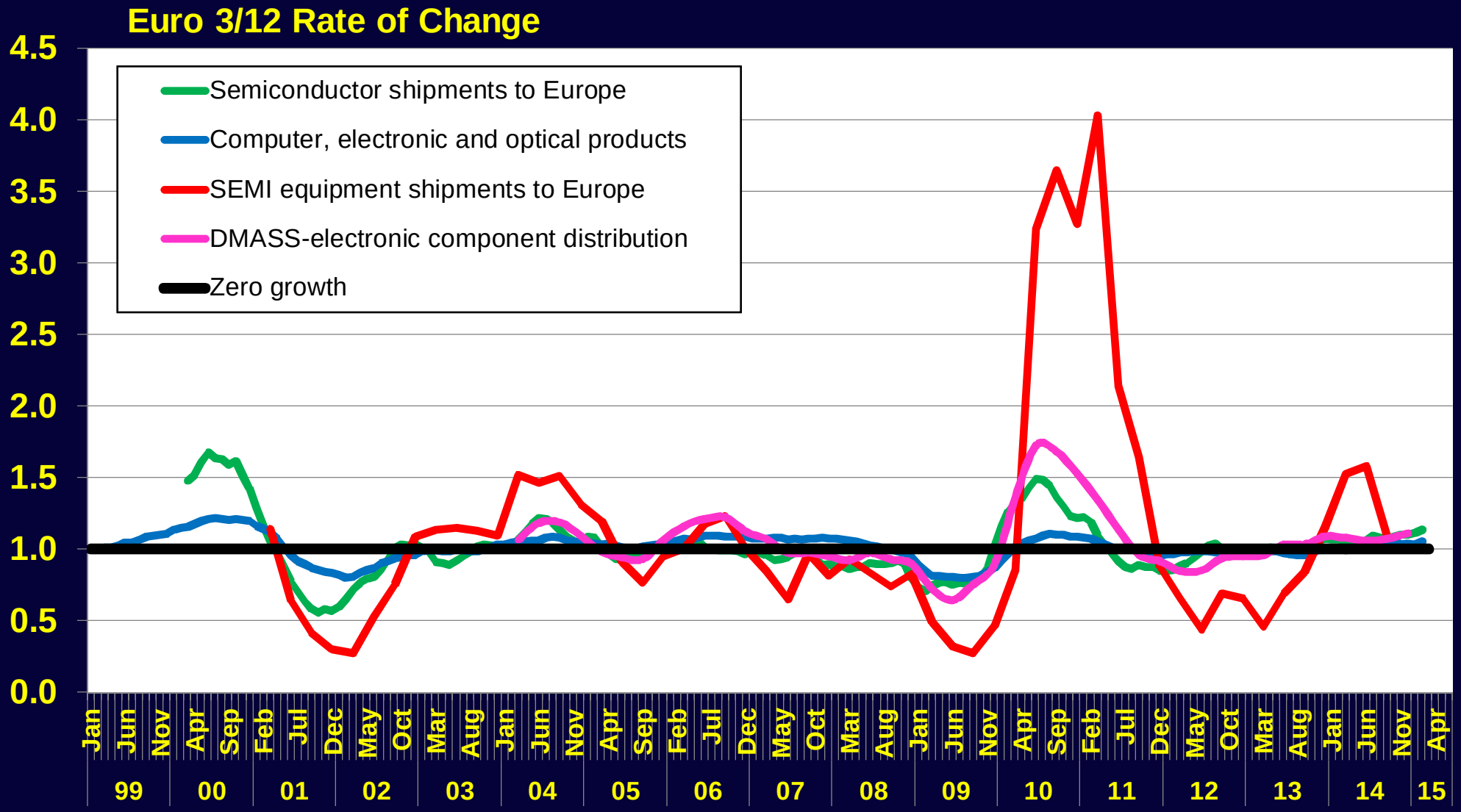
Chart 1

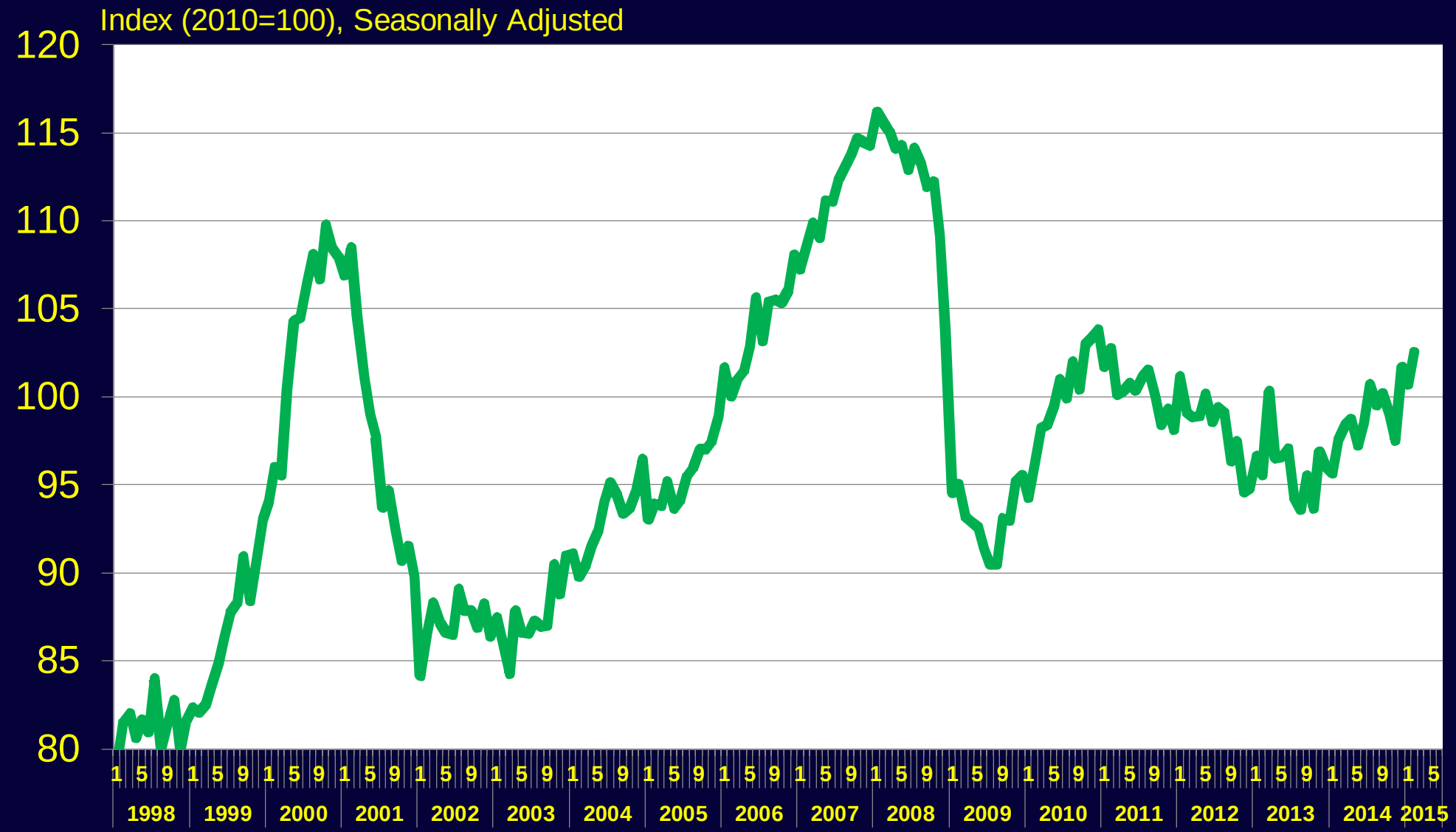
European Computer, Electronic and Optical Products, Semiconductors, & SEMI Equipment Shipments



Total $ Semiconductor Shipments from All Countries to Europe www.sia-online.org/, Eurostat class C26 & SEMI, CCG Extrapolation of SEMI growth

Chart 2

European Computer, Electronic & Optical Products Production



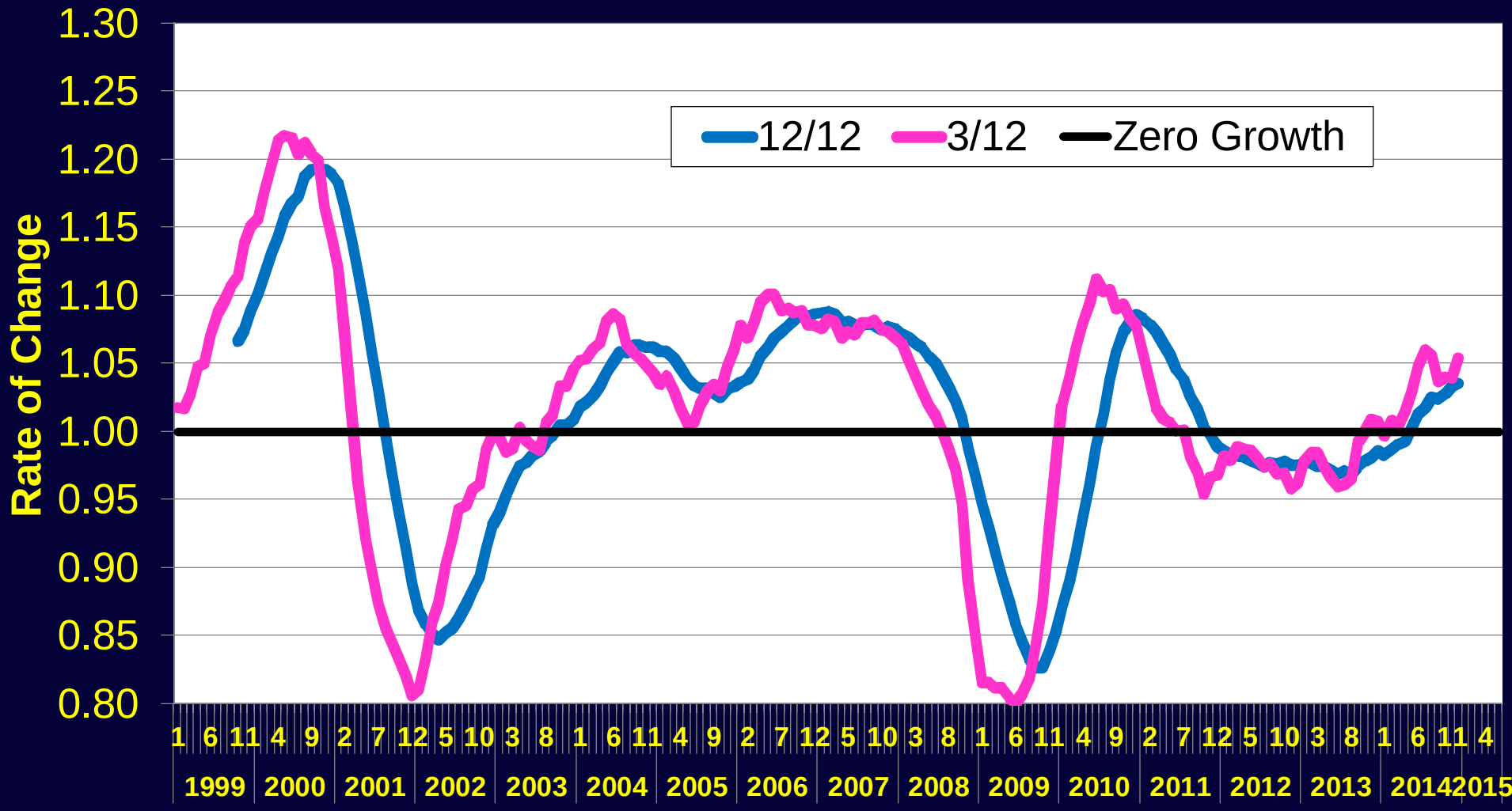
Eurostat, C26 category, EU 27 countries

Chart 3

Europe- EU27

Manufacture of computer, electronic & optical products

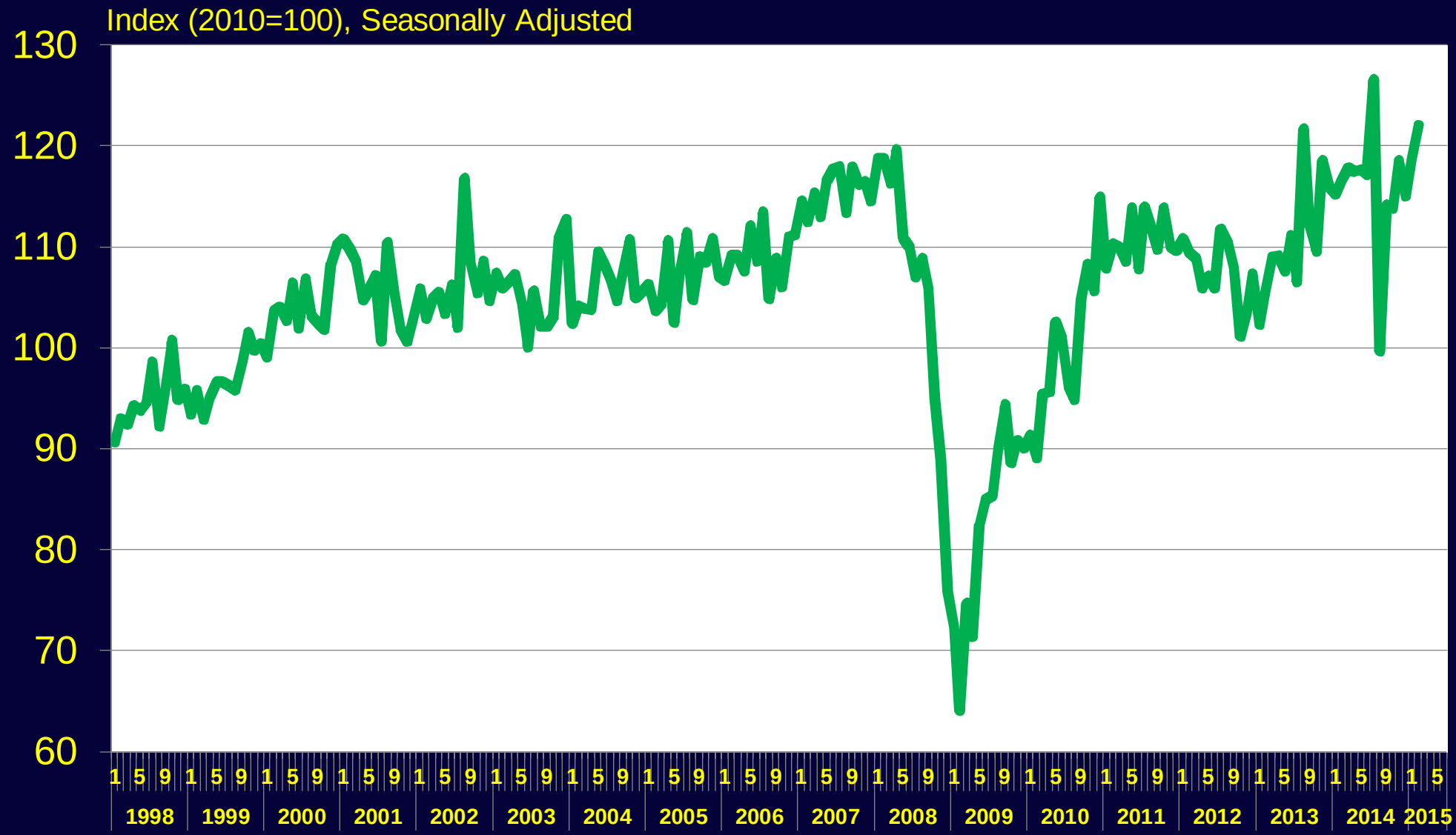
12/12 & 3/12 Rate of Change



Eurostat

Chart 4

European Motor Vehicle Production



Eurostat, C291 category, EU 27 countries

Chart 5

European Production - Aircraft, Spacecraft & Related Equipment

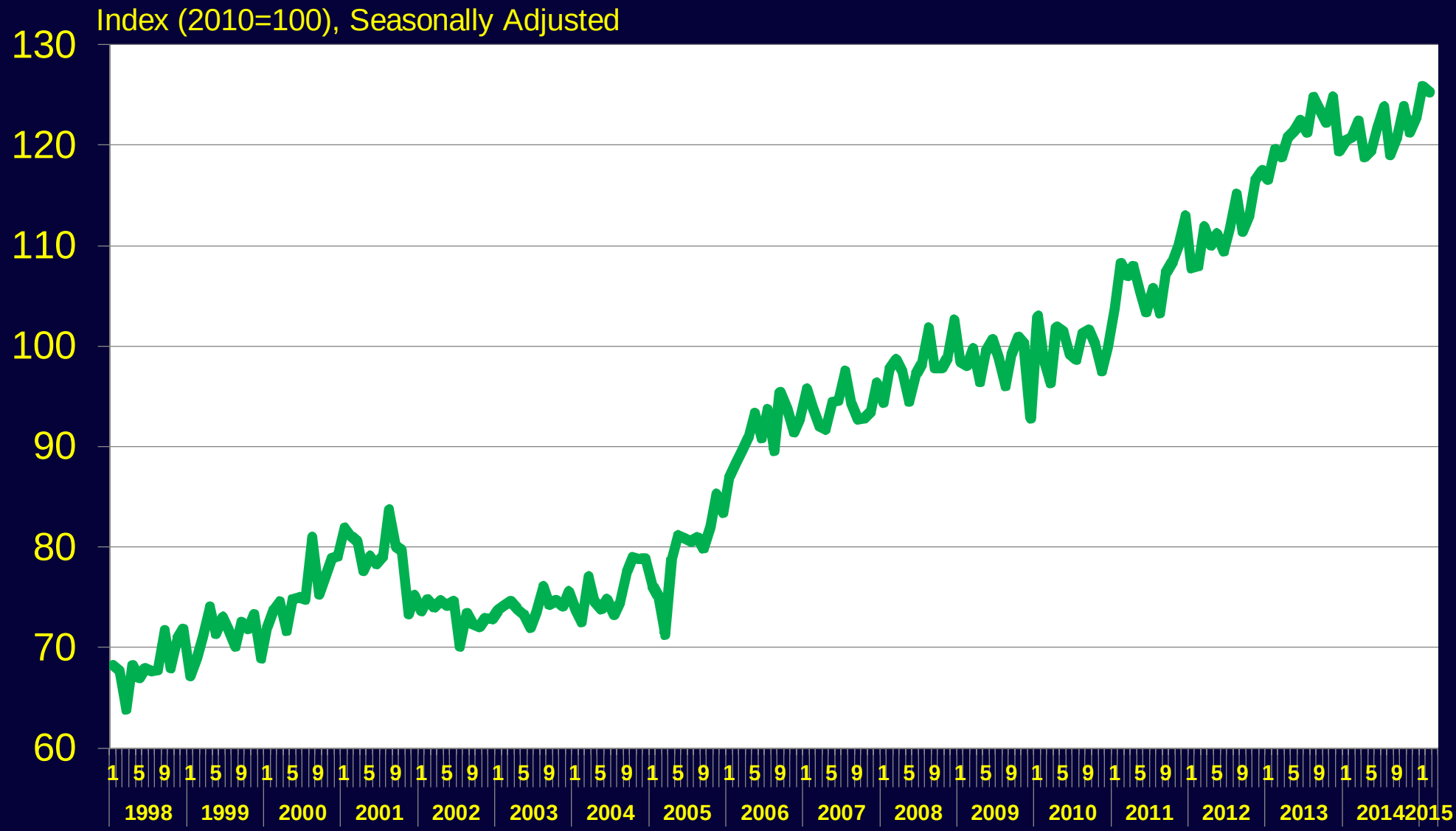

Index (2010=100), Seasonally Adjusted
130
120
110
100
90
80
70
60
1 5 9 1 5 9 1 5 9

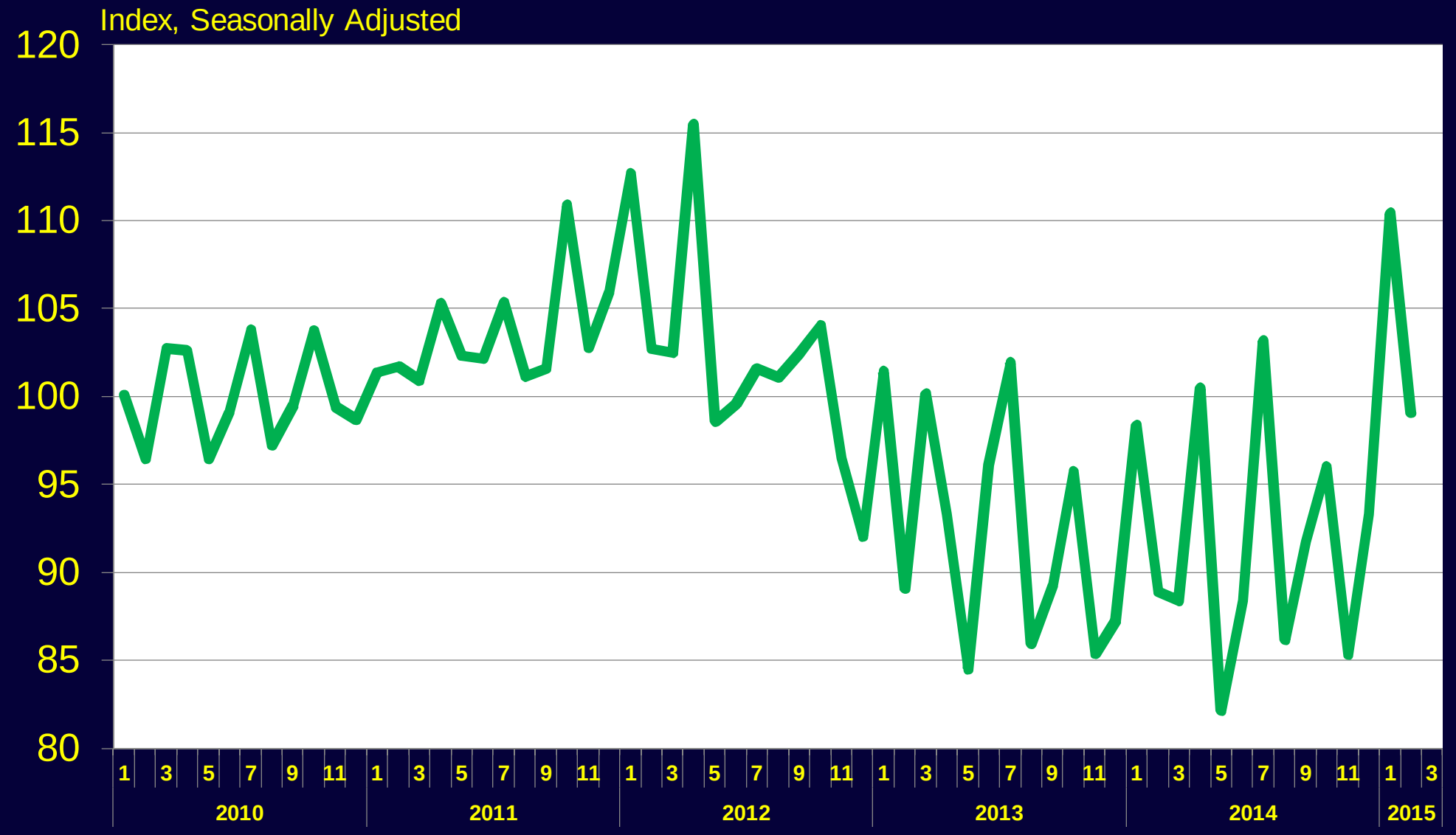
Chart 6

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



Eurostat, C2651 category, EU 27 countries

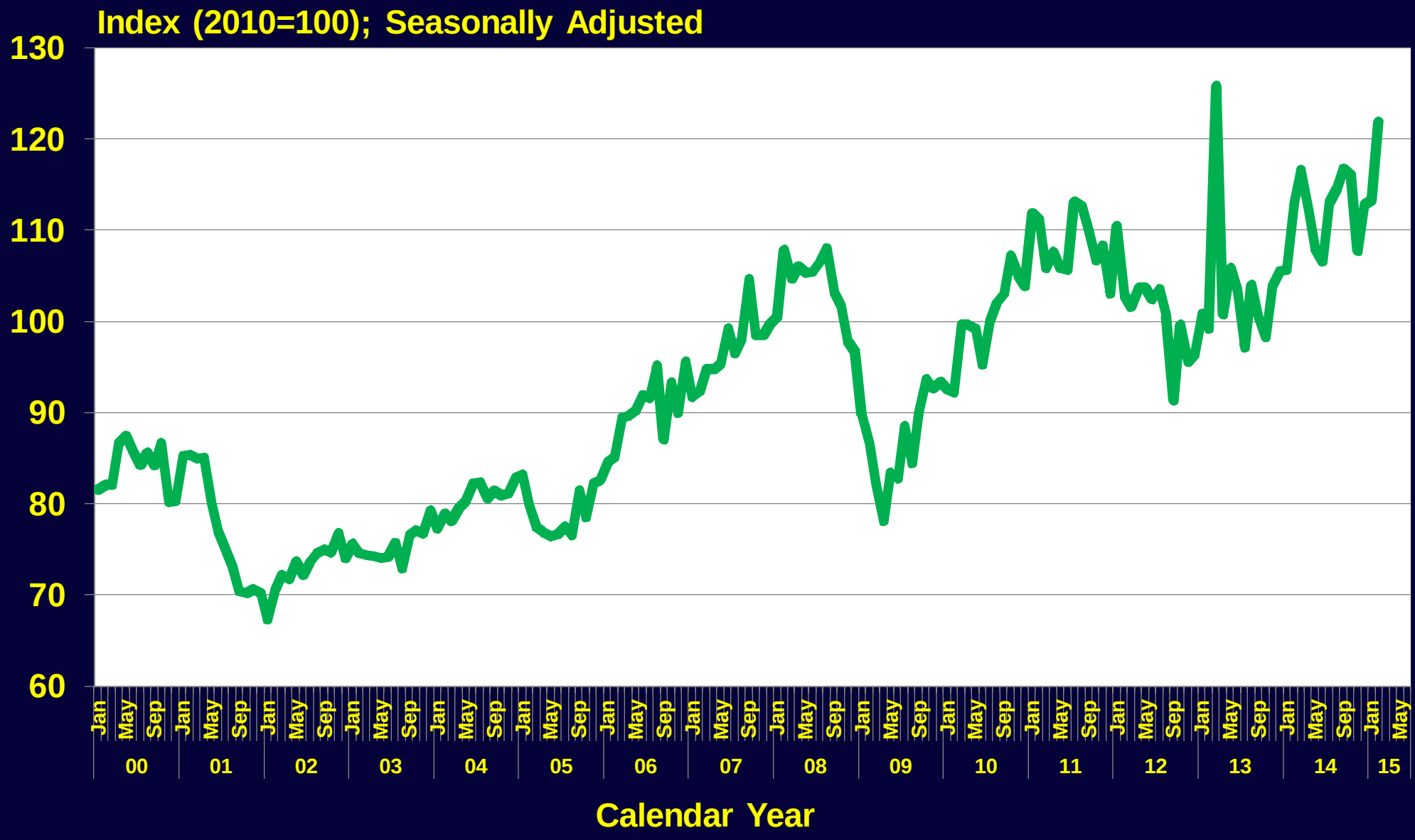
Chart 7 **European Production - Irradiation, Electromedical & Electrotherapeutic Equipment**



Eurostat, C266 category, EU 27 countries

Chart 8

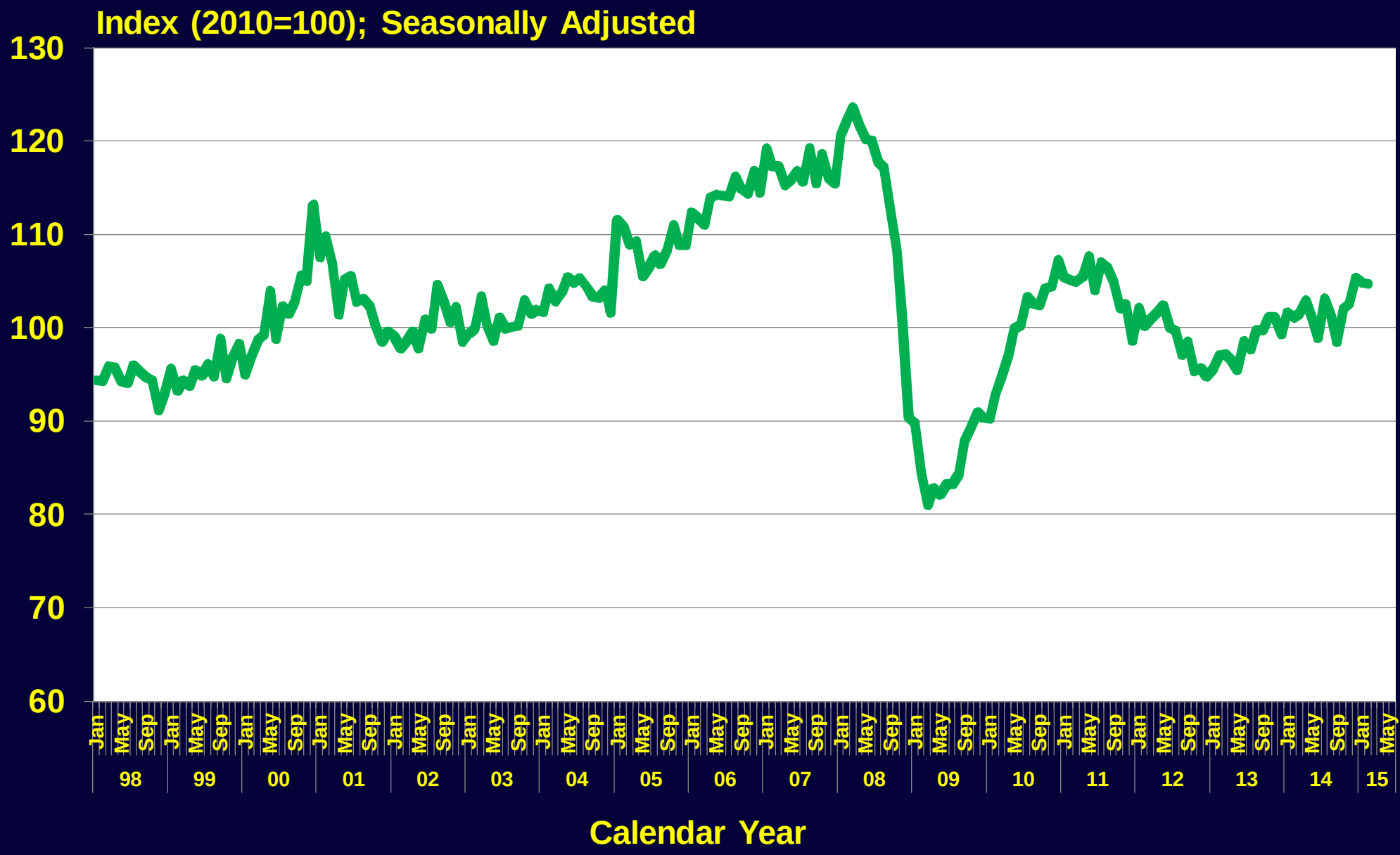
European Electronic Components & Board Production



Eurostat

Chart 9

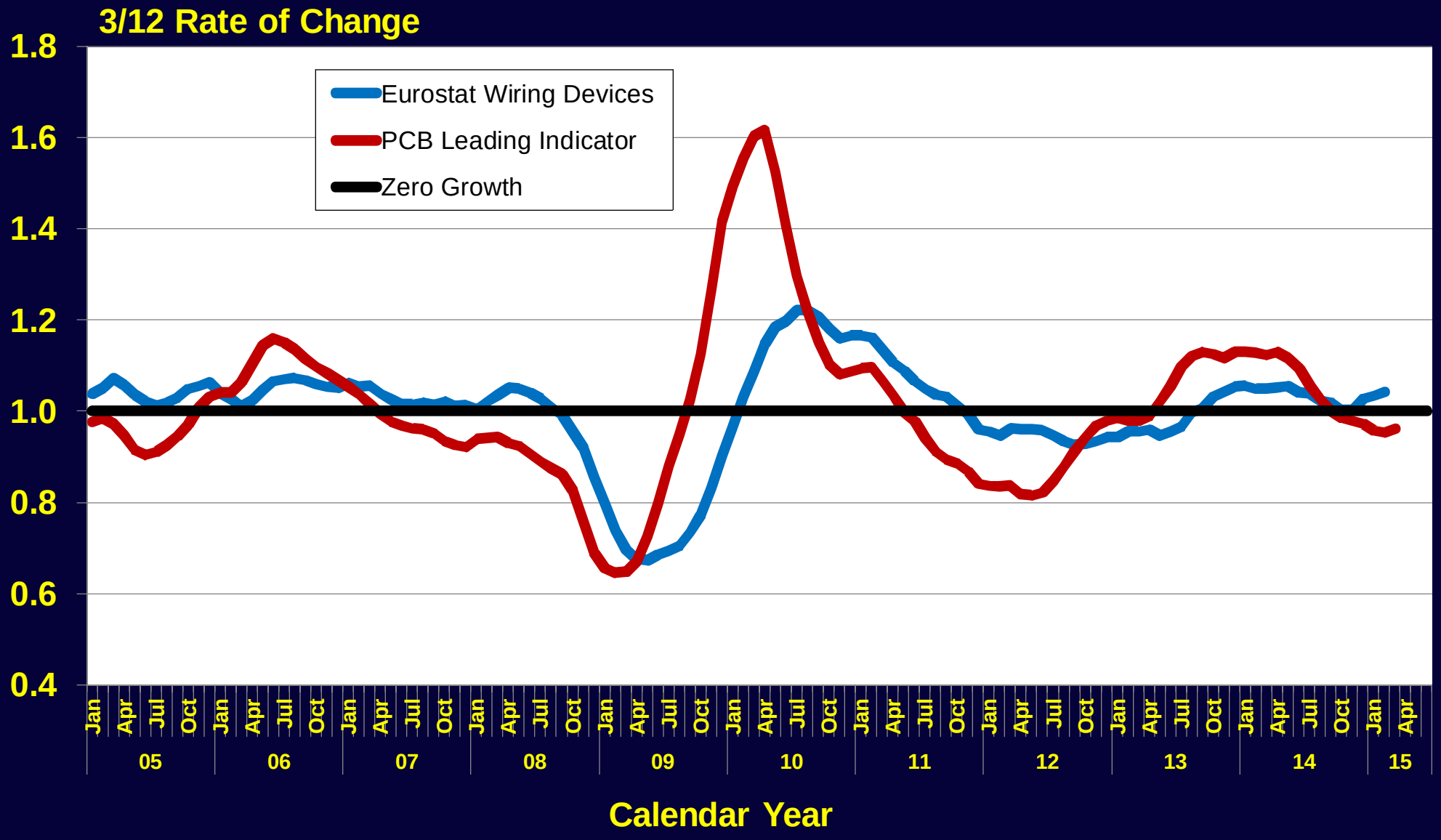
European Electronic Wiring Devices



Eurostat

Chart 10

Europe PMI Leading Indicator vs. Europe Wiring Devices



Source: Custer Consulting Group

Chart 11

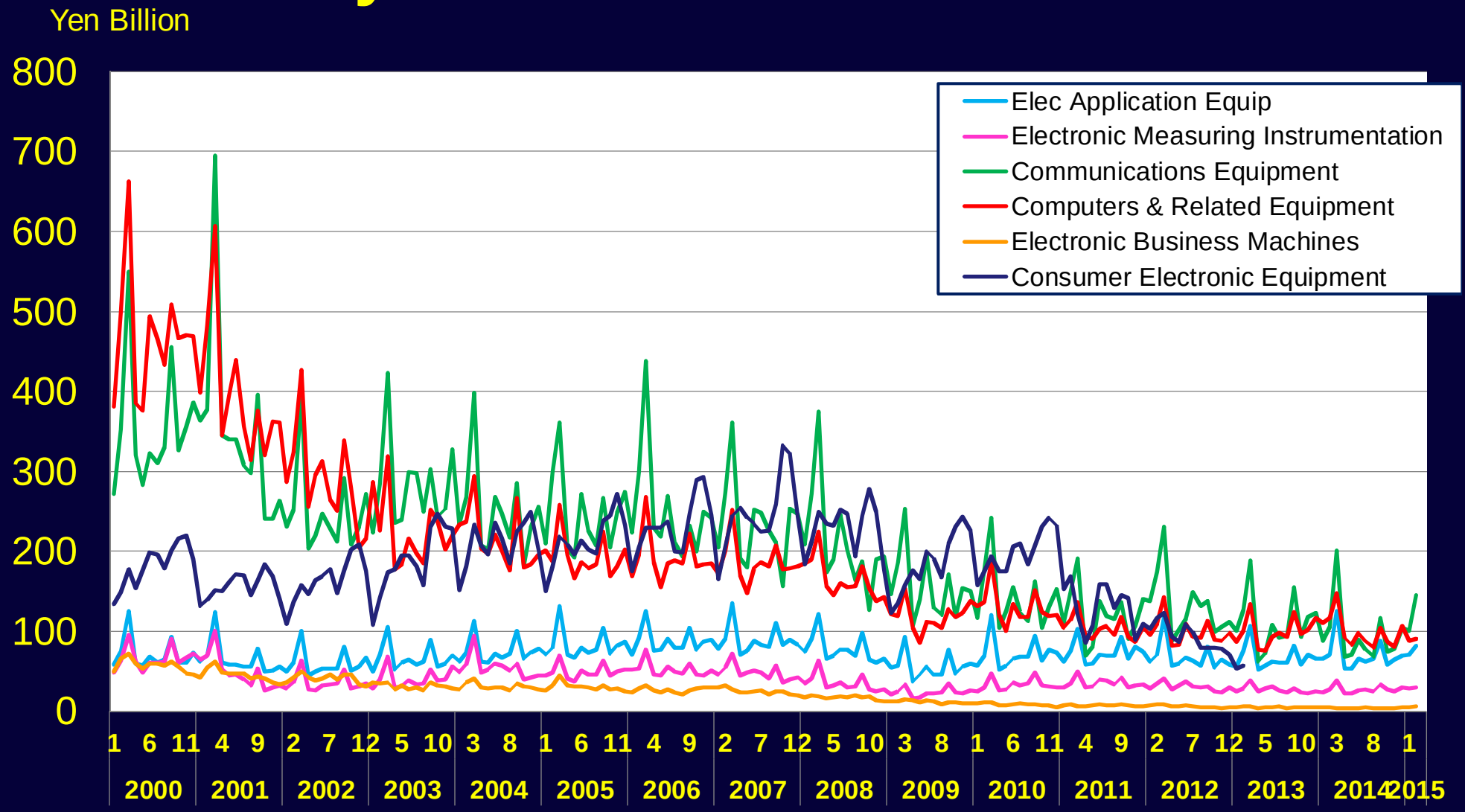
Present Growth Rates (%)
European Electronics Industry

	Latest Month	Annual Growth Rate	3-Month Growth Rate
ELECTRONIC EQUIPMENT SHIPMENTS (Index CY 2010 =100)			
Computer, Electronic & Optical Products	2/15	103.6	105.4
Components & Boards	2/15	107.6	107.4
Wiring Devices	2/15	103.1	104.3
Loaded Electronic Boards	2/15	103.9	104.7
Office Equipment	2/15	85.3	81.9
Consumer Electronics	2/15	89.7	80.6
Electric Domestic Appliances	2/15	97.1	98.6
Electronic Instruments	2/15	101.8	101.7
Medical Electronics	2/15	101.6	110.3
Motor Vehicles	2/15	103.4	102.4
Air & Space Aircraft	2/15	100.3	103.7
Semiconductor Shipments (Eur) to Europe	2/15	108.9	113.9
Industrial Production	2/15	100.9	100.9

Sources: Eurostat & SIA

Chart 12

Japan Electronic Equipment Production by Month 2000 to Present



JEITA www.jeita.or.jp/

Chart 13

Japan Electronic Equipment Production by Month 2000 to Present

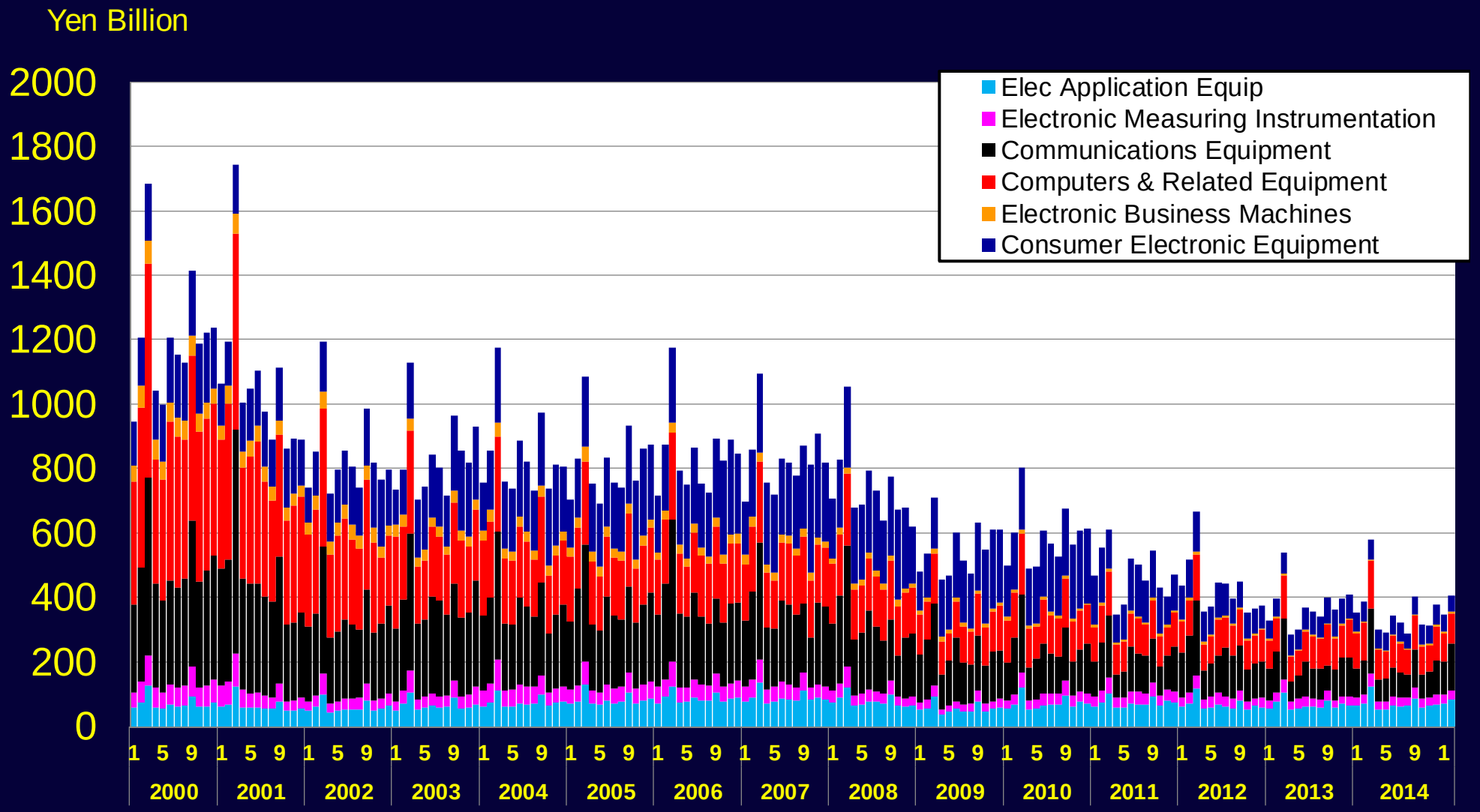
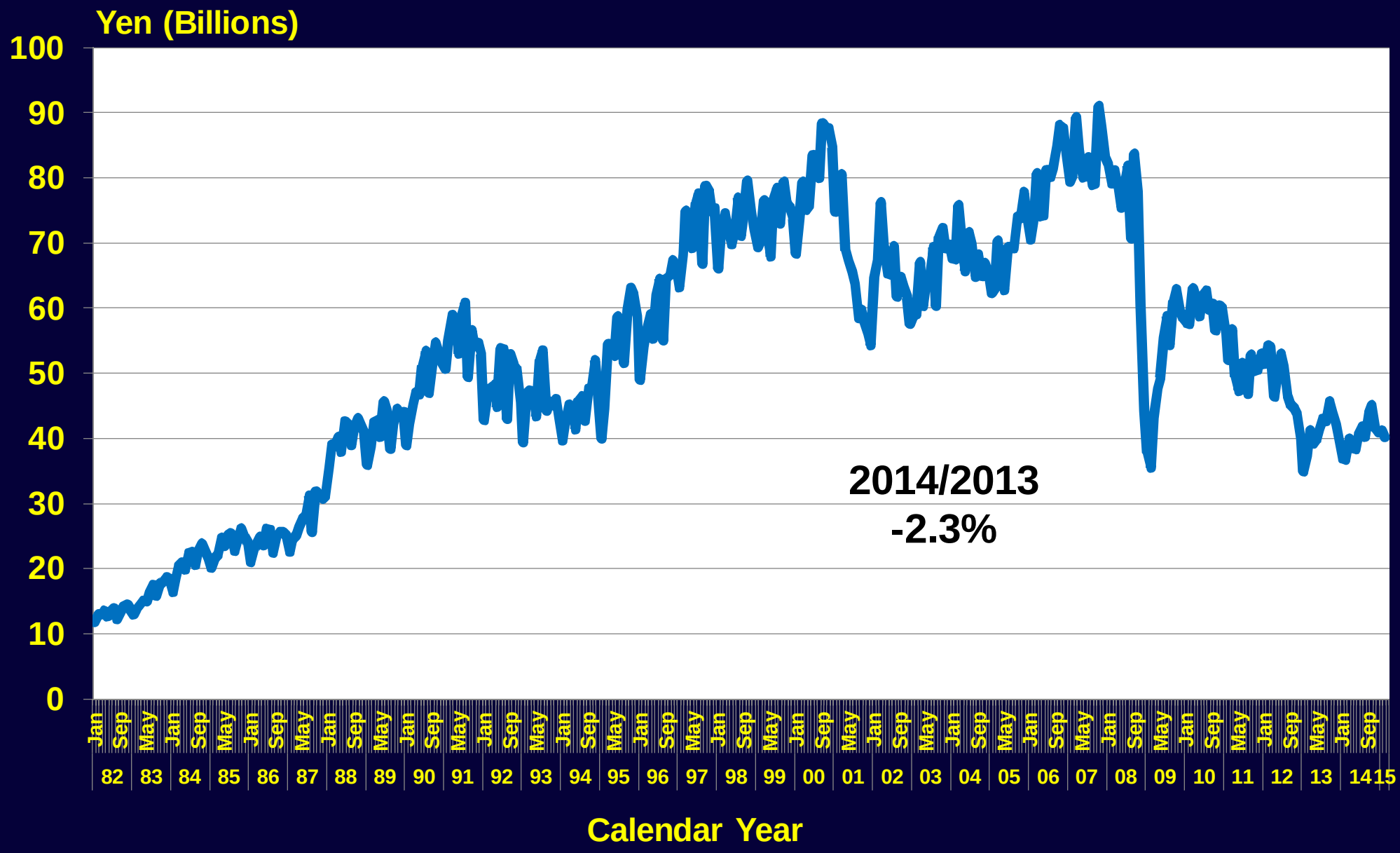


Chart 14

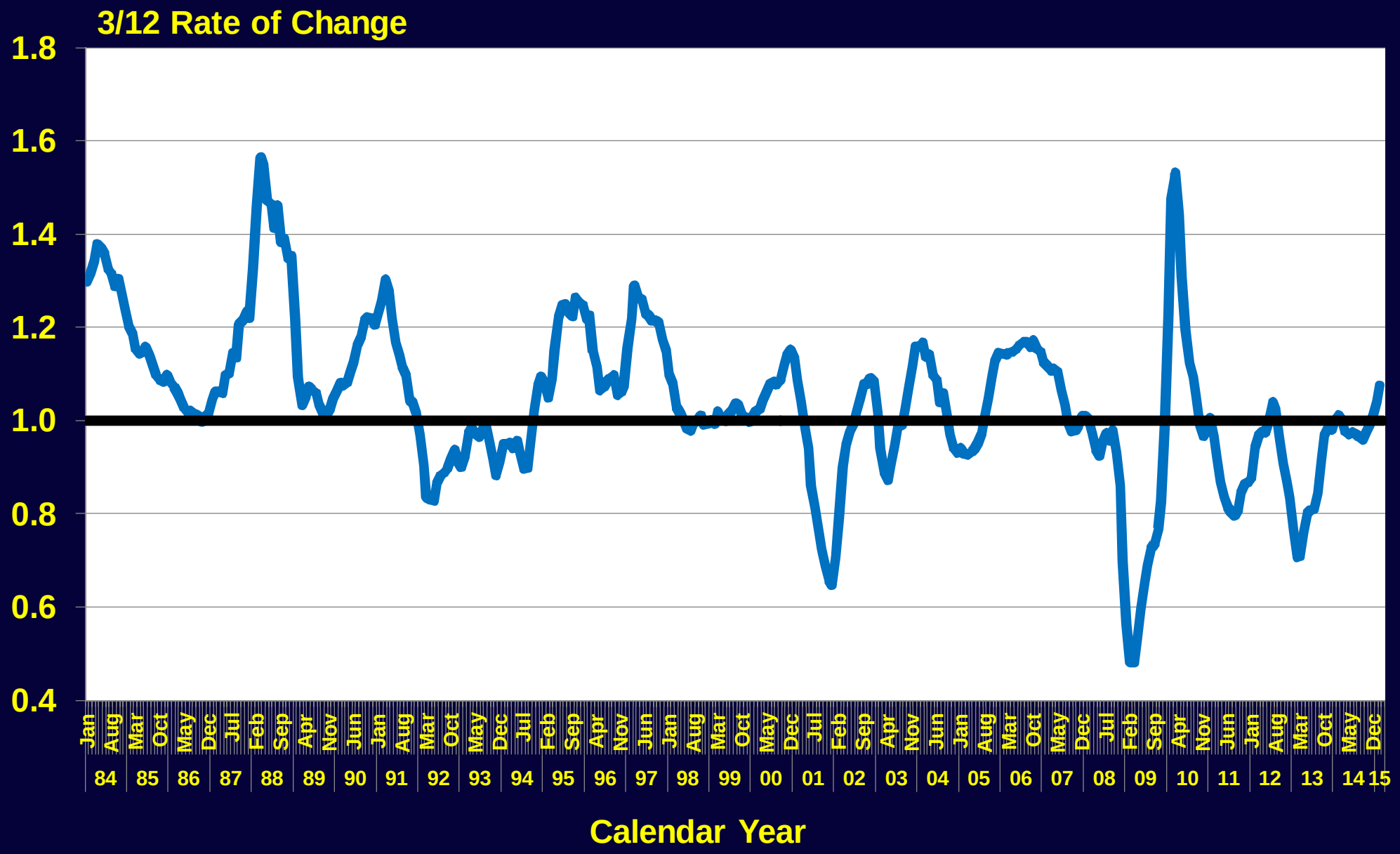
Japan PCB Shipments



www.jpca.org/kikaitoukei/kikai2013.xls

Chart 15

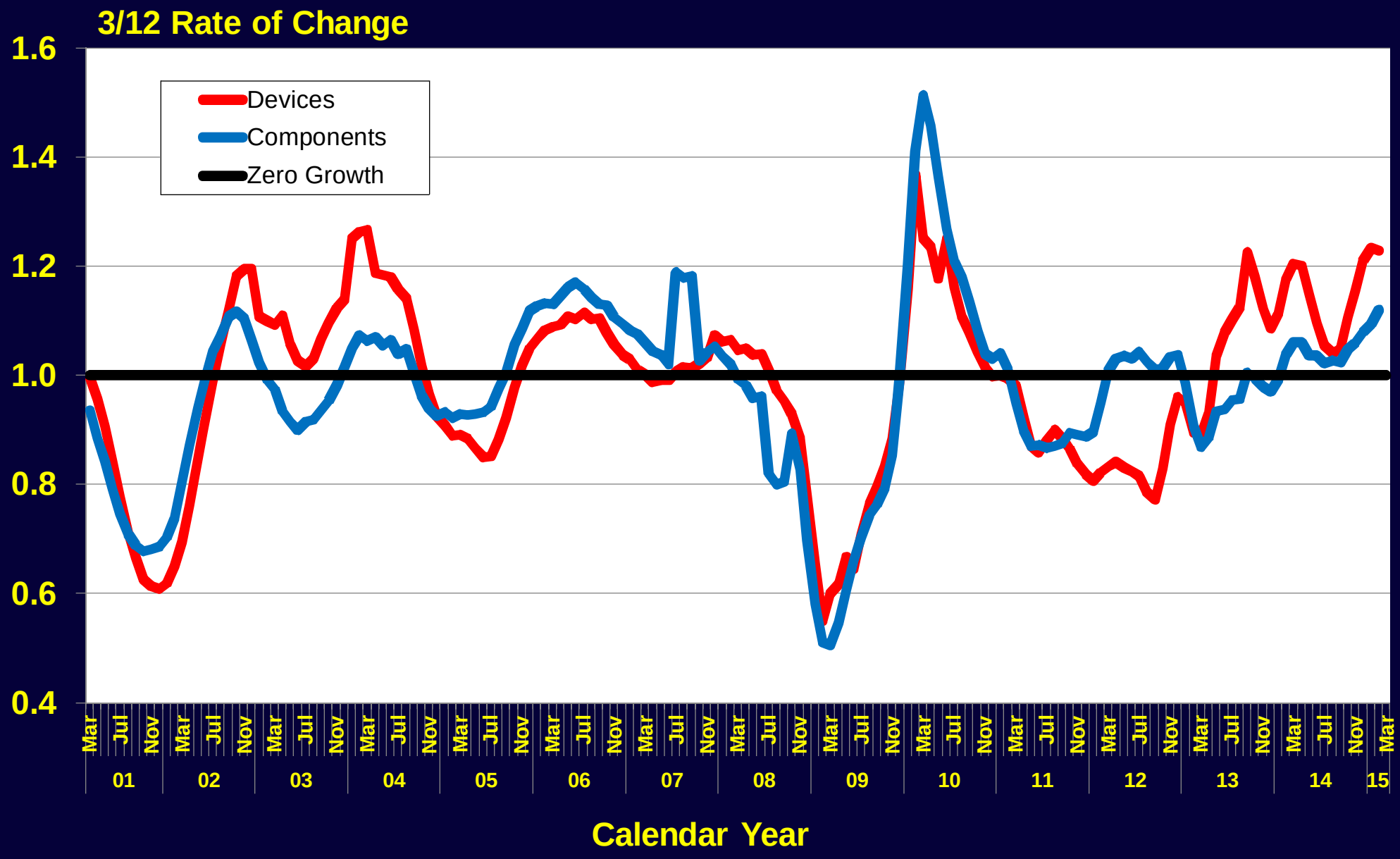
Japan PCB Shipments



www.jpca.org/kikaitoukei/kikai2013.xls

Chart 16

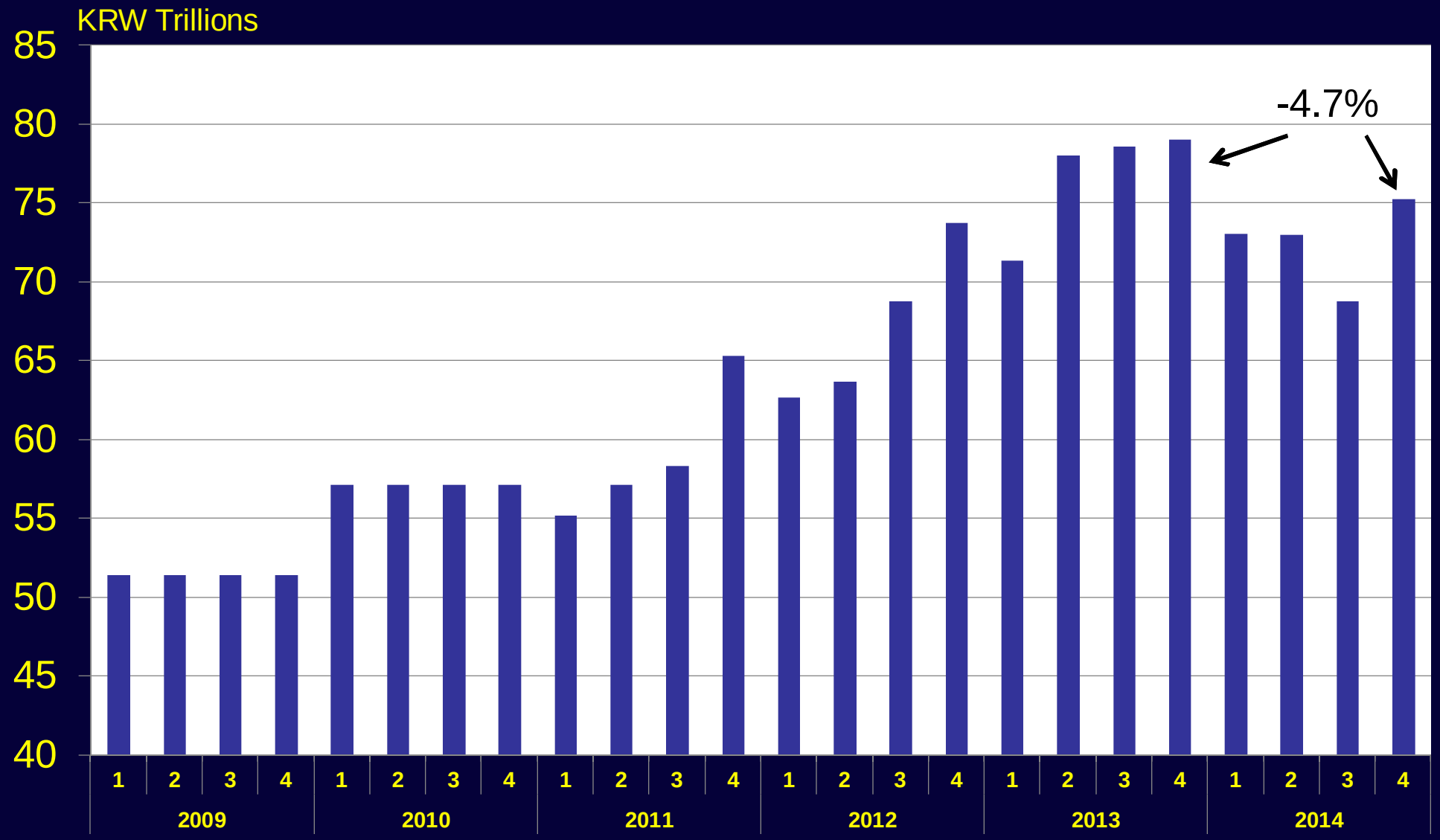
Japanese Electronic Component & Device Production



JEITA www.jeita.or.jp/

Chart 17

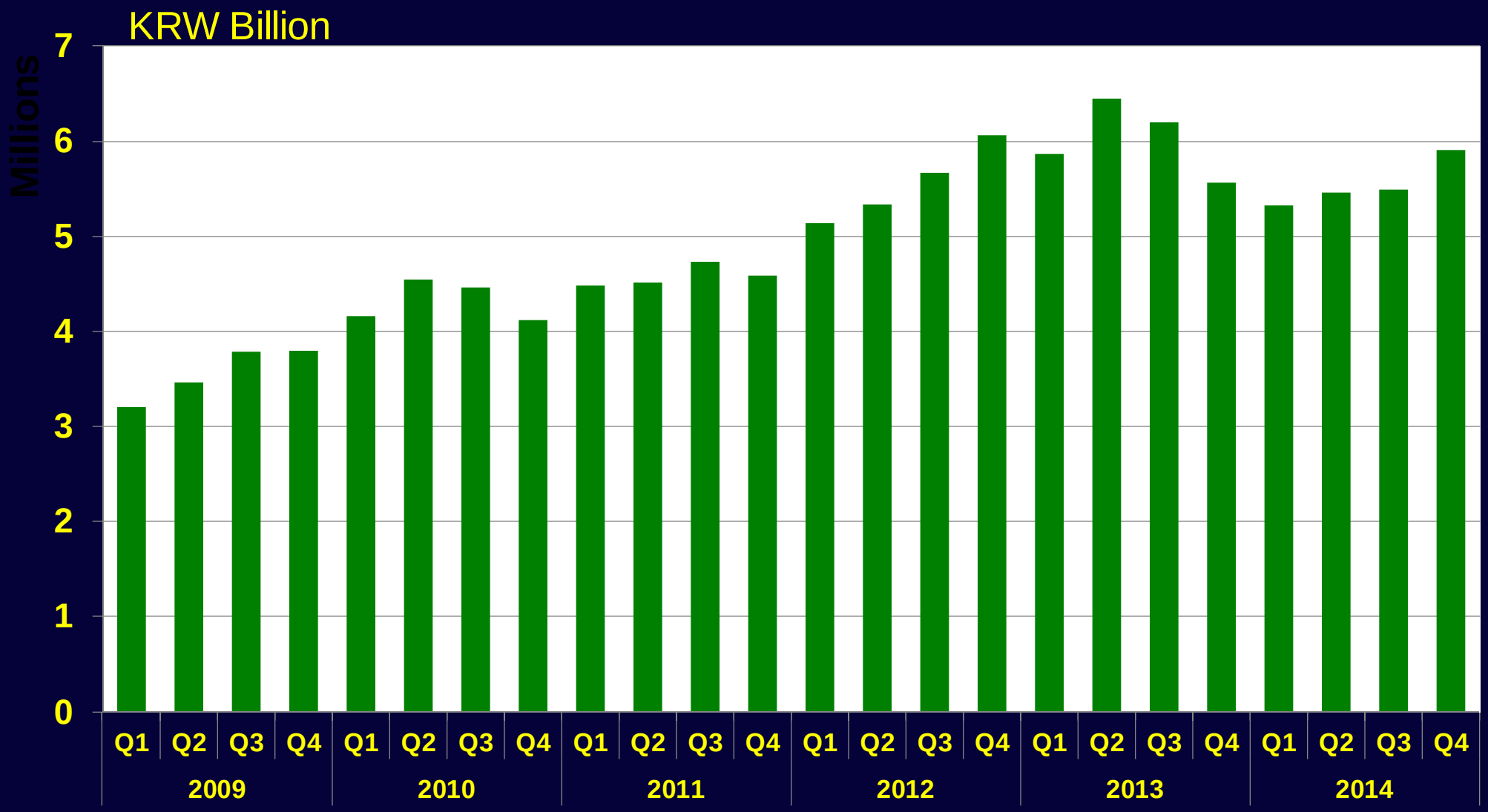
S Korea Electronic Equipment Producers
Composite of 7 Manufacturers



Samsung Electronics, LG Electronics, Daewoo Electronic Components, Samsung SDI, Dongbu Hitek, SK Hynix, KEC Corp

Chart 18

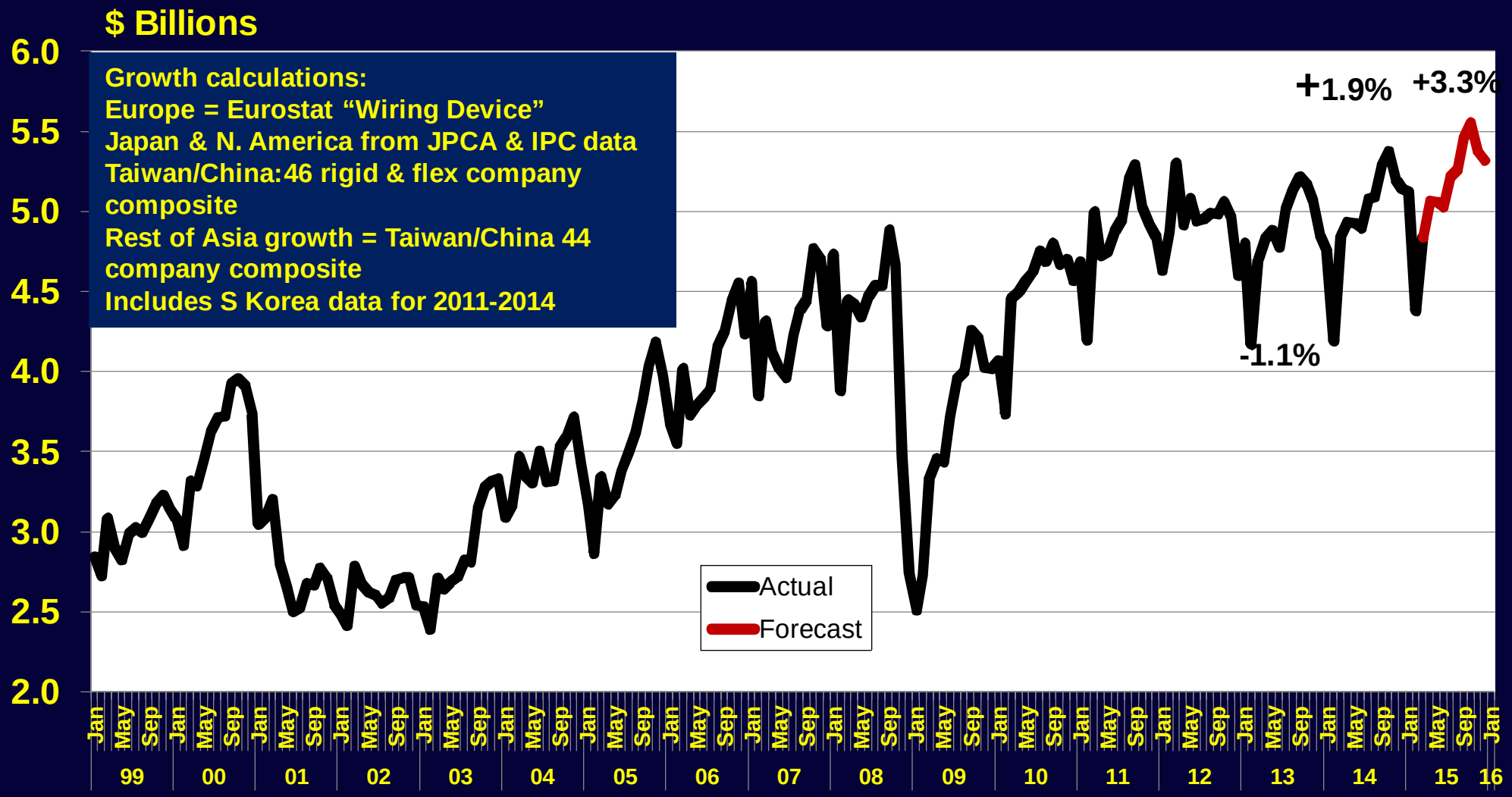
S. Korean PCB Revenues
Composite of 11 Publicly Traded Manufacturers
Quarterly Revenue



Samsung EM, Young Poong, Daeduck, Simm Tech, Isu Petasys, Flexcom, DAP, BH, Samsung Techwin, Korea Circuit

Chart 19

World PCB Shipments (with forecast)
Converted @ Fluctuating Exchange Rates



Source: Custer Consulting Group - 2010 base year expanded by monthly growth of N. American, European, Japanese & Taiwan/China monthly PCB shipments

Chart 20

Solar/Photovoltaic Financials
Composite of 90 Public Global Companies
Revenue, Net Income & Inventory

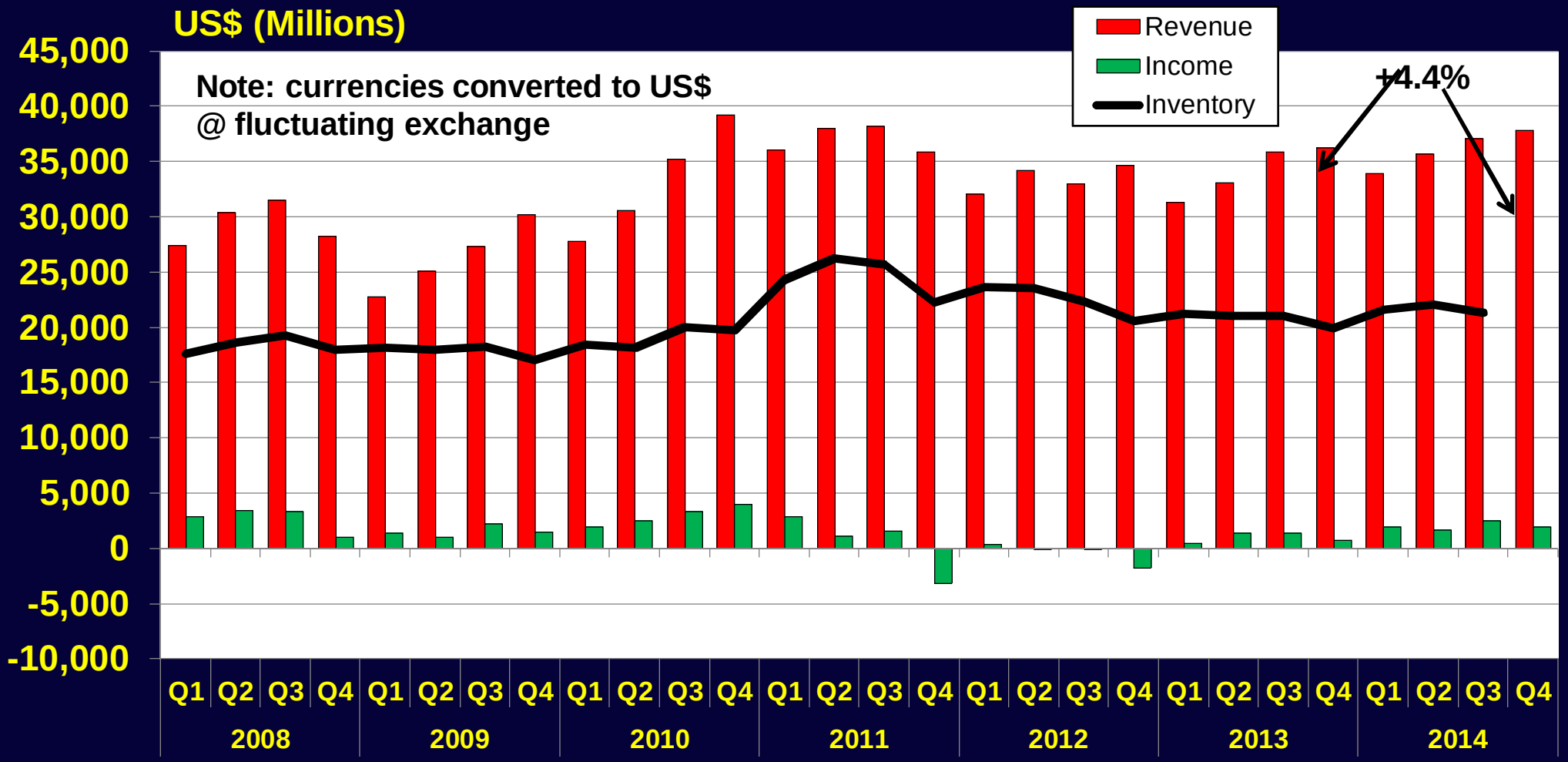


Chart 21

Global Solar/Photovoltaic Growth

Total Industry based upon 90 Company broad sample

3/12 & 12/12 Rate of Change

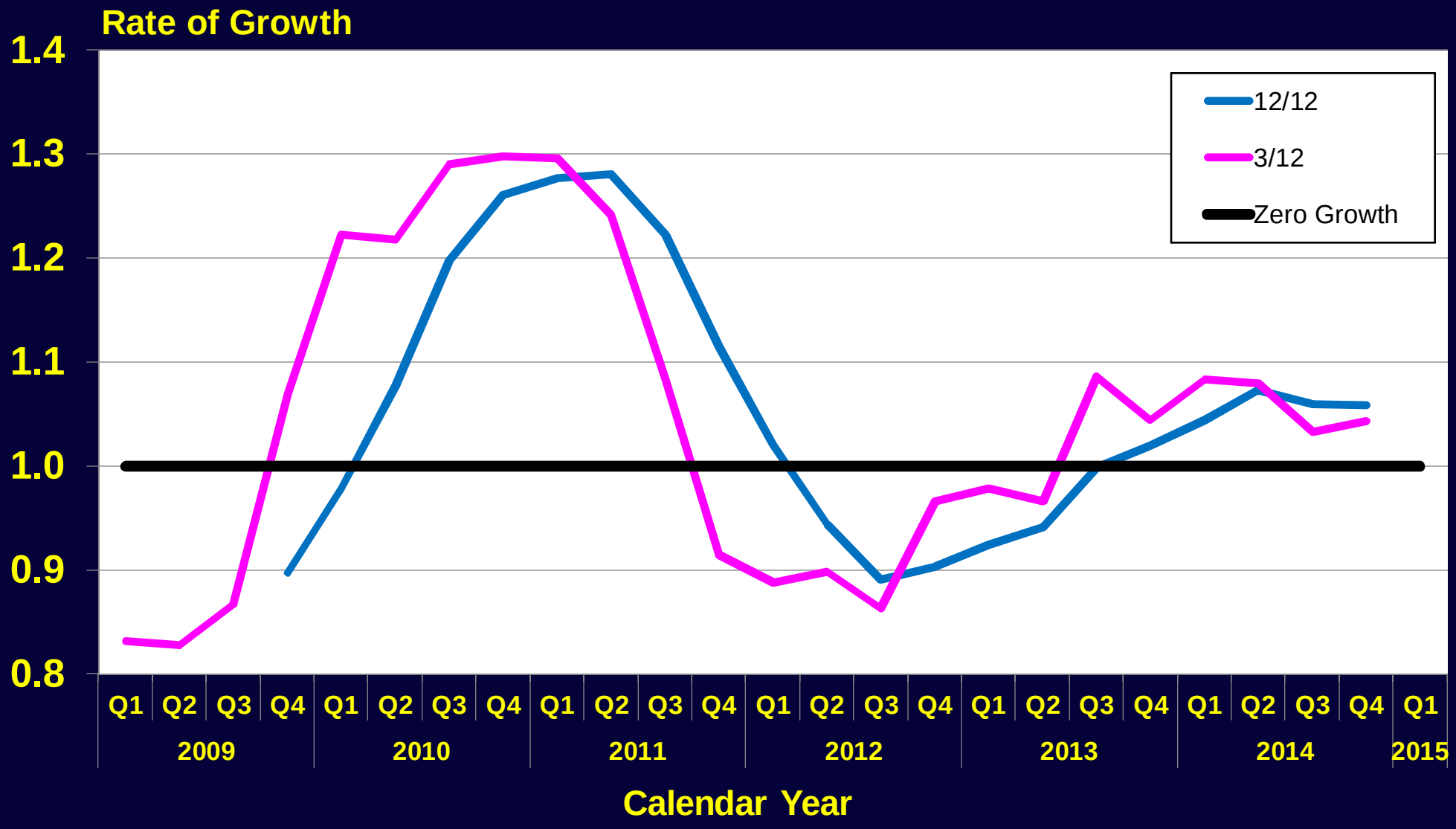


Chart 22

Solar/Photovoltaic Inventory/Sales Ratio Composite of 90 Public Companies

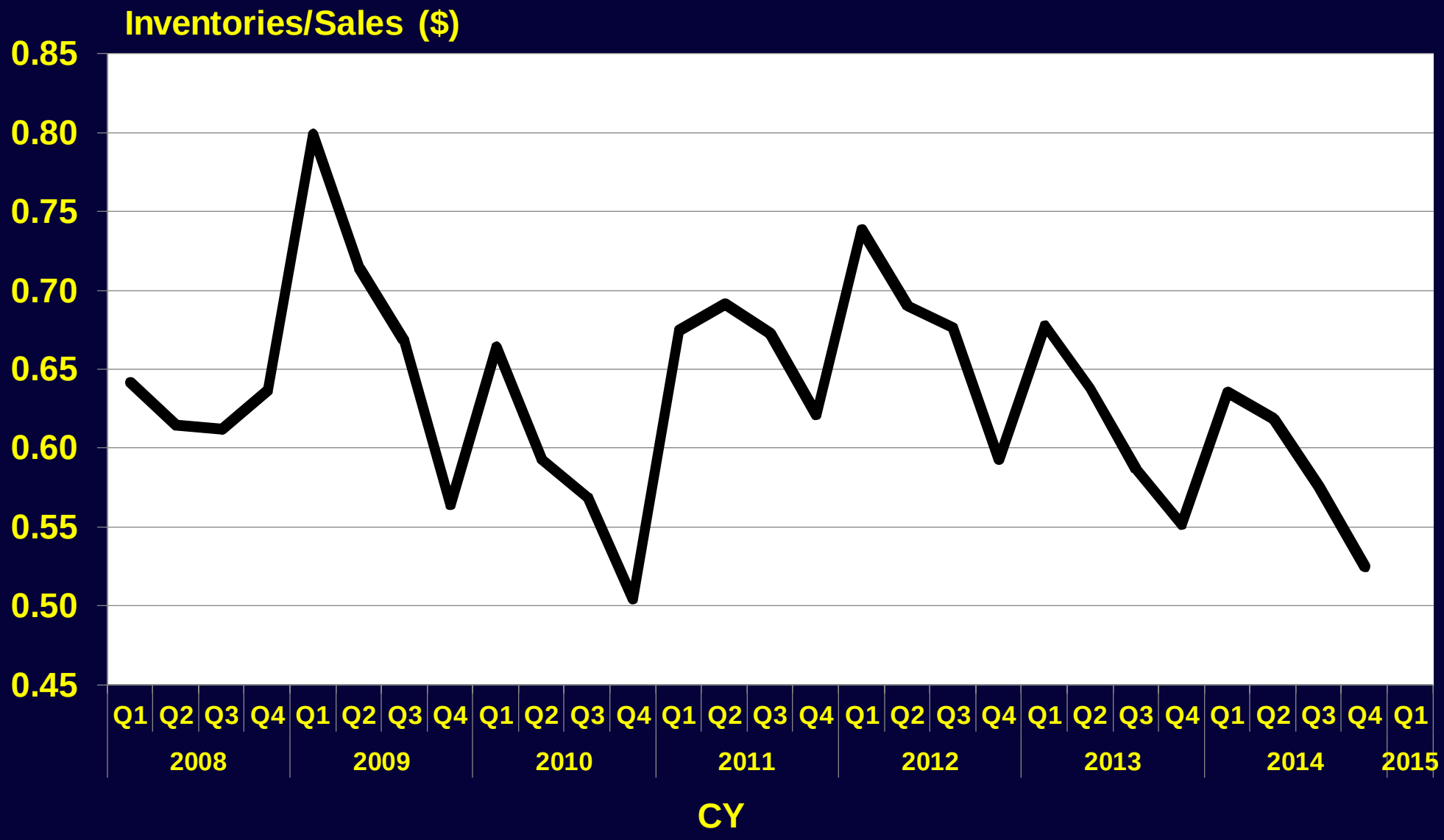
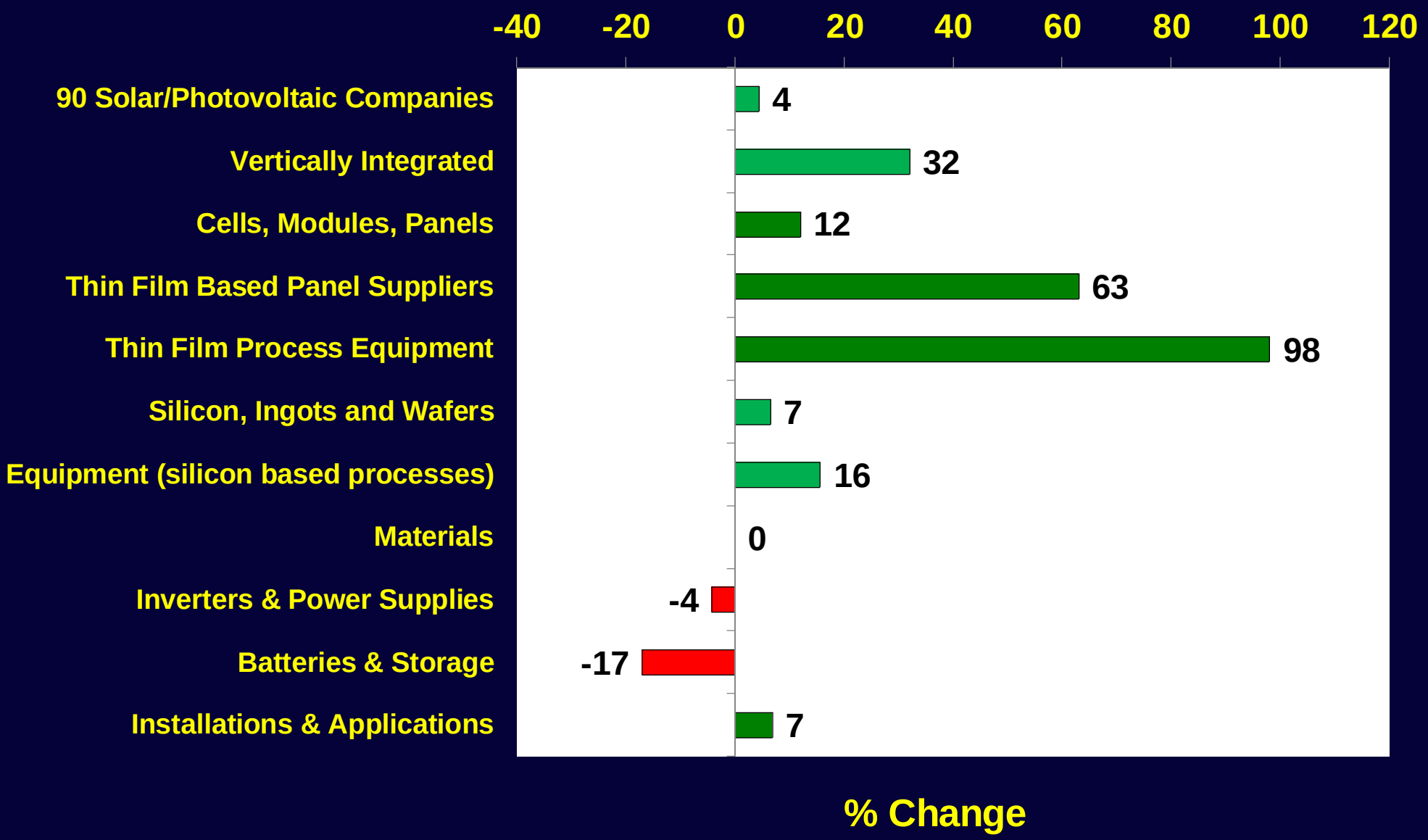


Chart 23

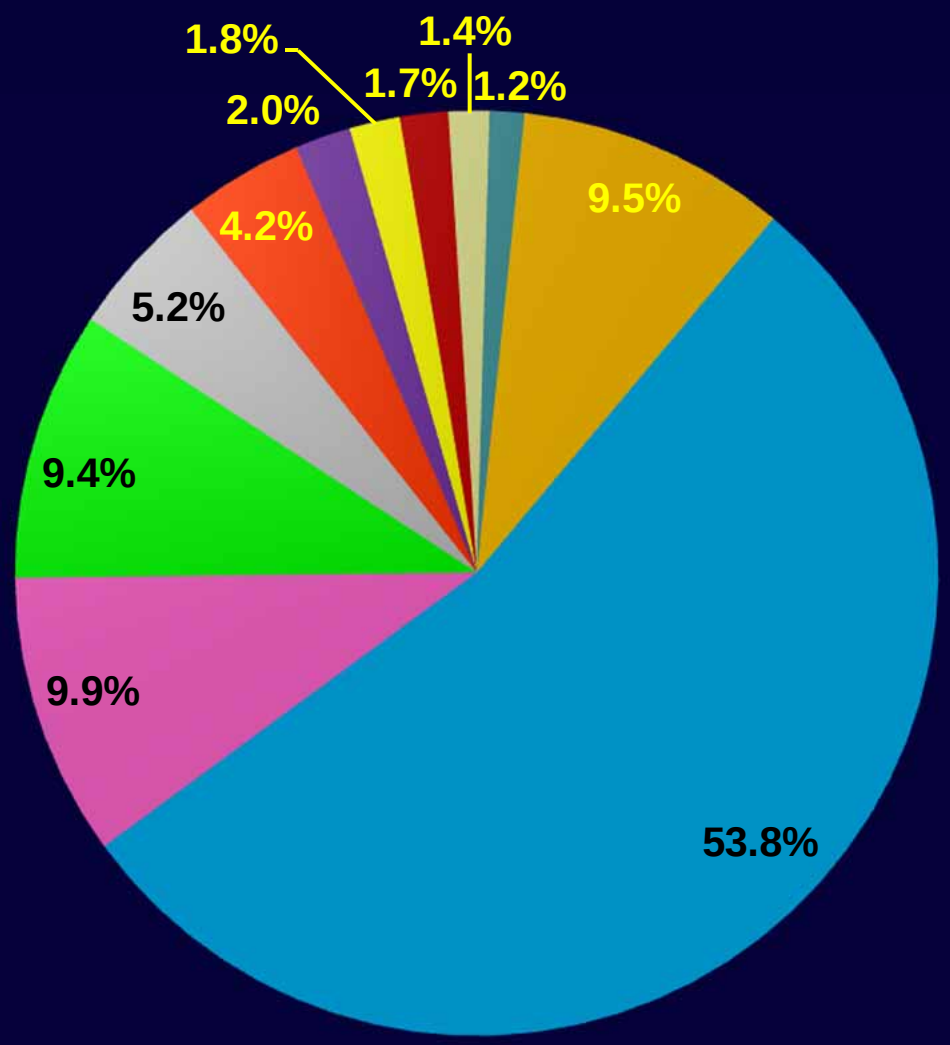
Photovoltaic Supply Chain Growth 4Q'14 vs. 4Q'13



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

Chart 24

World Semiconductor Foundry Sales - 2014



2014 Total: $46,852 million

Gartner 4/15

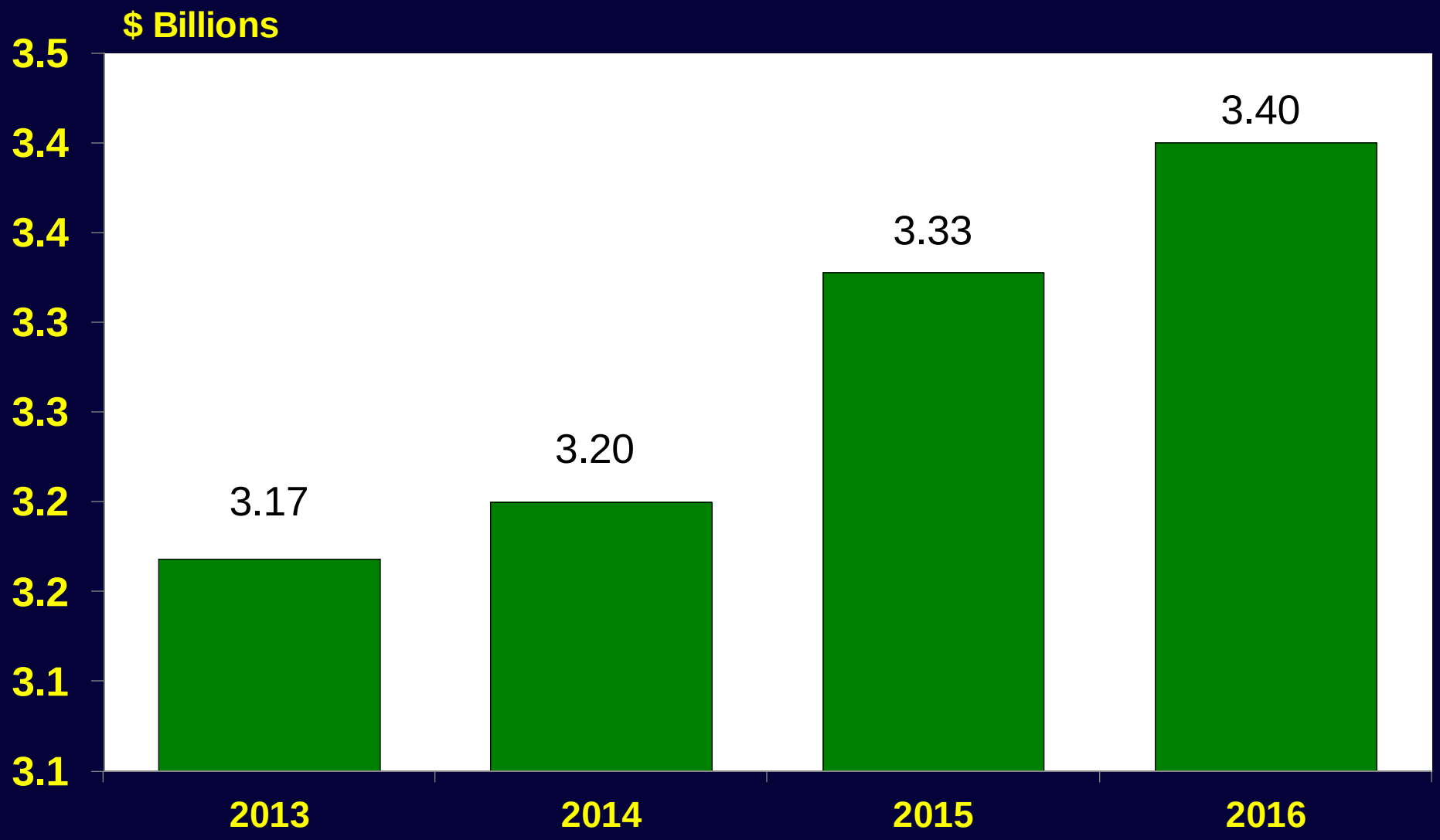
Chart 25

Top 10 2014 IC Foundries

Rank	Maker	2013	2014	1H'14/1H'13
1	TSMC	20,113	25,175	25.2%
2	UMC	4,172	4,621	10.8%
3	Globalfoundries	4,550	4,400	-3.3%
4	Samsung	2,300	2,412	4.9%
5	SMIC	2,069	1,970	-4.8%
6	Powerchip	862	917	6.4%
7	TowerJazz	505	828	64%
8	Vanguard	712	790	11%
9	Huahong Grace	555	665	19.7%
10	Fujitsu Semiconductor	459	653	42.2%
	Total Top 10 for 2014	36,297	42,431	16.9%
	Other Foundry	4,052	4,421	9.1%
	Total Market	40,349	46,852	16.1%

Chart 26

Semiconductor Photomask Market

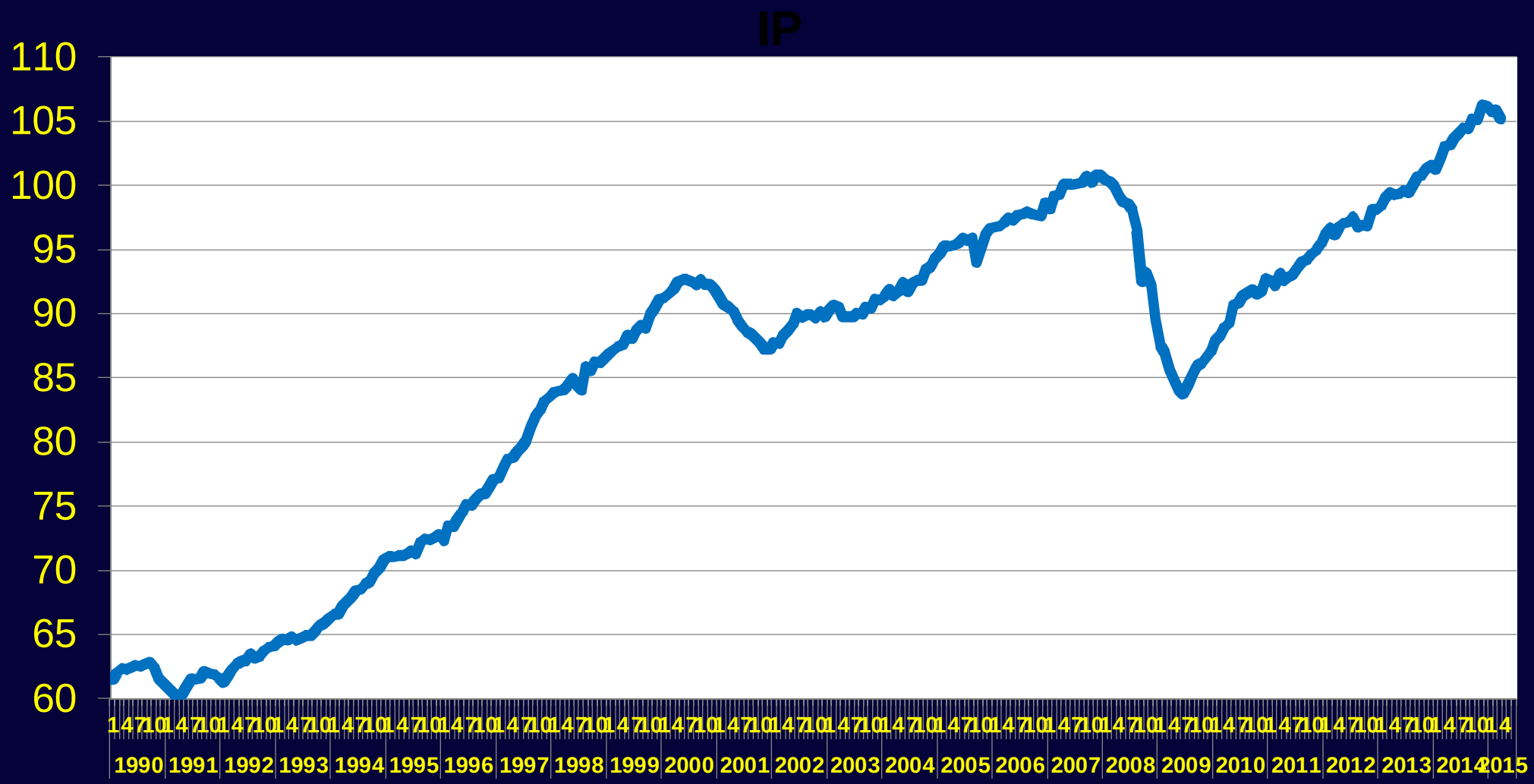


SEMI 4/15

Chart 27

U.S. Industrial Production

Index (2007=100)



www.federalreserve.gov/releases/g17/table1_2.htm