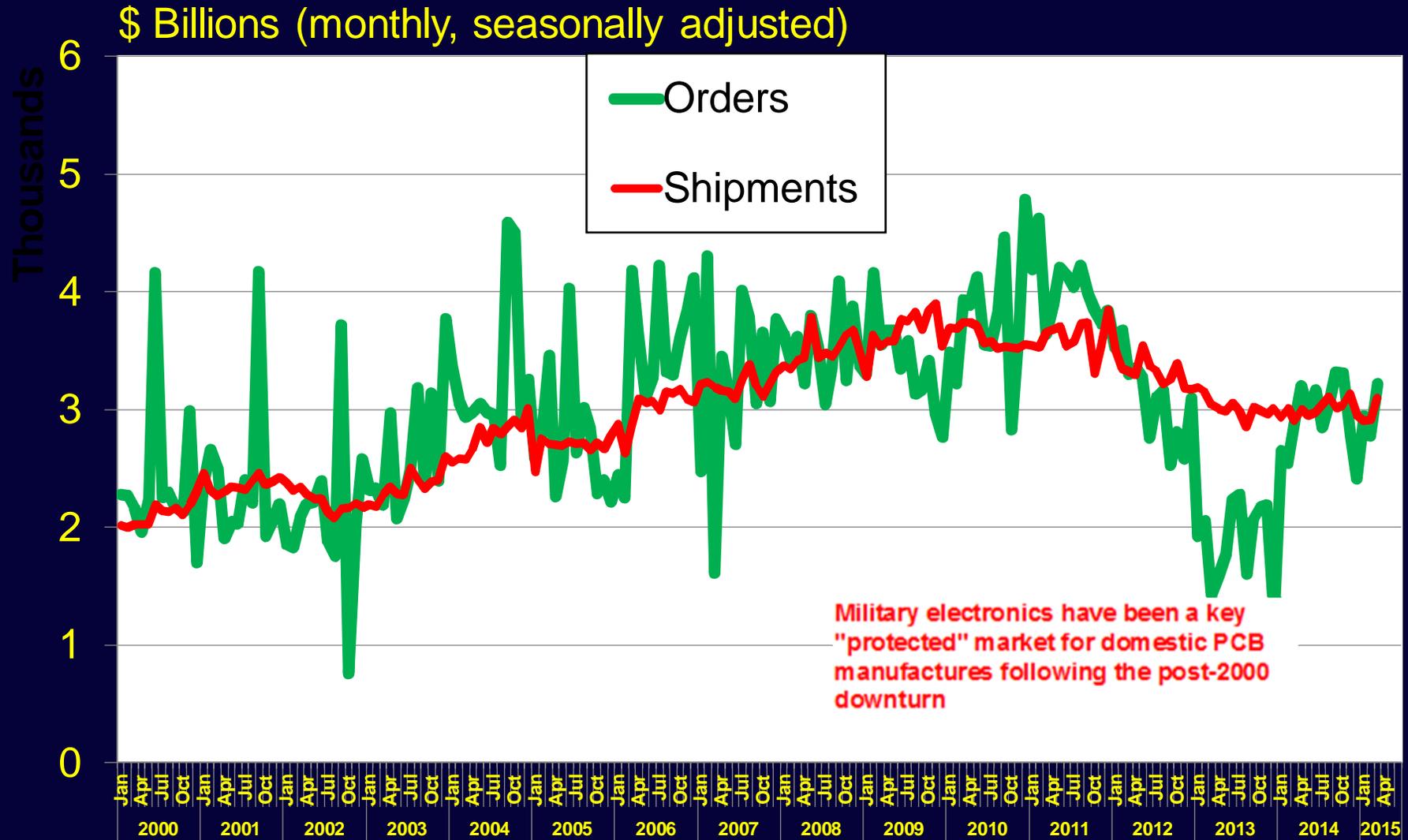


# U.S. Electronic Equipment Orders

## Monthly Data



# U.S. Military Electronics Orders & Shipments Defense Communication & Search & Navigation Equipment



# SEARCH & NAVIGATION EQUIPMENT

## Orders & Shipments (primarily military electronics)

\$ Billions (monthly, seasonally adjusted)

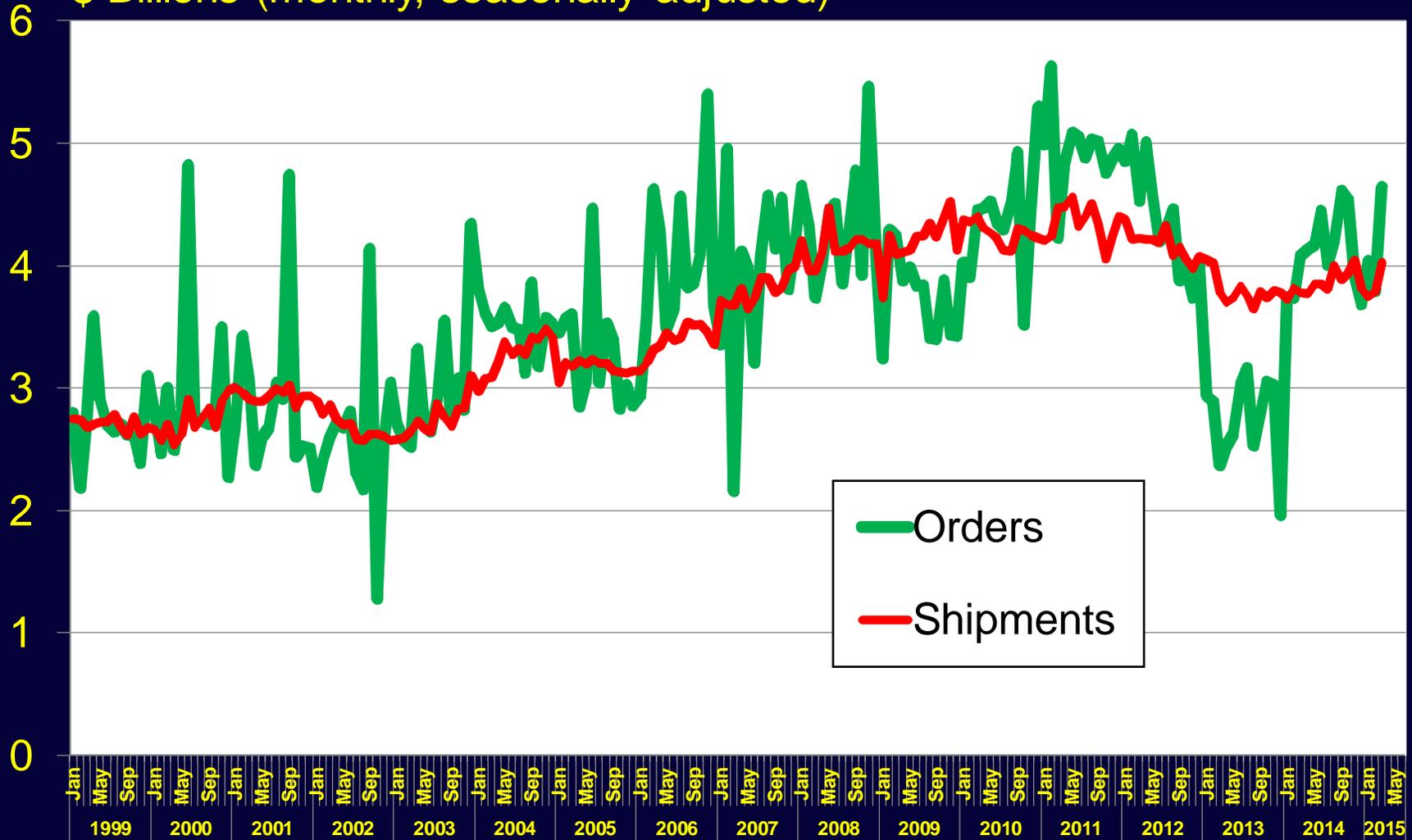
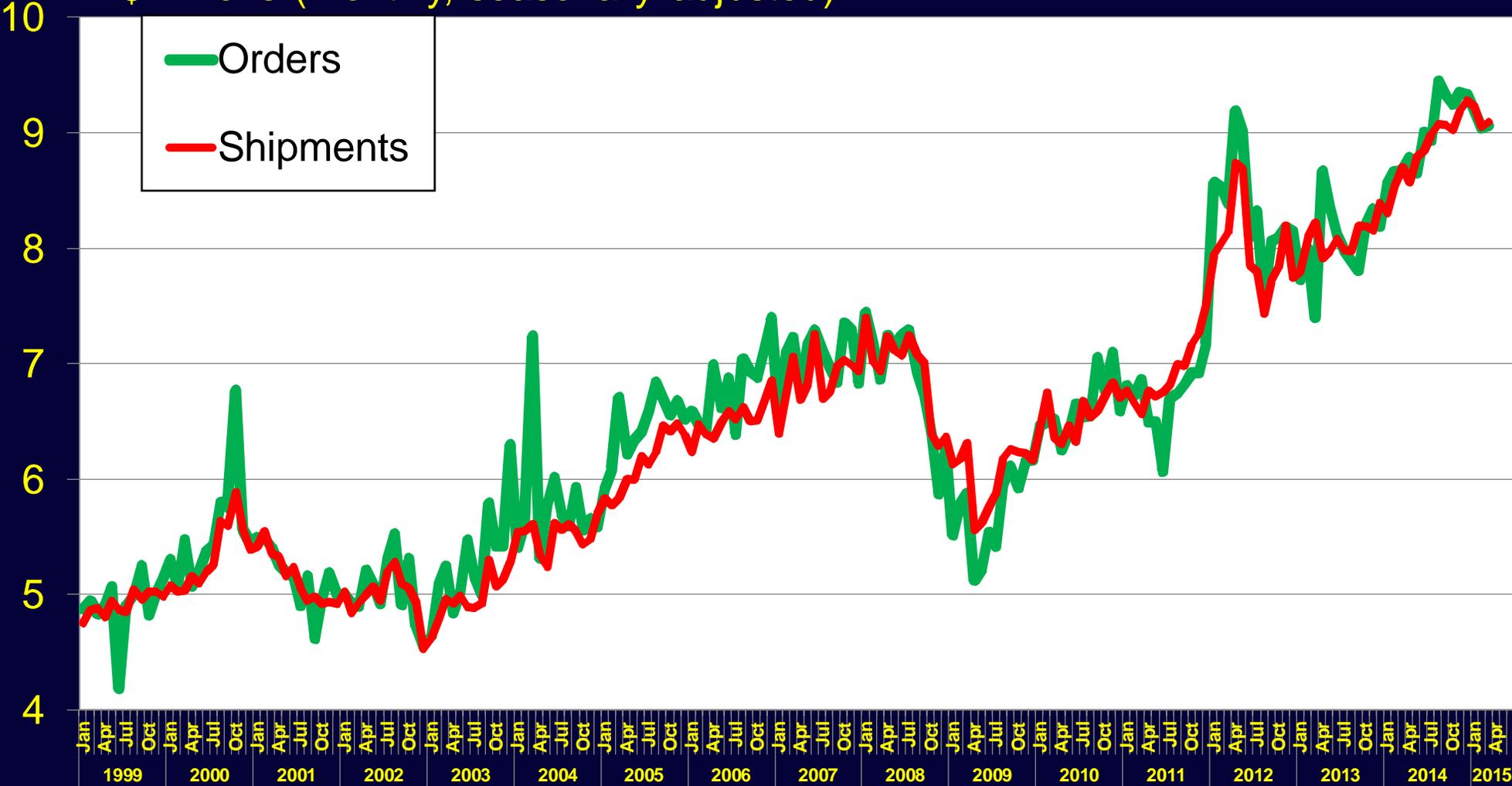


Chart 13

# U.S. Electromedical, Measurement & Control Equipment Orders & Shipments

\$ Billions (monthly, seasonally adjusted)



# U.S. Production: "Other" Electronic Components (excludes semiconductors) Orders & Shipments

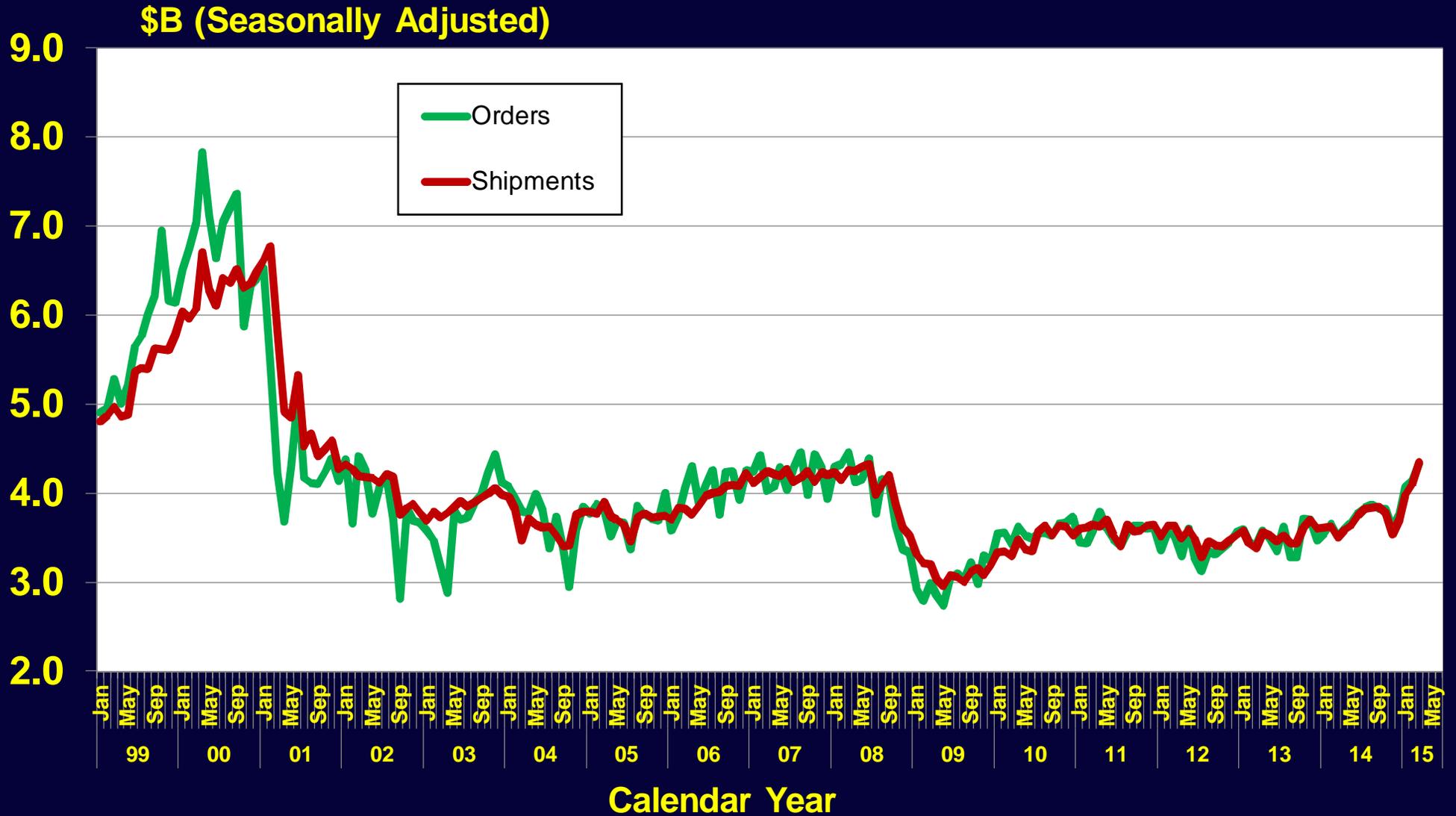


Chart 15

# Present Growth Rates (%)

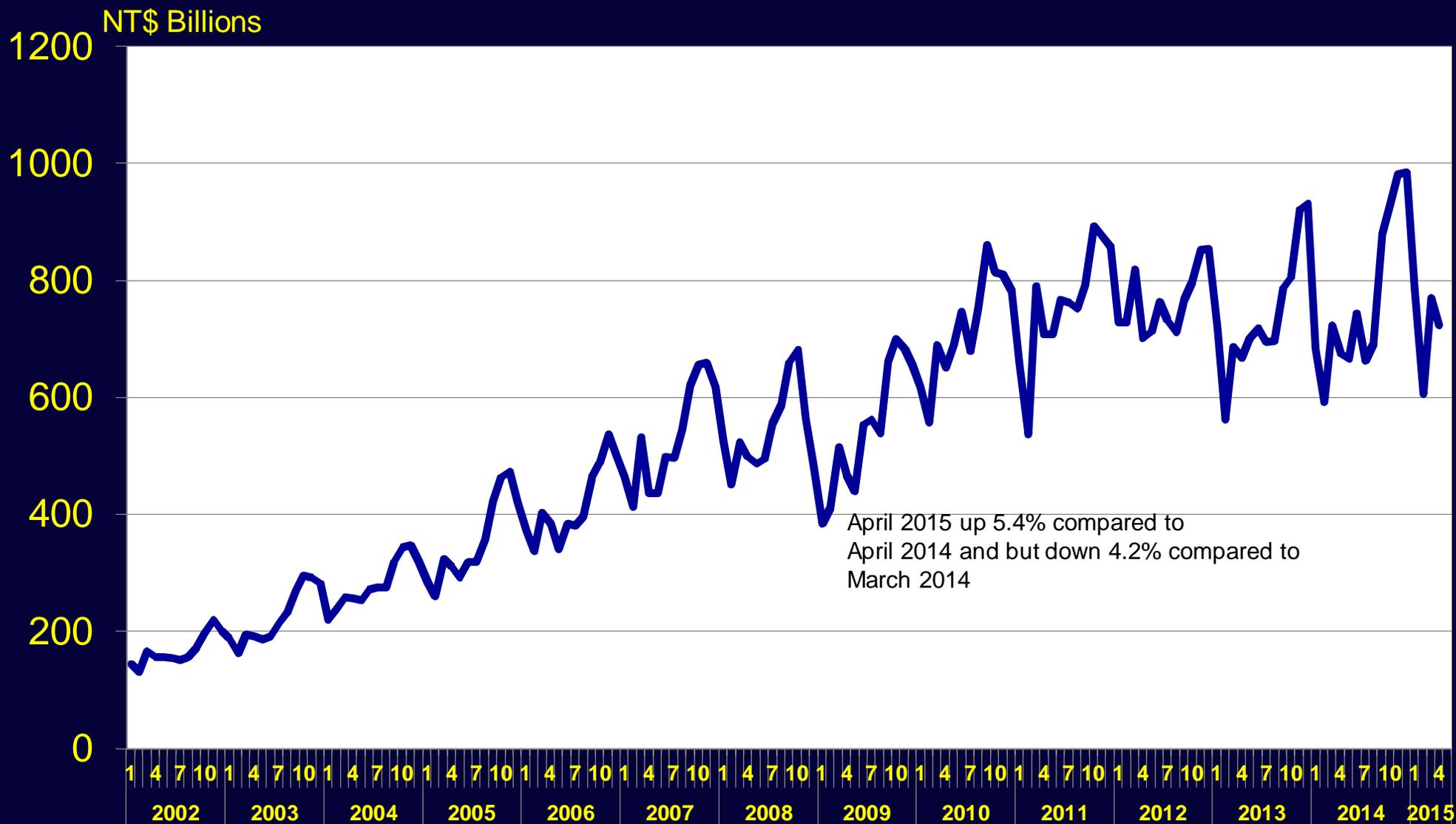
## U.S. Economy & Electronics Industry

	Latest Month	Annual Growth	3-Month Growth
<b>Electronic Component \$</b>			
Rigid & Flex PCB Orders (N Amer)	3/15	102.4	101.2
Rigid & Flex PCB Shipments (N Amer)	3/15	<b>99.1</b>	<b>99.1</b>
Electronic Component Orders	3/15	109.7	116.9
Electronic Component Shipments	3/15	107.9	115.8
Semiconductor Shipments to N America	3/15	112.4	114.2
<b>U.S. Electronic Equipment Orders \$</b>			
Computer & Related	3/15	<b>88.8</b>	<b>93.0</b>
Communication	3/15	102.4	<b>97.0</b>
Medical, Measurement & Control	3/15	110.0	105.3
Search & Navigation	3/15	138.4	107.9
Defense Capital Goods	3/15	109.3	108.8
Military Electronics	3/15	142.7	110.2
Total Electronic Equipment	3/15	110.1	102.5
<b>U.S. Industrial Production</b>	4/15	104.1	102.8

NOTE: 3 month growth rates compare most recent 3 months to same 3 months one year earlier

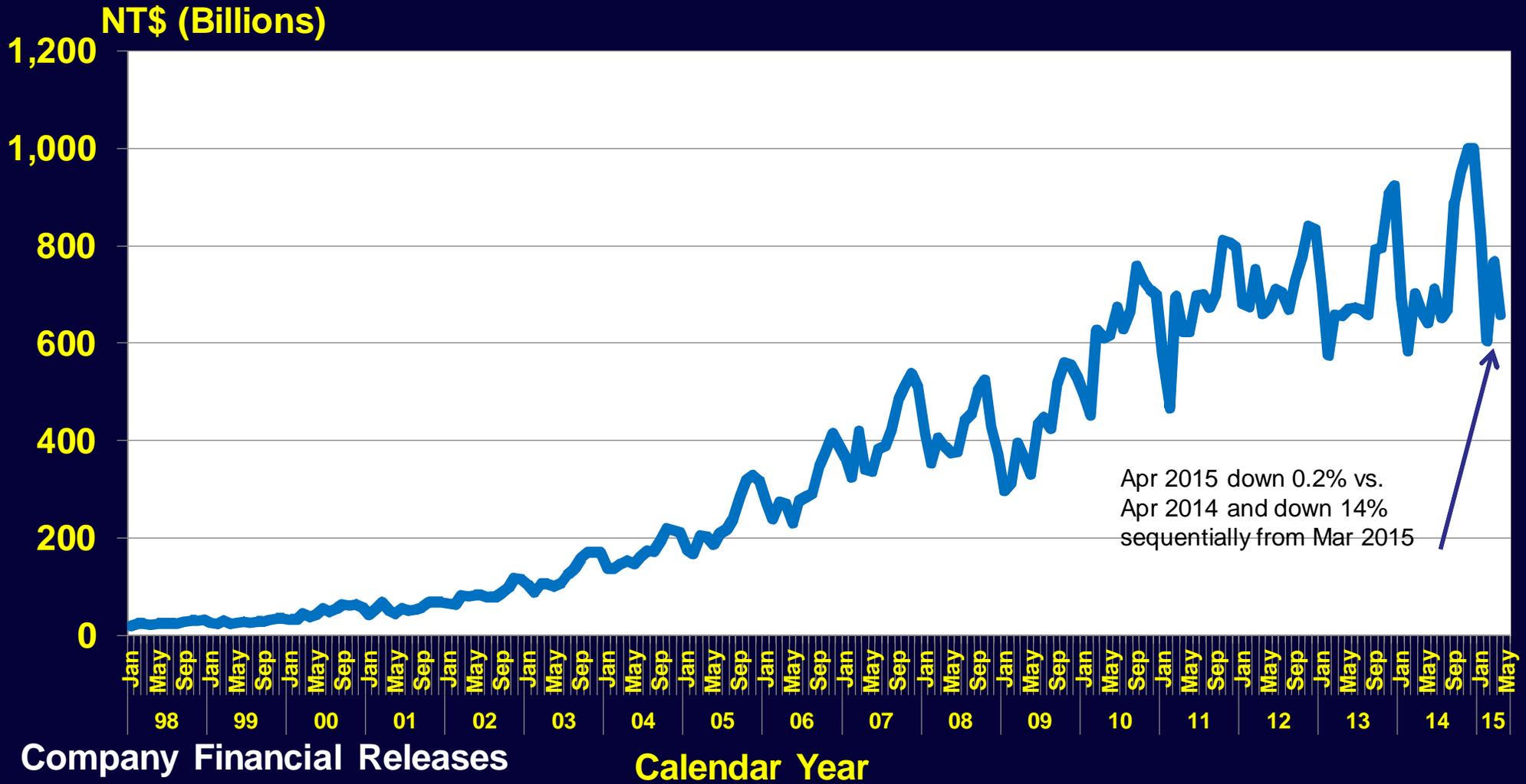
# Taiwan/China Electronic Equipment Producers Composite of 101 Manufacturers Consolidated Revenue

Chart 16



Taiwan listed companies, often with significant manufacturing in China

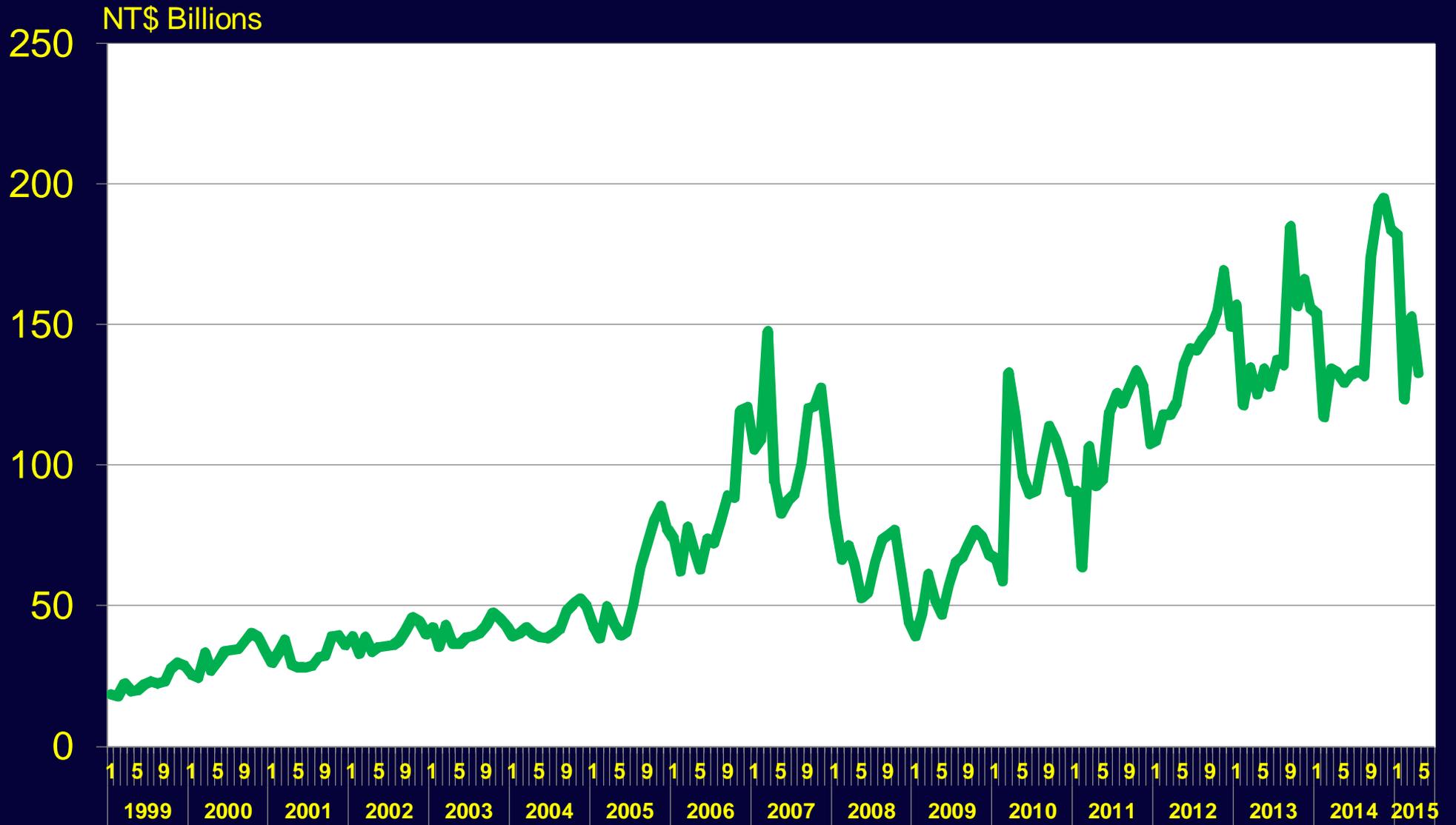
# Taiwan ODM Companies Composite Sales of 11 Large Manufacturers



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

Chart 18

# Taiwan/China Motherboard Vendor Sales Composite of 22 Manufacturers



Taiwan listed companies, often with significant manufacturing in China

# Taiwan Display Producers Composite of 6 TFT-LCD Panel Manufacturers



Taiwan listed companies, often with significant manufacturing in China

# 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

# 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

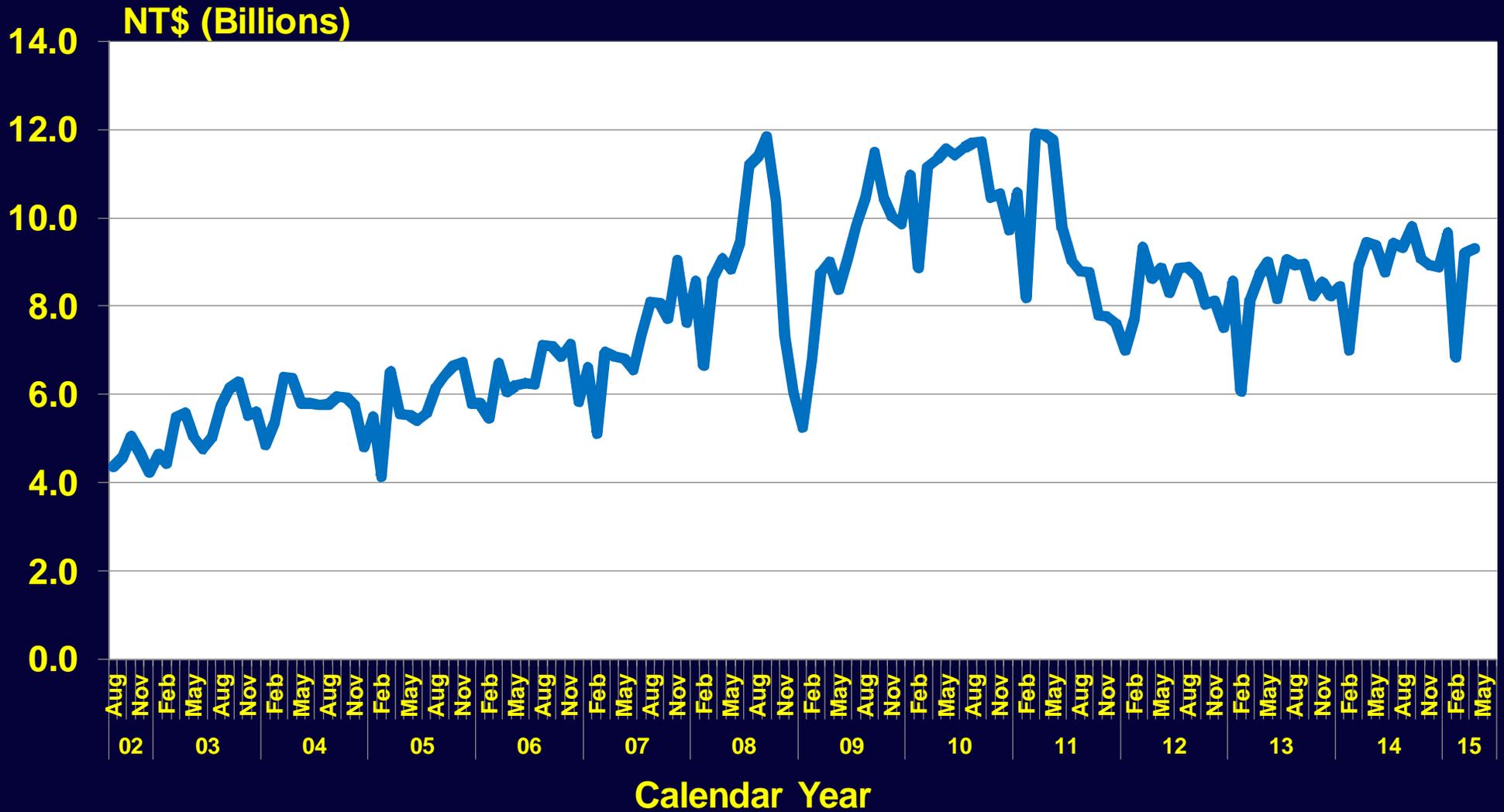
# Taiwan Memory Companies Composite of 8 Manufacturers



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

Chart 23

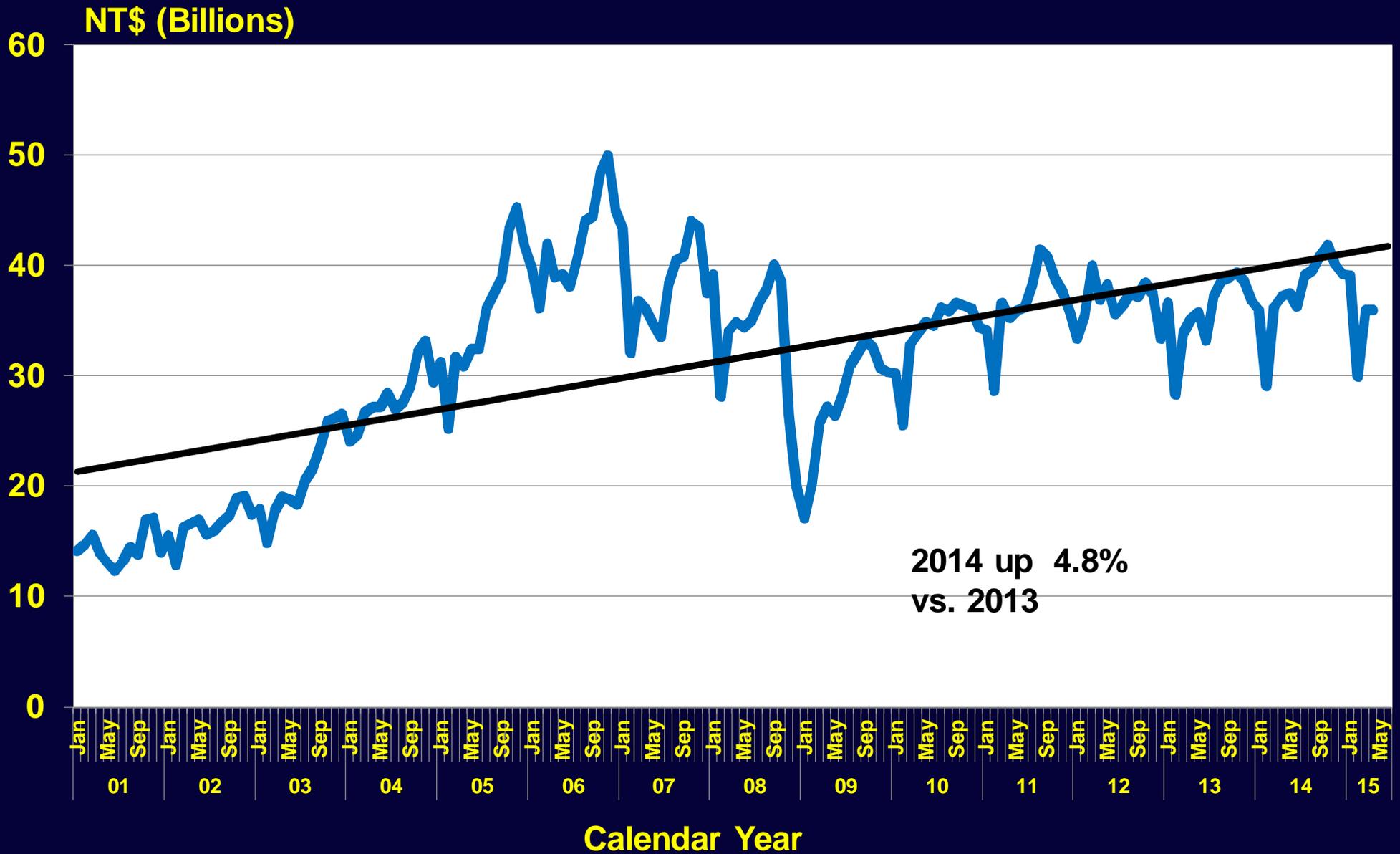
# Taiwan Passive Component Companies Composite of 25 Manufacturers



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)

# Taiwan Rigid & Flex PCB Shipments

## Broad Composite of 46 Taiwan-listed Manufacturers



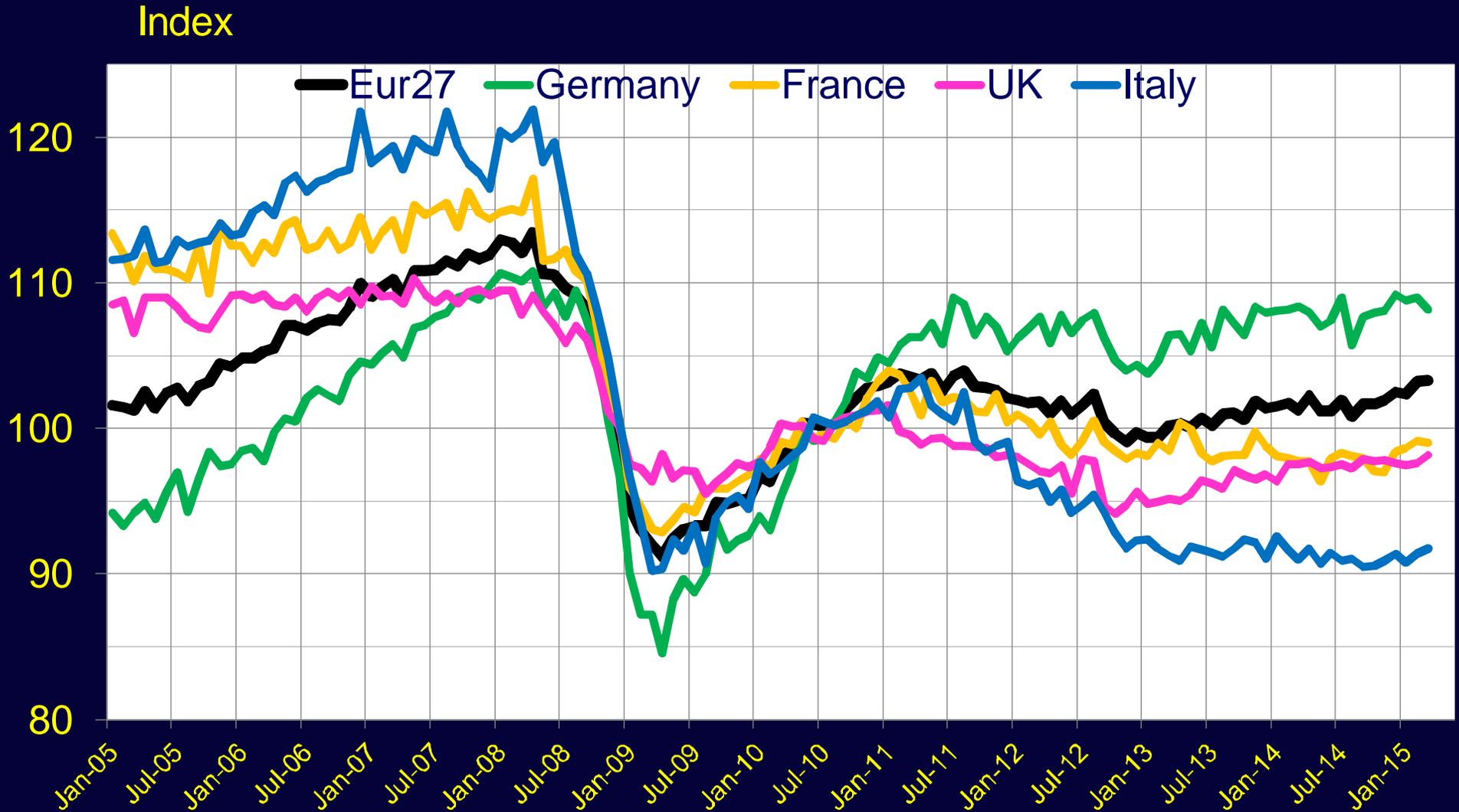
# Taiwan Solar/Photovoltaic Panel Companies Composite of 27 Manufacturers



Acter, Big Sun Energy Technology, Chen Full Intl, Danen Technology, Daxon Technology, DeISolar, Delta Electronics, e\_TON Solar Tec, Invetec Group, Eversol, Gigasolar materials, Gintech, Green Energy Technology (GET), Higher Way Elec, Kenmec Mechanical, Ligitek, Motech, Neo Solar Power, Phoenixtec Power Co (PPC), Powermate, Precision Silicon, Sino-American Silicon Products (SAS), Solar Applied Materials Technology, Solartech Energy Corp, Sunrise Global Solar Energy, Sysgration, Tainenergy Tech, Tera Autotec, Tyntek, Wafer Works, Wholetech System Hitech

# Industrial Production - Europe

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



# European Computer, Electronic & Optical Products Production

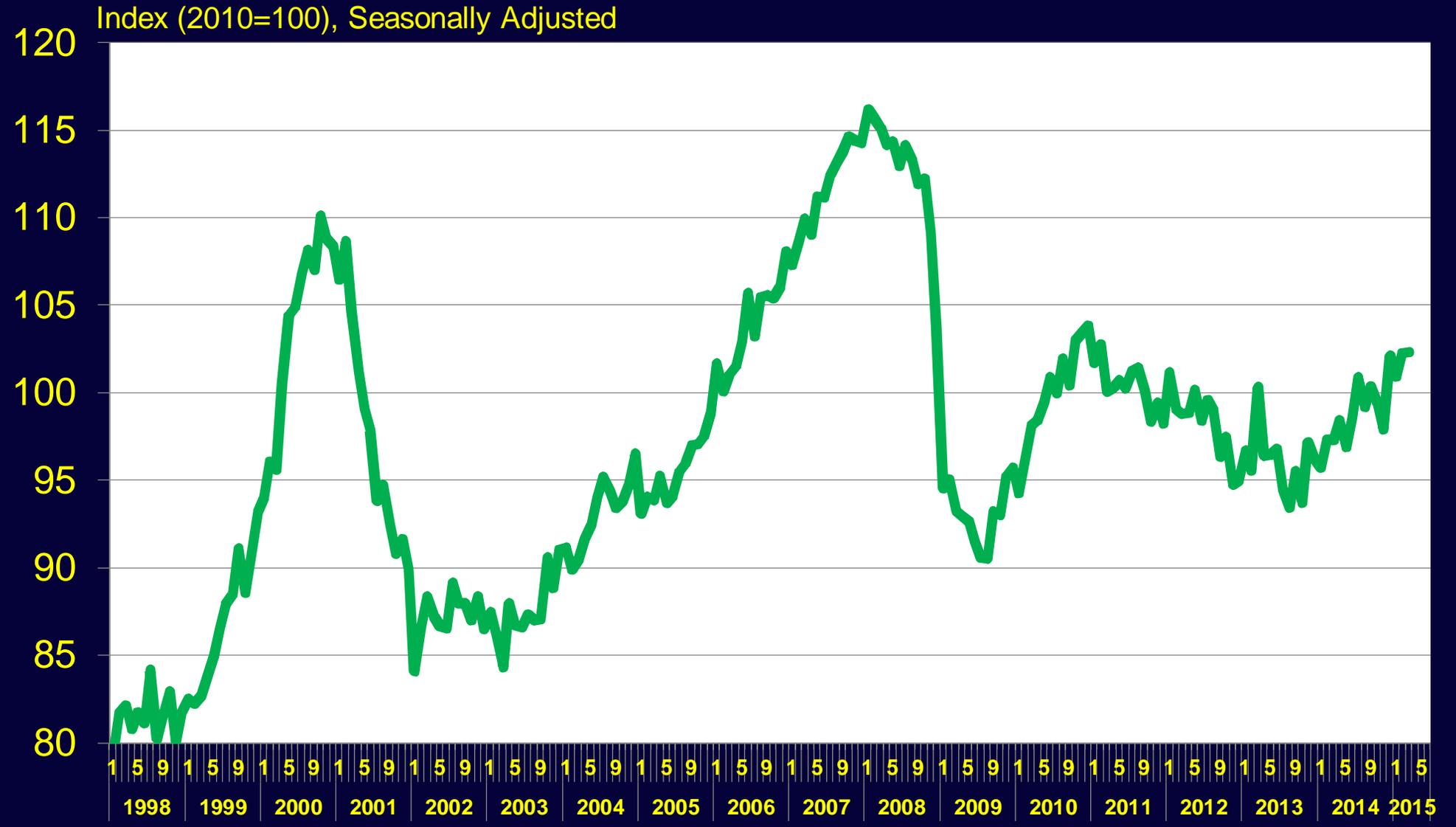
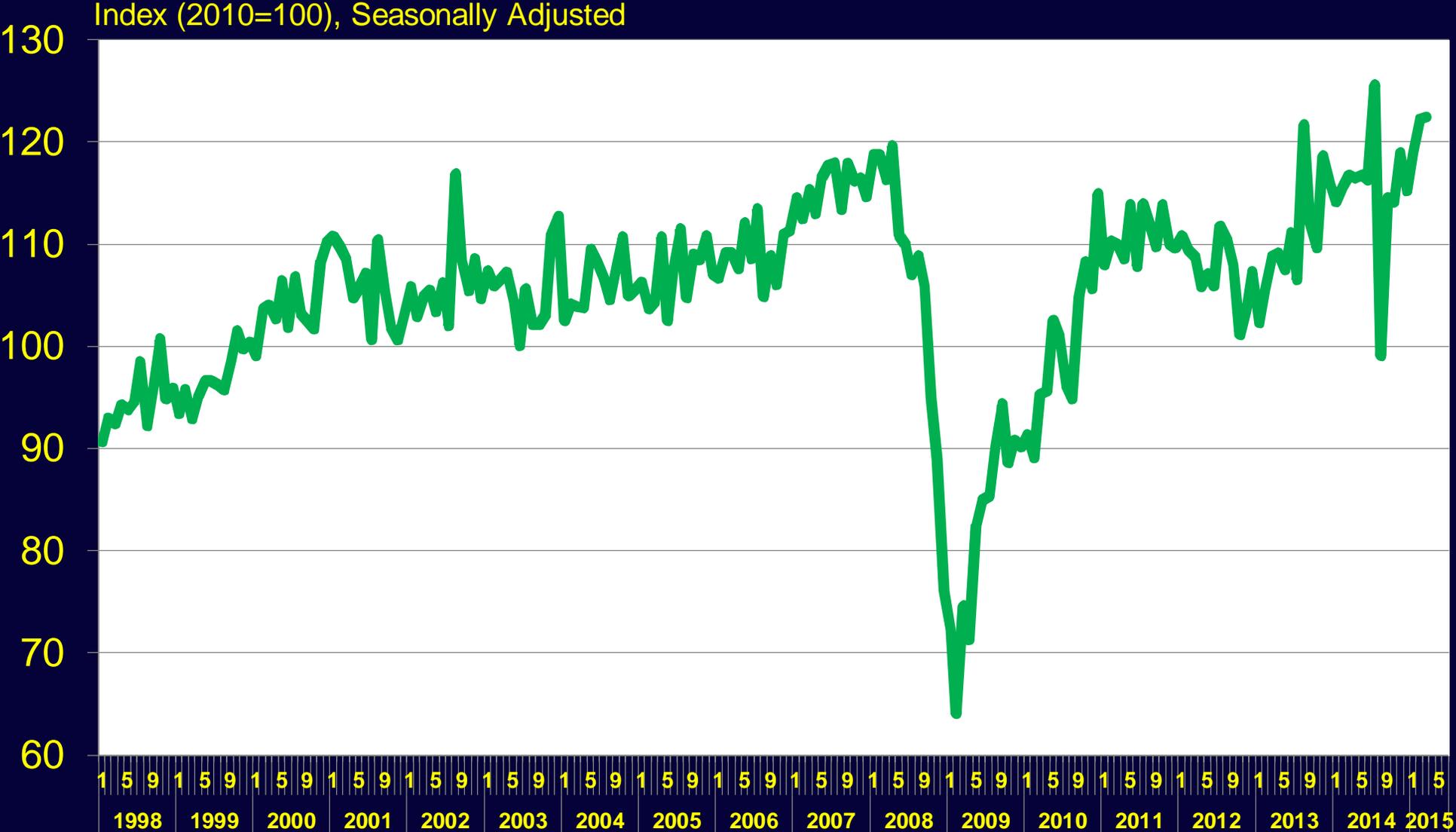


Chart 28

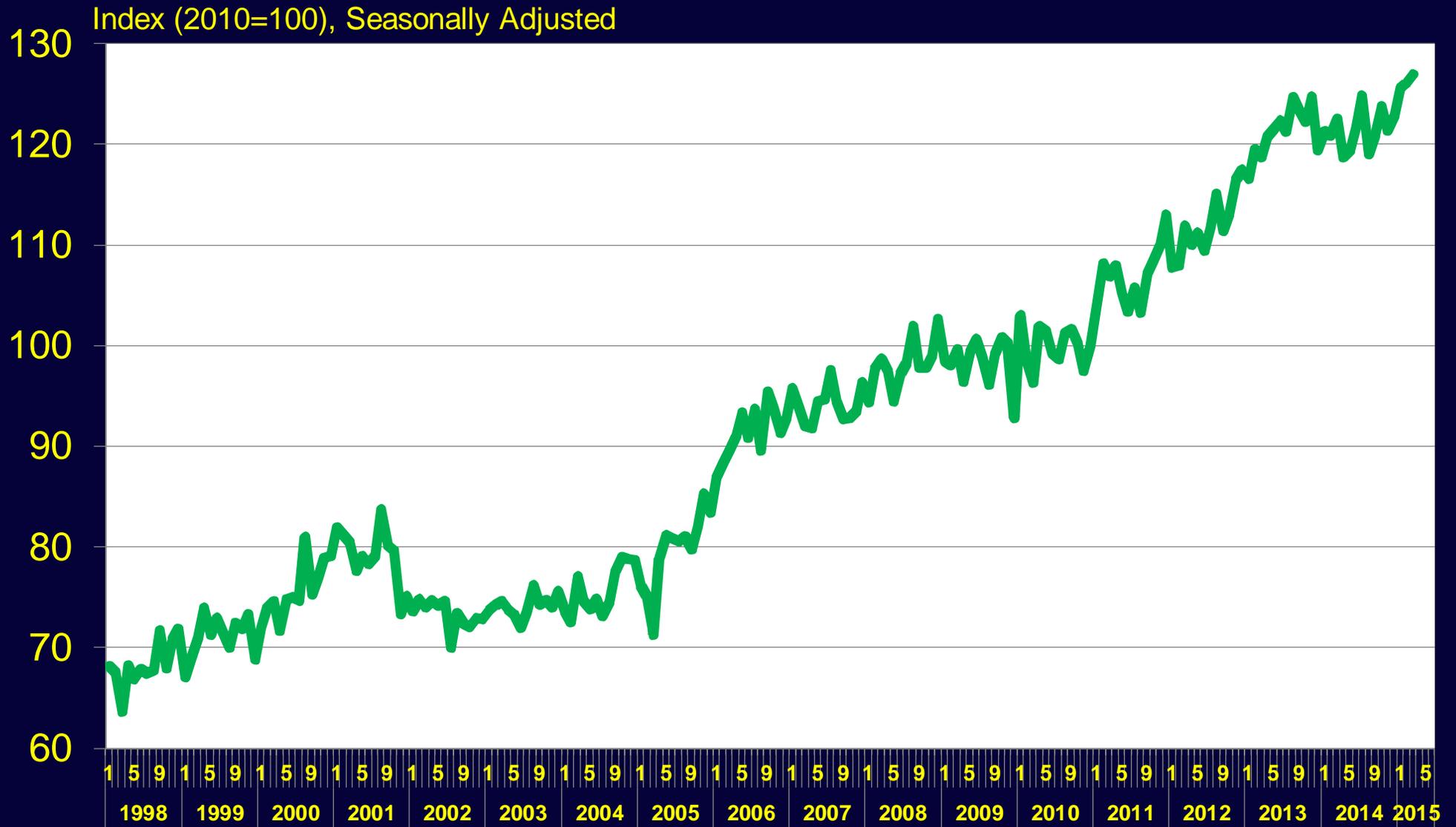
# European Motor Vehicle Production



Eurostat, C291 category, EU 27 countries

Chart 29

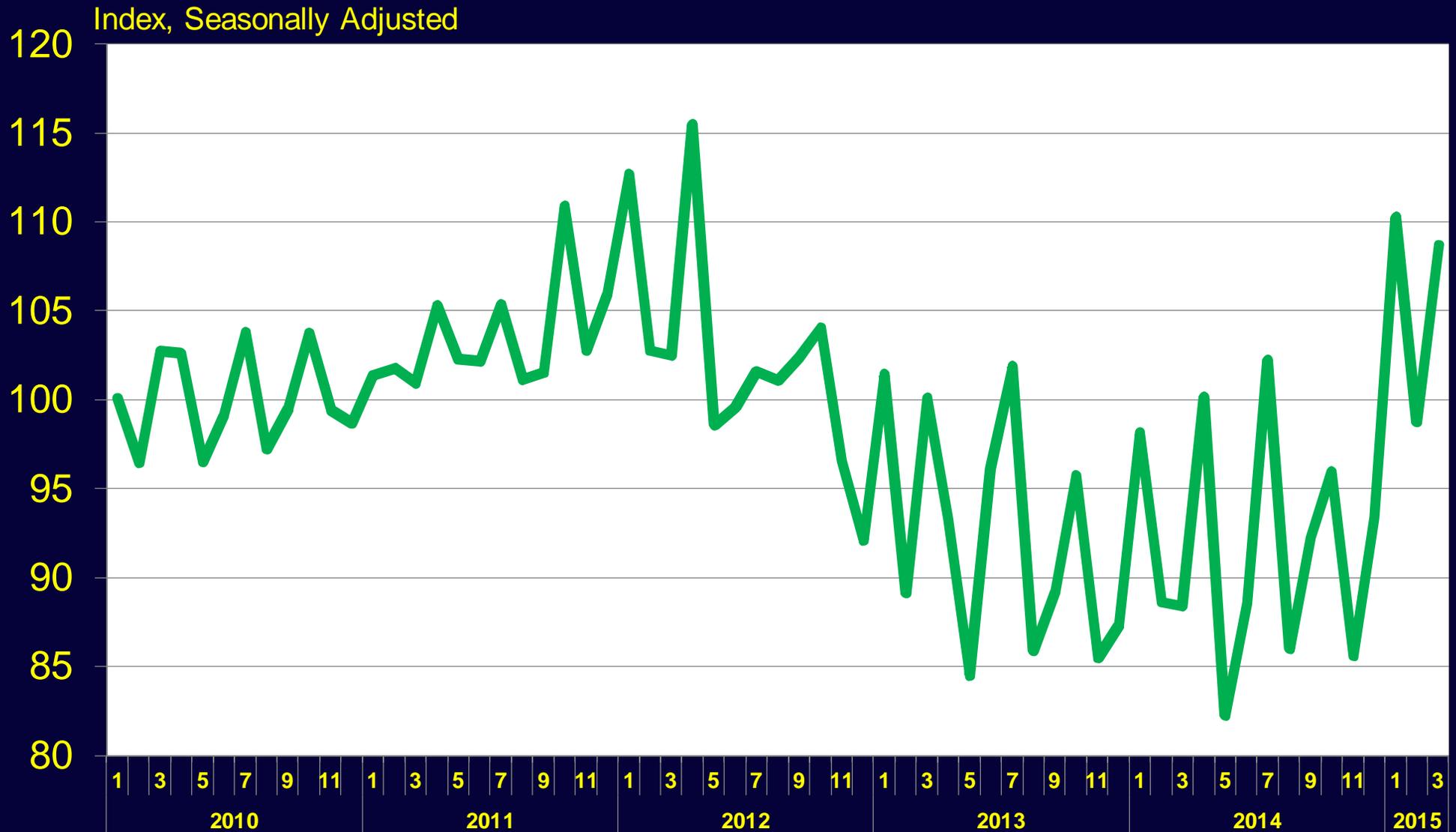
# European Production - Aircraft, Spacecraft & Related Equipment



# Chart 30 European Production - Instruments & Appliances for Measuring, Testing & Navigation



# Chart 31 European Production - Irradiation, Electromedical & Electrotherapeutic Equipment

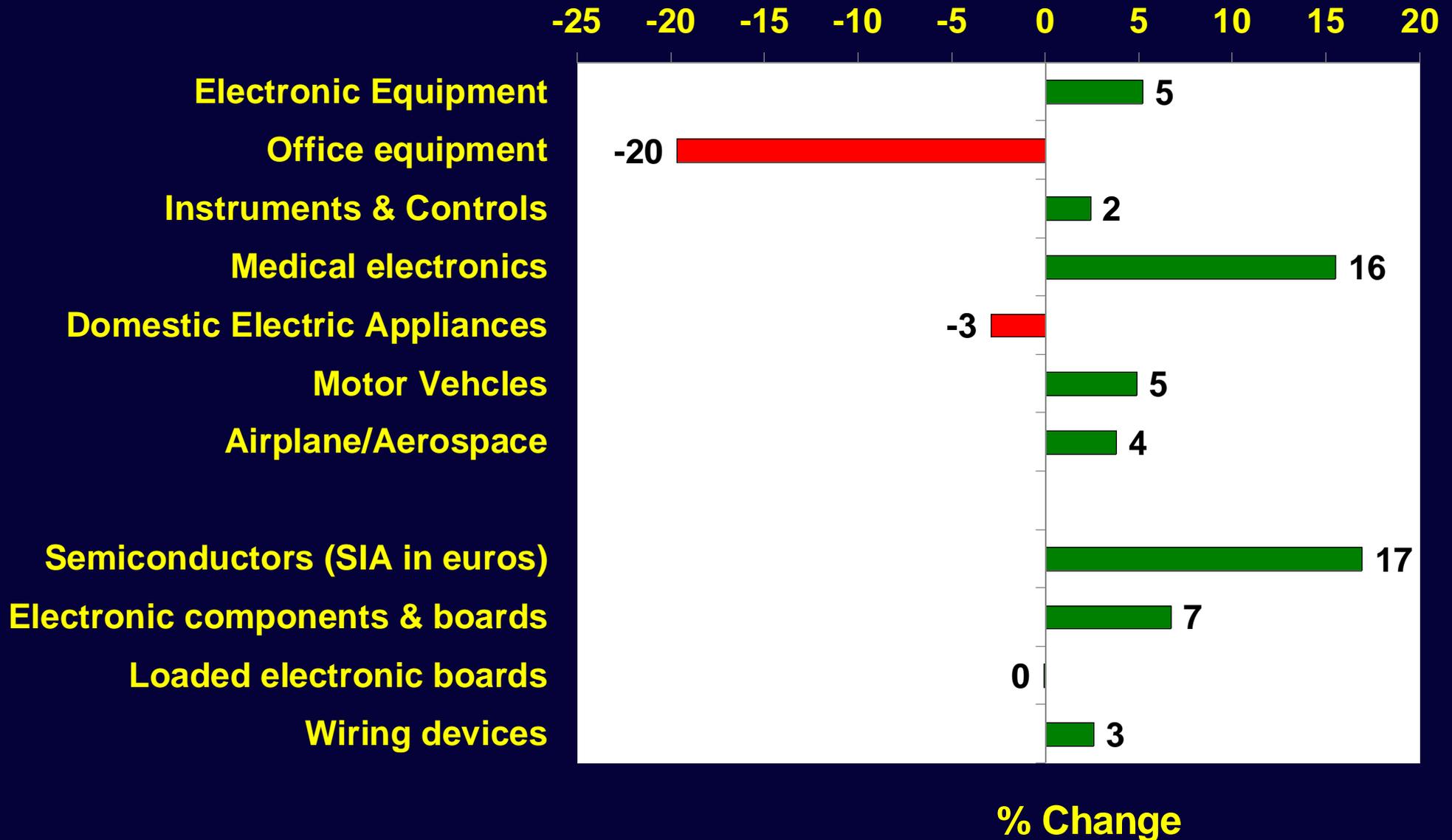




# European Electronic Wiring Devices

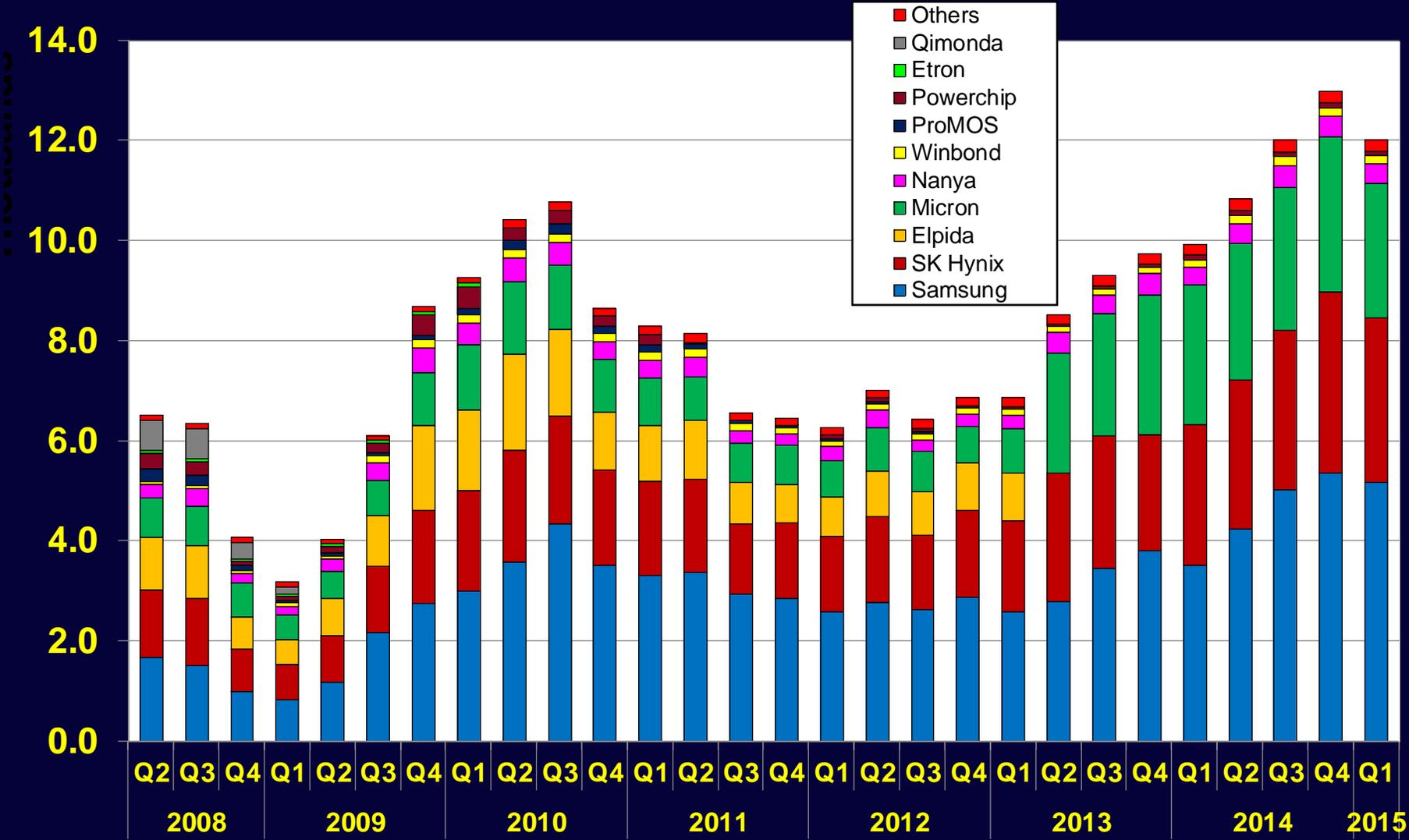


# European Electronic Supply Chain Growth 1Q'15 vs 1Q'14



# Branded DRAM Revenue

US\$ (Billions)



# U.S. Industrial Production

Index (2007=100)

IP

