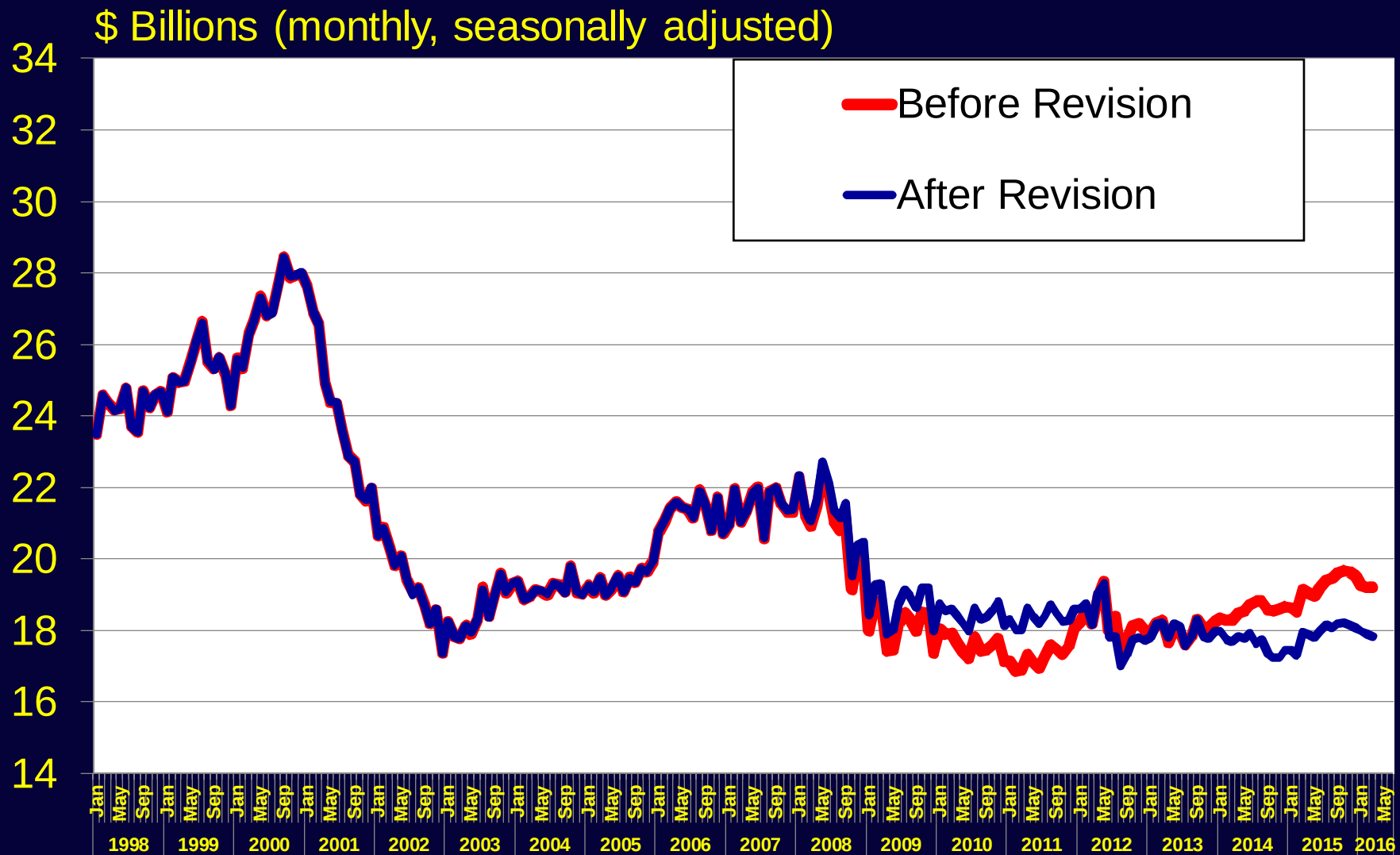


U.S. Electronic Equipment Shipments

before & after May 2016 Dept. of Commerce revision



U.S Electronic Supply Chain Shipment Growth 1Q'16 vs. 1Q'15 (before & after May 18, 2016 revision)

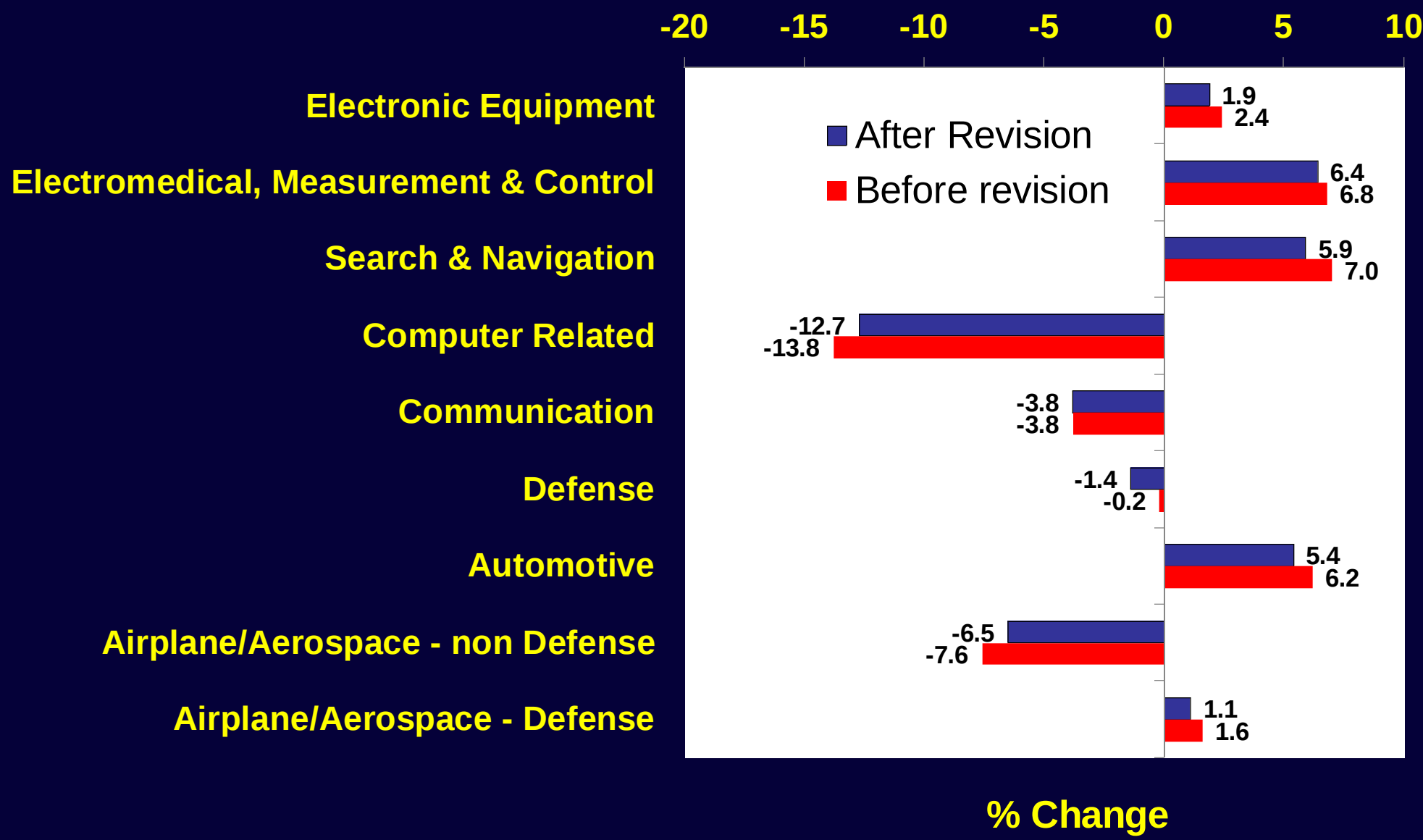


Chart 3

Japan Electronic Equipment Production by Month 2000 to Present

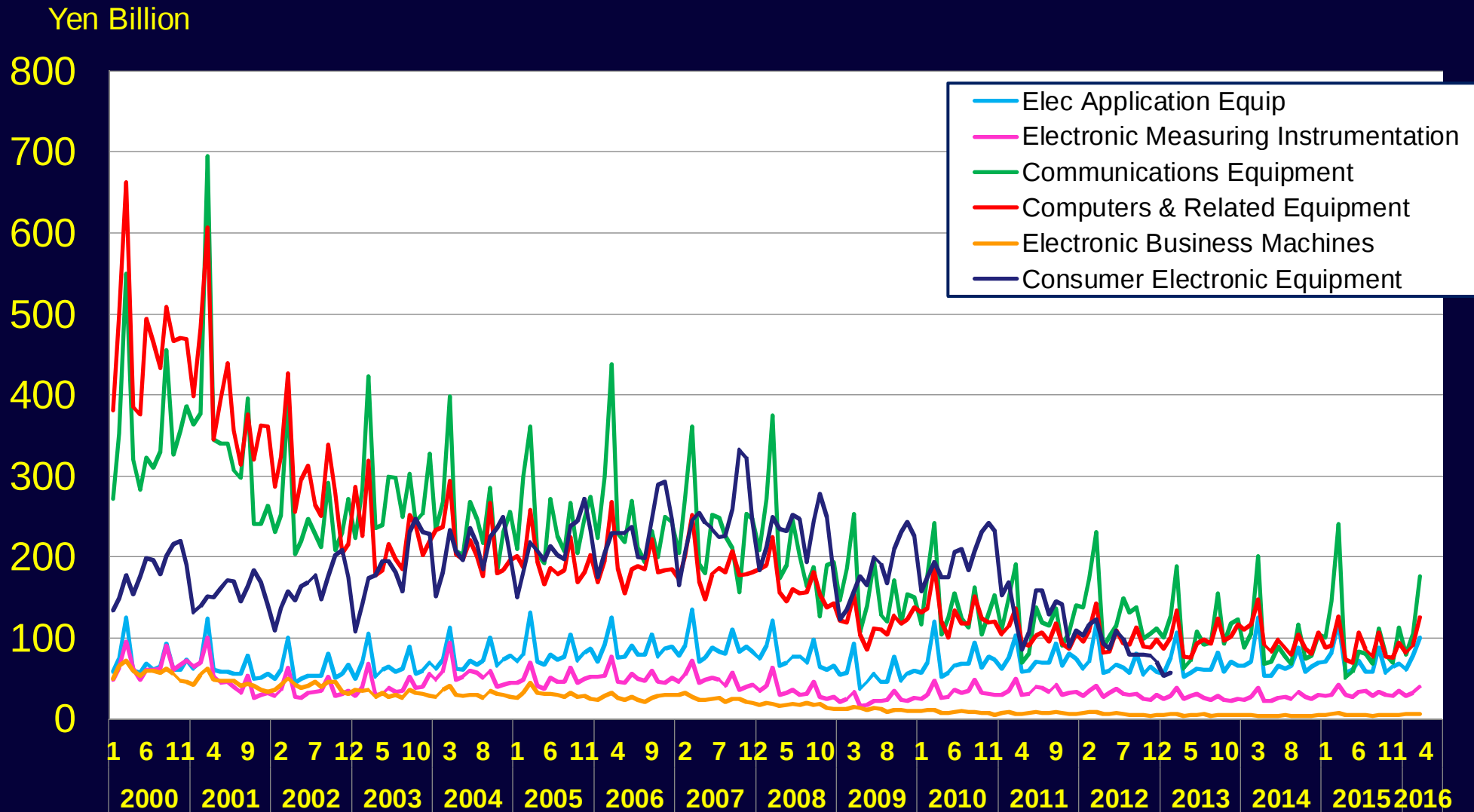
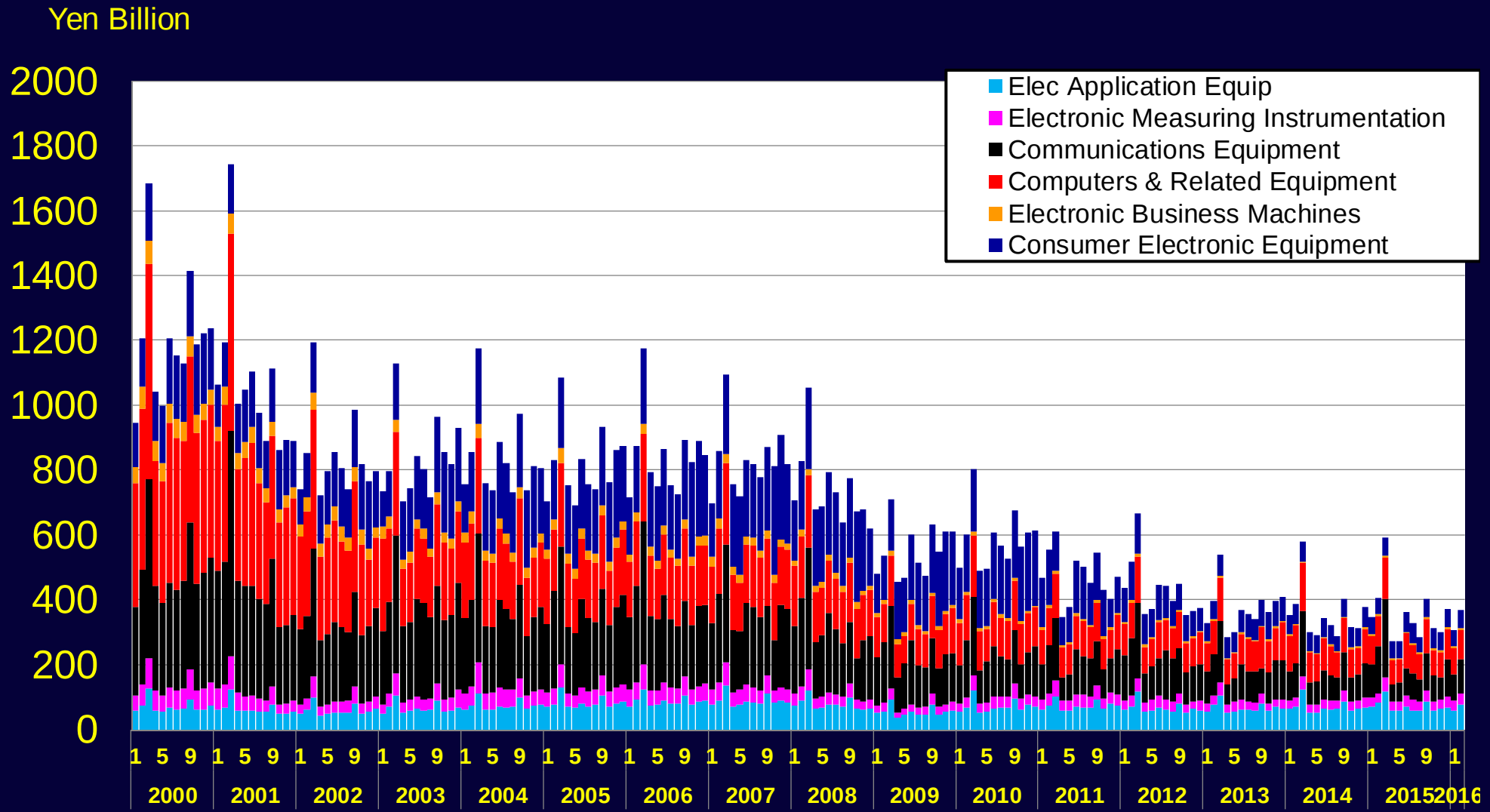


Chart 4

Japan Electronic Equipment Production by Month 2000 to Present



Japan Electronic Supply Chain Growth

1Q'16 vs 1Q'15 (production in Yen)

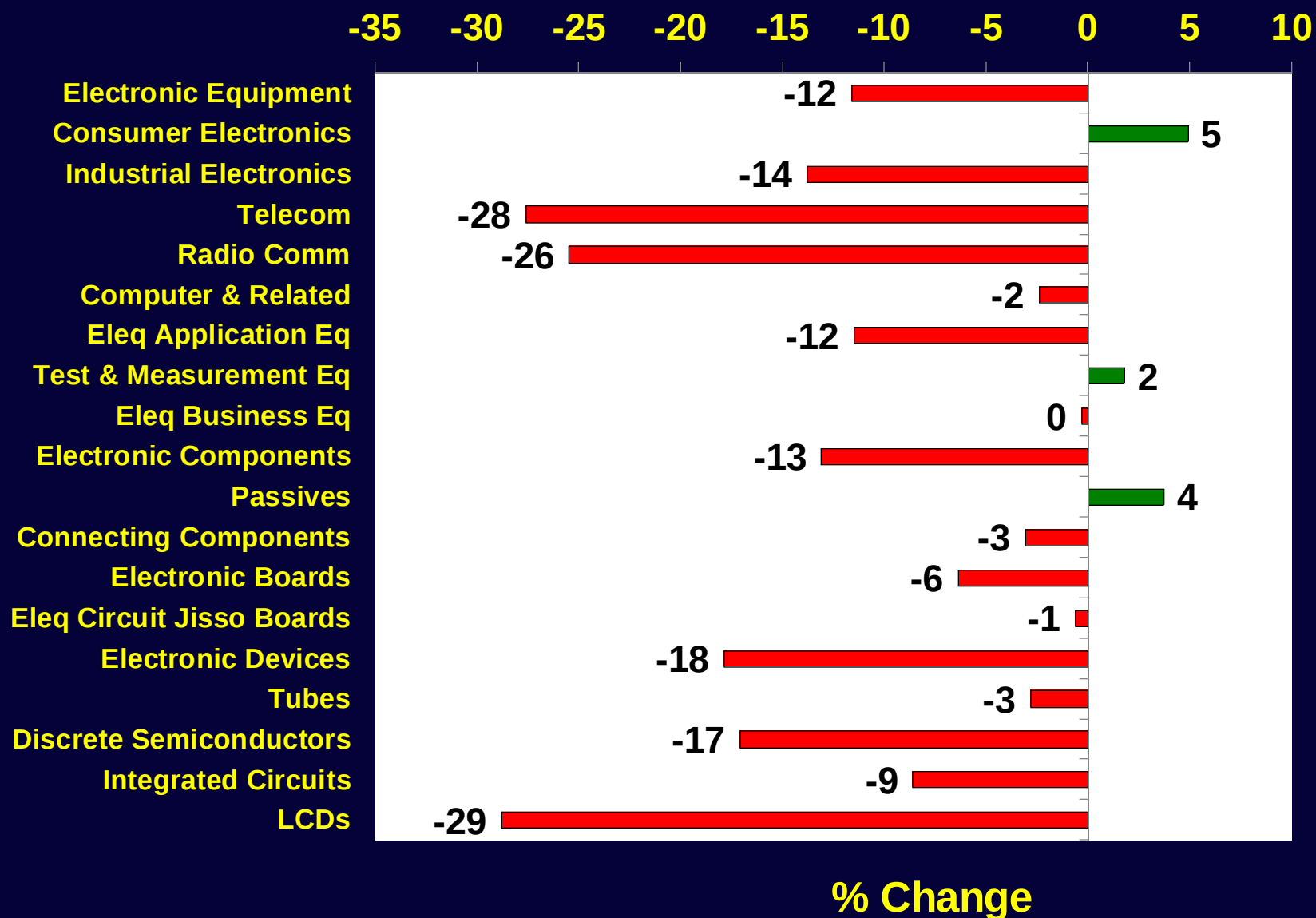
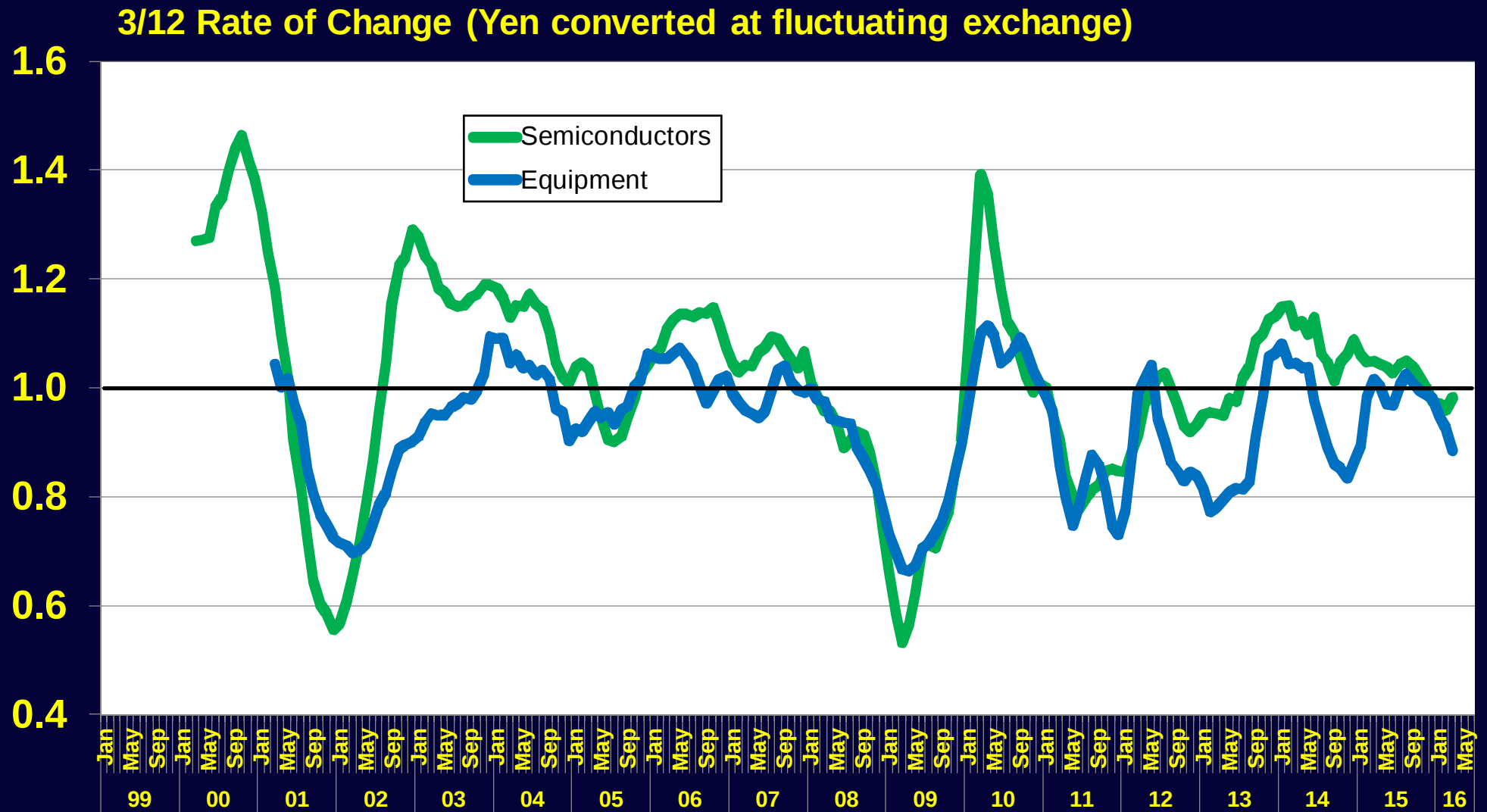


Chart 6

Semiconductor Shipments to Japan vs. Japanese Electronic Equipment Production



Total \$ Semiconductor Shipments from All Countries to Japan www.sia-online.org/,
JEITA www.jeita.or.jp/

Chart 7

Japan Integrated Circuit & Discrete Semiconductor Domestic Production

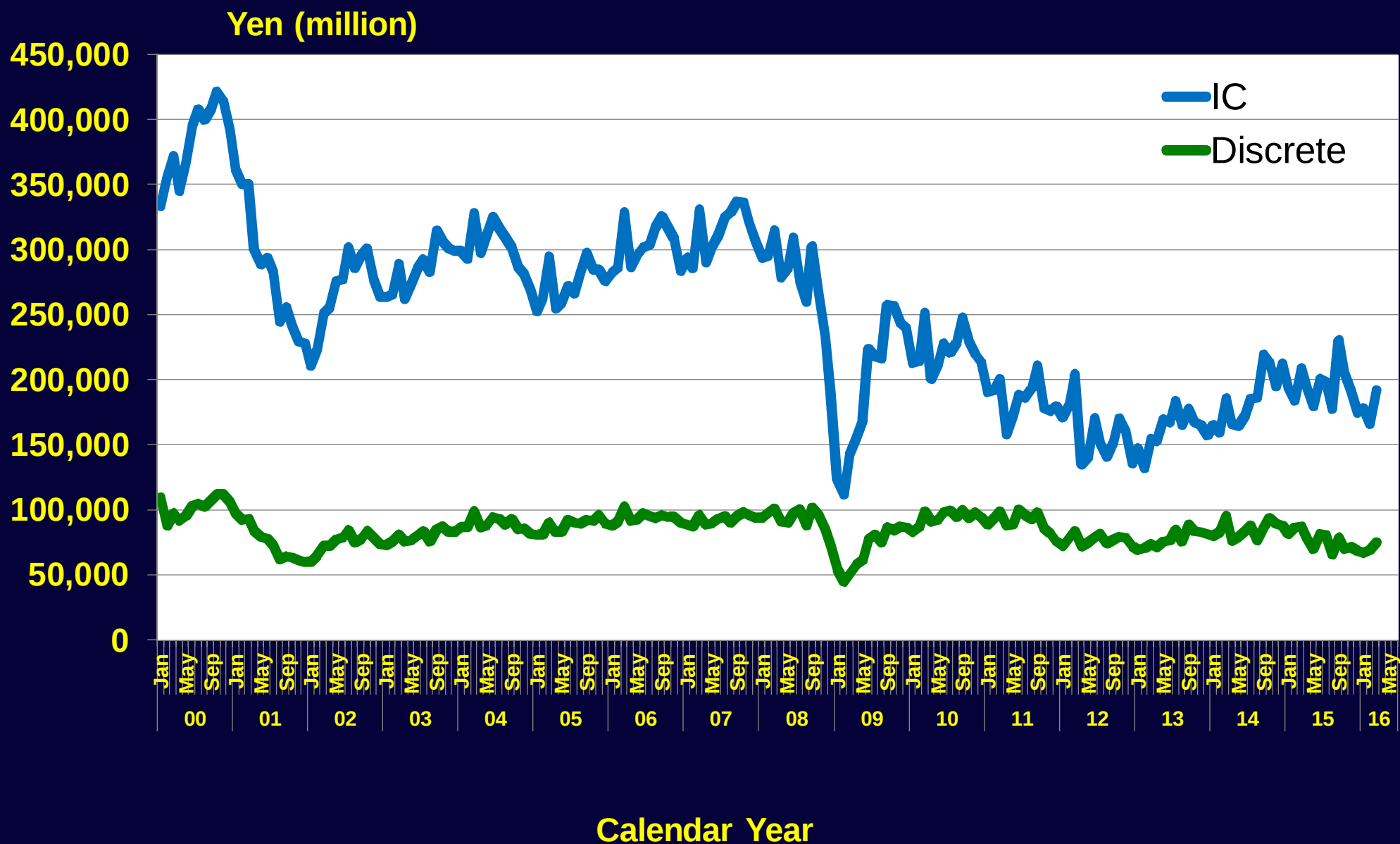


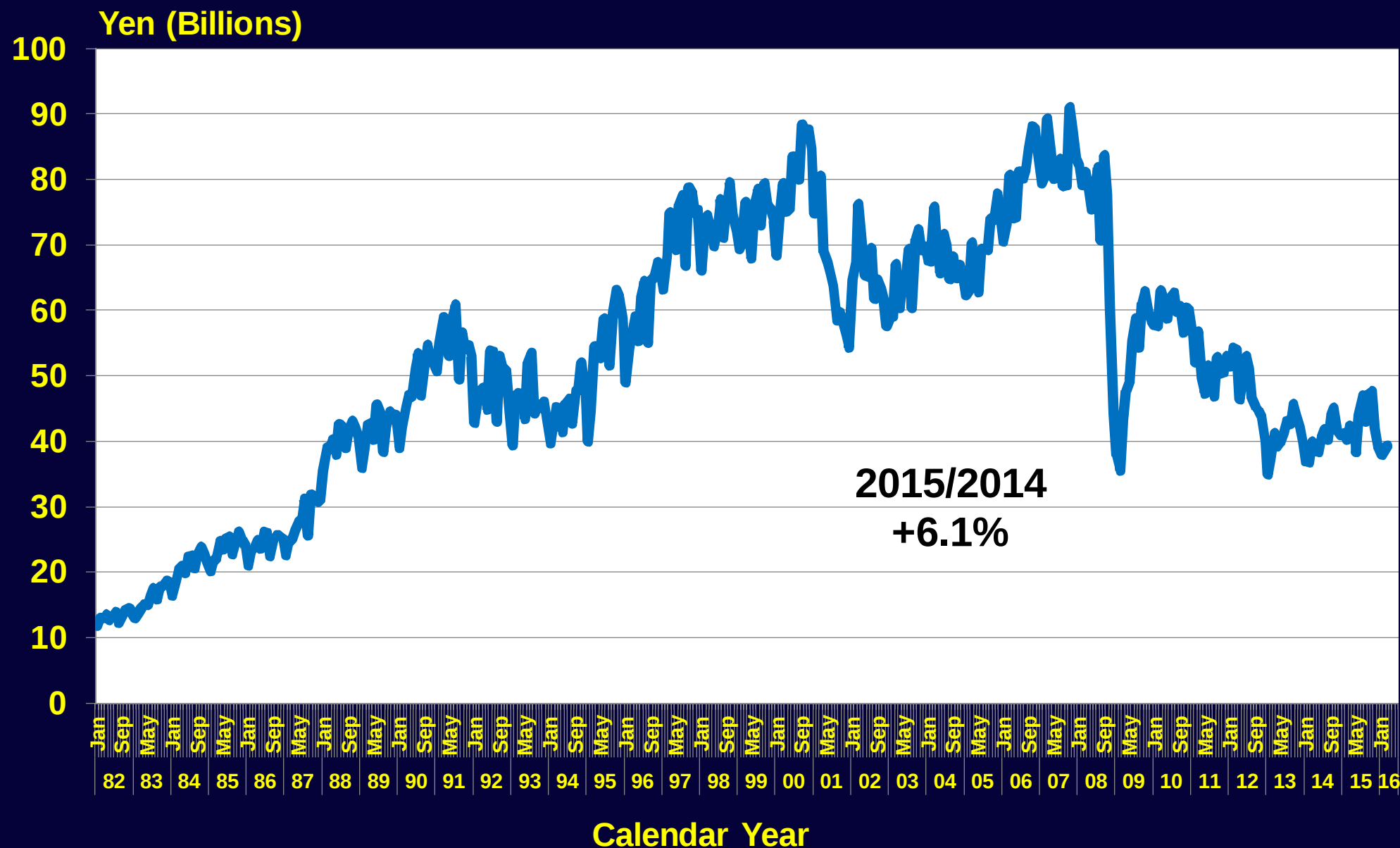
Chart 8

Japan Passive Component Domestic Production

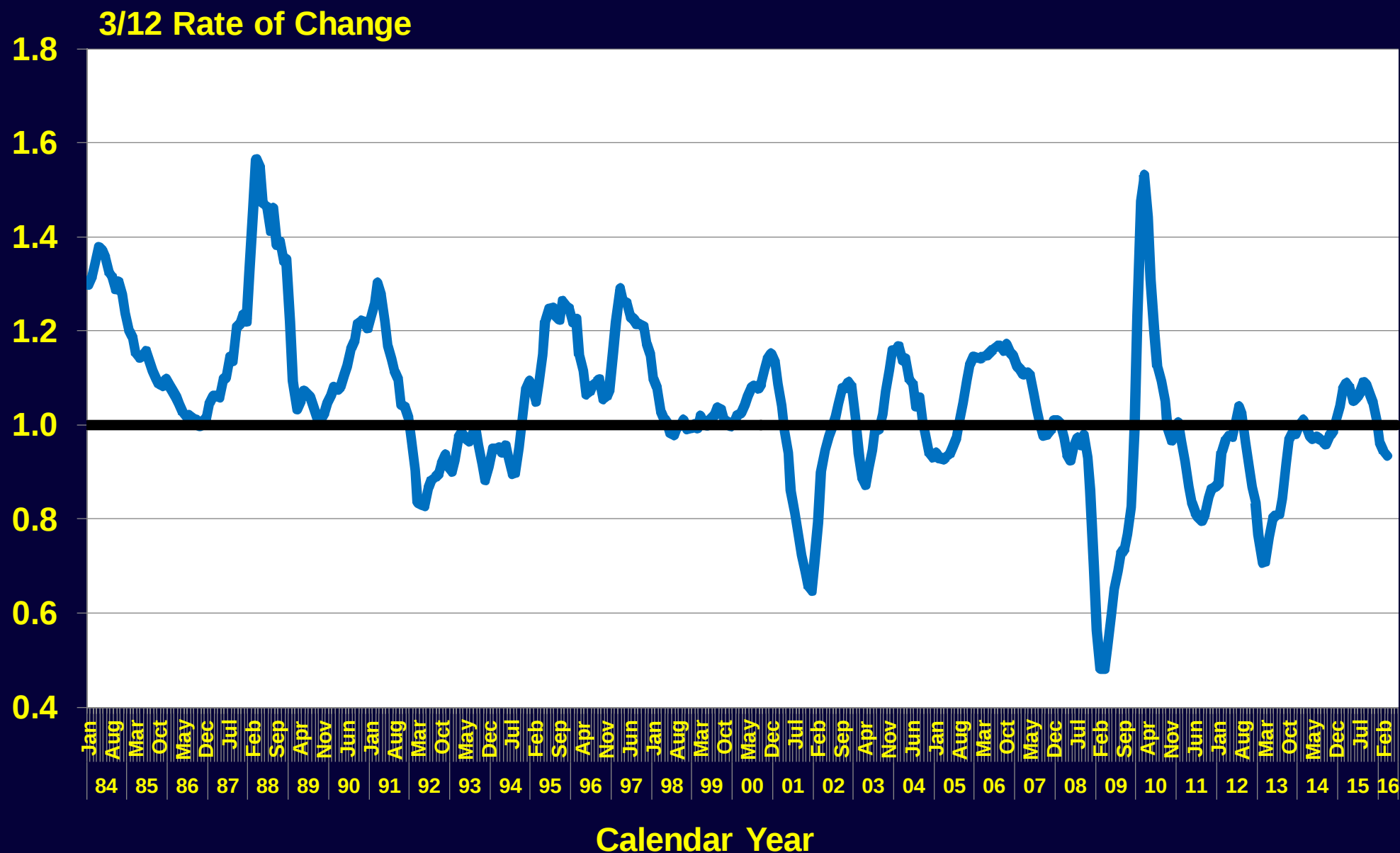


Chart 9

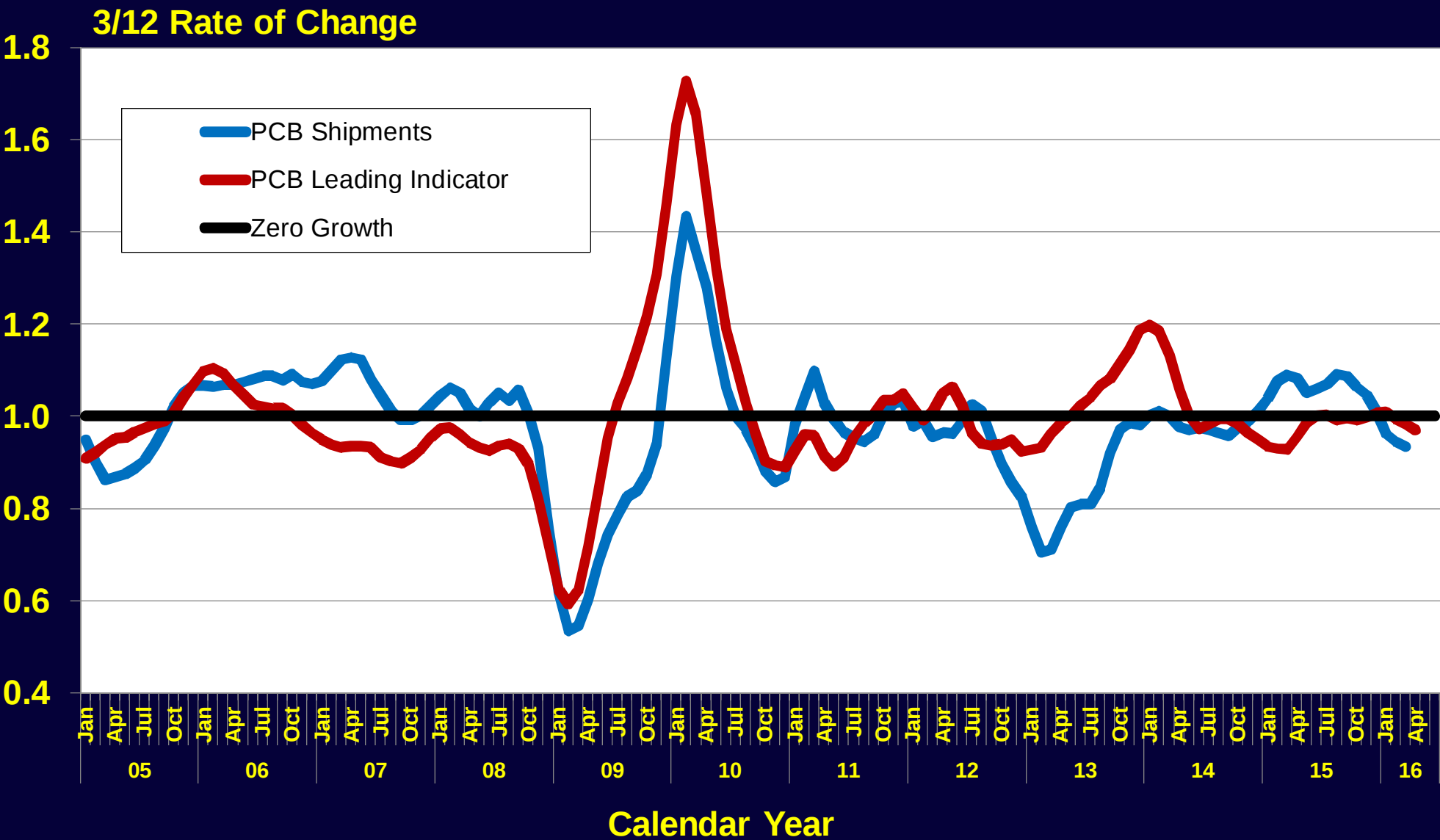
Japan PCB Shipments



Japan PCB Shipments



Japan PMI PCB Leading Indicator vs. Japan PCB Shipments



Source: Custer Consulting Group

Japanese Electronic Component & Device Production

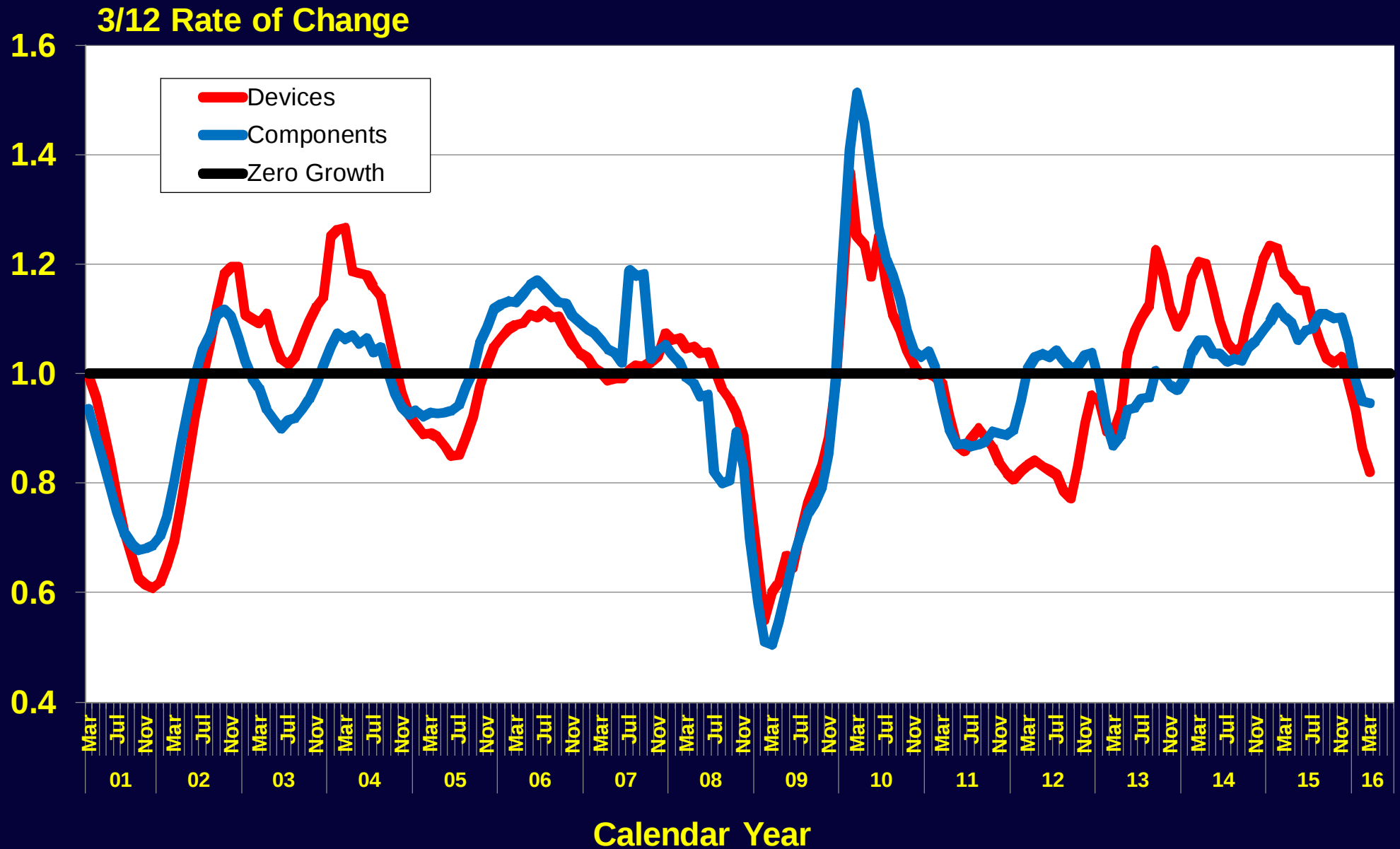


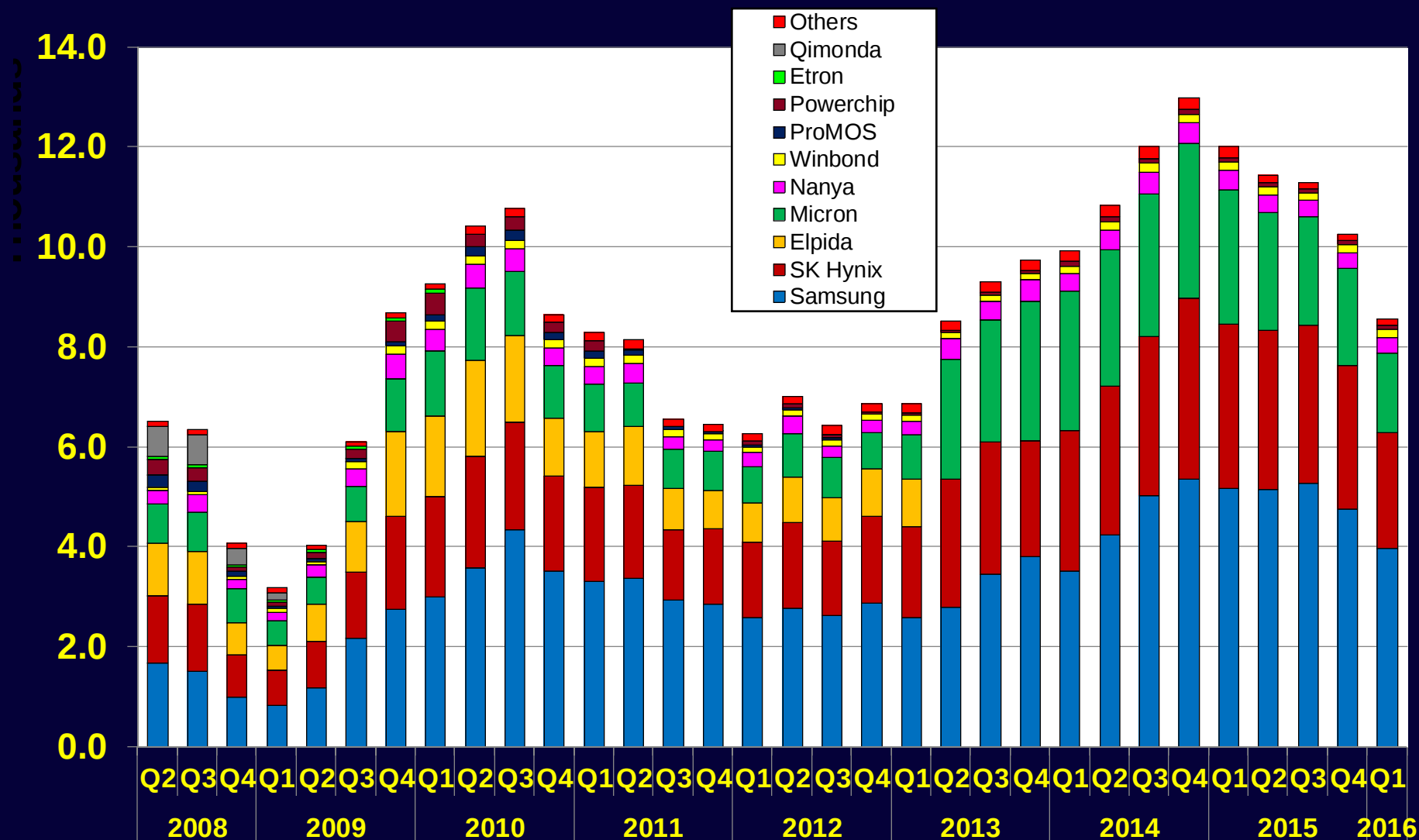
Chart 13

1Q'16 Semiconductor Sales Leaders (US\$ millions, including Foundries)

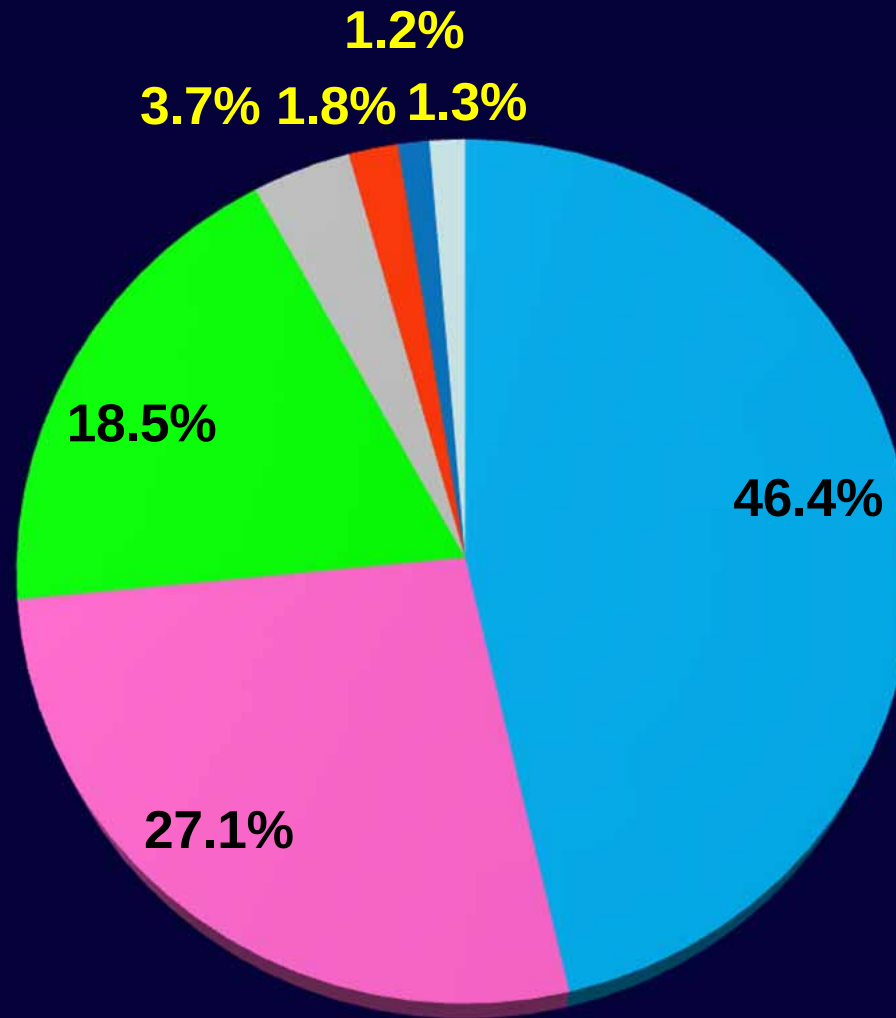
<u>Rank</u>	<u>Maker</u>	<u>1Q'16</u>	<u>1Q'16/1Q'15</u>
1	Intel	13,115	9%
2	Samsung Electronics	9,340	0%
3	TSMC (1)	6,122	-12%
4	Broadcom Ltd (2)	3,550	-4%
5	Qualcomm (2)	3,337	-25%
6	SK Hynix	3,063	-30%
7	Micron	2,930	-28%
8	TI	2,804	-5%
9	Toshiba	2,446	-7%
10	NXP	2,224	-16%
11	Infineon	1,776	7%
12	MediaTek (2)	1,691	12%
13	ST	1,601	-6%
14	Renesas	1,415	-4%
15	Apple (2)	1,390	10%
16	GlobalFoundries (1)	1,360	-5%
17	Nvidia (2)	1,285	15%
18	Sony	1,125	-12%
19	UMC (1)	1,034	-9%
20	AMD (2)	832	-19%
	Total Top 20	62,440	-6%

Branded DRAM Revenue

US\$ (Billions)



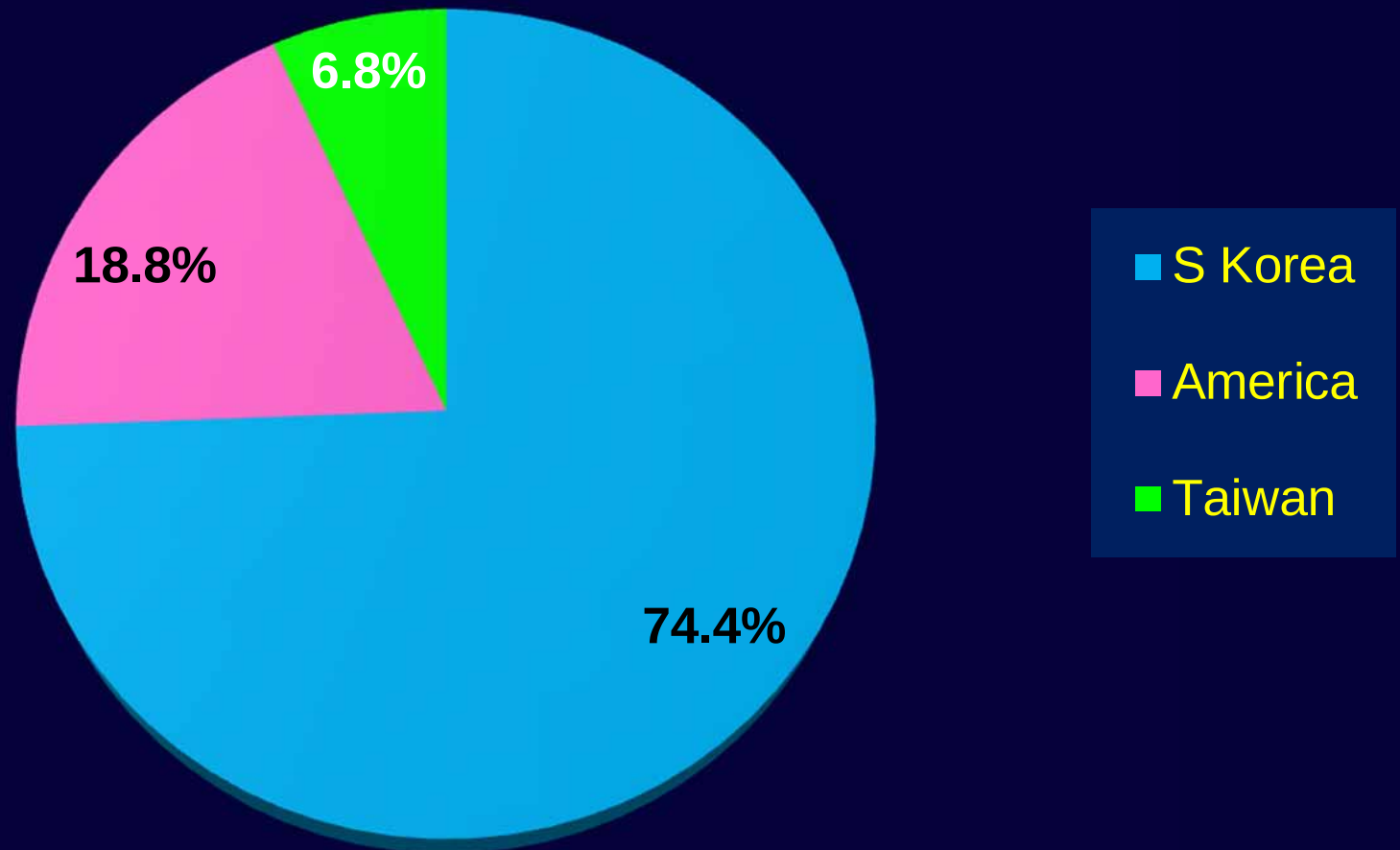
Branded DRAM Revenues 1Q'16



\$10,270 B
4Q'15

1Q'16 Total: US\$8,562 Billion

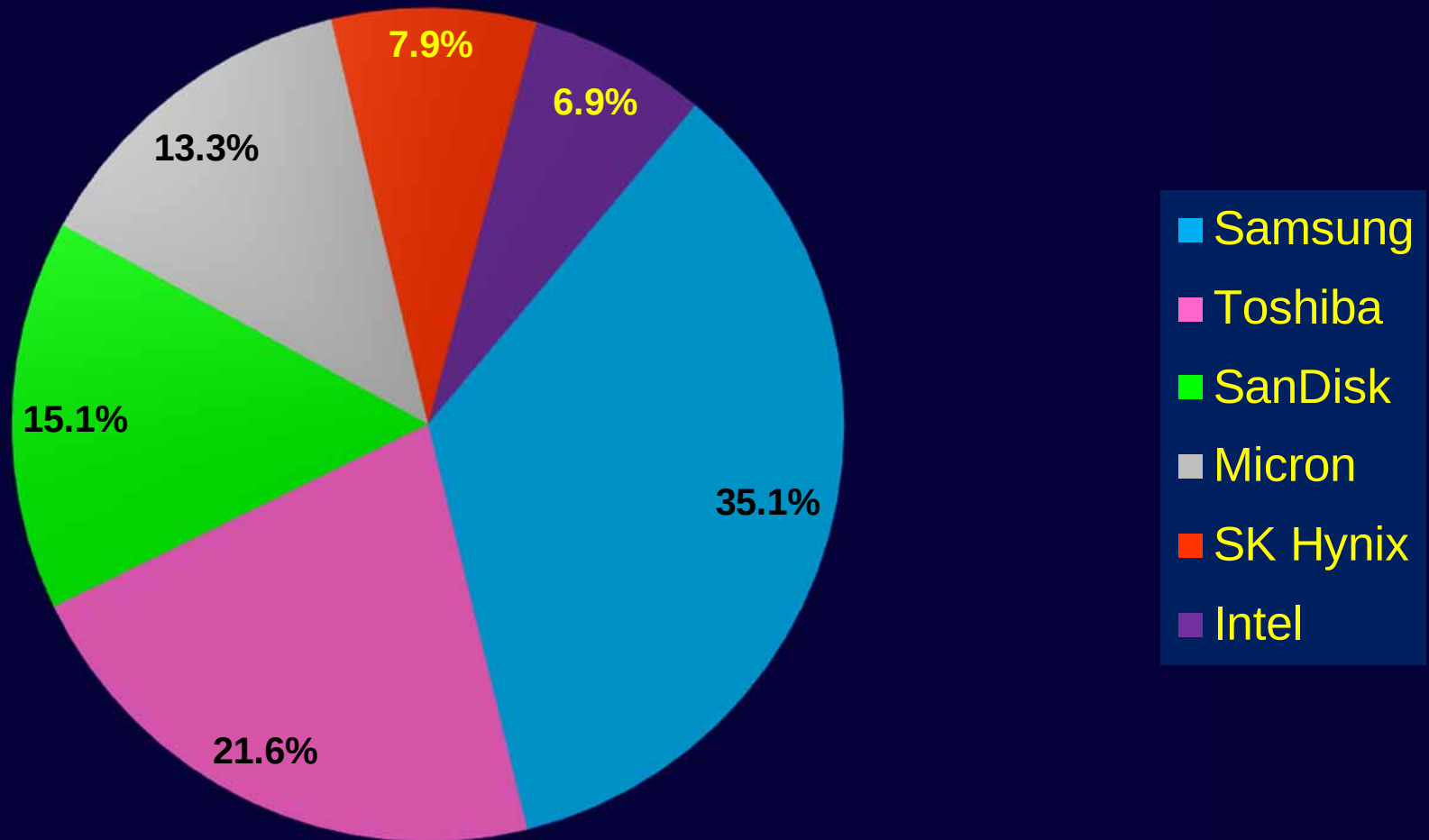
Regional Branded DRAM Market Share 1Q'16



1Q'16 Total: US\$ 8.6 Billion

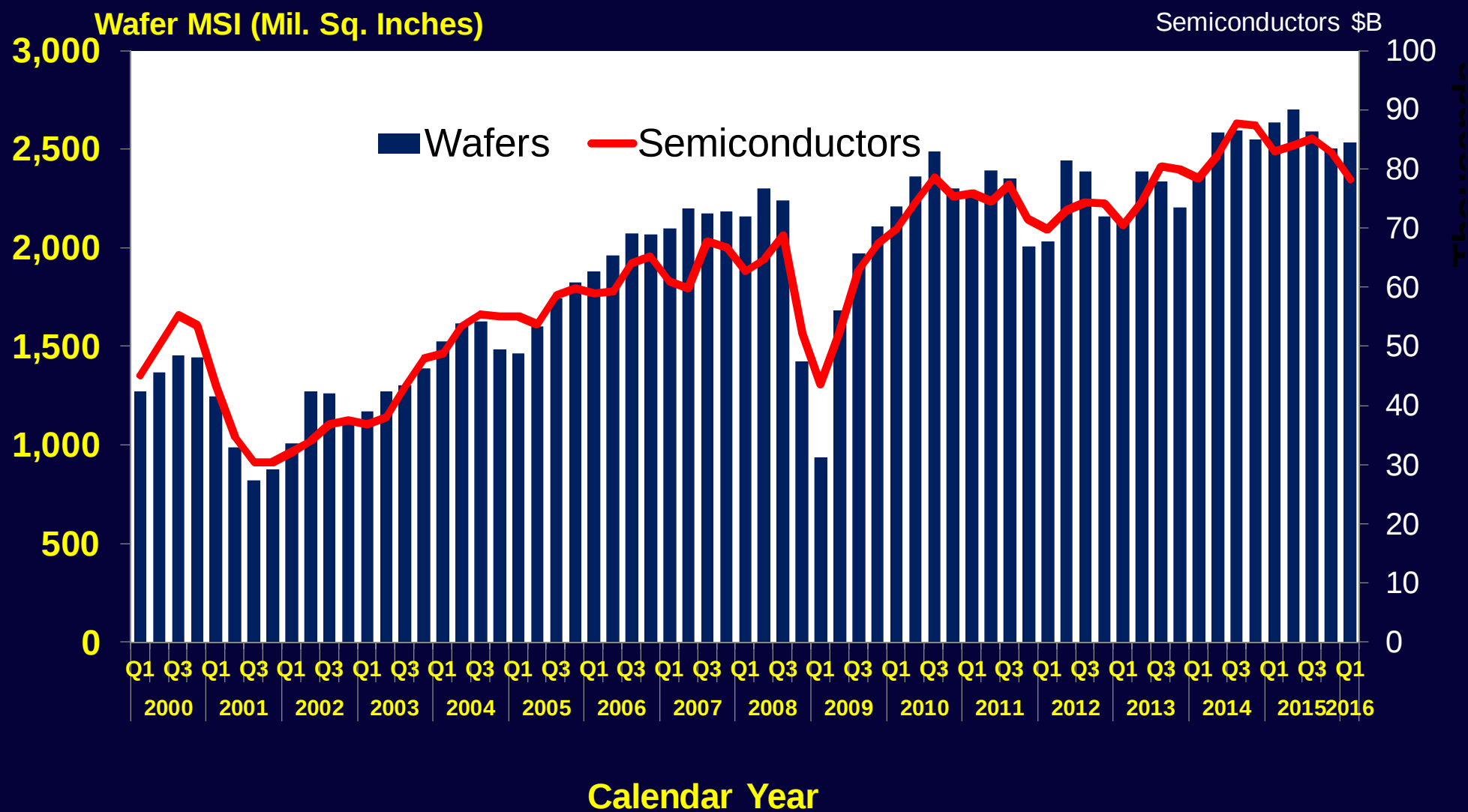
Market shares above do not include “other” smaller producers

NAND Flash Market 1Q'16

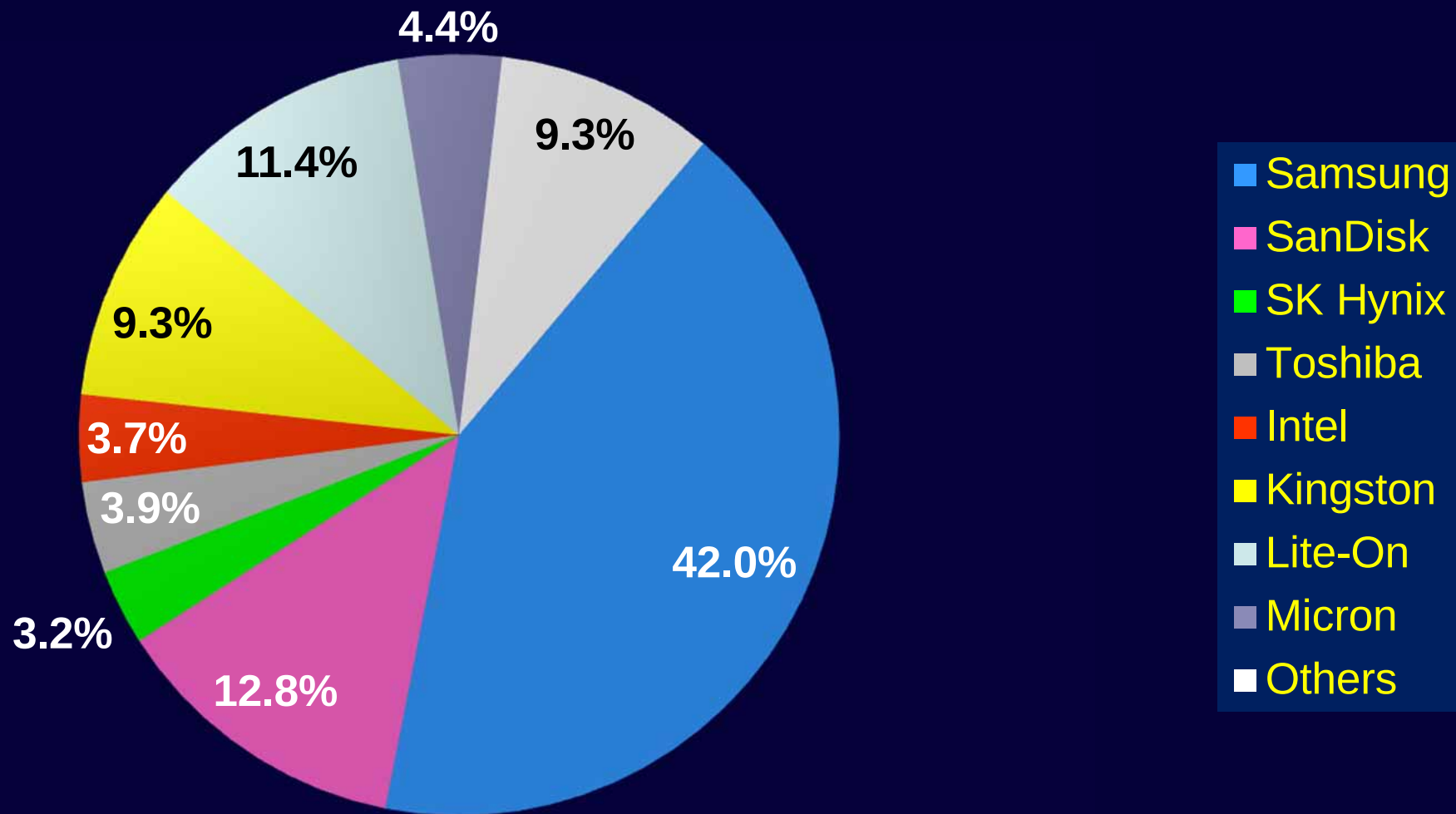


1Q'16 Total 8,307 Million US\$

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

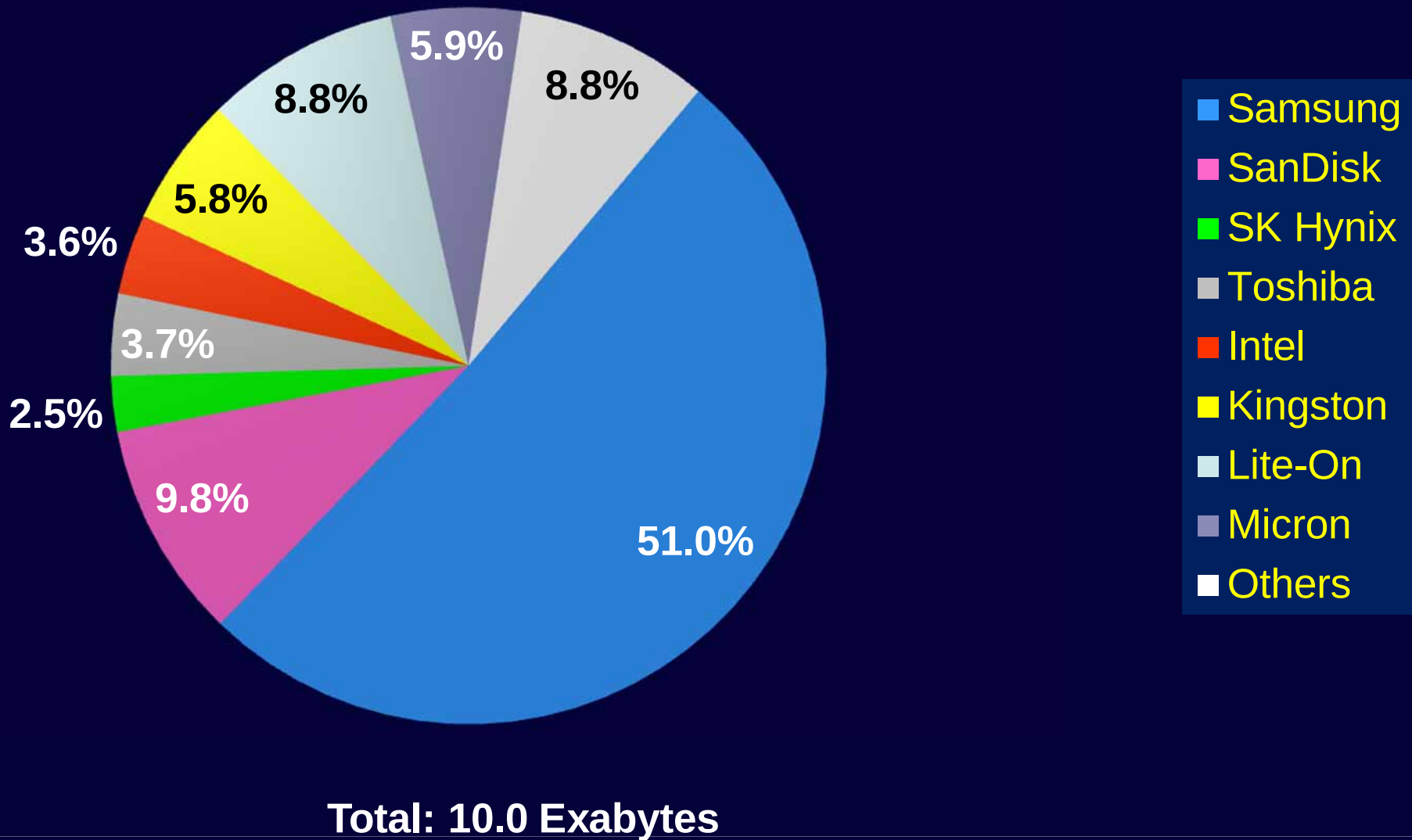


Total SSD Storage Market Share by Supplier Units 1Q'16



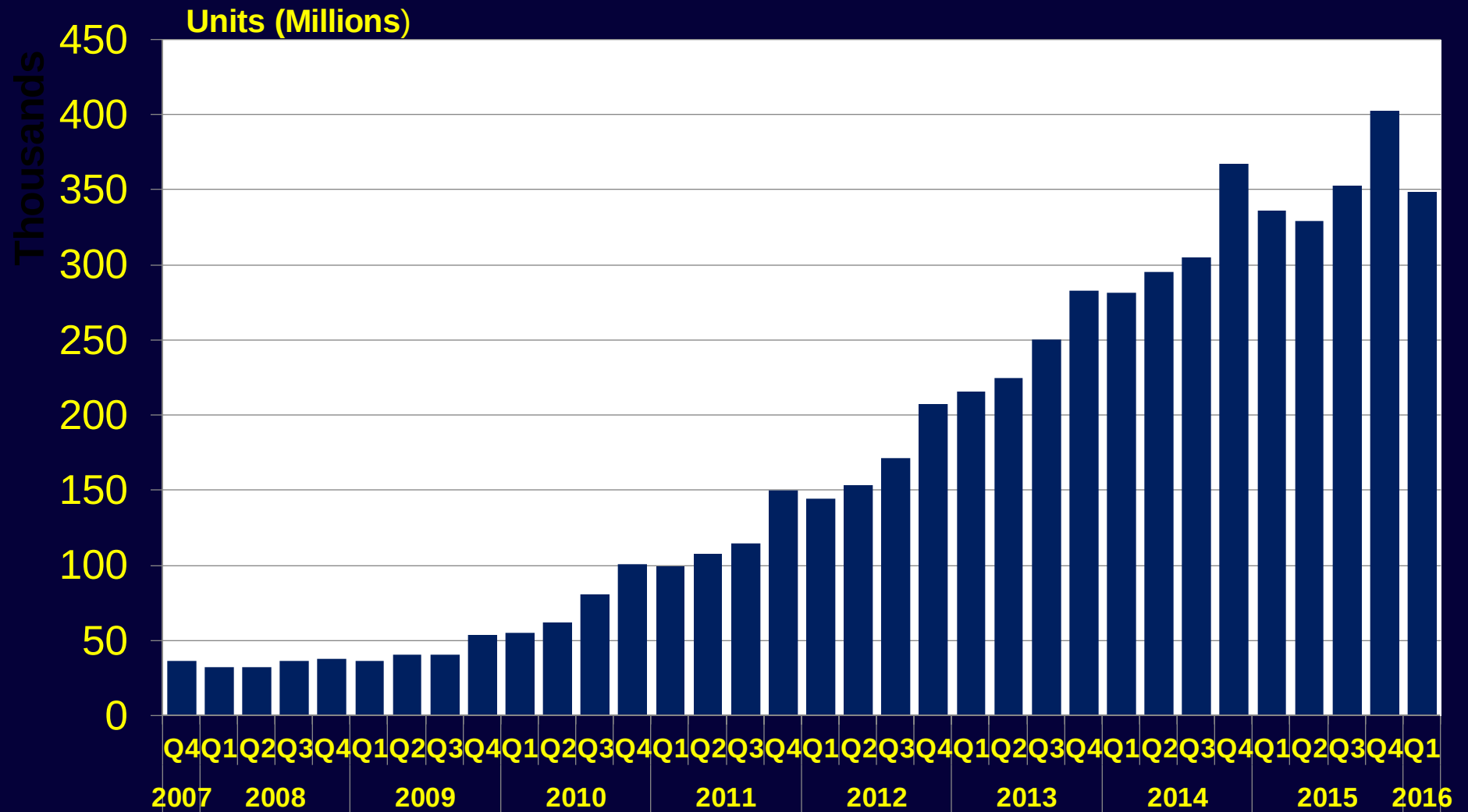
Total: 30.8 Million Units

Total SSD Storage Market Share by Supplier Exabytes 1Q'16

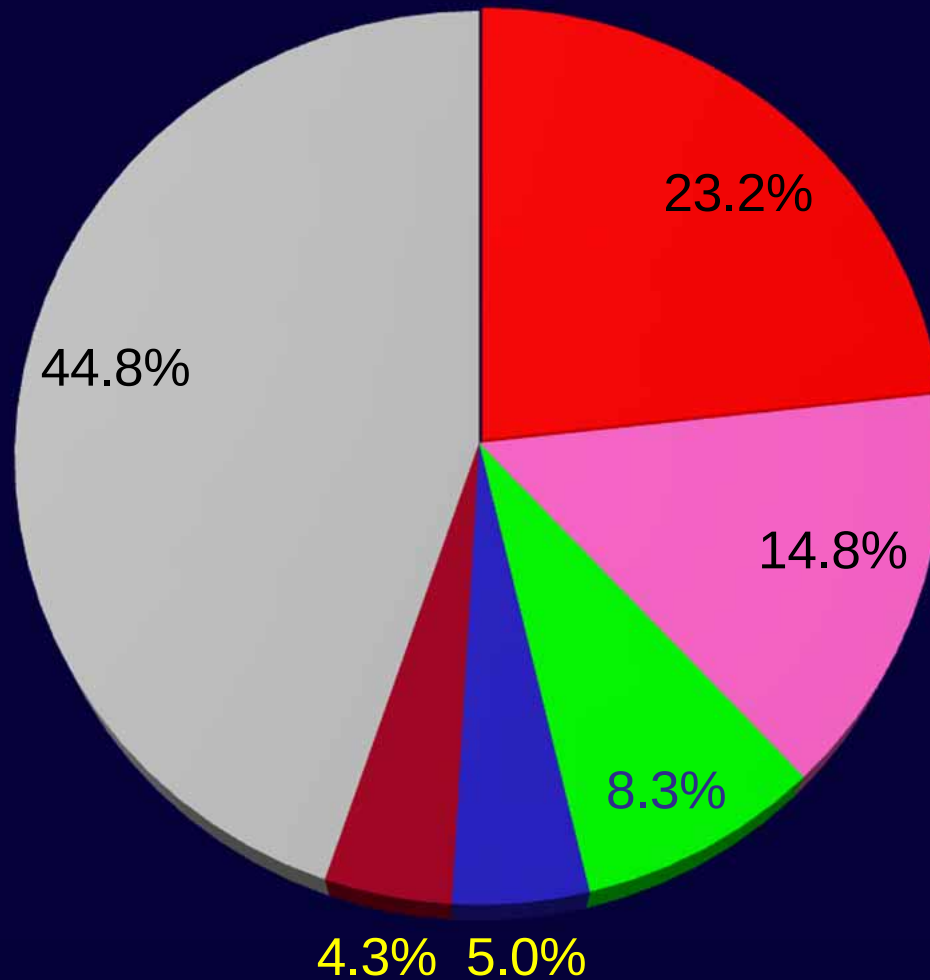


Smartphone Unit Shipments to End Users

World

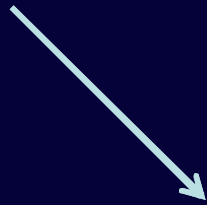


World Smartphone Sales 1Q'16



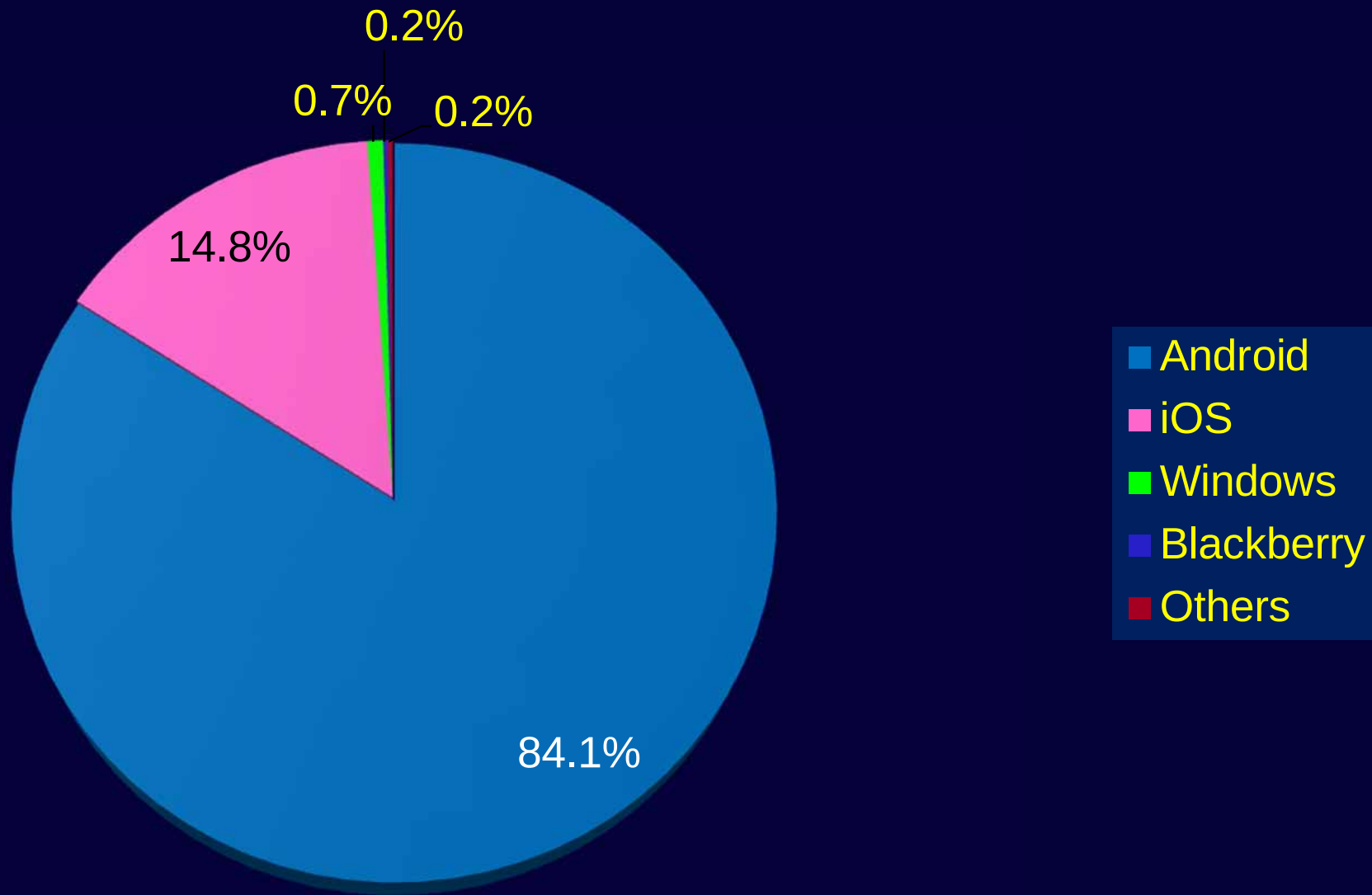
- Samsung
- Apple
- Huawei
- Oppo
- Xiaomi
- Others

1Q'15
336.3 M



1Q'16 TOTAL: 349.3 Units

World Smartphone Sales 1Q'16 by Operating System

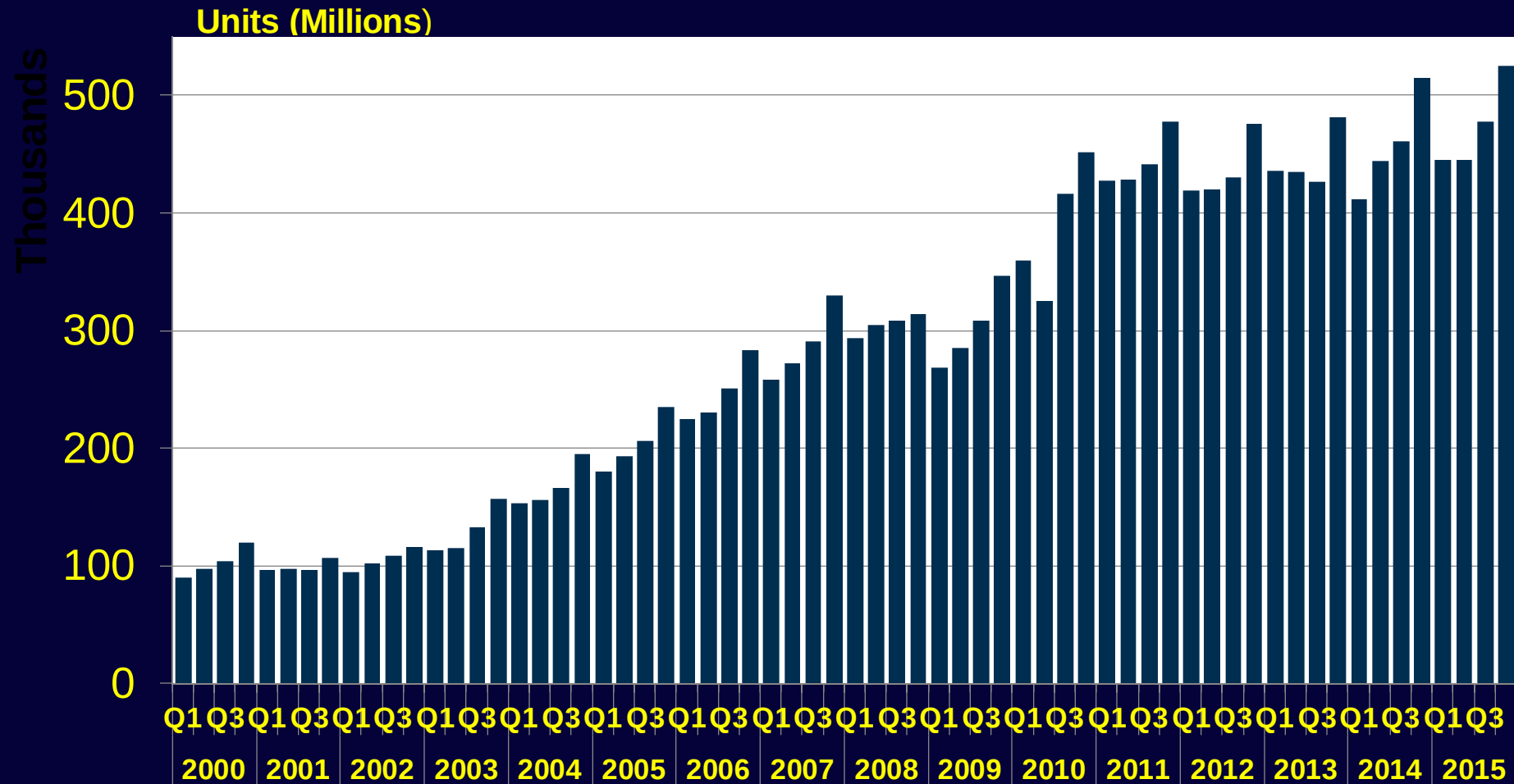


1Q'16 TOTAL: 349.3 Units

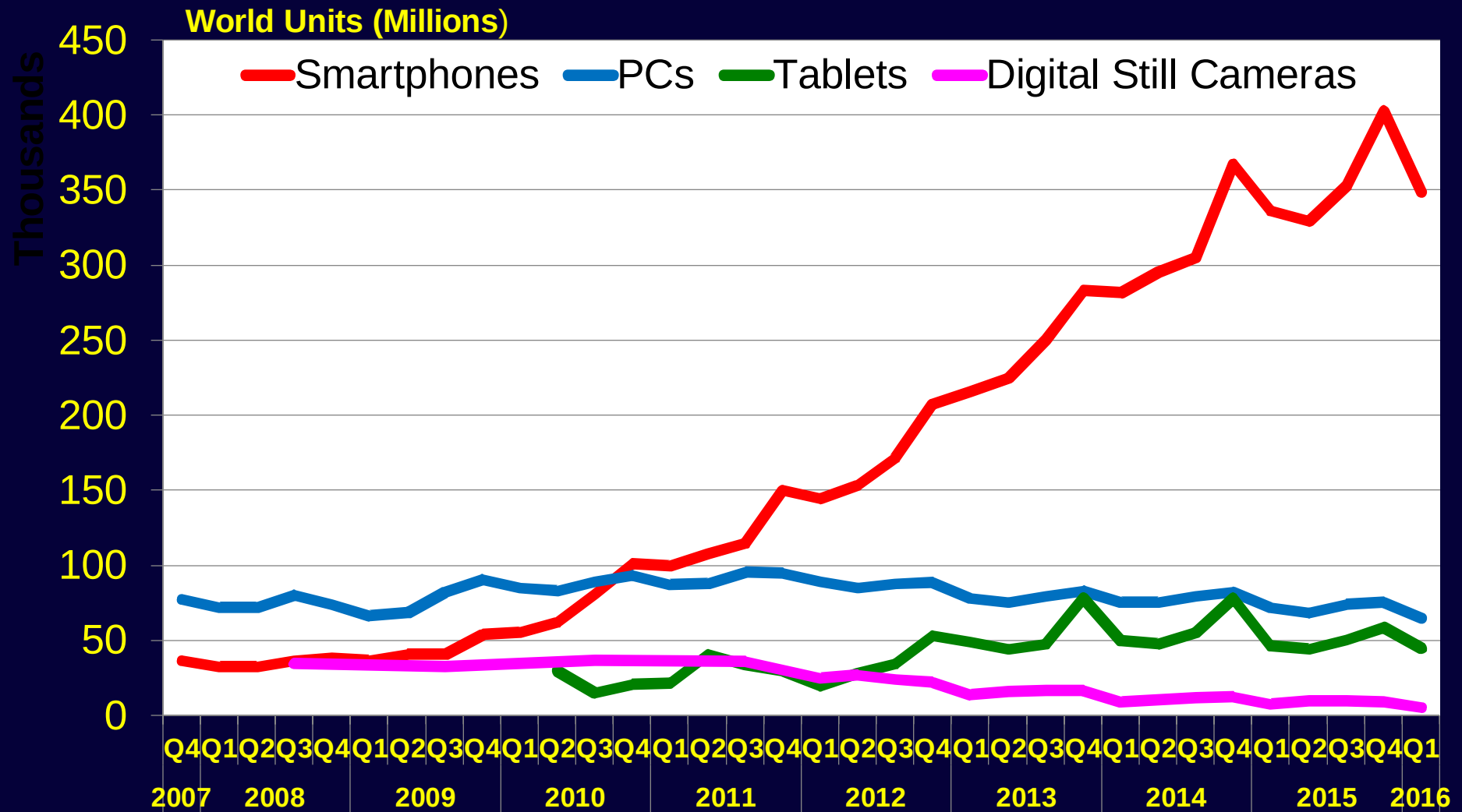
Mobile Phone Unit Shipments

World

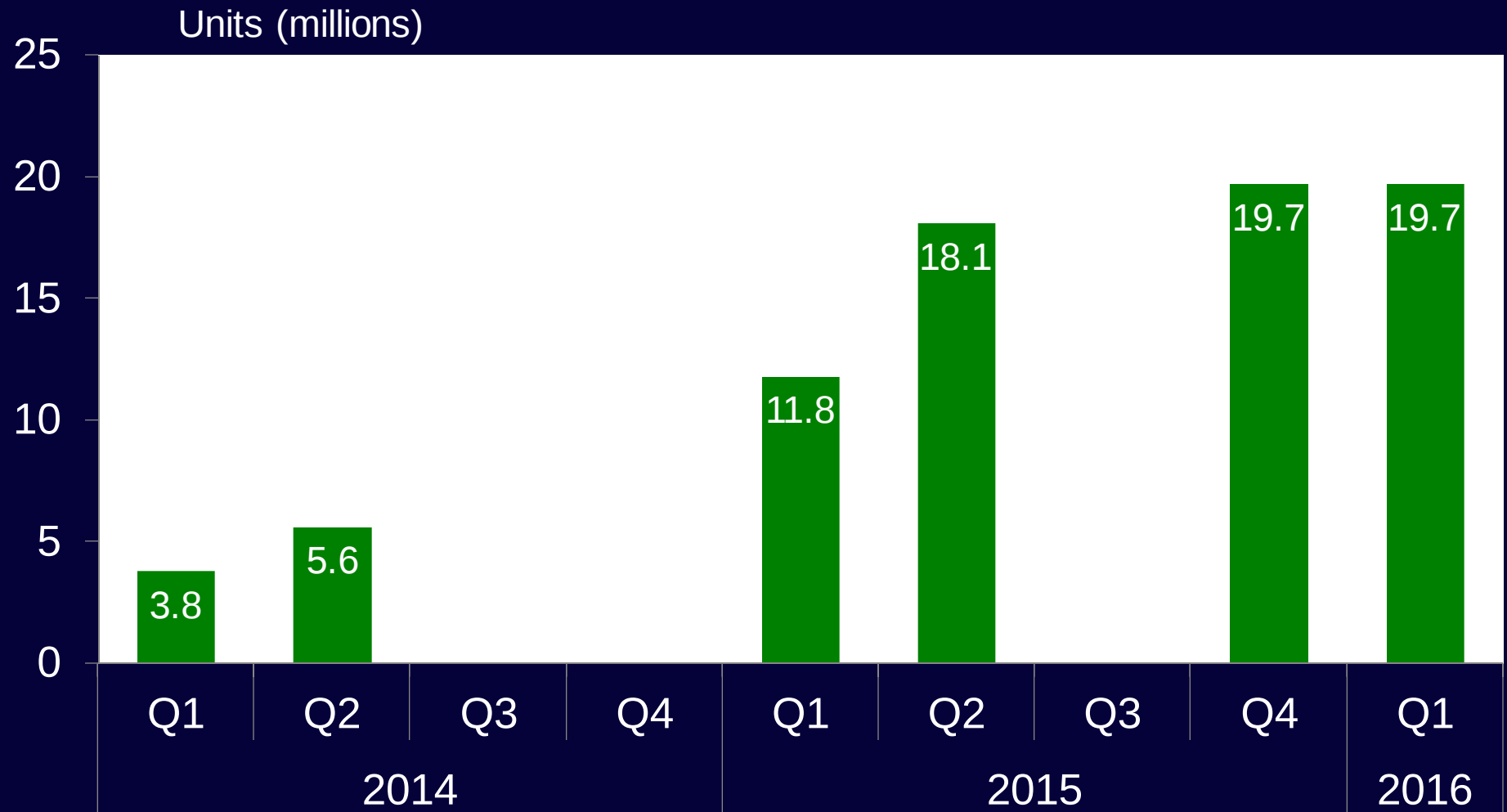
Units



Smartphones Cannibalize PCs, Tablets & Digital Cameras

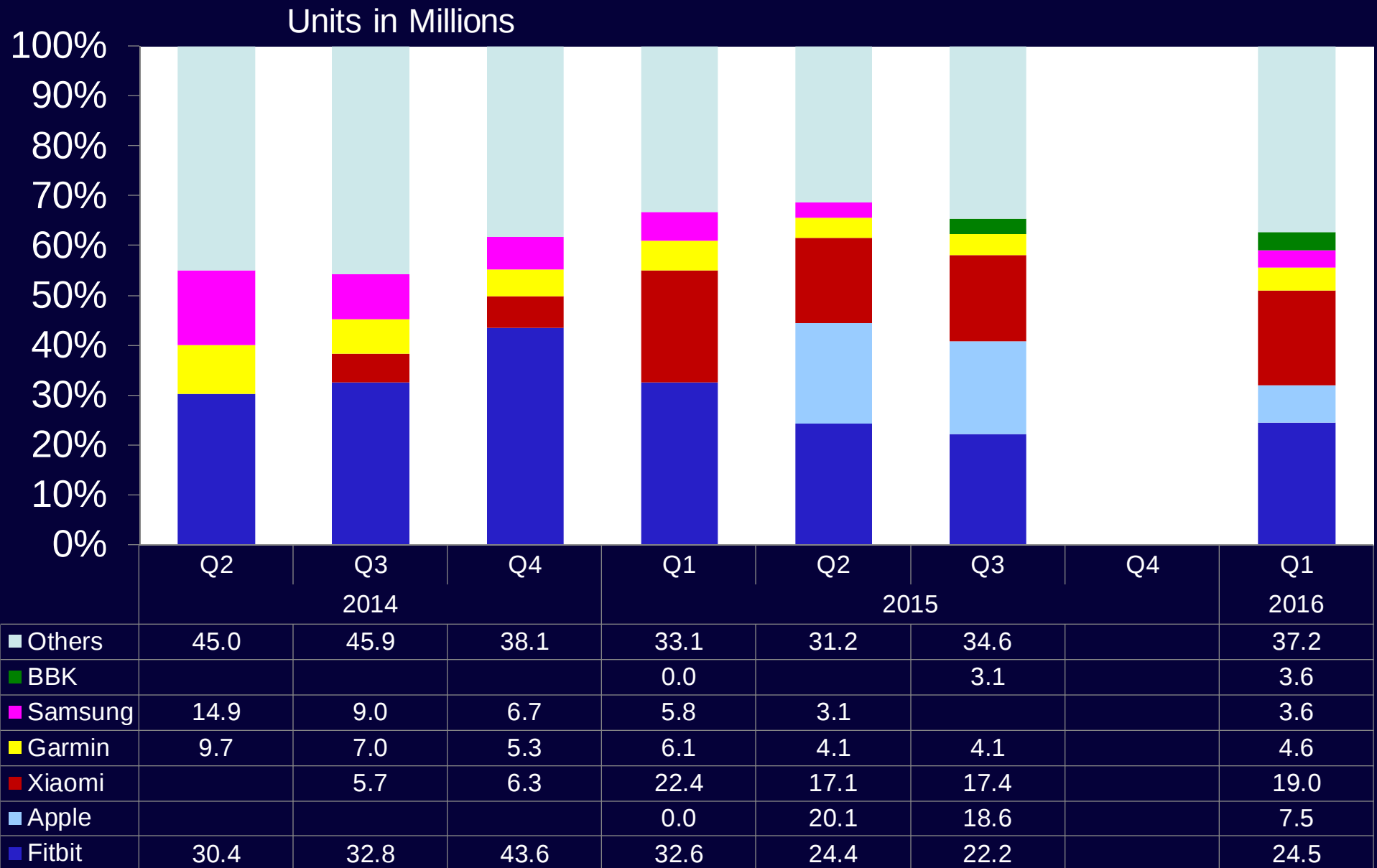


Wearables Global Shipments

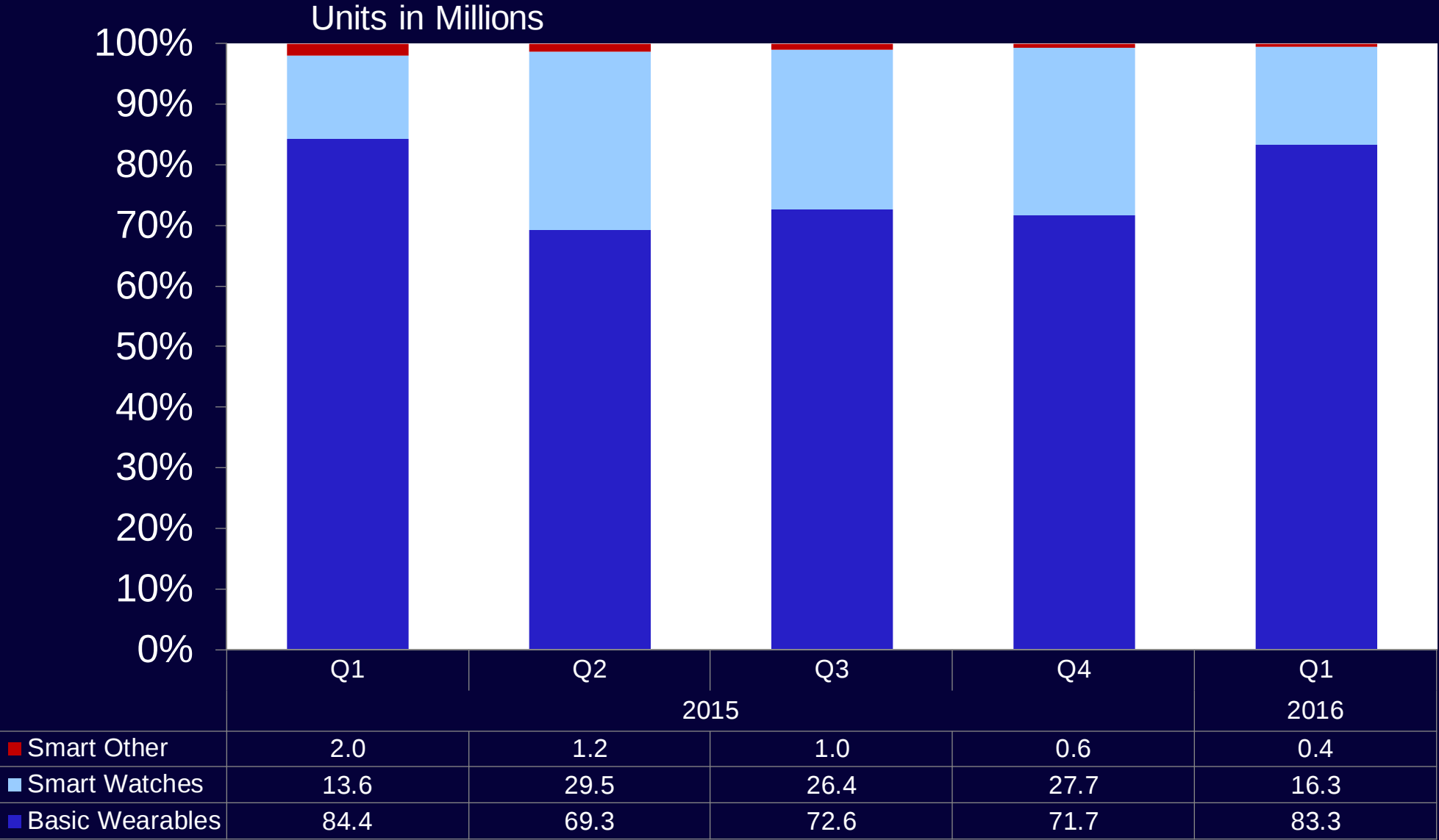


Wearable Vendors

Global % Share of Largest Suppliers



Worldwide Wearable Devices Market Share by Product Type



U.S. Industrial Production

Index (2012=100)

