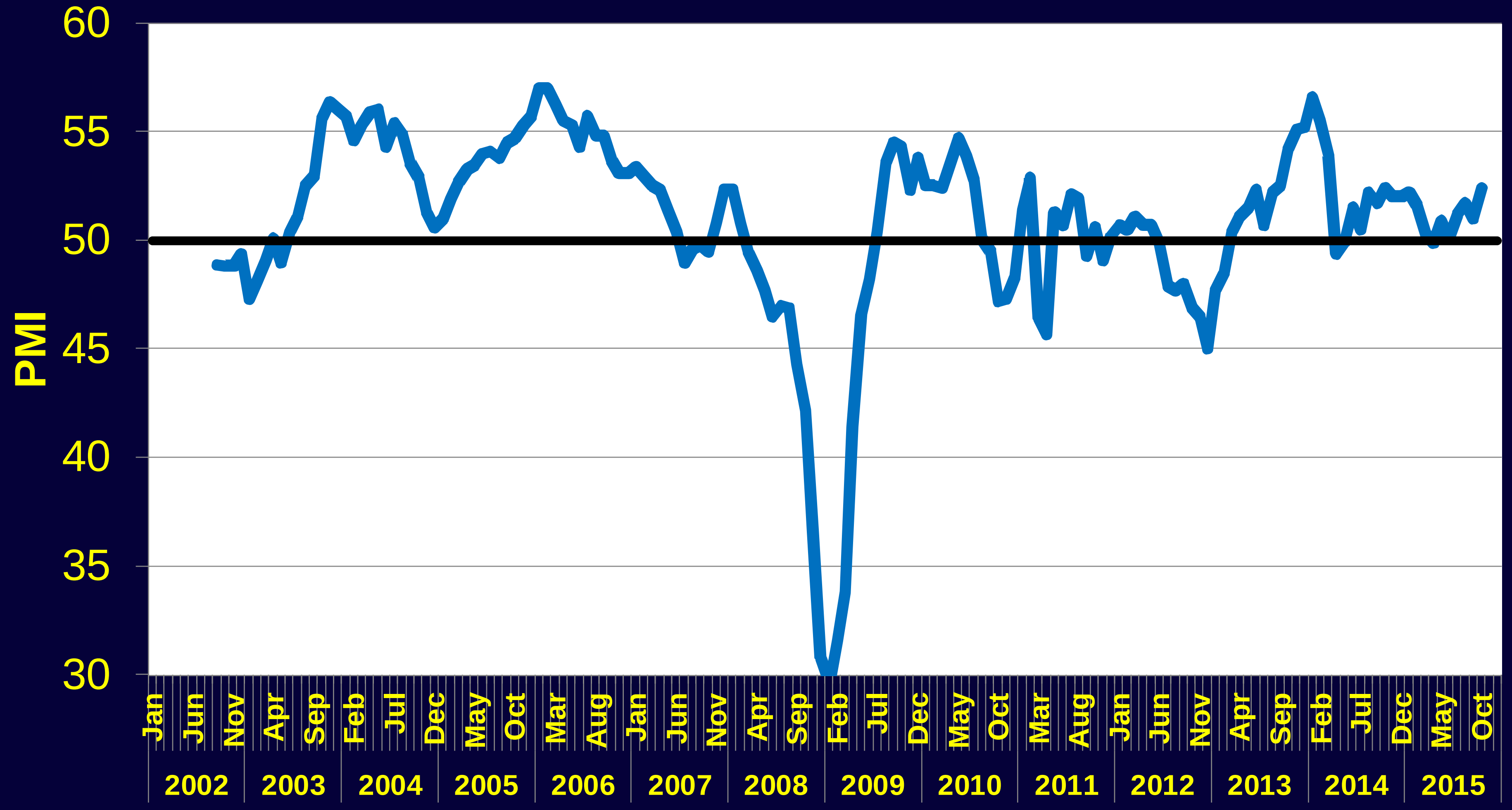
Chart 1

Japan "Purchasing Managers" Index

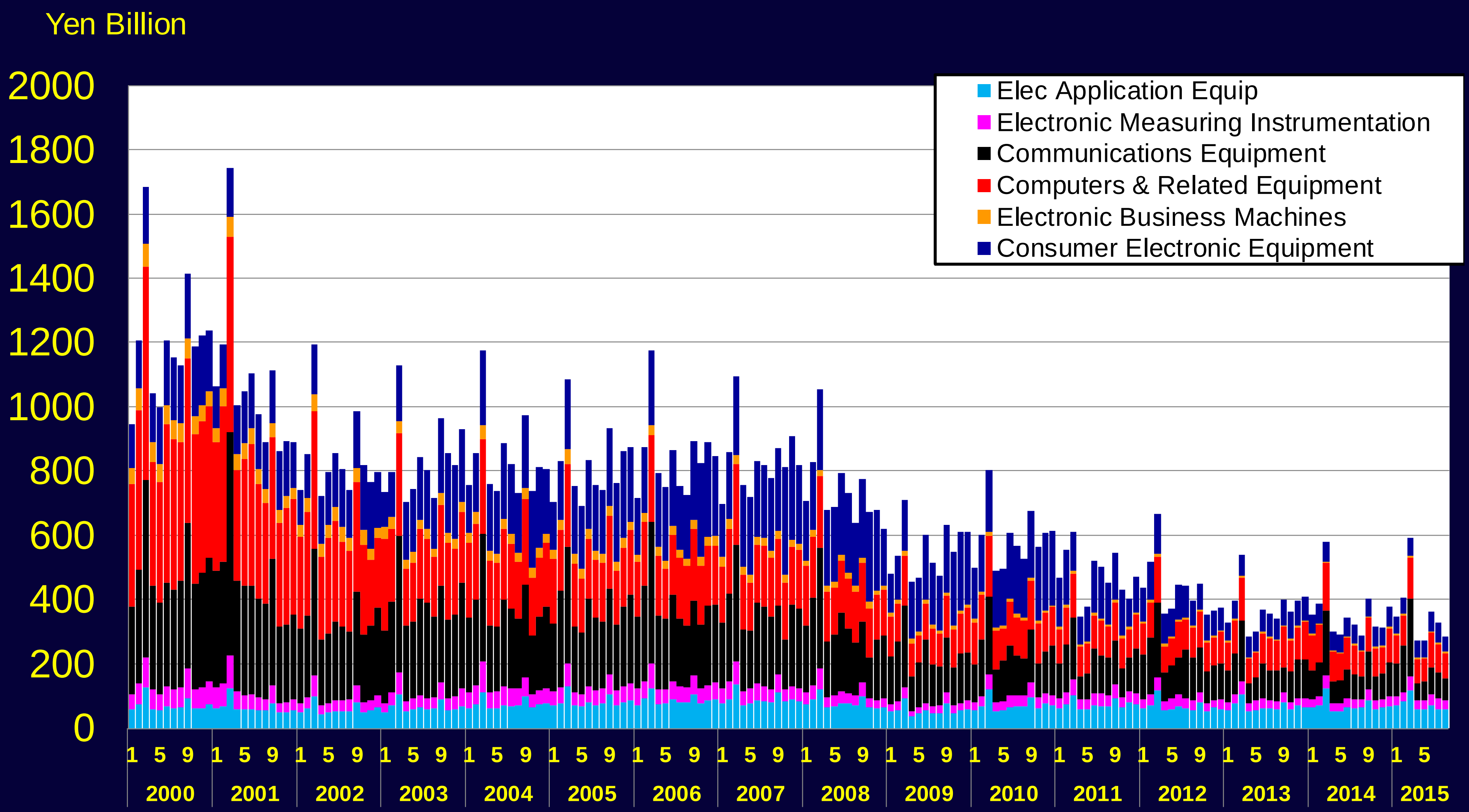
Diffusion Index, >50 = Growth



Nomura/JMMA

Chart 2

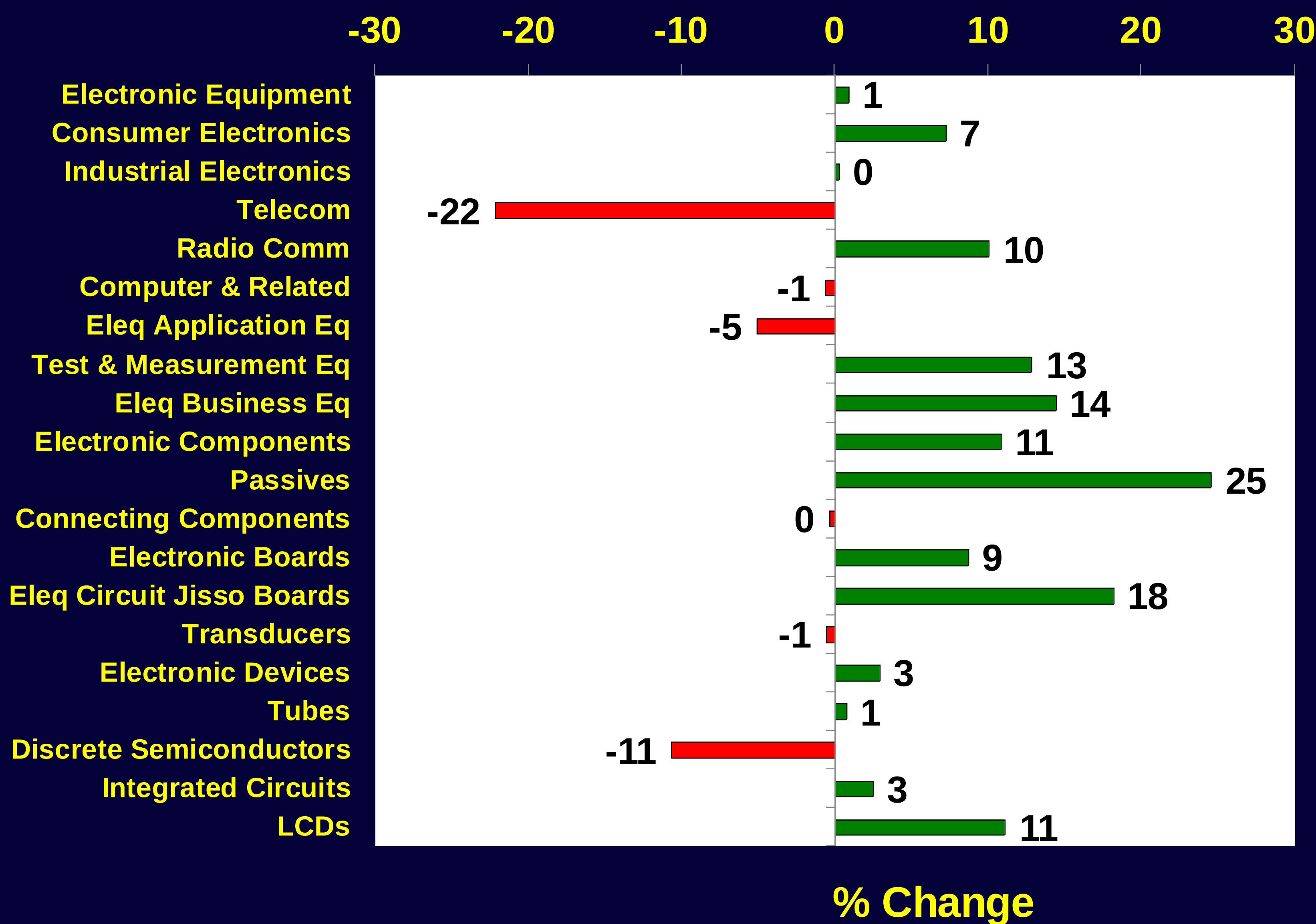
Japan Electronic Equipment Production by Month 2000 to Present



JEITA www.jeita.or.jp/

Chart 3

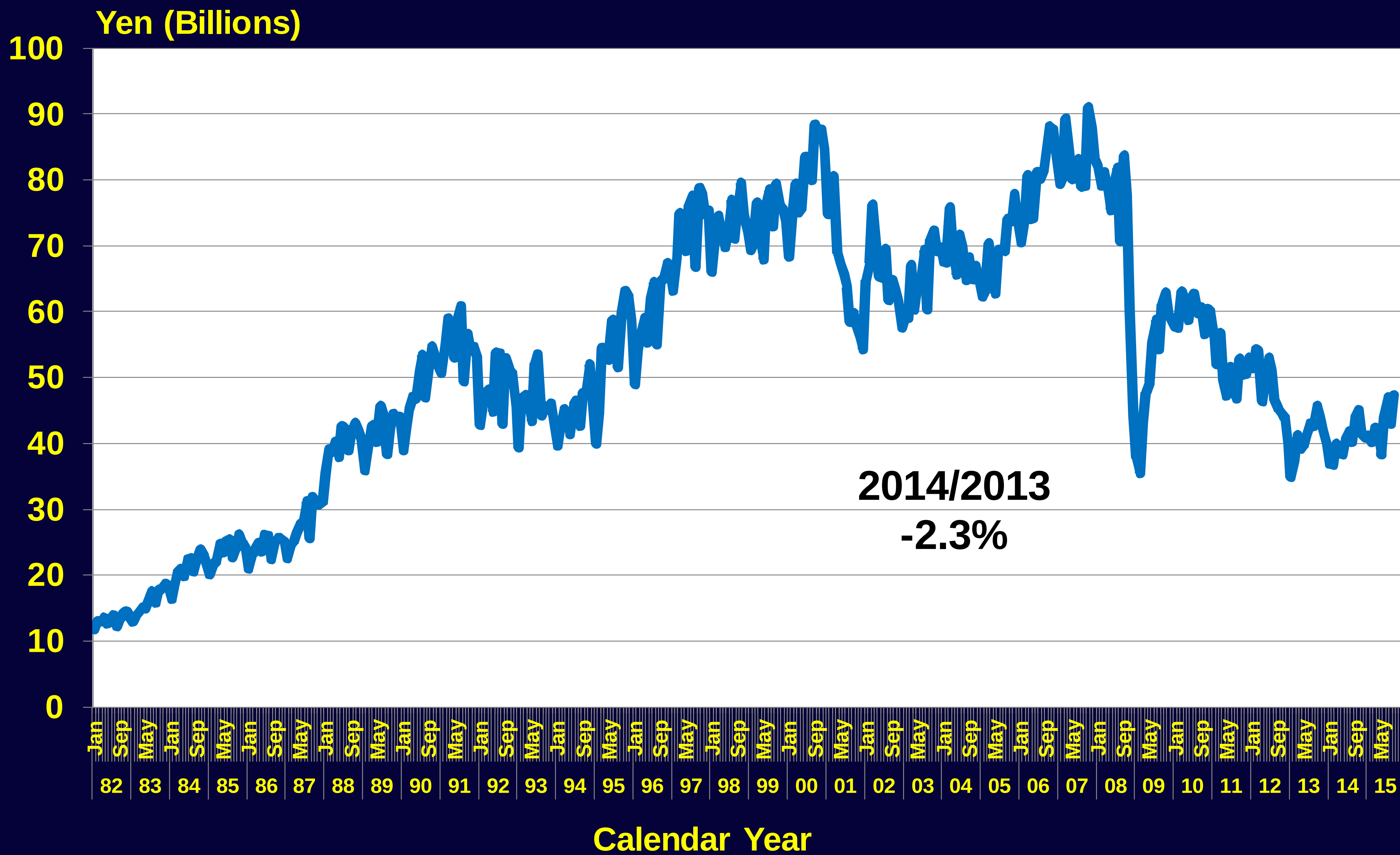
Japan Electronic Supply Chain Growth 3Q'15 vs 3Q'14 (production in Yen)



JEITA 11/15

Chart 4

Japan PCB Shipments

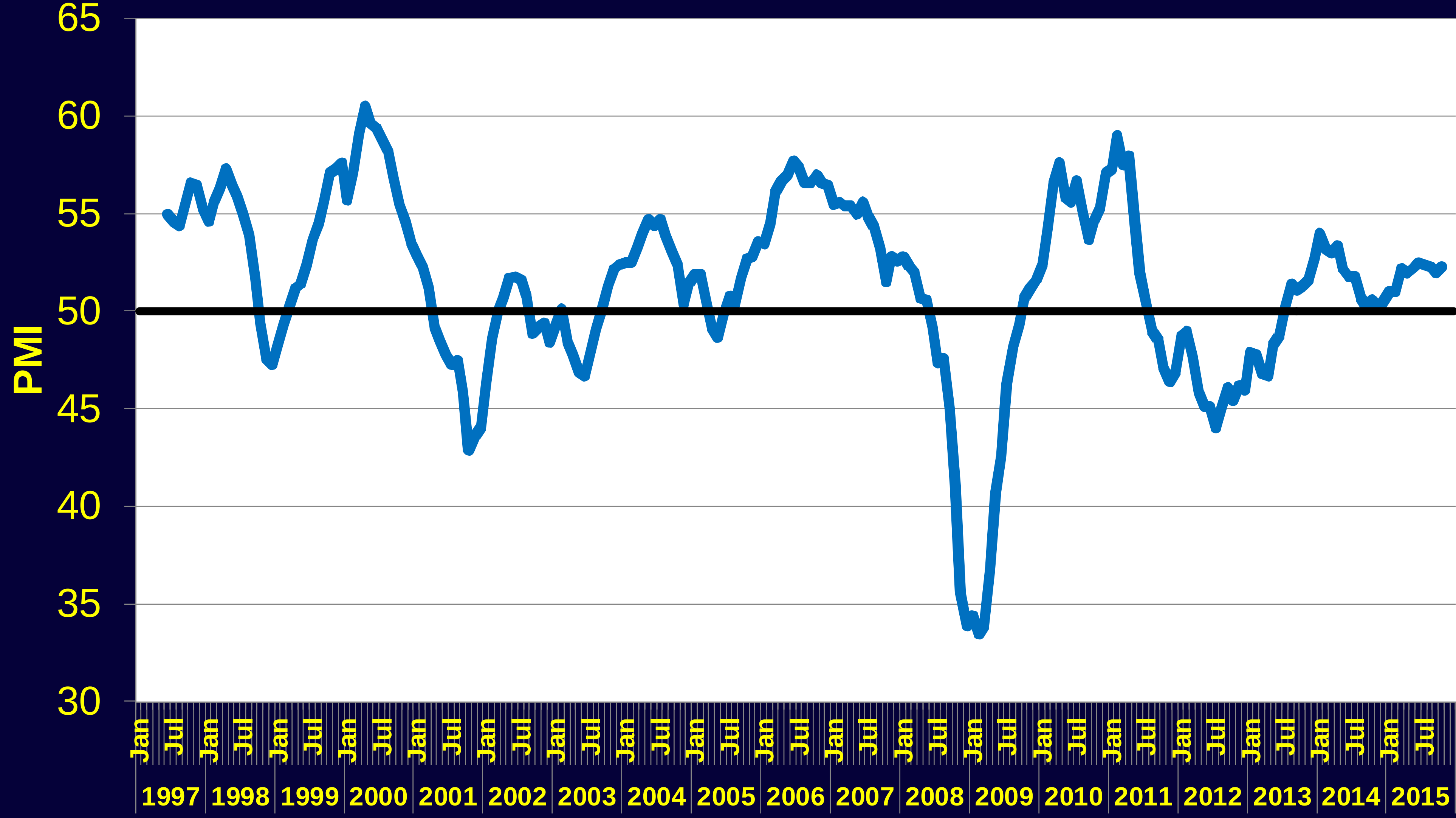


www.jpca.org/kikaitoukei/kikai2013.xls

Chart 5

Eurozone "Purchasing Managers" Index

Diffusion Index, >50 = Growth

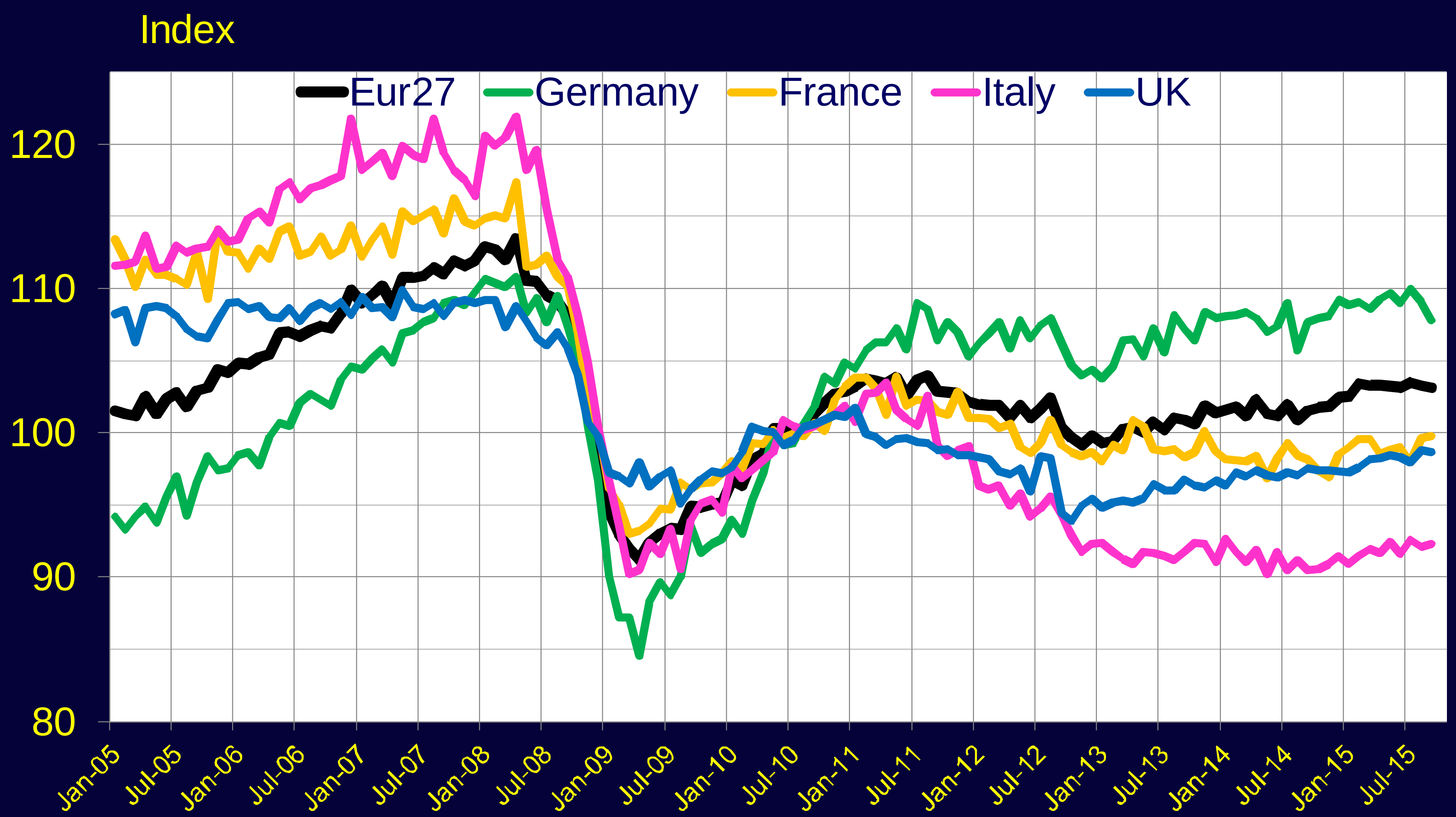


Markit Economics

Chart 6

Industrial Production - Europe

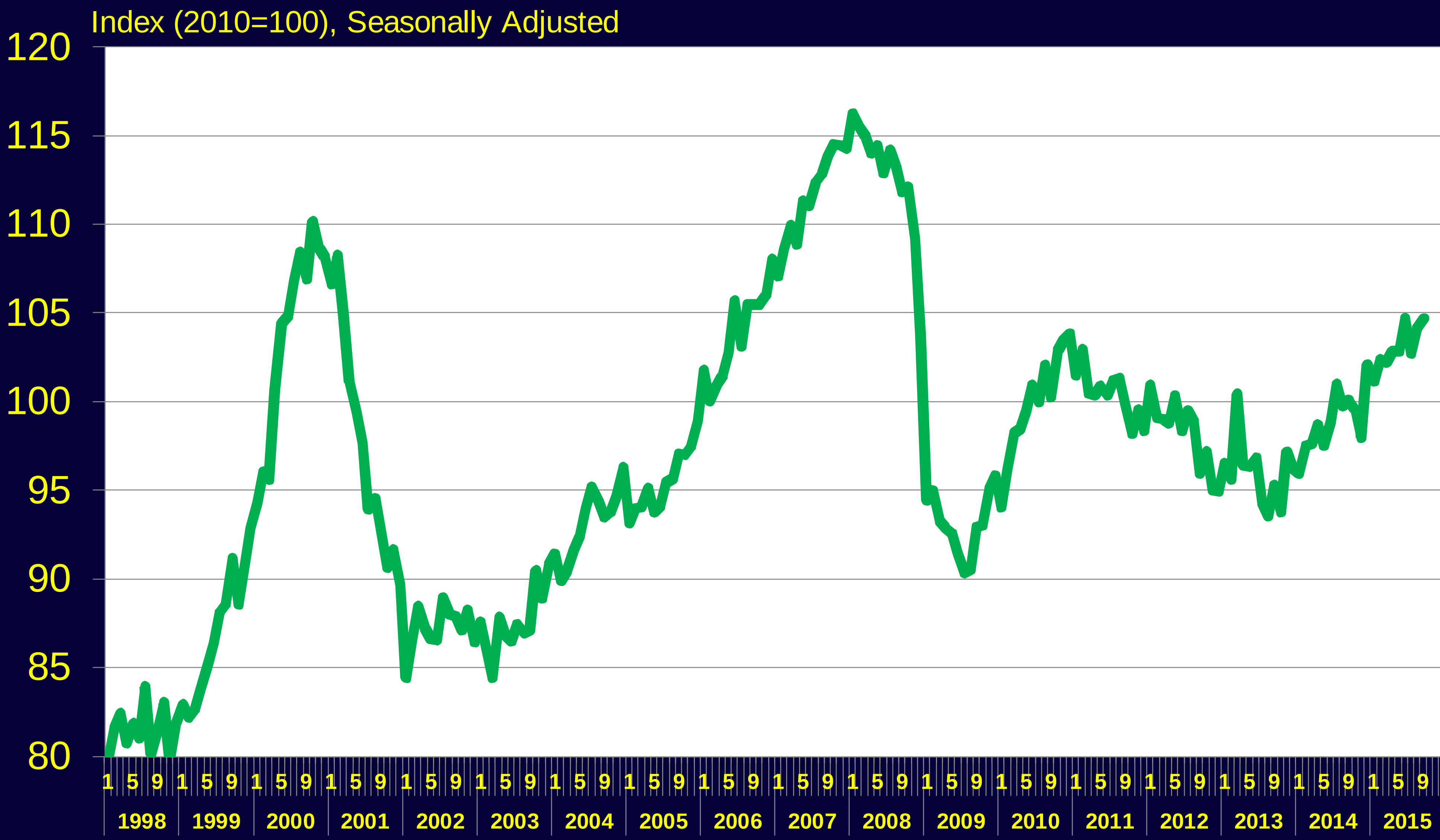
Index (2010 Avg. Month = 100, Seasonally Adjusted)



Eurostat

Chart 7

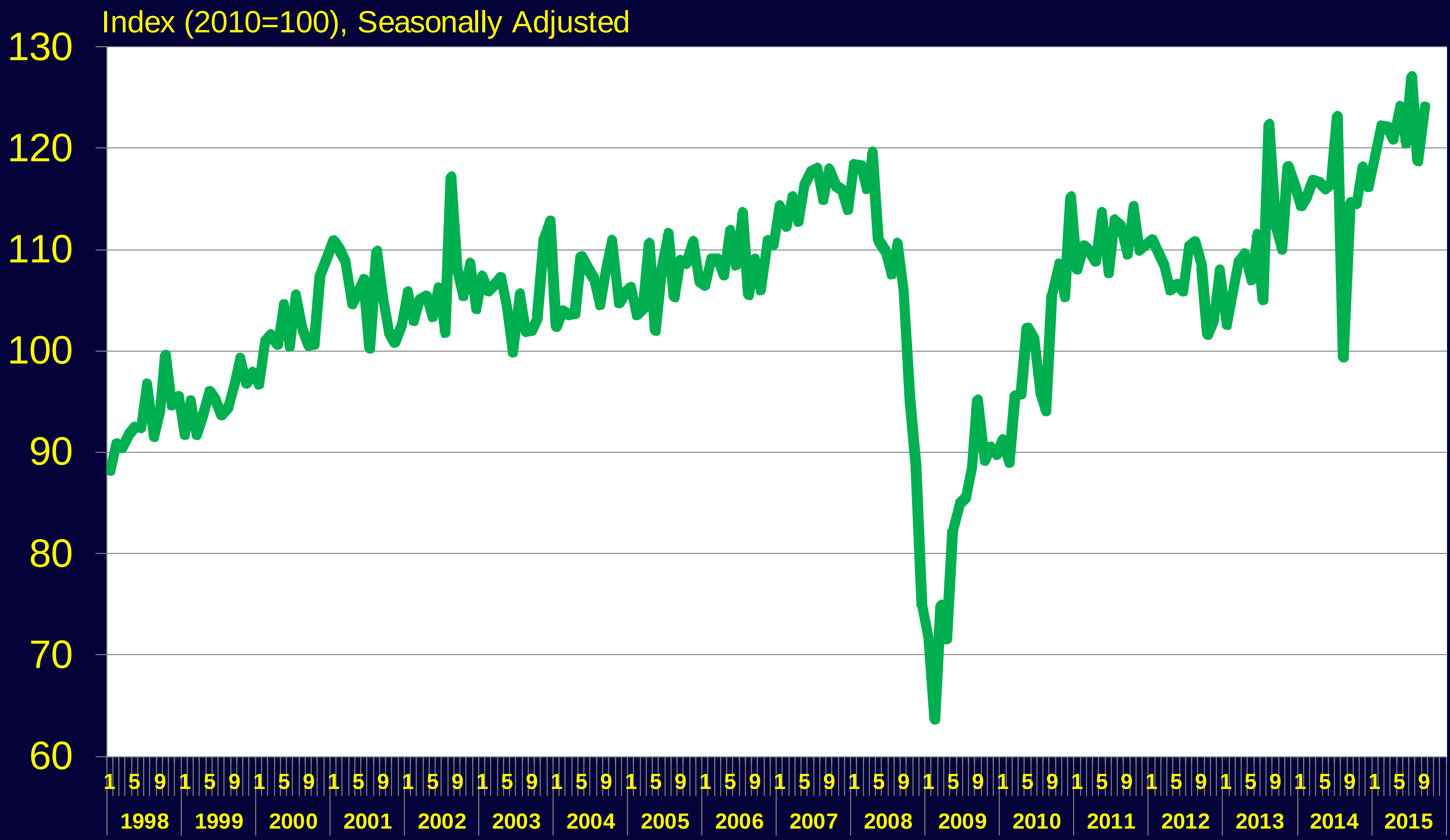
European Computer, Electronic & Optical Products Production



Eurostat, C26 category, EU 27 countries

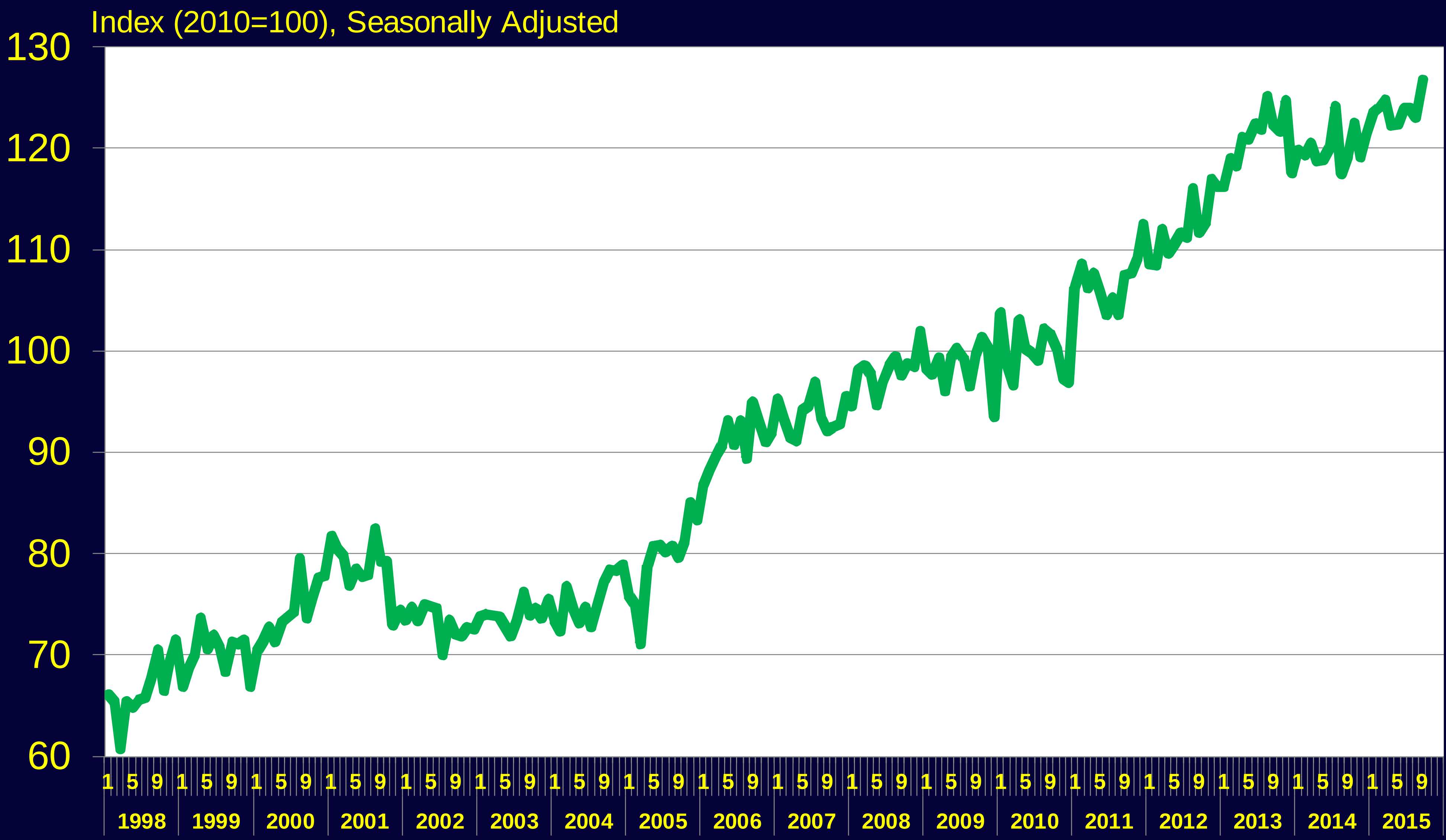
Chart 8

European Motor Vehicle Production



Eurostat, C291 category, EU 27 countries

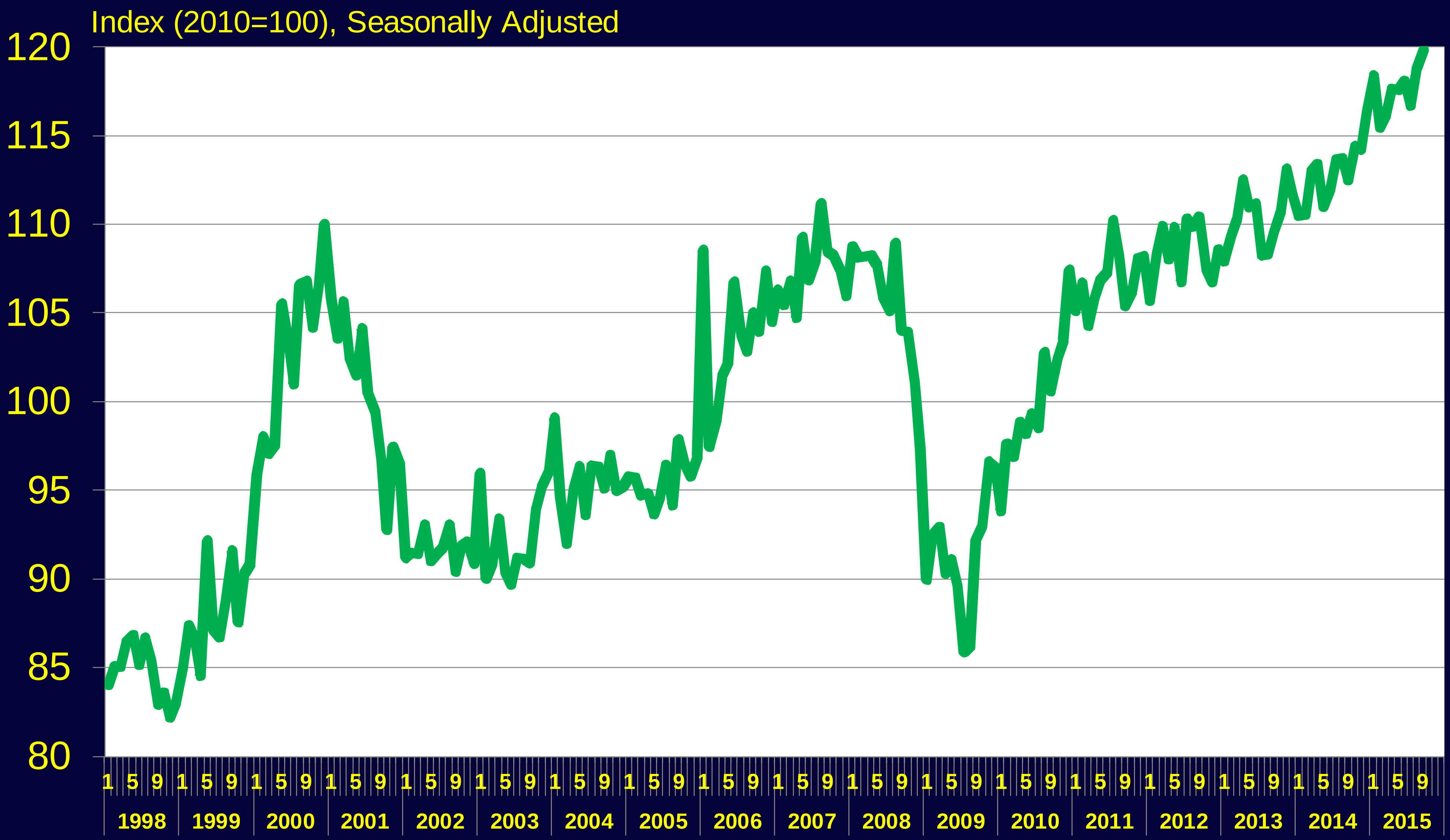
Chart 9 **European Production - Aircraft, Spacecraft & Related Equipment**



Eurostat, C303 category, EU 27 countries

Chart 10

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



Eurostat, C2651 category, EU 27 countries

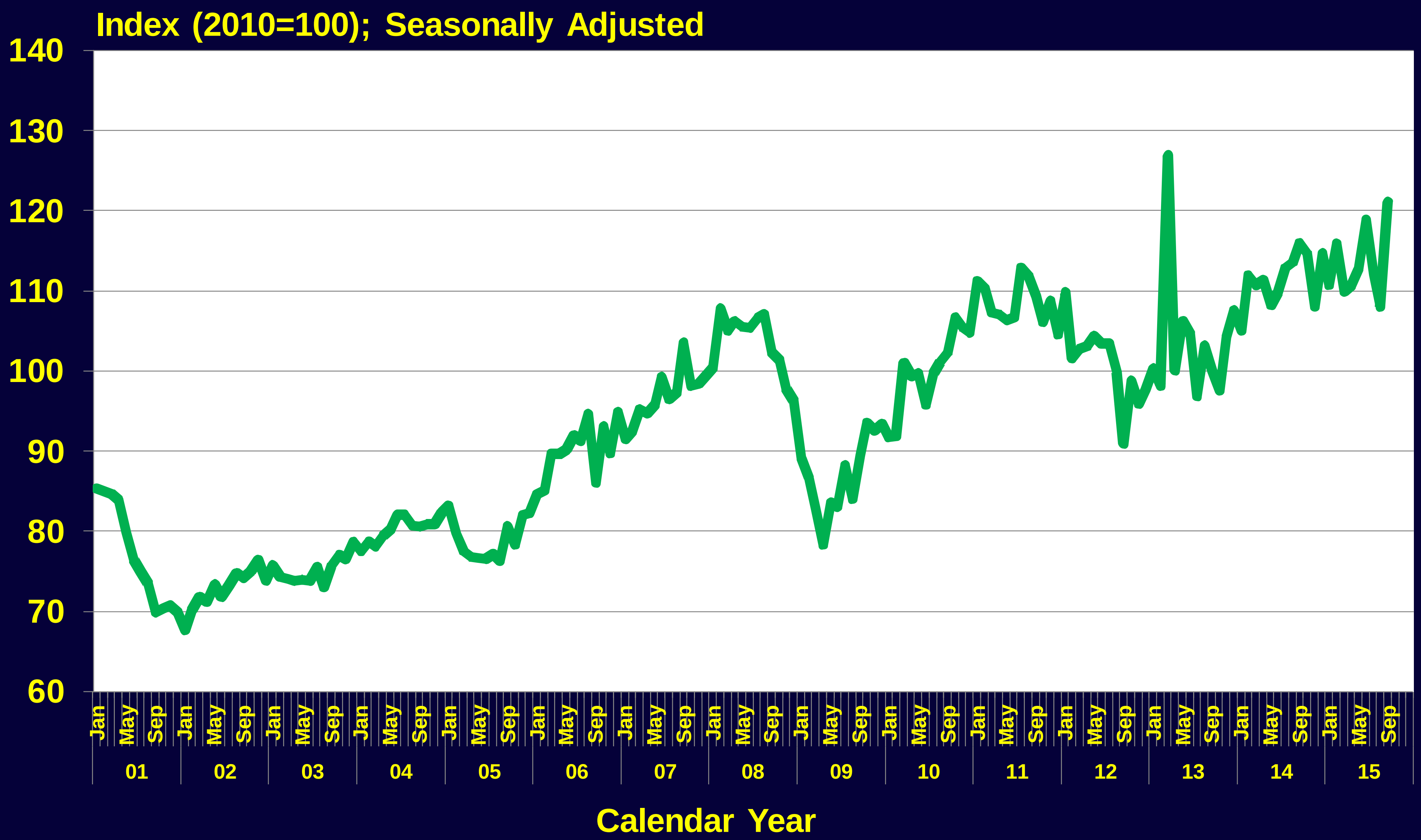
Chart 11

European Loaded Electronic Board Production

Eurostat, C2612

Chart 12

European Electronic Components & Board Production



Eurostat

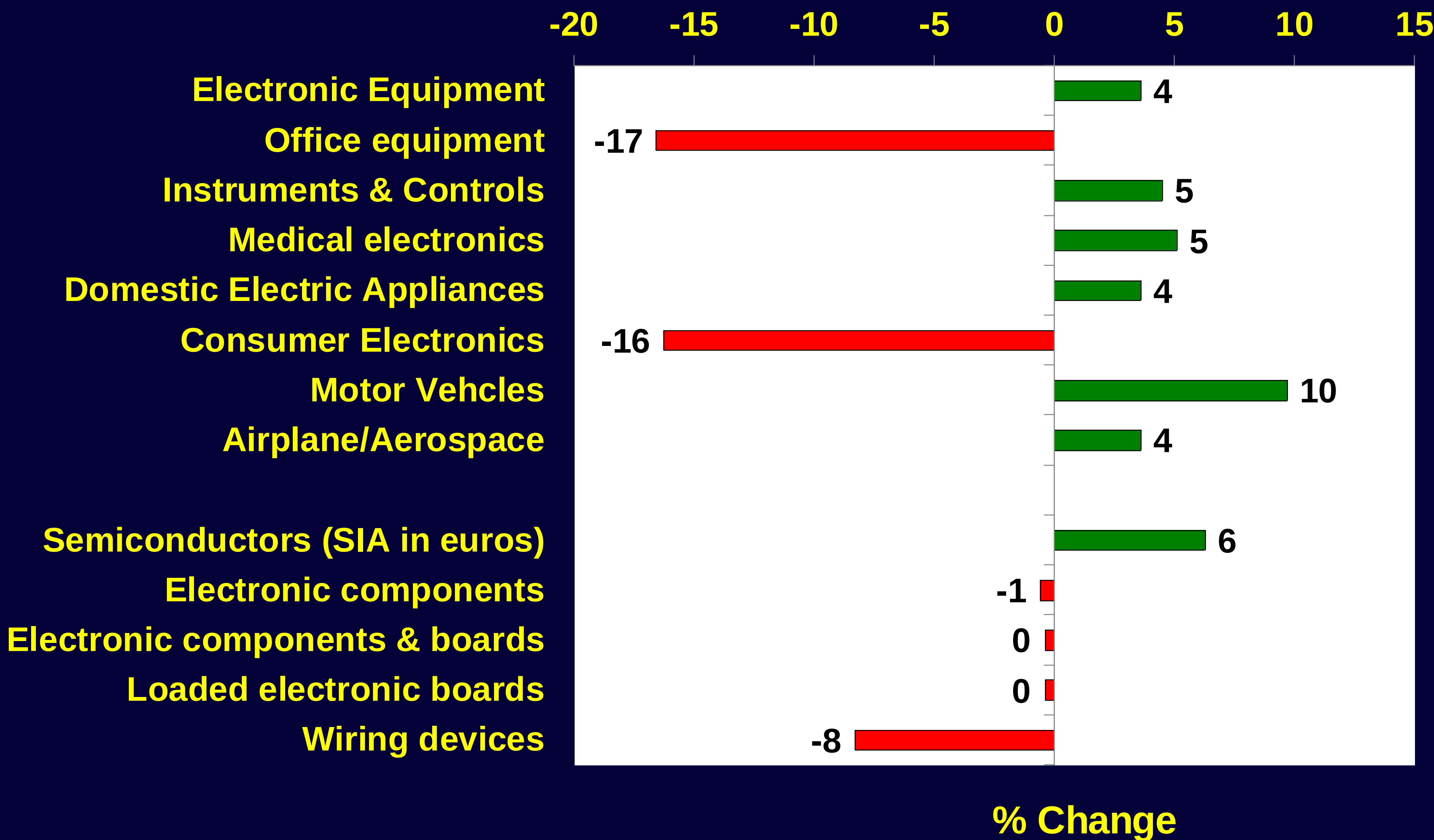
Chart 13

European PCB Monthly Shipments

Source: Custer Consulting Group estimate based upon industry data

Chart 14

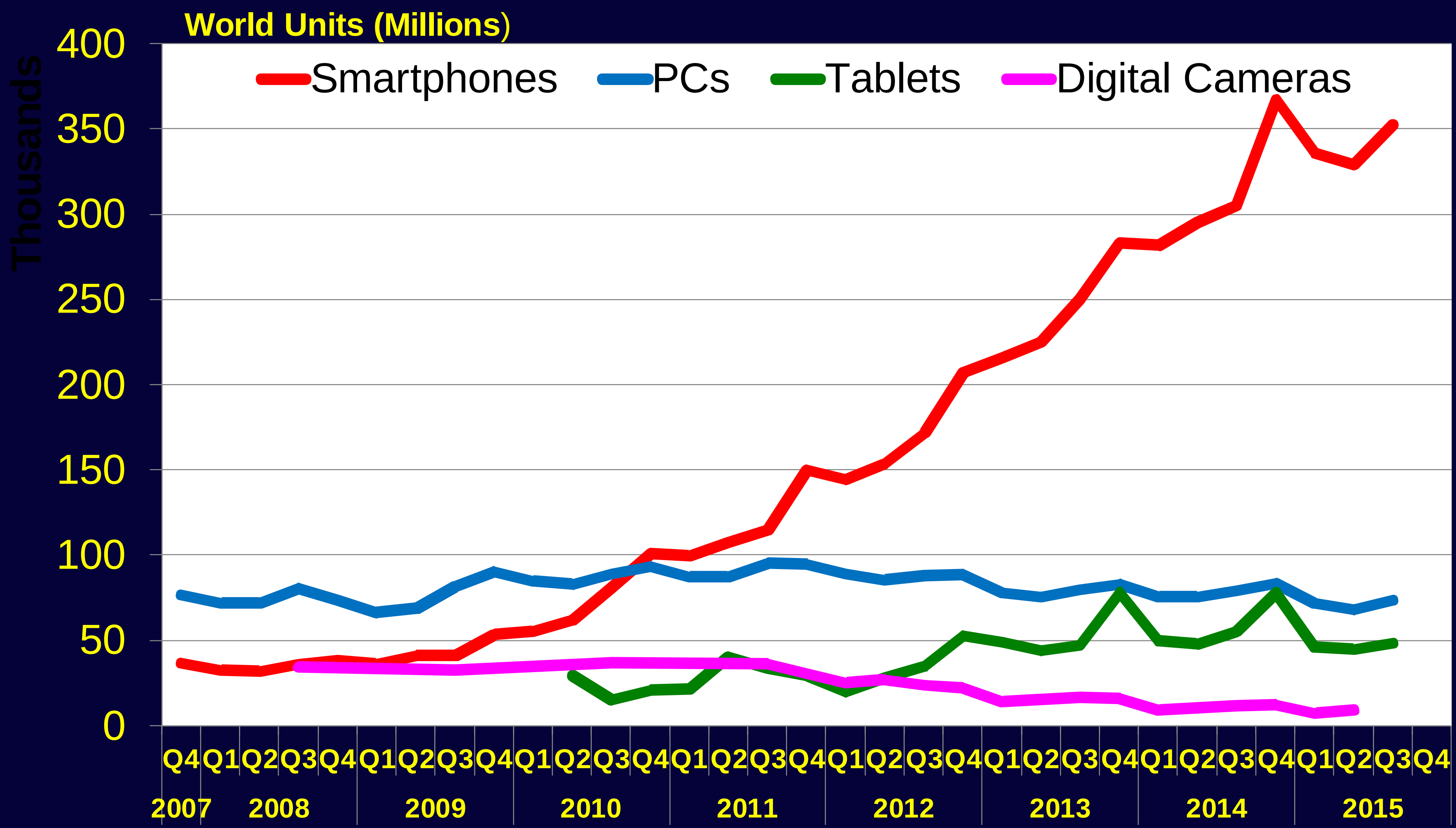
European Electronic Supply Chain Growth 3Q'15 vs 3Q'14



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

Chart 15

Smartphones Cannibalize PCs, Tablets & Digital Cameras

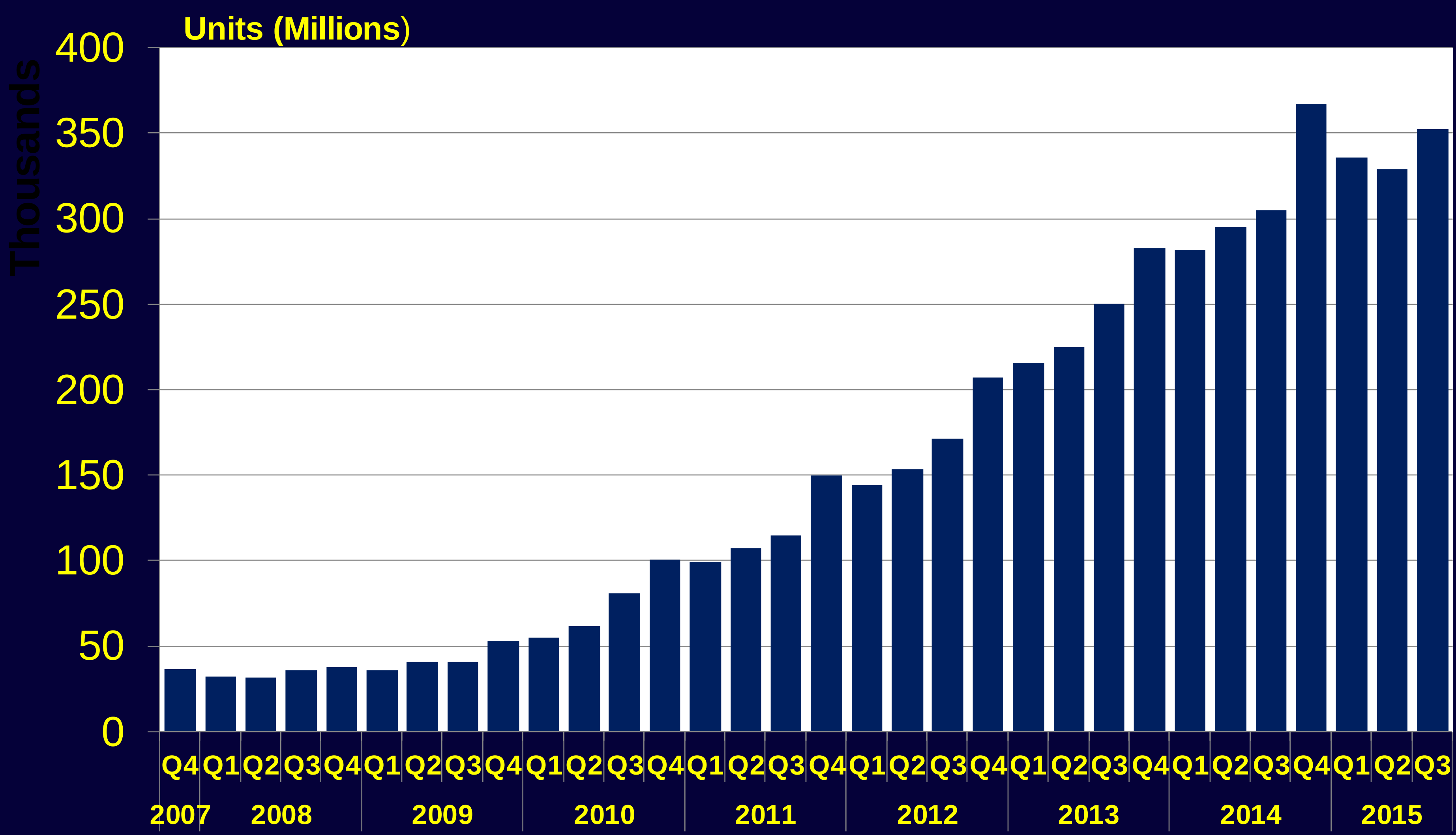


www.gartner.com; www.cipa.jp/; www.icinsights.com; www.idc.com

Chart 16

Smartphone Unit Shipments to End Users

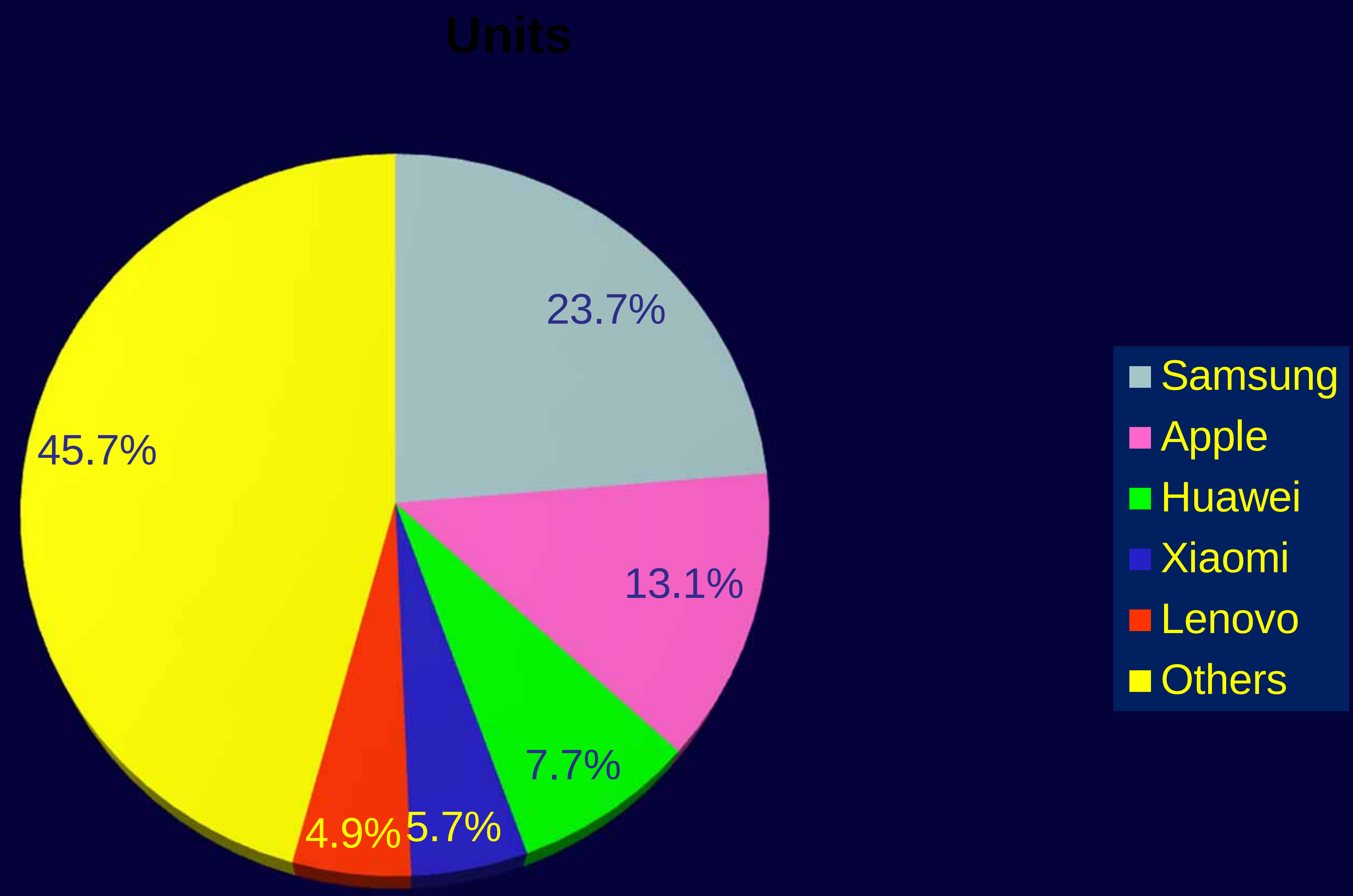
World



Gartner Dataquest 11/15 & prior reports

Chart 17

World Smartphone Sales 3Q'15

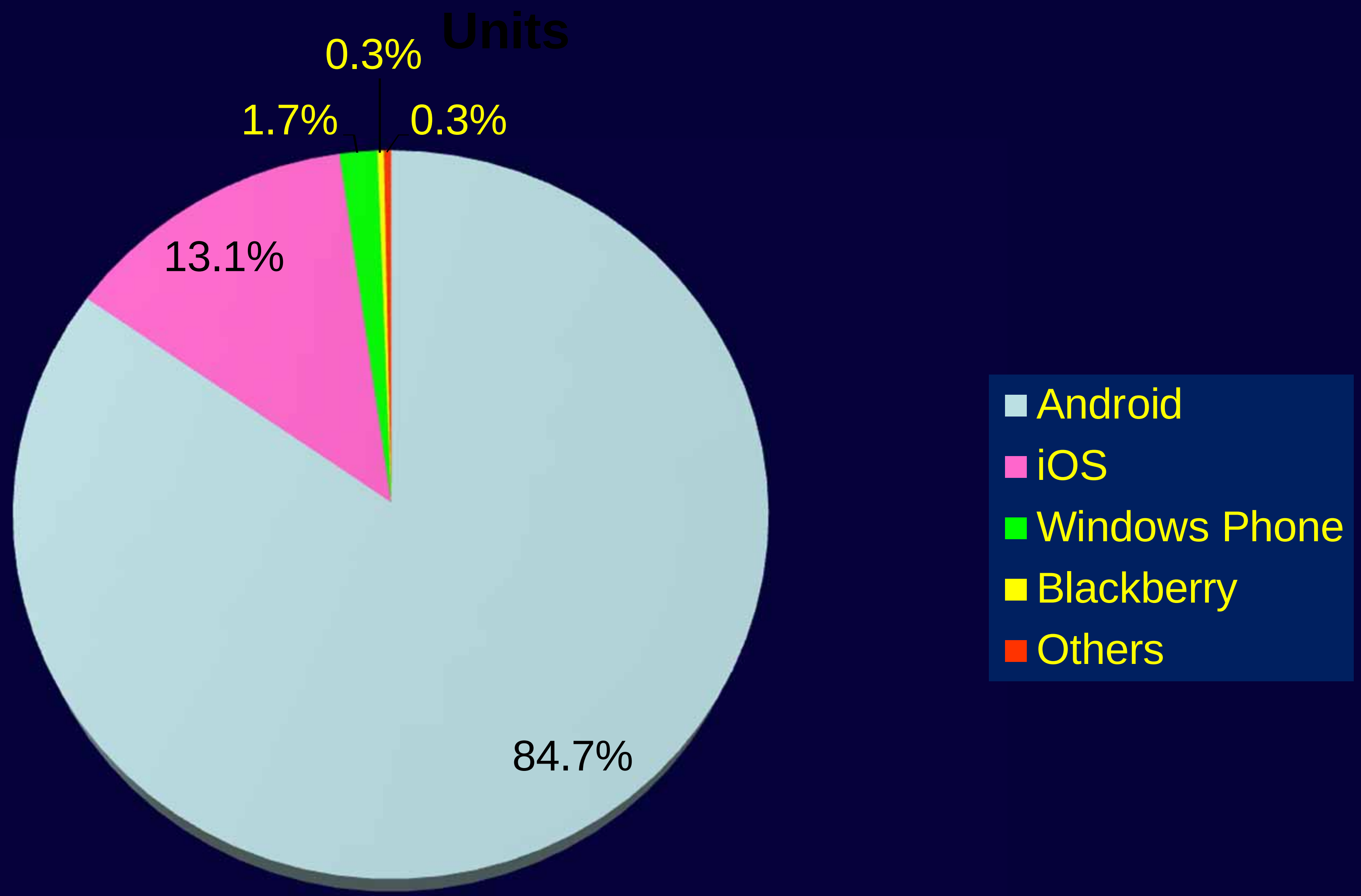


TOTAL: 352.8 Million Units

Gartner 11/15

Chart 18

World Smartphone Sales by Operating System 3Q'15



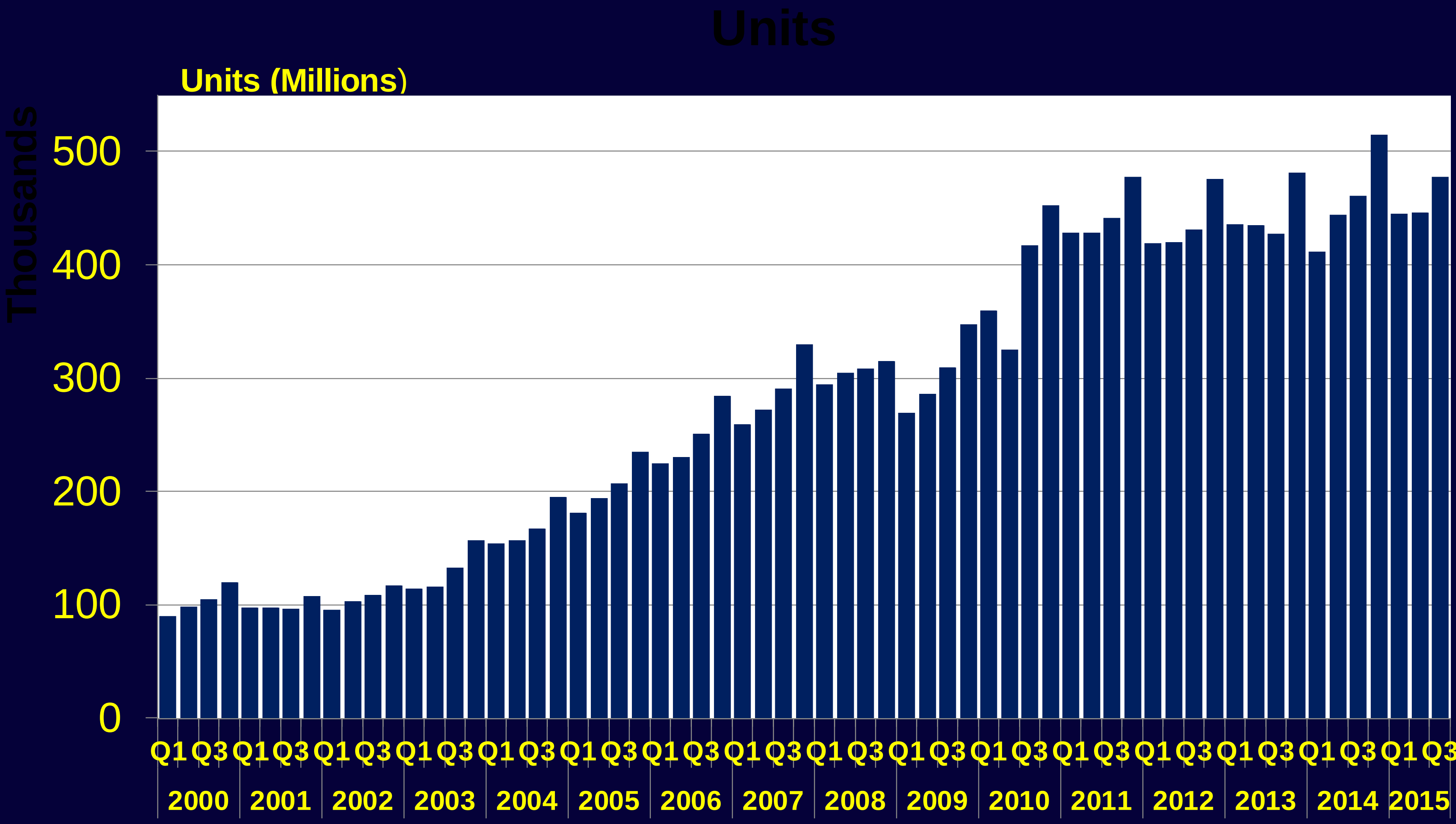
TOTAL: 352.8 Million Units

Gartner 11/15

Chart 19

Mobile Phone Unit Shipments

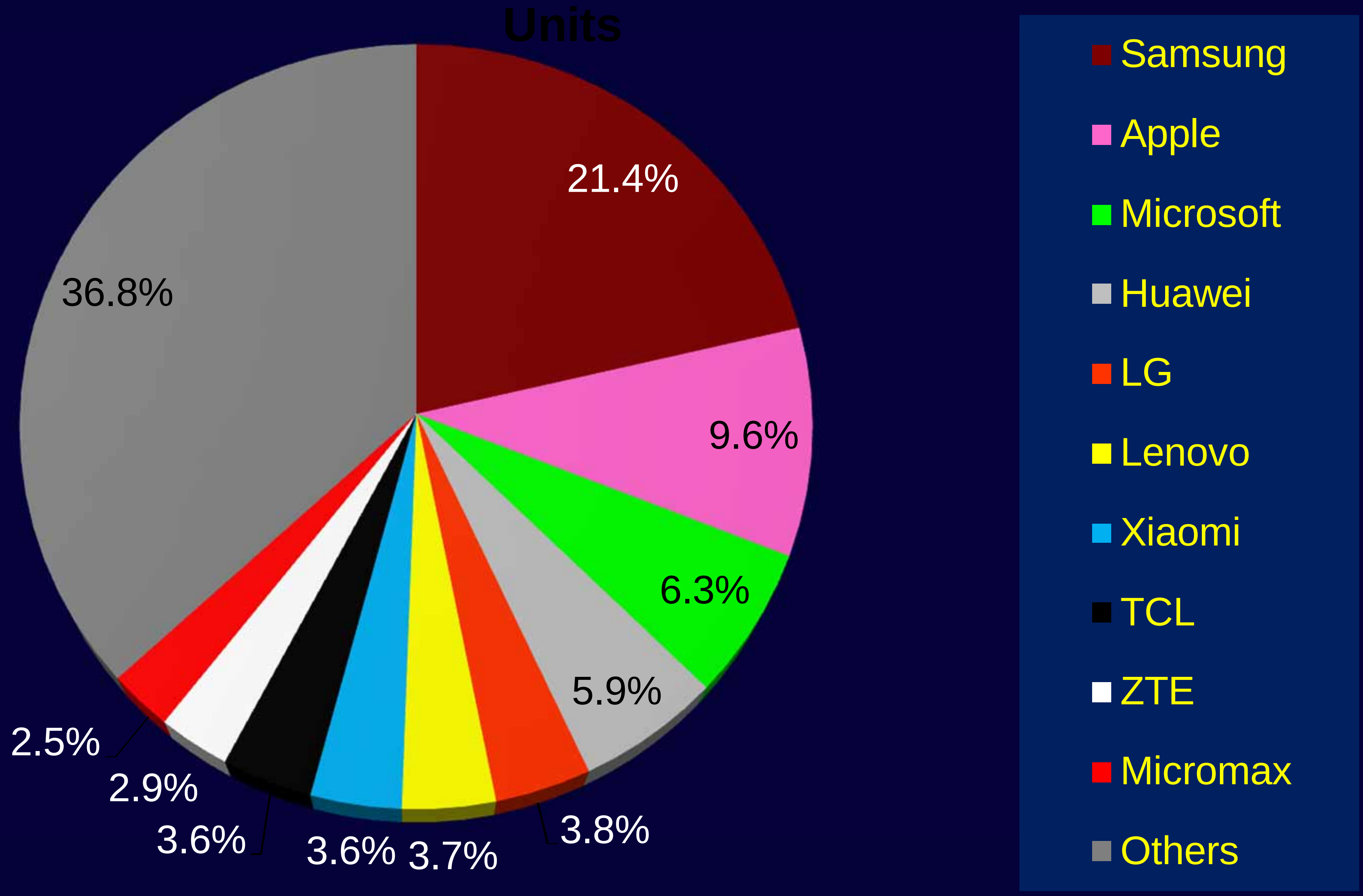
World



Gartner Dataquest 11/15 & prior reports

Chart 20

World Mobile Phone Sales to End Users 3Q'15

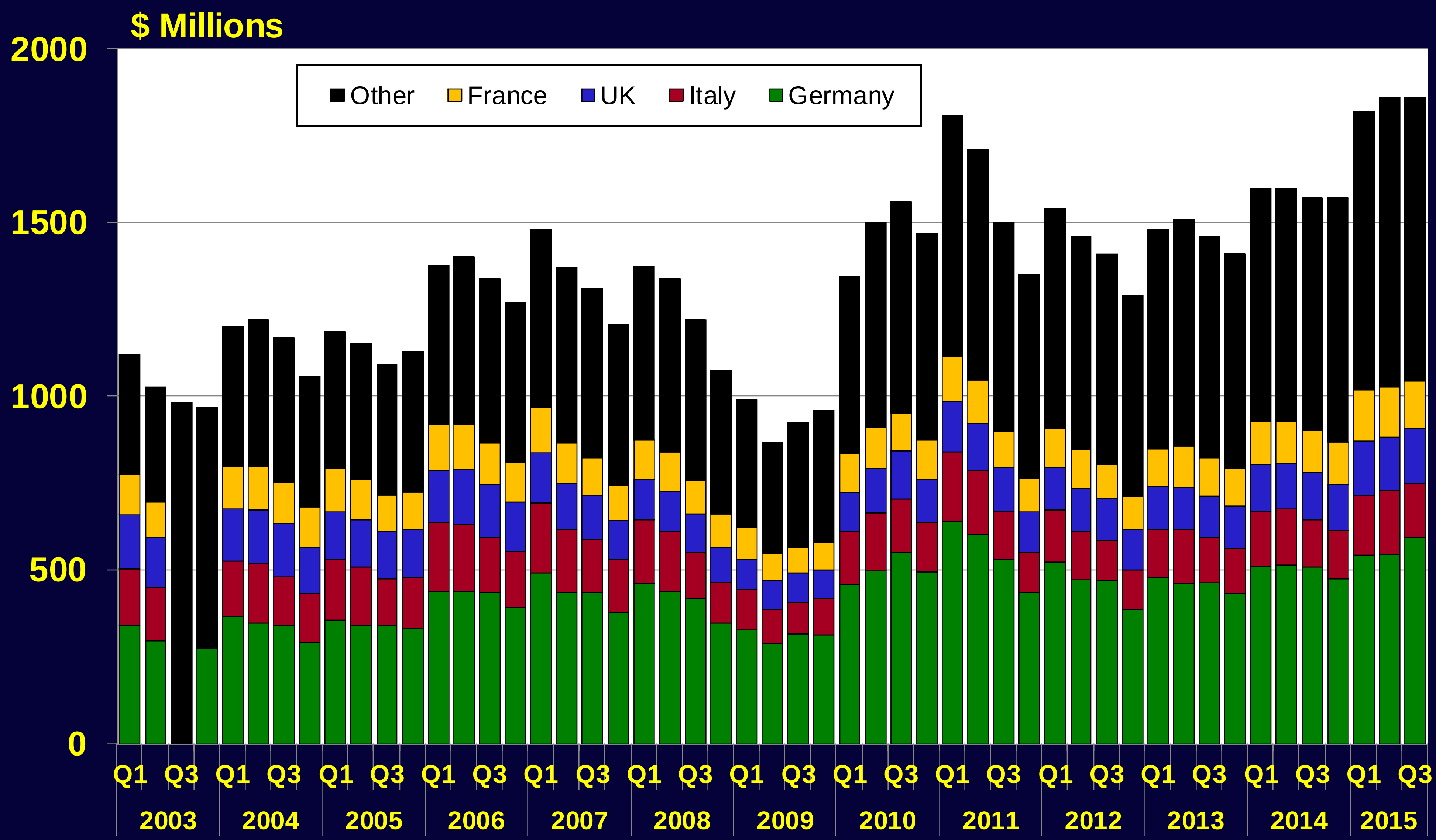


TOTAL: 478 Million Units

Gartner 11/15

Chart 21

DMASS - European Semiconductor Distribution Industry



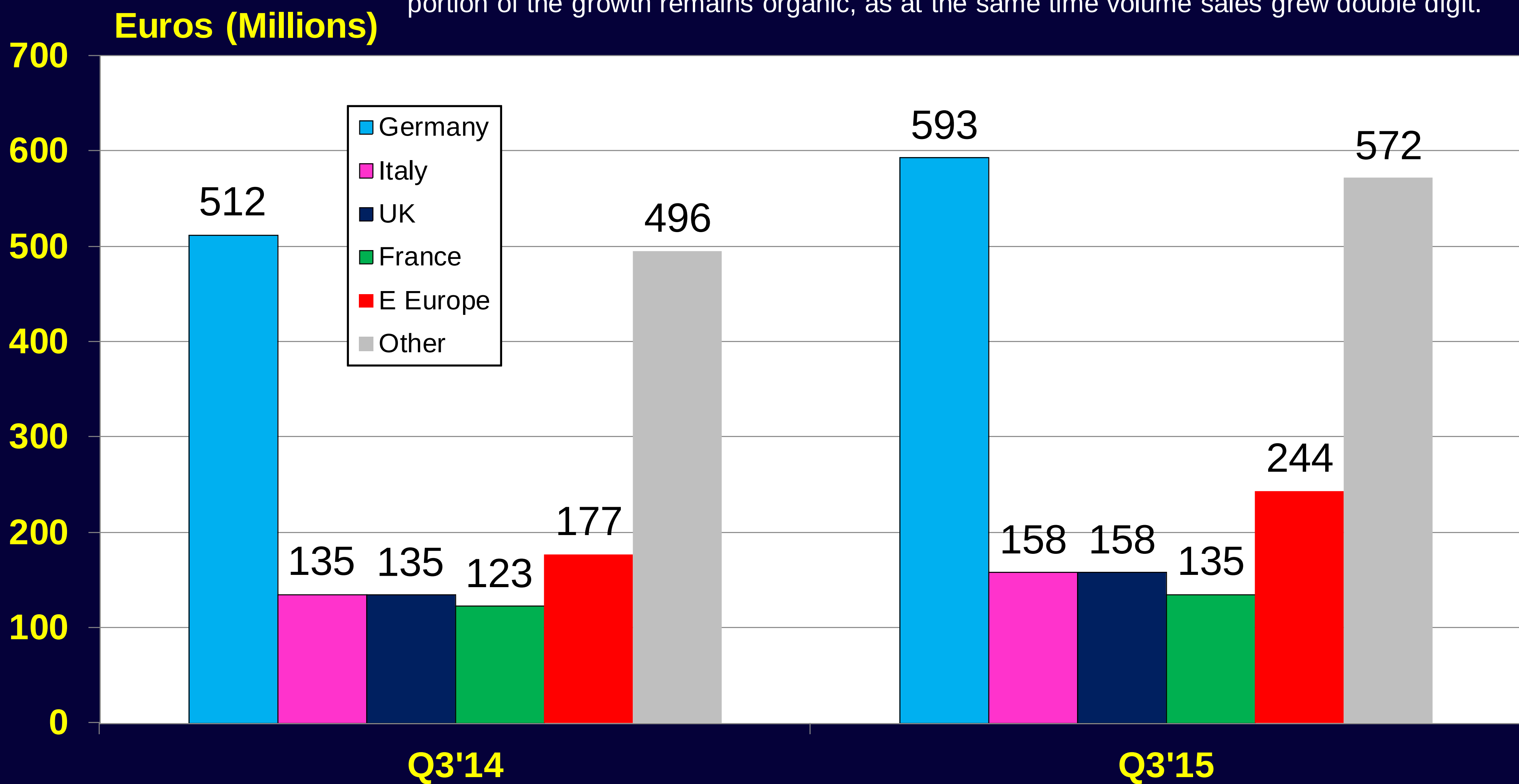
http://dmass.com/ 8/15

Chart 22

DMASS

European Semiconductor Distribution Industry

Again, exchange rate effects between US Dollar and Euro had their influence, but a significant portion of the growth remains organic, as at the same time volume sales grew double digit.

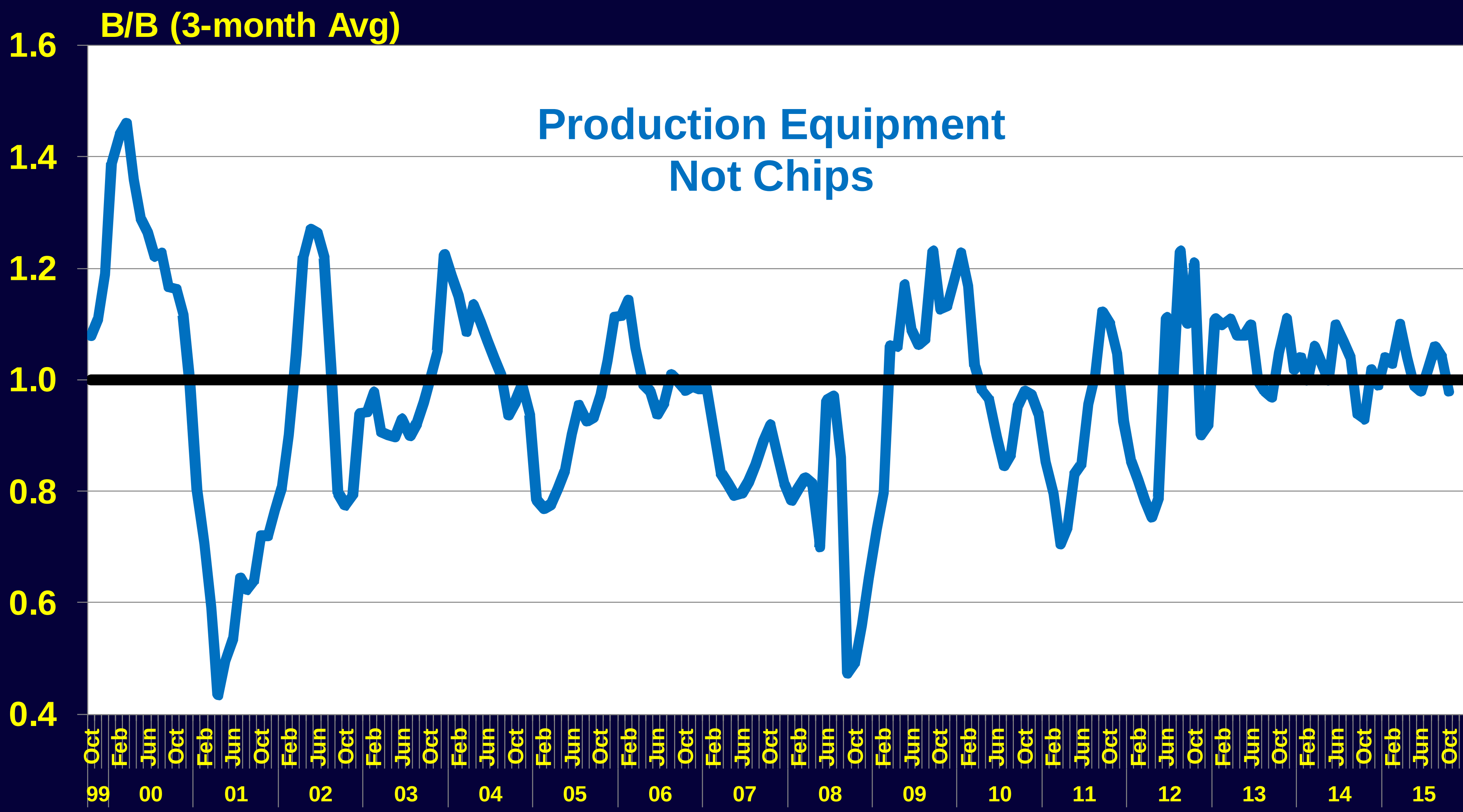


This will become a record year for DMASS, breaking the 7-Billion-Euro mark for sure. Even though the exchange rate effects will disappear soon, European semiconductor distributors will continue to grow, albeit at a slower pace. We certainly will remain mindful of potential macro-effects like China, the refugee crisis or the shakeup in the automotive industry, which could easily affect further market development."

DMASS 11/2015; http://dmass.com/

Chart 23

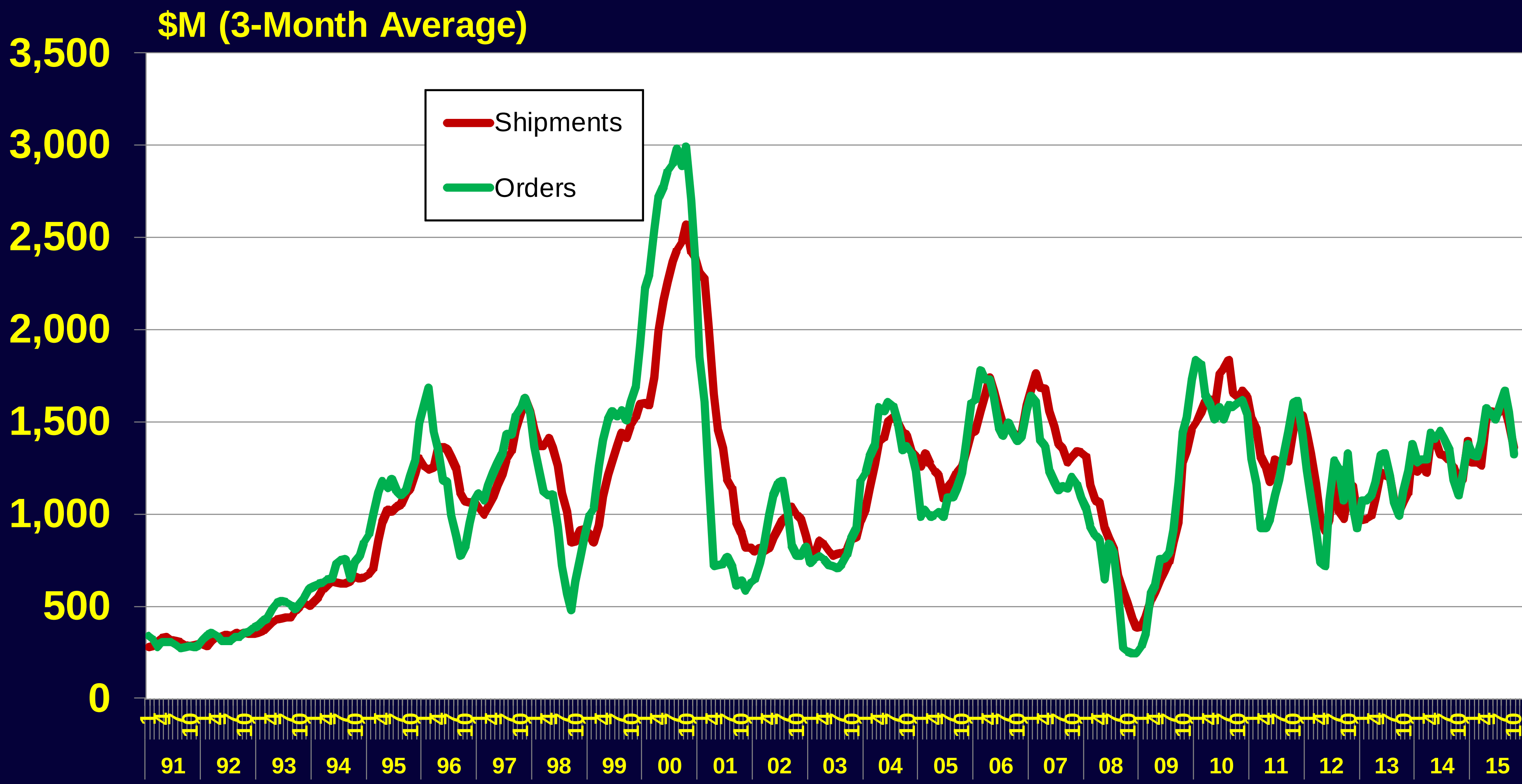
N American Semiconductor Equipment Industry Book/Bill Ratio



SOURCE Semiconductor Equipment and Materials International
http://www.semi.org

Chart 24

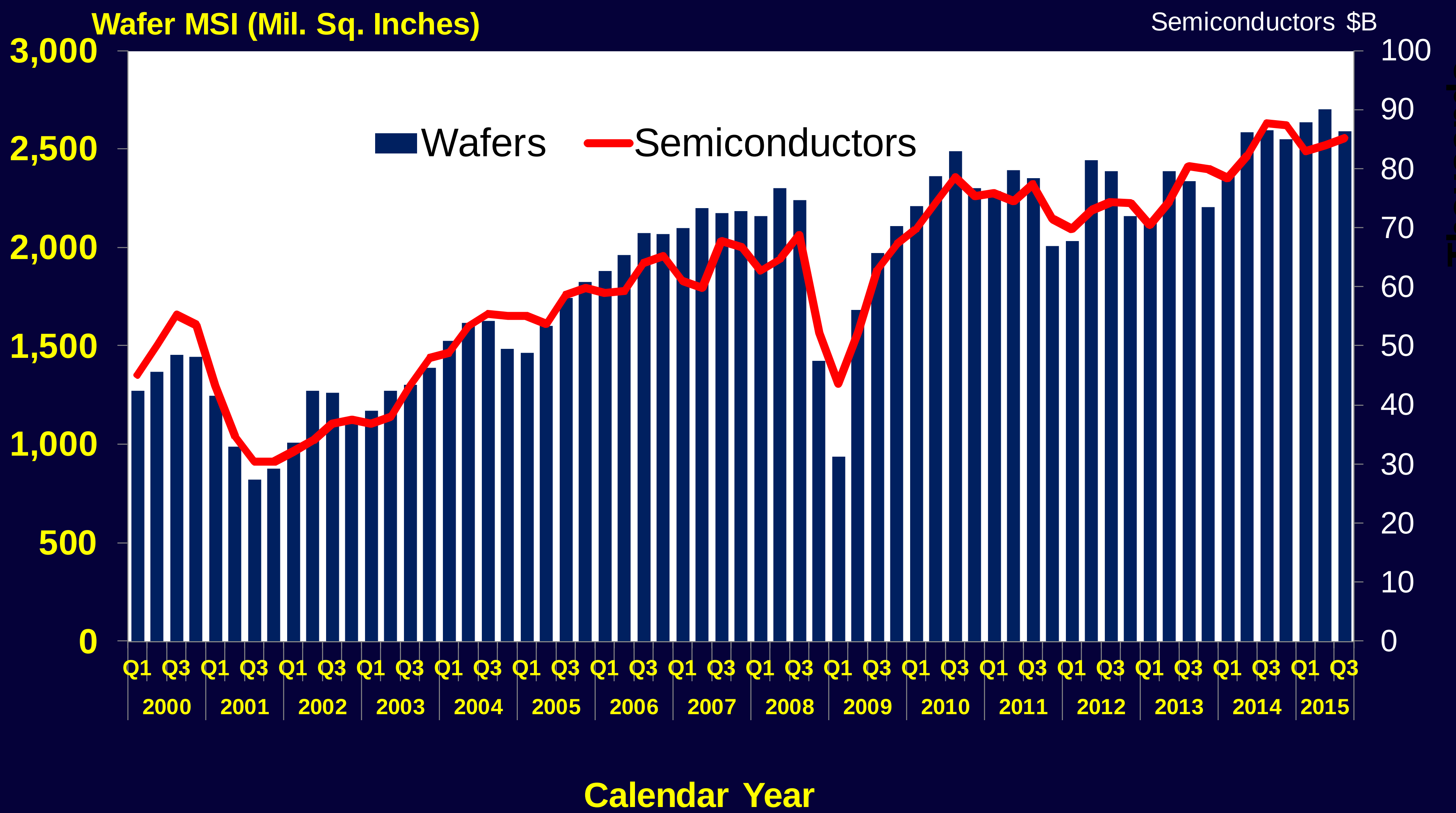
N American Semiconductor Equipment Industry Shipments & Orders



SOURCE Semiconductor Equipment and Materials International
http://www.semi.org

Chart 25

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



www.semi.org and www.sia-online.org

Chart 26

2015F Top 20 Semiconductor Sales Leaders (US$ millions, including Foundries)

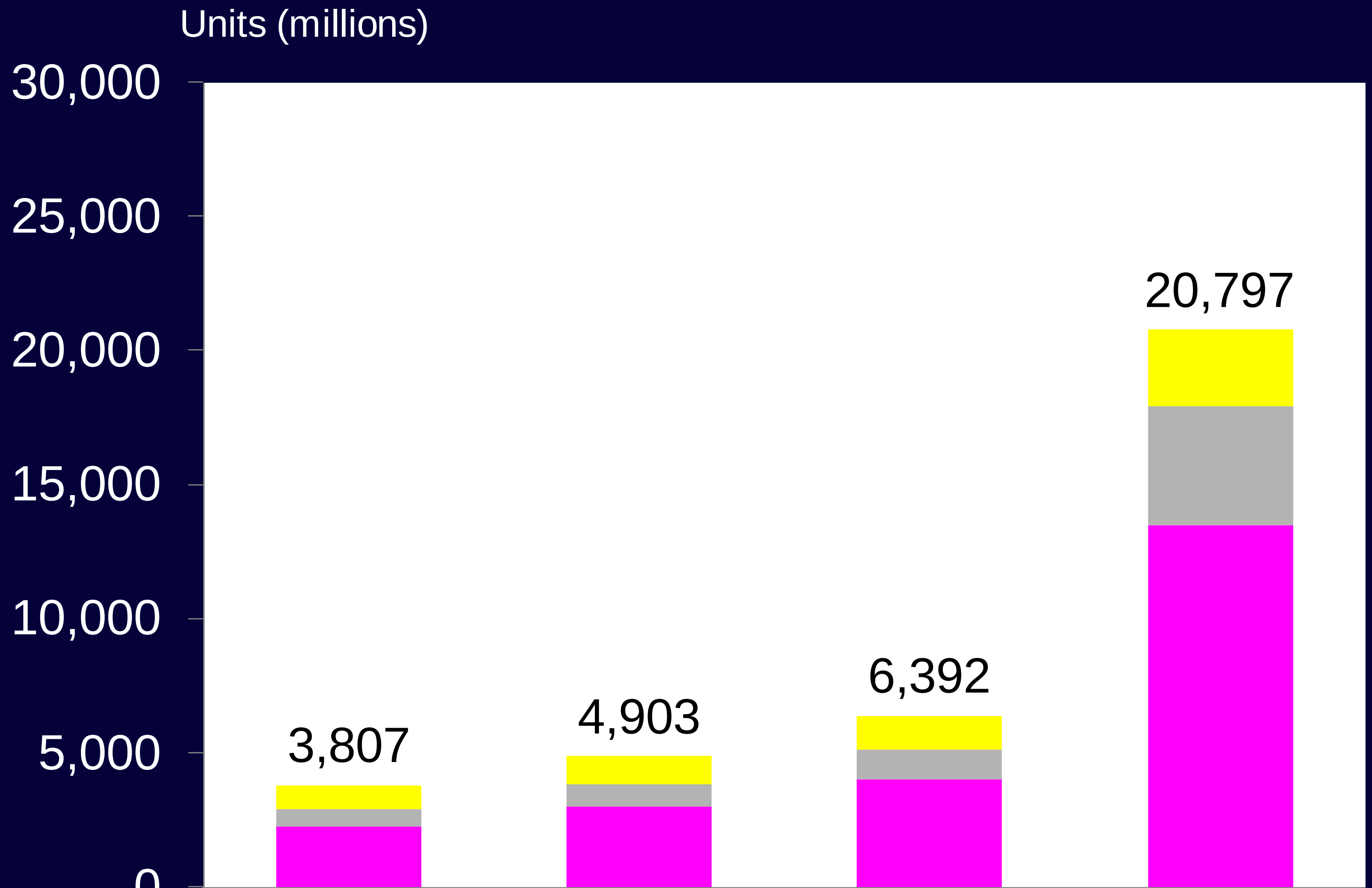
2015F Rank	2014 Rank	Company	Headaquarters	2014 Tot Semi	2015F Tot Semi	2015/2014 % Change	2015F @ 2014 Exch Rates	2015/2014 % Change
1	1	Intel	USA	51400	50305	-2%	50305	-2%
2	2	Samsung	S Korea	37810	41606	10%	44776	18%
3	3	TSMC	Taiwan	24975	26562	6%	27798	11%
4	4	SK Hynix	S Korea	16286	16917	4%	18206	12%
5	5	Qualcomm	USA	19291	15632	-19%	15632	-19%
6	6	Micron	USA	16720	14816	-11%	14816	-11%
7	7	TI	USA	12166	12112	0%	12112	0%
8	8	Toshiba	Japan	11040	9734	-12%	11143	1%
9	9	Broadcom	USA	8428	8421	0%	8421	0%
10	15	Avago	Singapore	5644	6961	23%	6961	23%
11	13	Infineon (1)	Europe	5938	6898	16%	8245	39%
12	10	ST	Europe	7384	6840	-7%	6840	-7%
13	12	MediaTek	Taiwan	7032	6504	-8%	6807	-3%
14	17	Sony	Japan	5292	5885	11%	6737	27%
15	14	NXP	Europe	5647	5790	3%	5790	3%
16	11	Renesas	Japan	7307	5664	-22%	6484	-11%
17	20	Global Foundries (2)	USA	4355	4990	15%	4990	15%
18	19	Nvidia	USA	4382	4628	6%	4628	6%
19	21	UMC	Taiwan	4331	4474	3%	4682	8%
20	18	Freescale	USA	4548	4410	-3%	4410	-3%
		Top 20 Total		259976	259149	0%	269783	4%

(1) Includes $1.1B of International Rectifier sales in 2015

(2) Includes $700M of IBM's sales in 2H'15

Chart 27

Internet of Things
Installed Base by Category

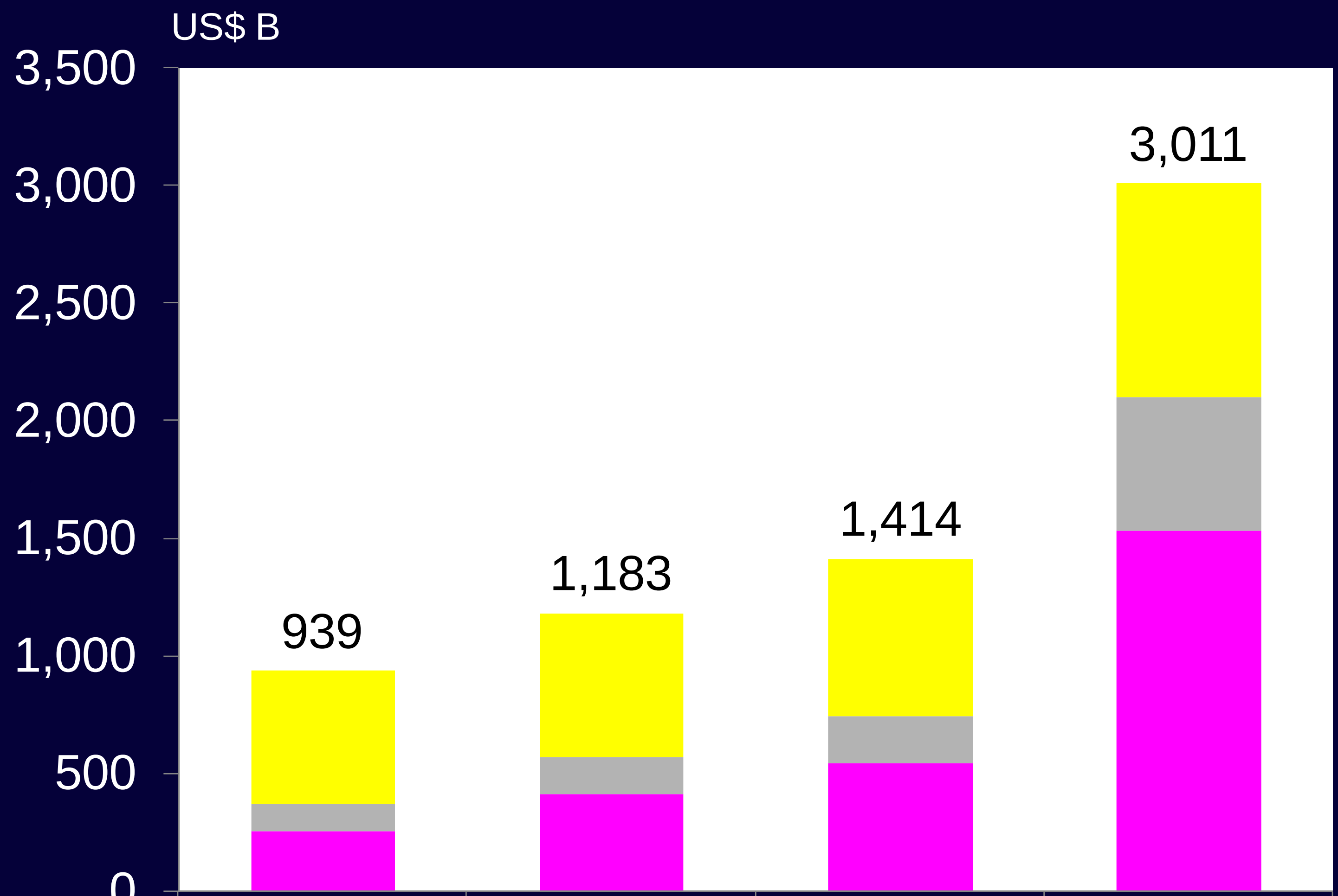


	2014	2015	2016	2020
Total	3,807	4,903	6,392	20,797
Business Vertical-Specific	898	1,065	1,276	2,880
Business Cross-industry	632	815	1,092	4,408
Consumer	2,277	3,023	4,024	13,509

Gartner 11/15

Chart 28

Internet of Things
Endpoint Spending by Category

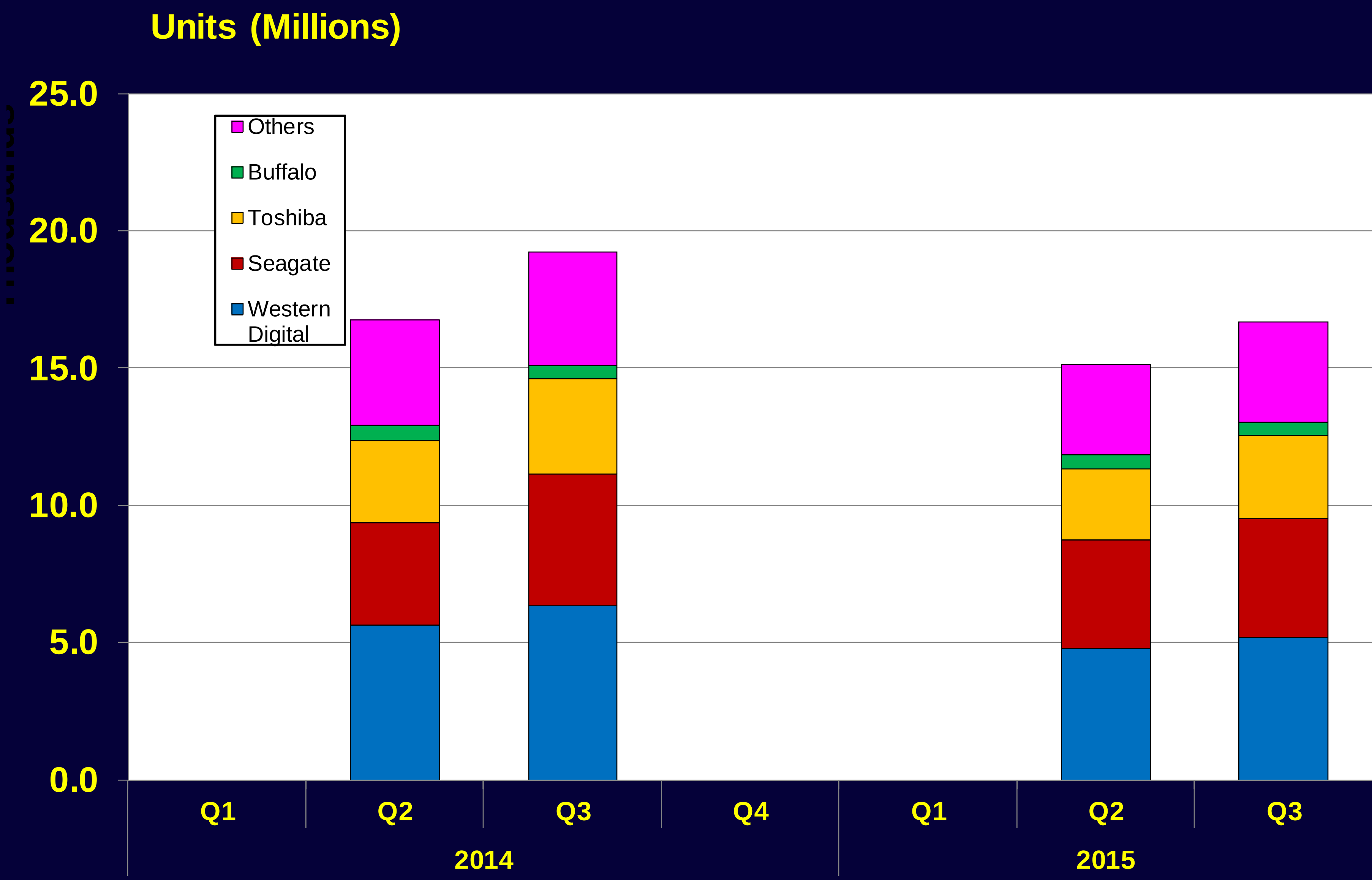


	2014	2015	2016	2020
Total	939	1,183	1,414	3,011
Business Vertical-Specific	567	612	667	911
Business Cross-industry	115	155	201	566
Consumer	257	416	546	1,534

Gartner 11/15

Chart 29

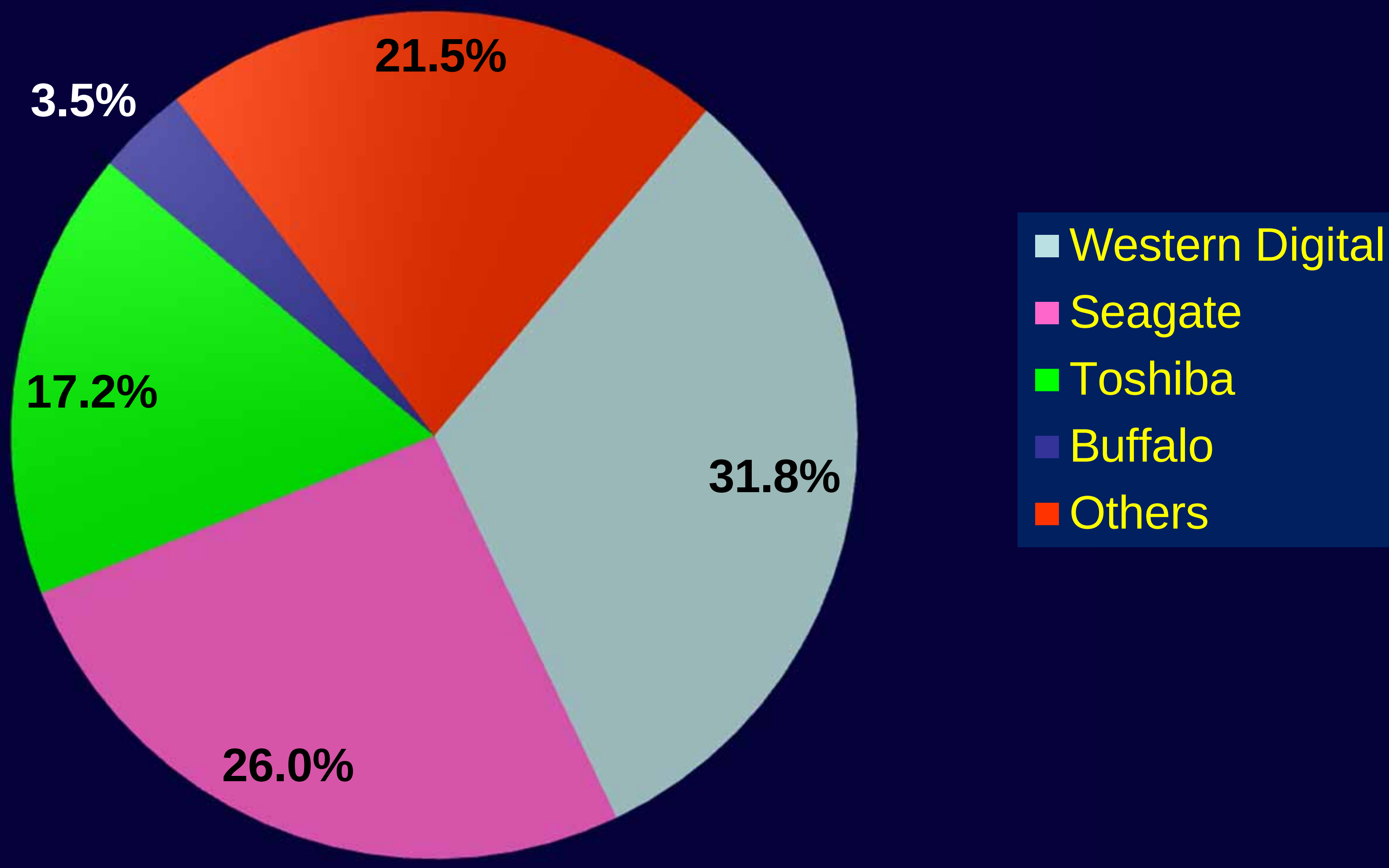
World Personal & Entry-Level Storage Shipments



IDC 11/15

Chart 30

World Personal & Entry-Level Storage Shipments

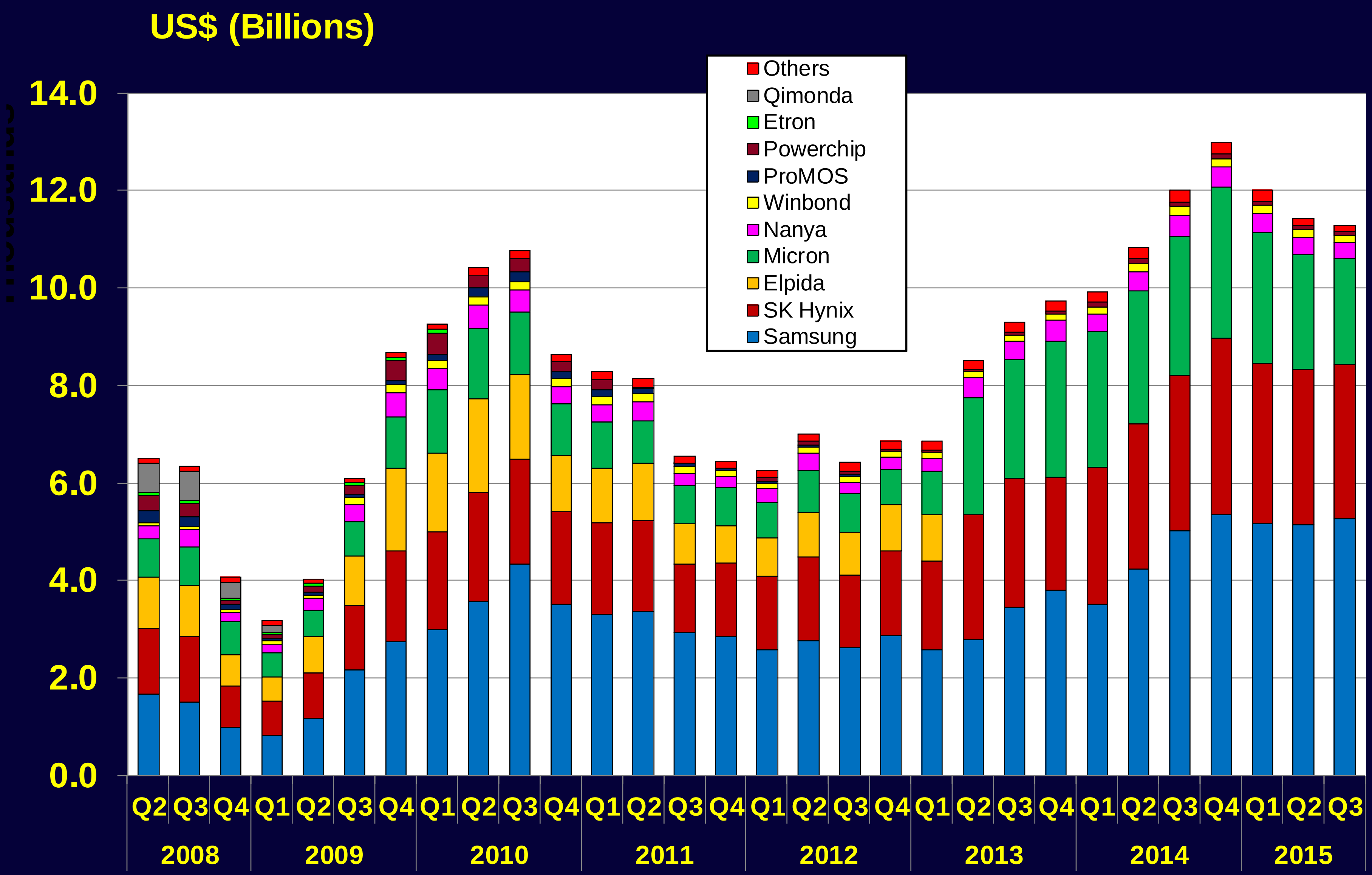


TOTAL: 15.1 Million Units

IDC 8/15

Chart 31

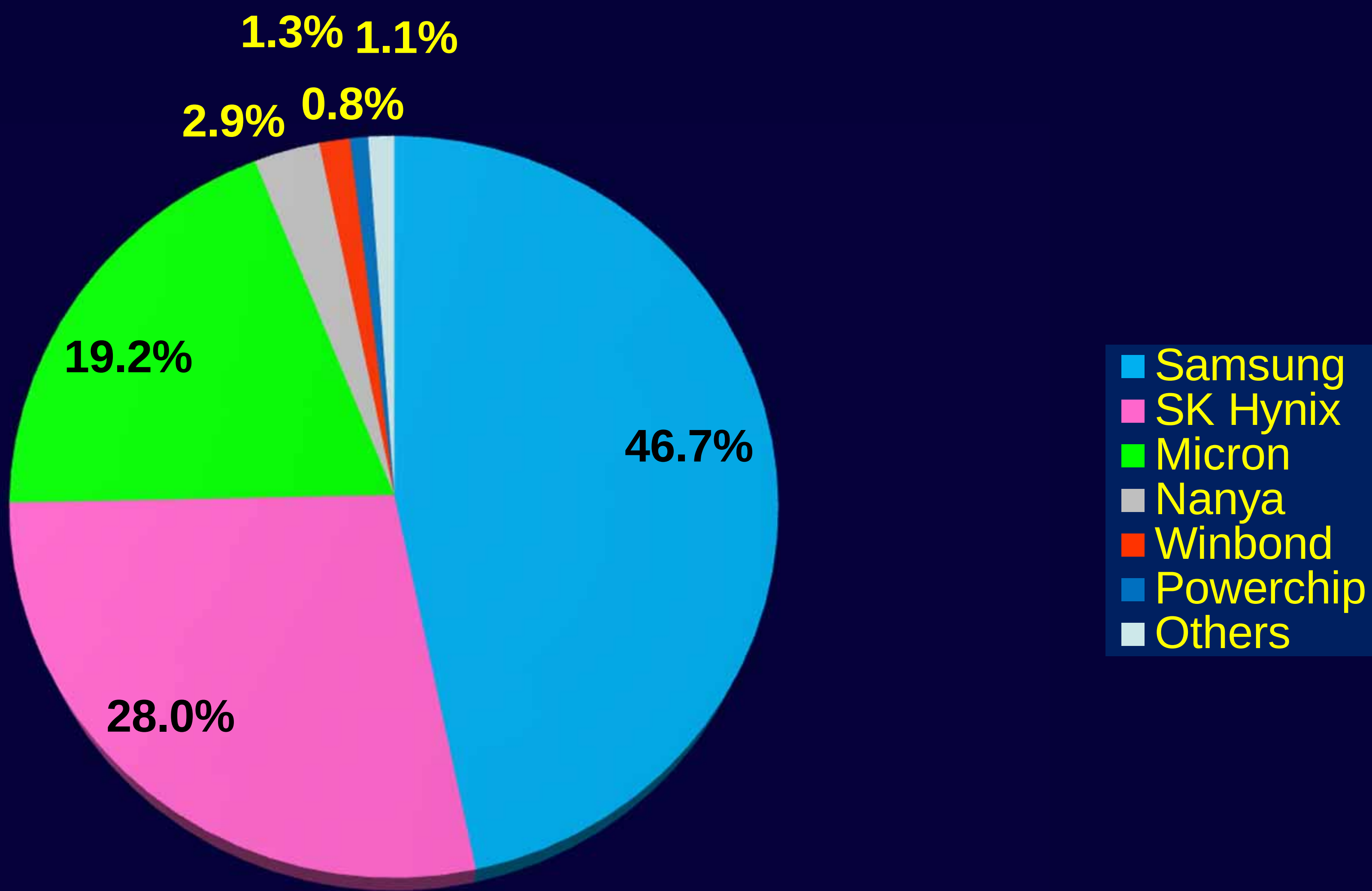
Branded DRAM Revenue



DRAMeXchange 11/2015 & earlier reporta

Chart 32

Branded DRAM Revenues 3Q'15



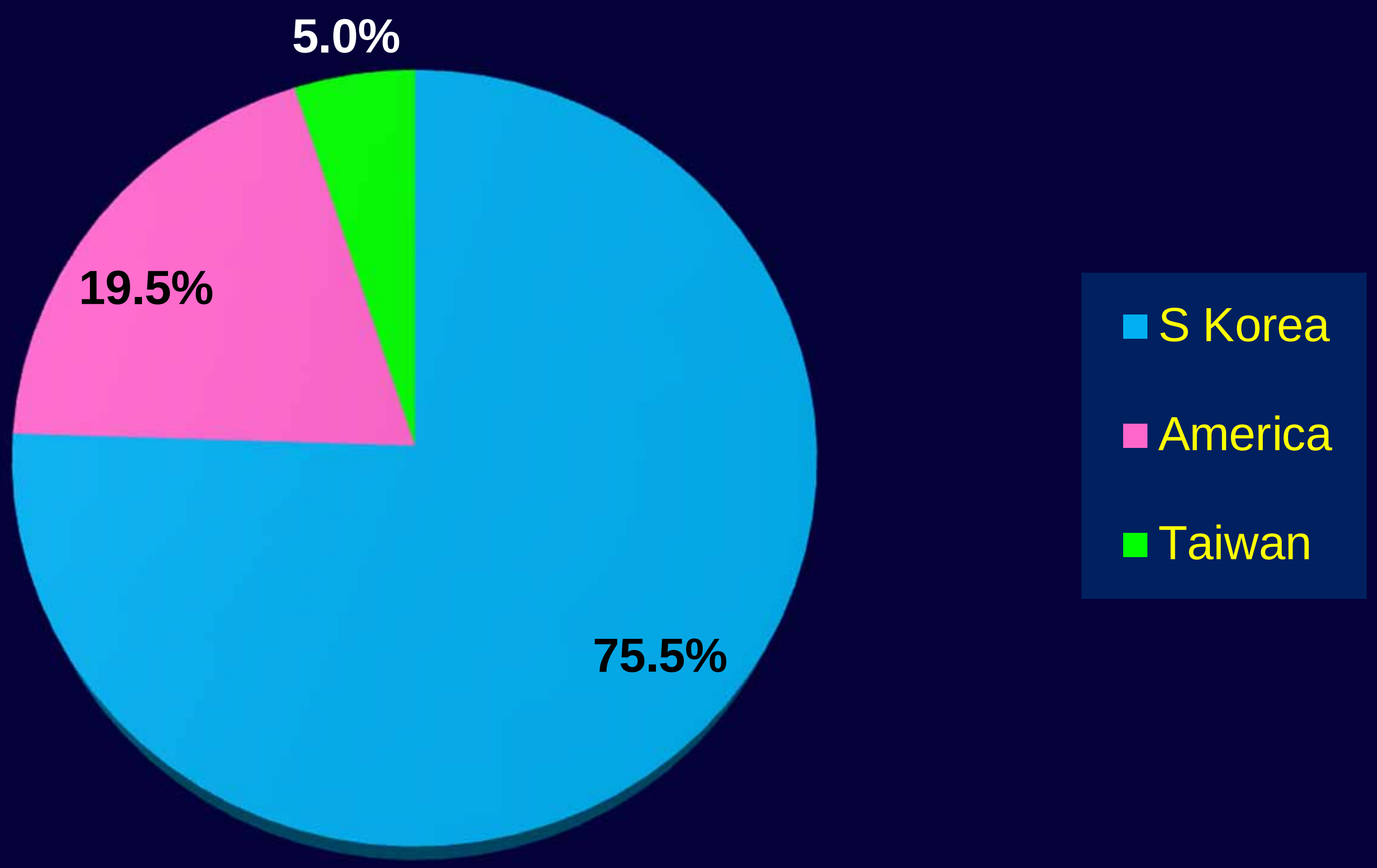
$11,435 B
2Q'15

3Q'15 Total: US$11.298 Billion

DRAMeXchange 11/15

Chart 33

Regional Branded DRAM Market Share 3Q'15



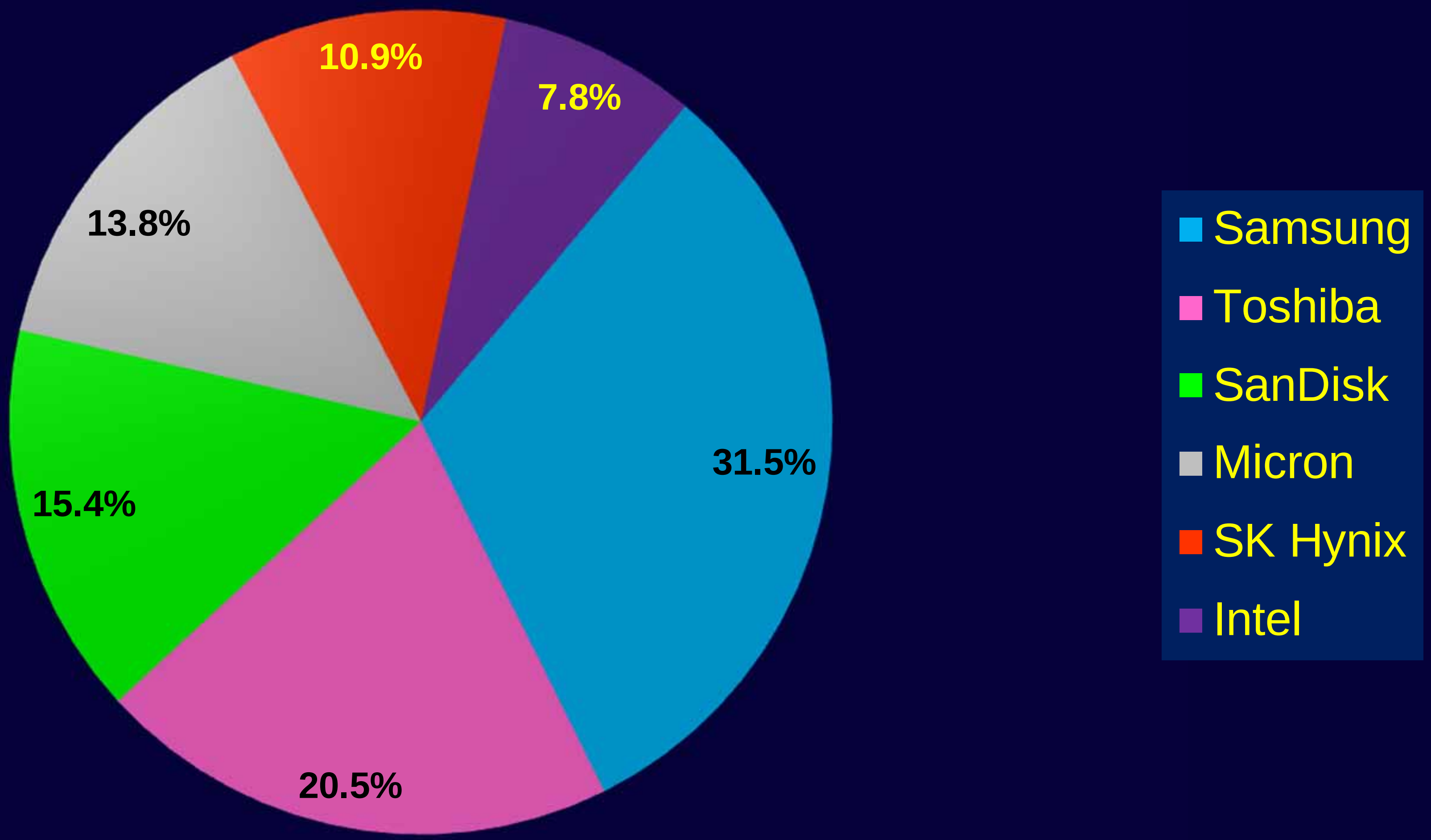
3Q'15 Total: US$ 11.3 Billion

Market shares above do not include “other” smaller producers

DRAMeXchange 11/15

Chart 34

NAND Flash Market 3Q'15



3Q'15 Total 8.5 B US$