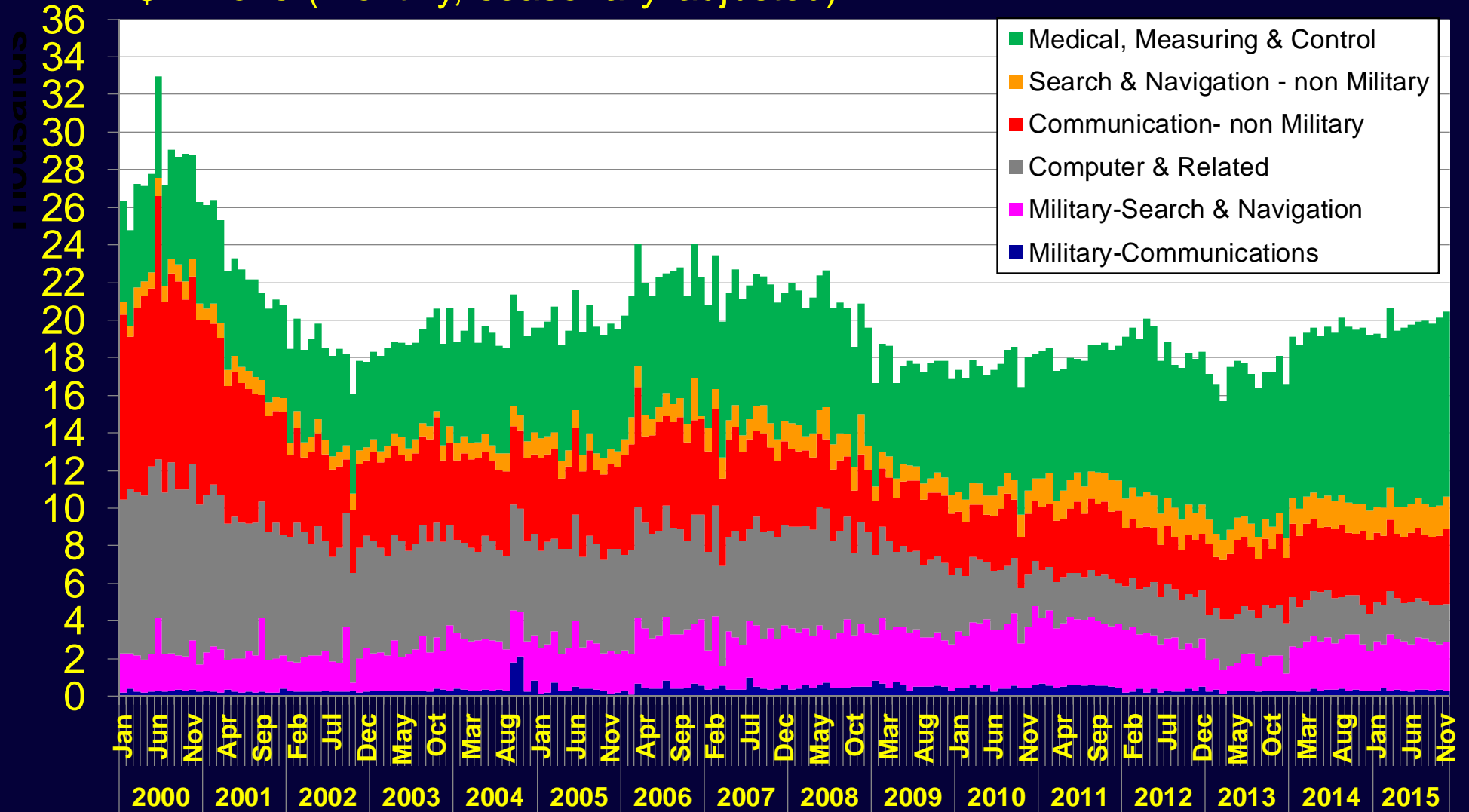


# U.S. Electronic Equipment Orders

## Monthly Data

\$ Billions (monthly, seasonally adjusted)



# U.S. Electronic Equipment Inventories

## Monthly Data

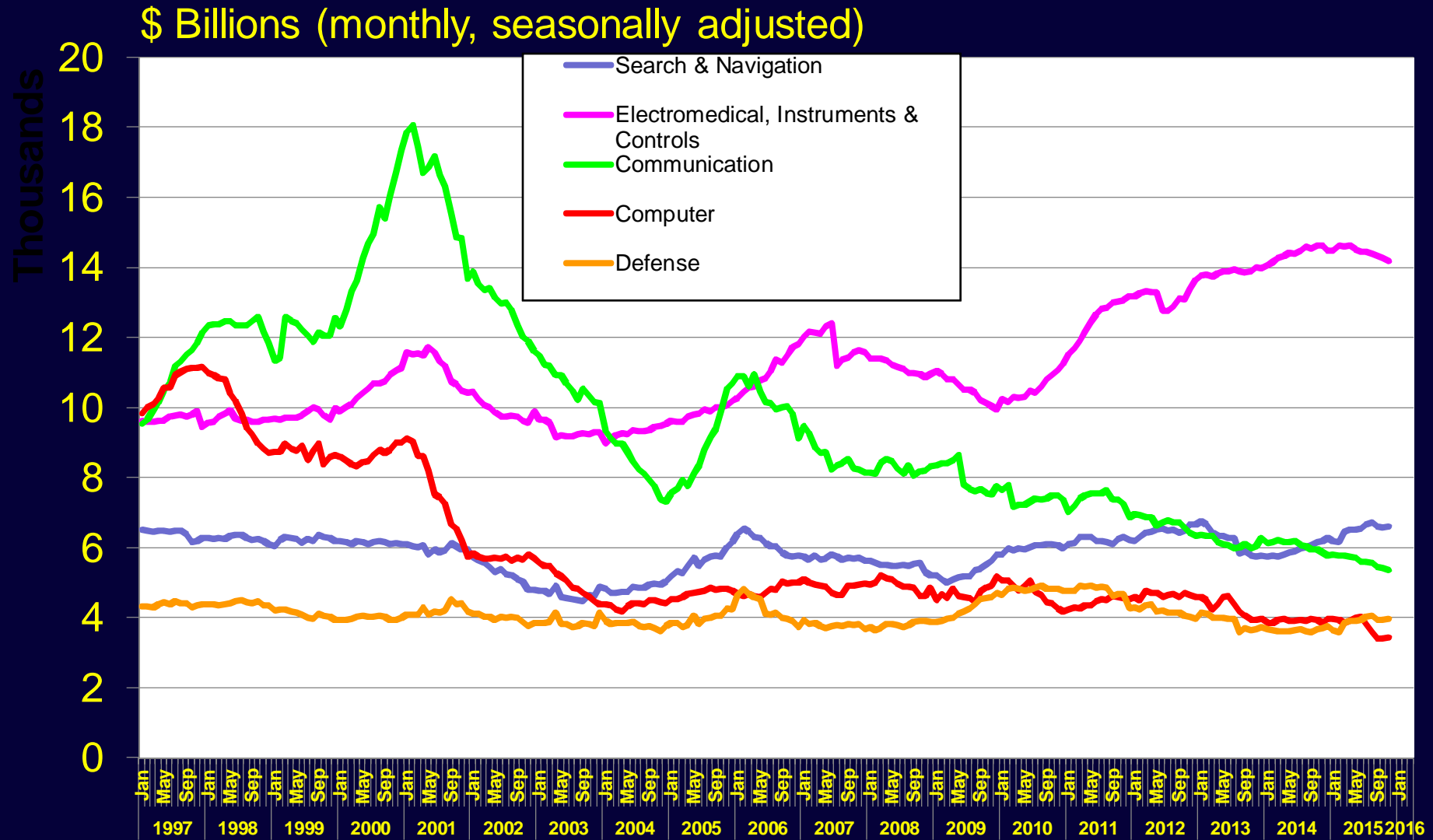


Chart 3

# U.S. Vehicle Shipments

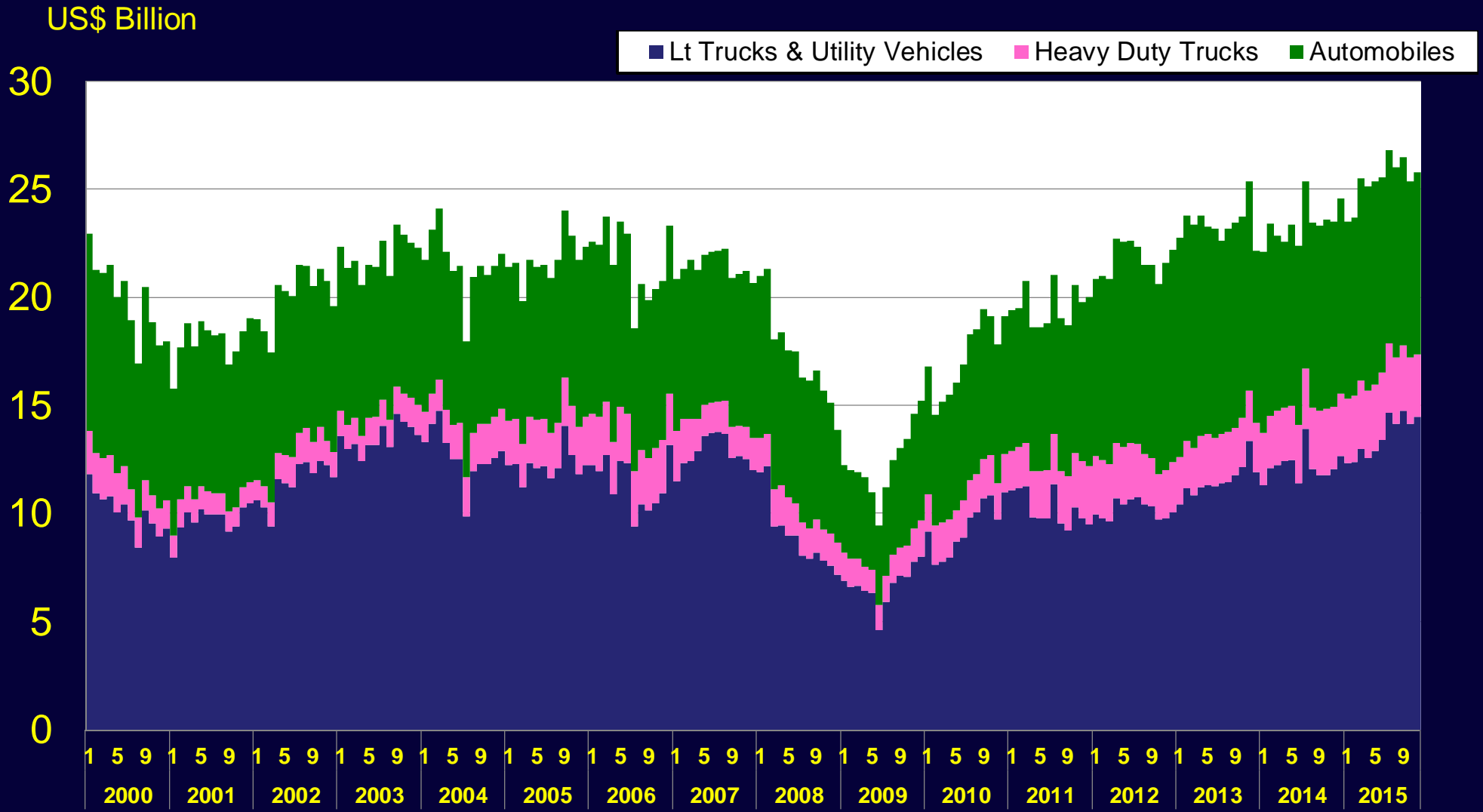


Chart 4

# U.S. Aircraft & Parts Shipments

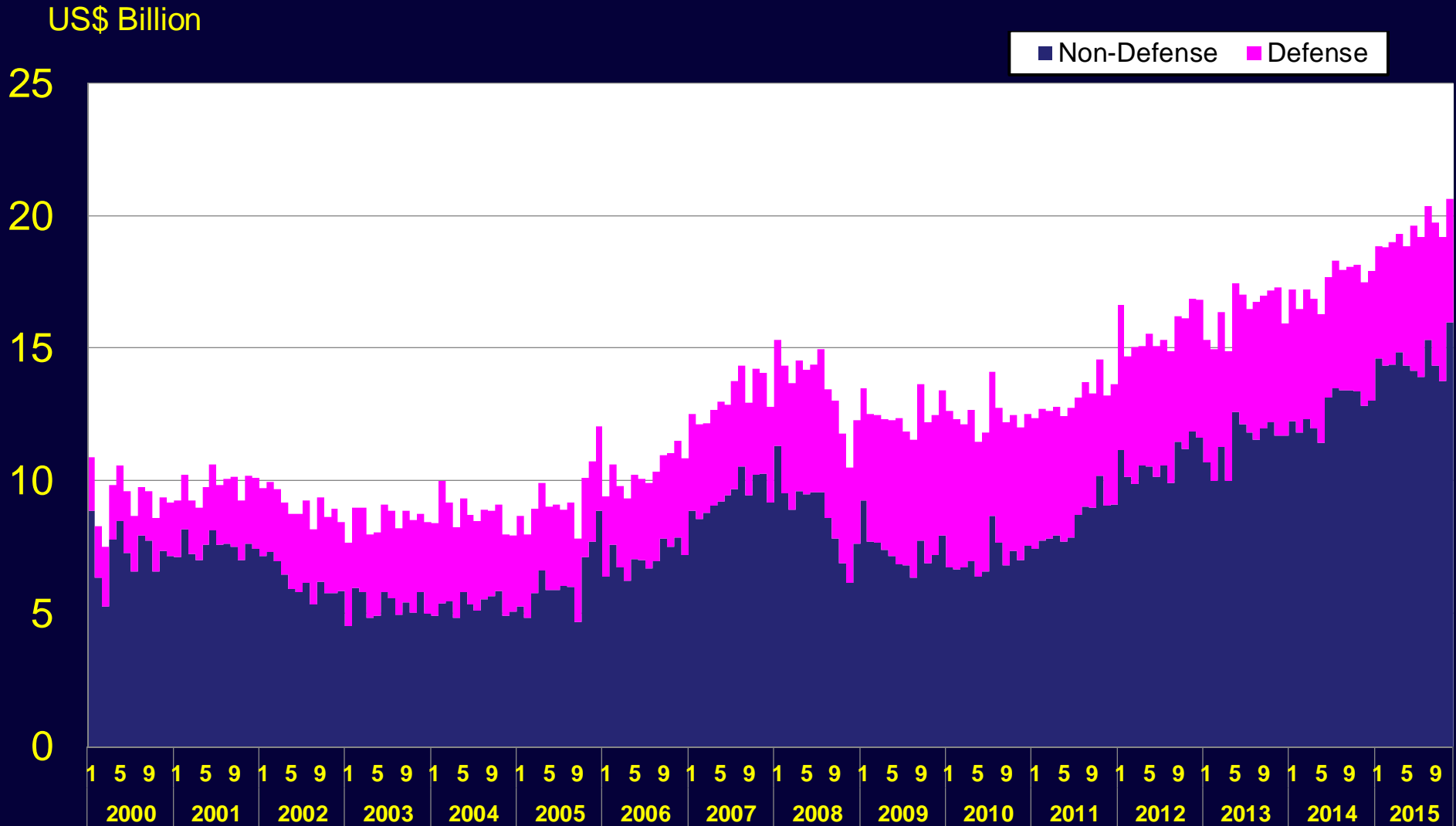
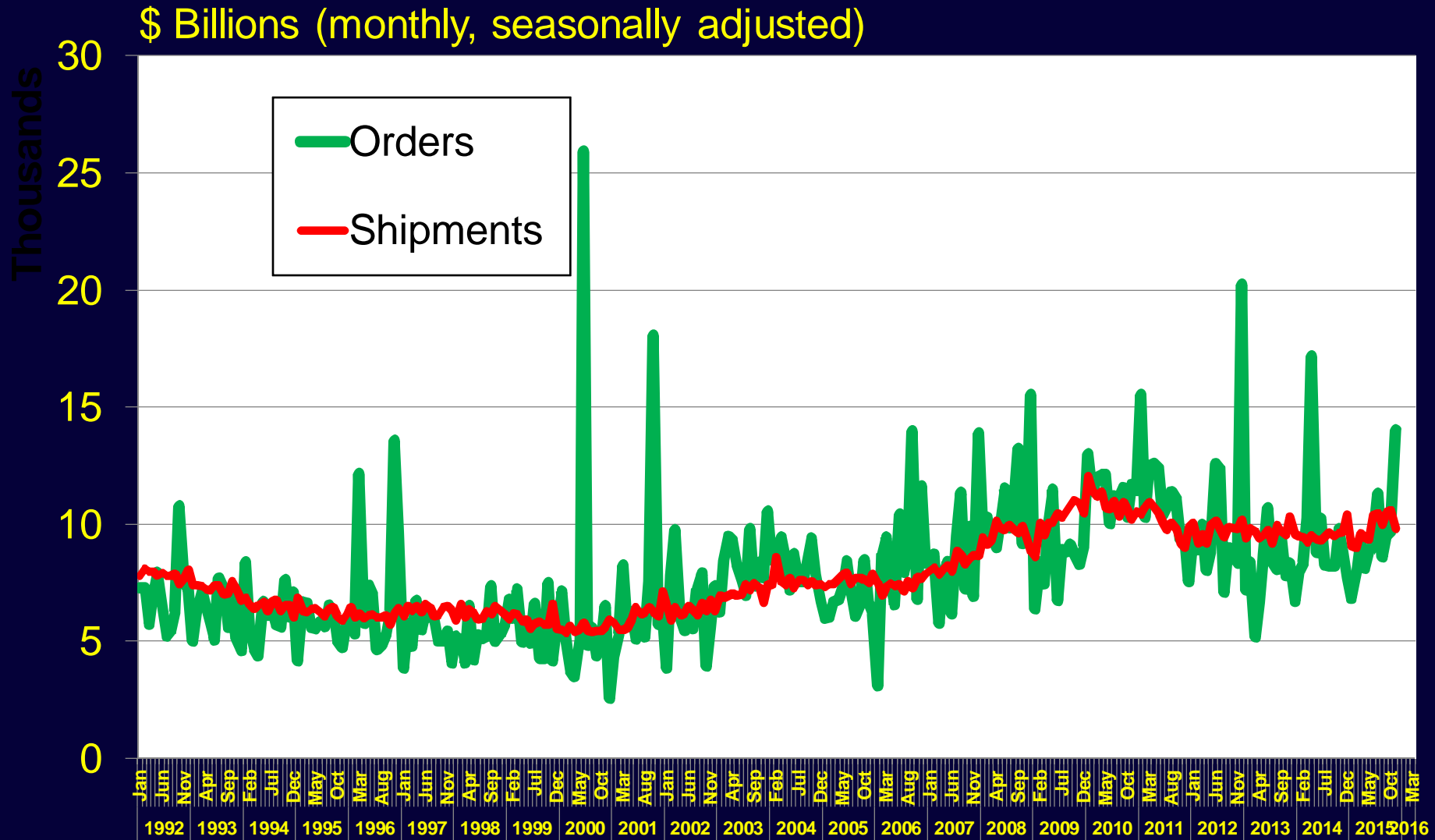


Chart 5

# U.S. Defense Capital Goods Orders & Shipments



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

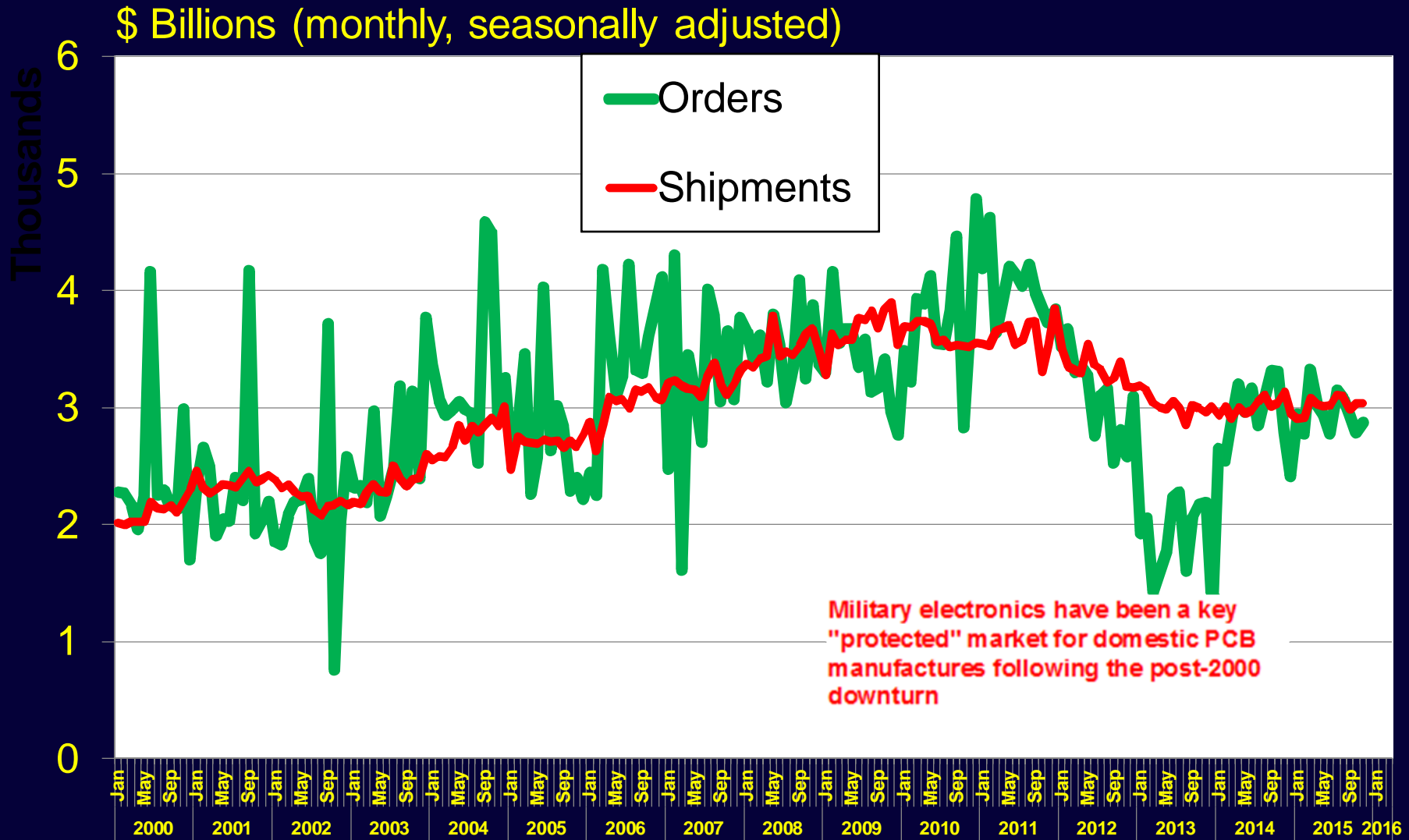


Chart 7

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

\$ Billions (monthly, seasonally adjusted)

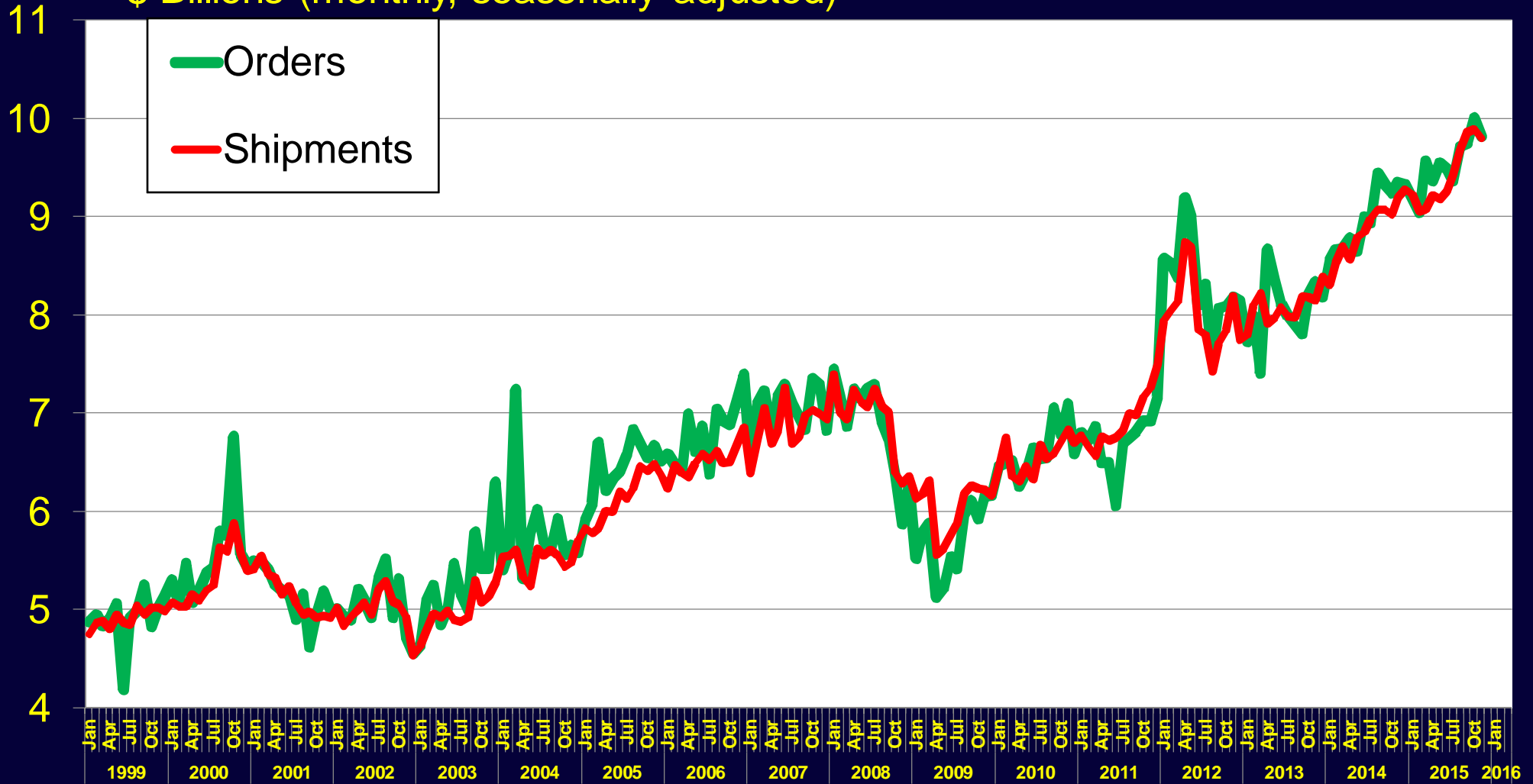
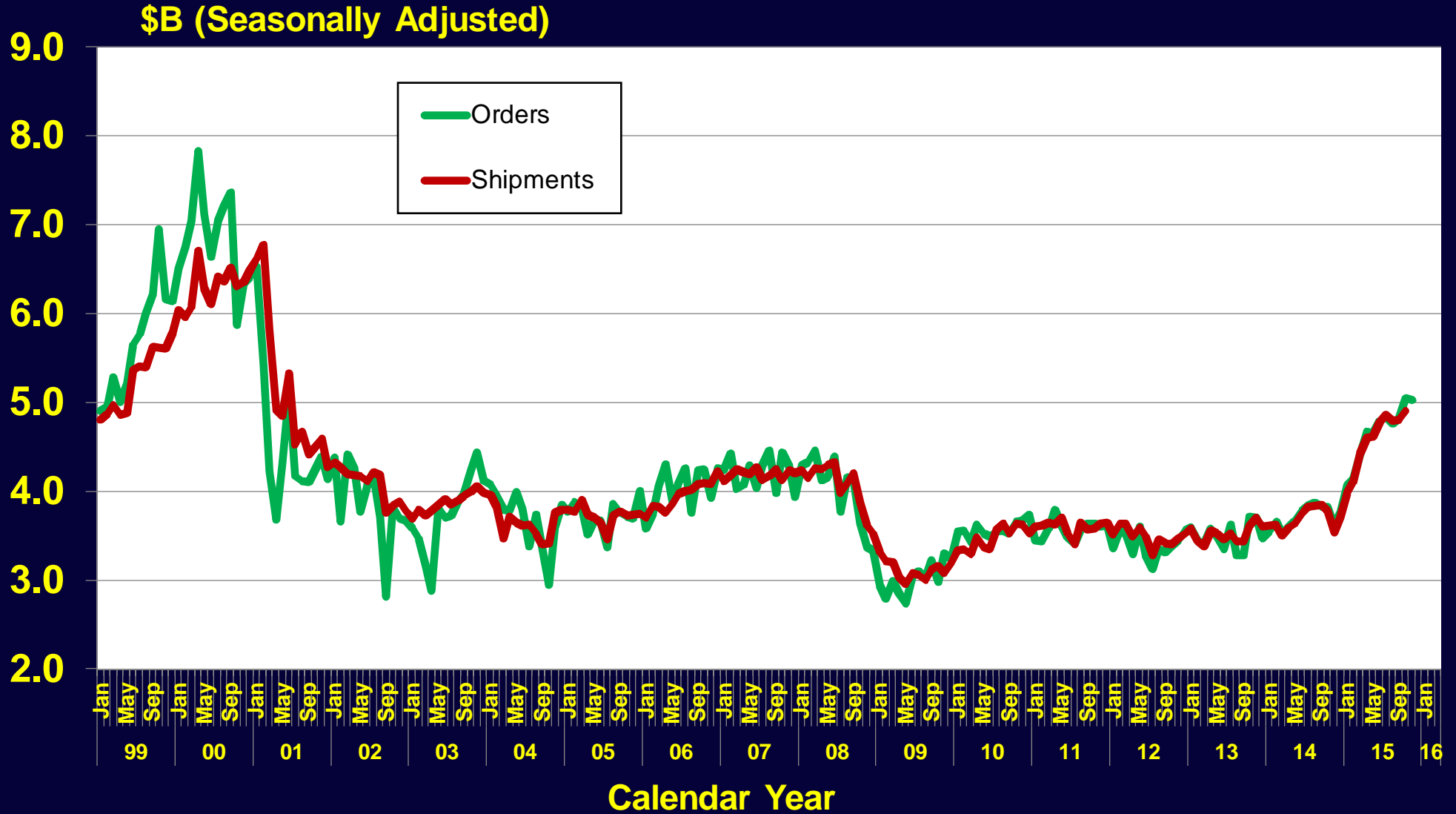


Chart 8

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





# U.S. Passive Component Orders & Shipments

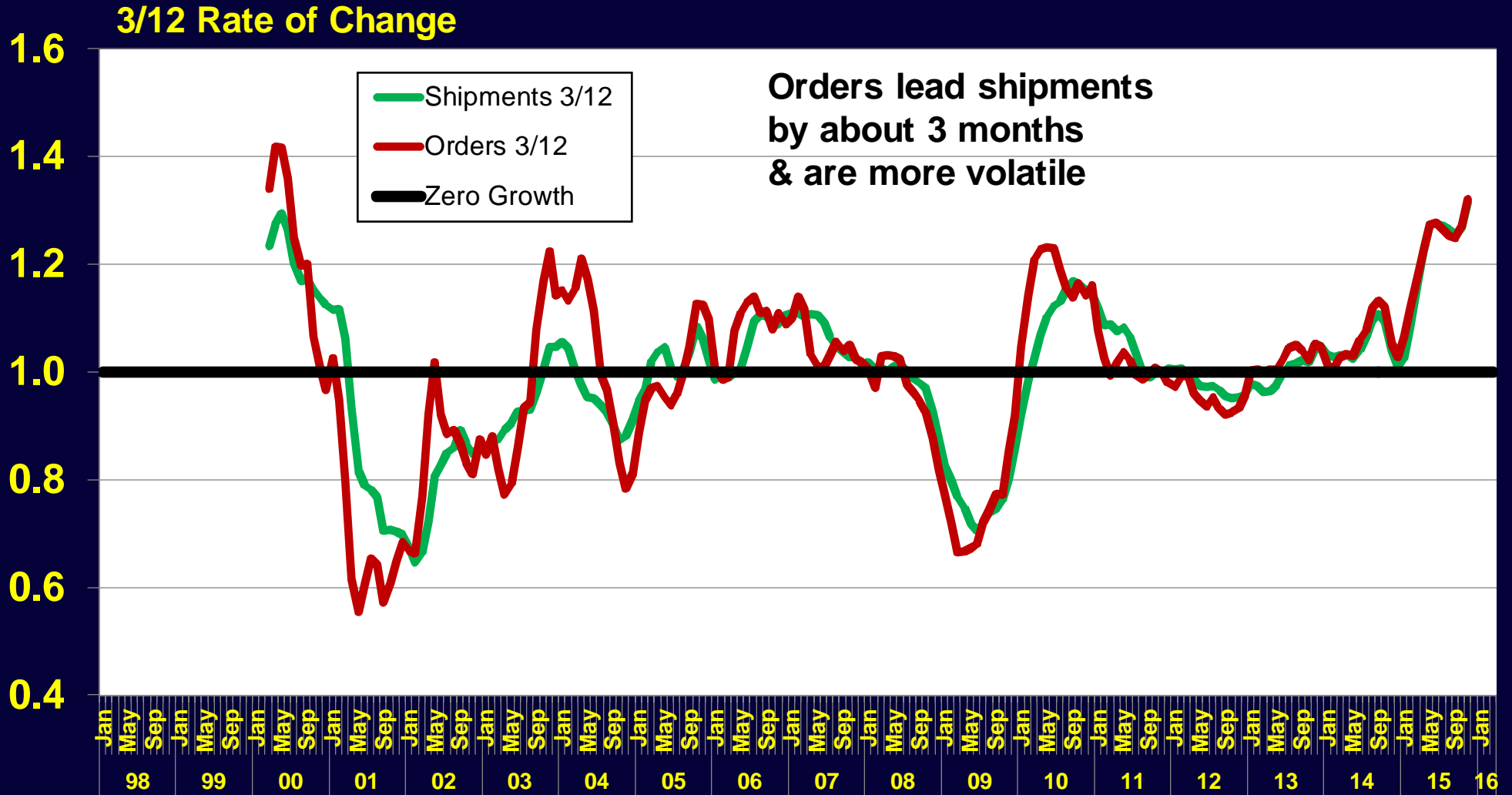


Chart 10

# U.S. Passive Components Shipments vs. Semiconductor Shipments to N America

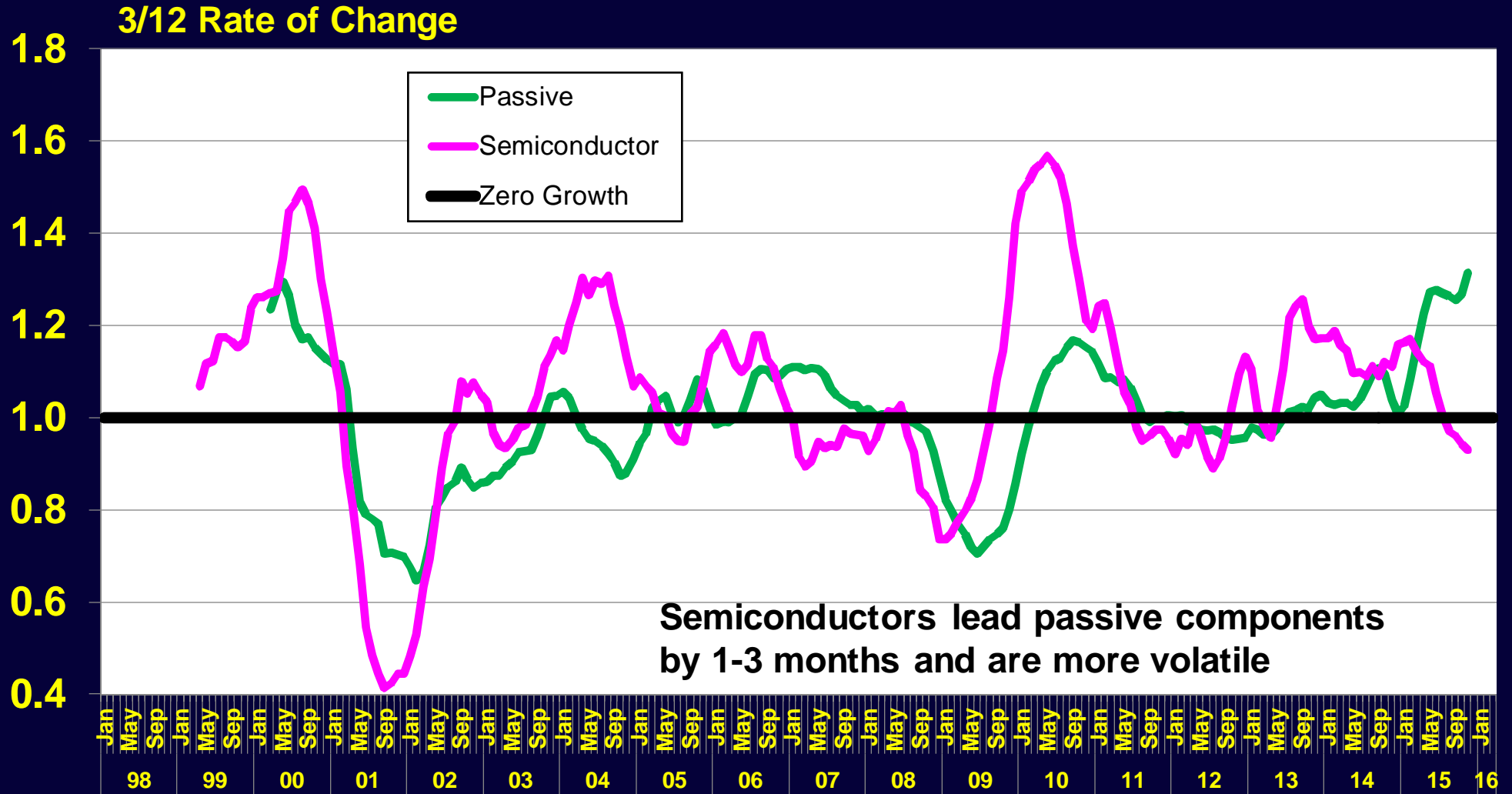


Chart 11

# Present Growth Rates (%)

## U.S. Economy & Electronics Industry

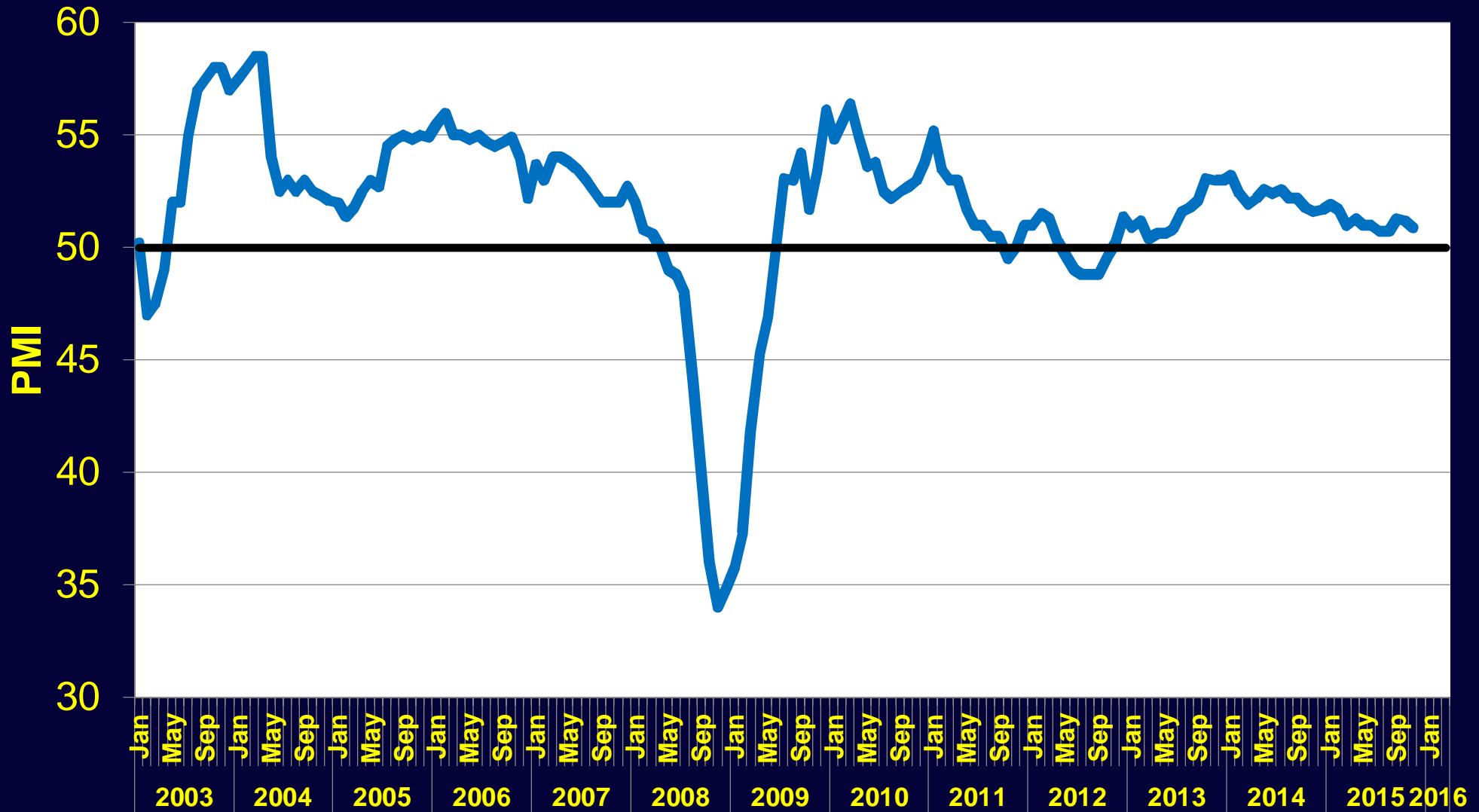
	Latest Month	Annual Growth	3-Month Growth
<b>Electronic Component \$</b>			
Rigid & Flex PCB Orders (N Amer)	11/15	102.9	<b>93.4</b>
Rigid & Flex PCB Shipments (N Amer)	11/15	100.6	101.3
Electronic Component Orders	11/15	124.4	132.3
Electronic Component Shipments	11/15	123.5	131.5
Semiconductor Shipments to N America	11/15	103.8	<b>93.0</b>
<b>U.S. Electronic Equipment Orders \$</b>			
Computer & Related	11/15	<b>89.2</b>	<b>96.6</b>
Communication	11/15	100.9	107.1
Medical, Measurement & Control	11/15	106.9	105.9
Search & Navigation	11/15	104.7	<b>95.5</b>
Defense Capital Goods	11/15	<b>98.4</b>	123.7
Military Electronics	11/15	102.9	<b>91.3</b>
Total Electronic Equipment	11/15	103.0	102.8
<b>U.S. Industrial Production</b>	11/15	101.8	100.0

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

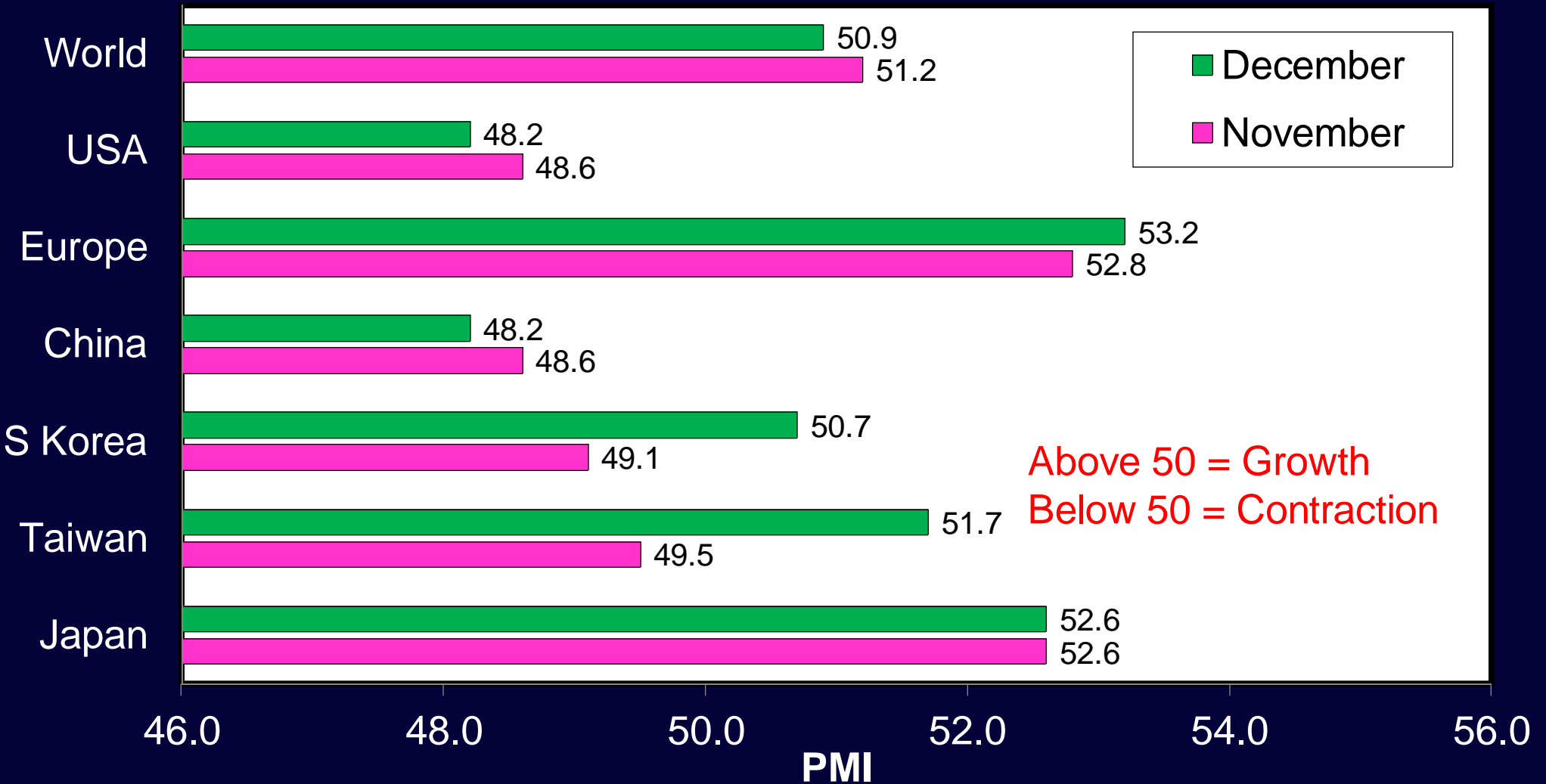
Chart 12

# Global "Purchasing Managers" Index

Diffusion Index, >50 = Growth



# Purchasing Managers' Indices November vs. December 2015



# U.S. "Purchasing Managers" Indices ISM vs. Markit Economics

Diffusion Index, >50 = Growth

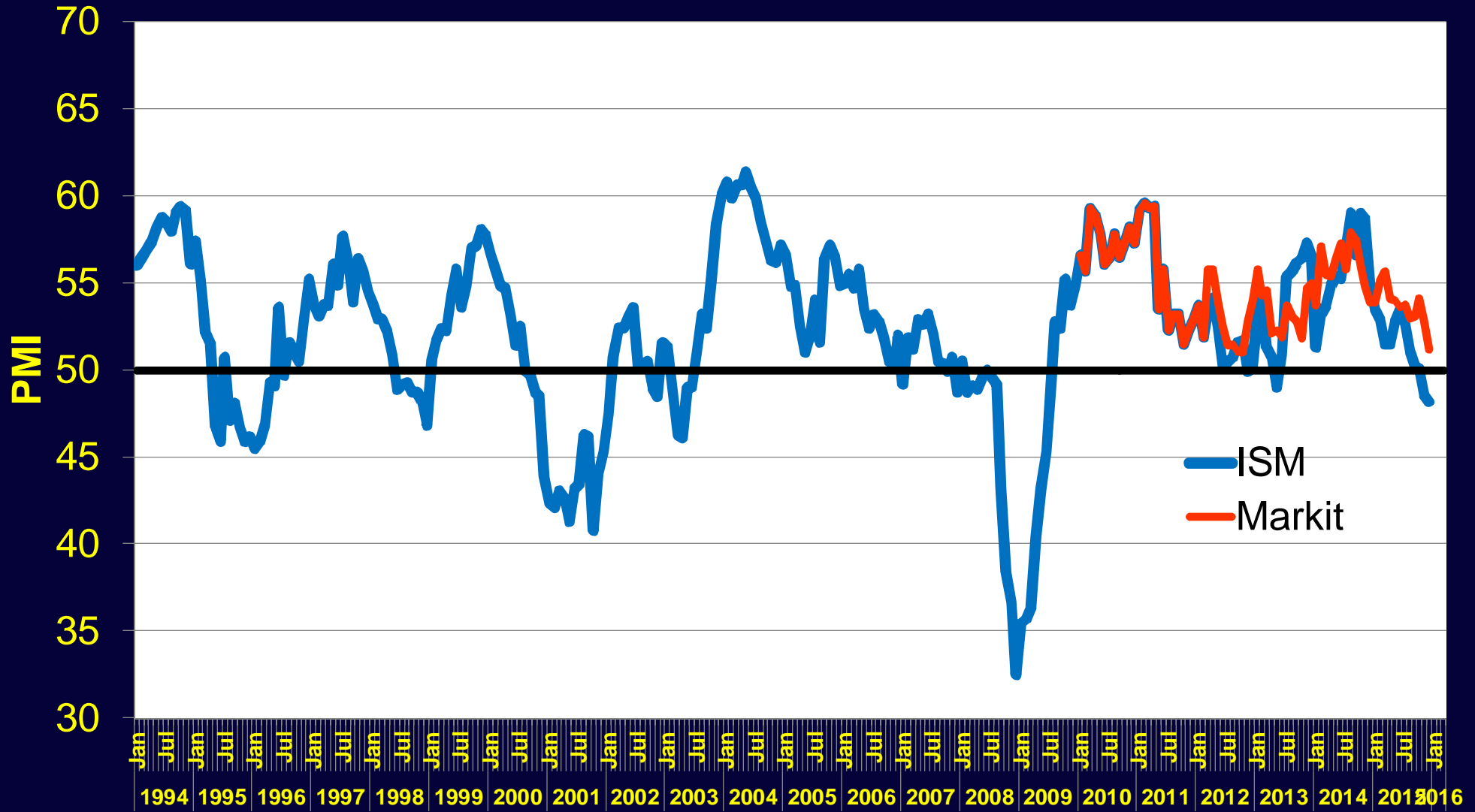


Chart 15

# Eurozone "Purchasing Managers" Index

Diffusion Index, >50 = Growth

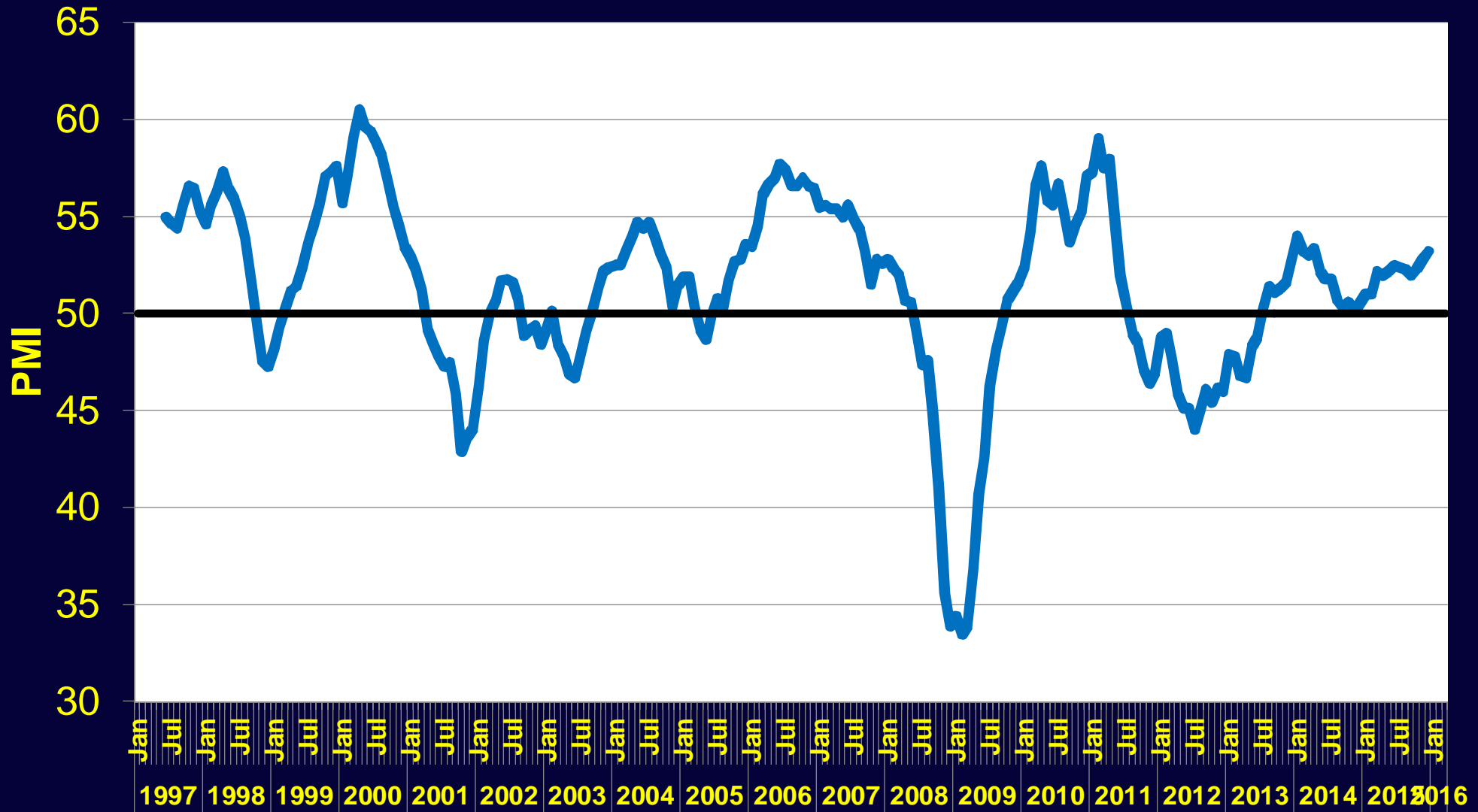
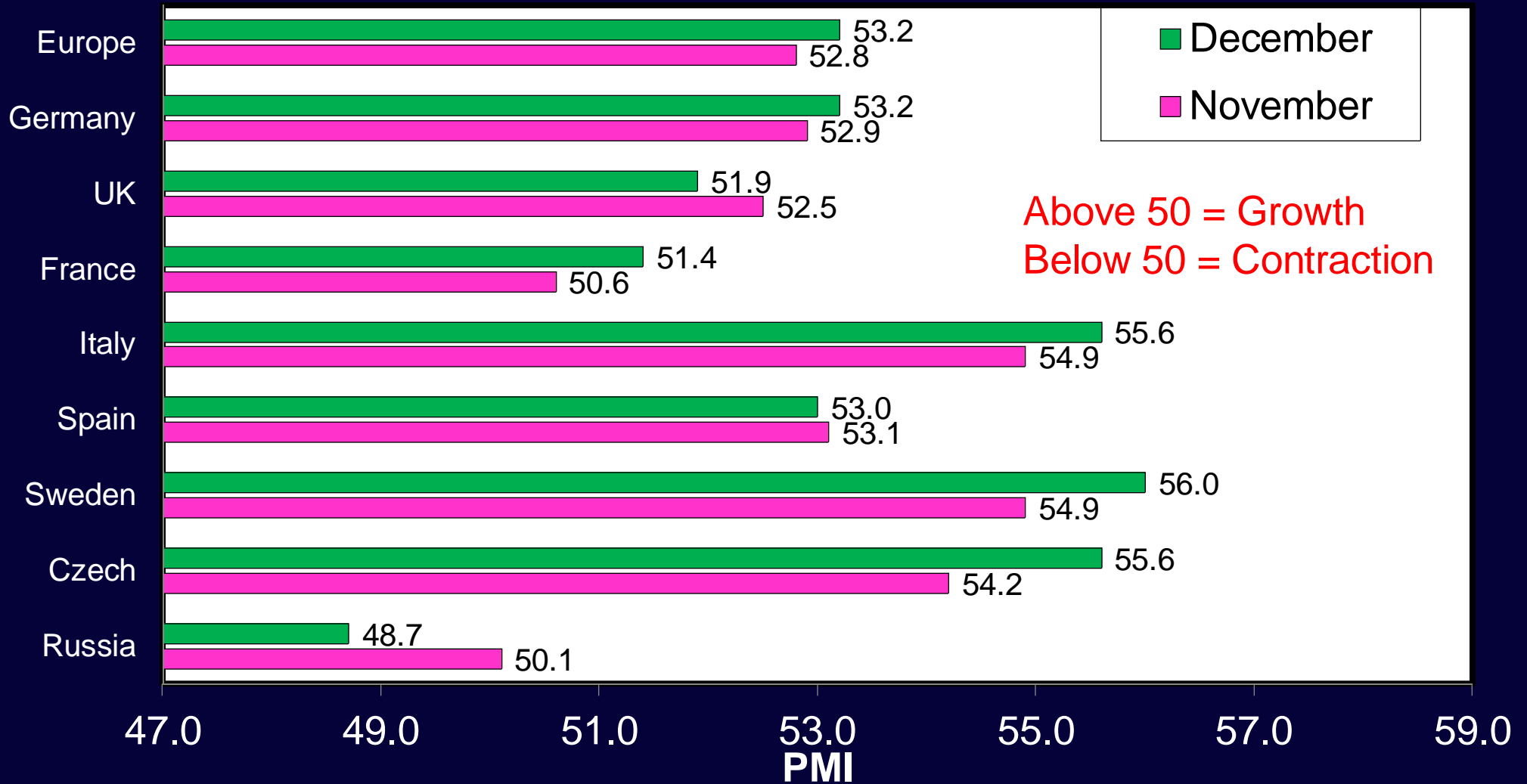


Chart 16

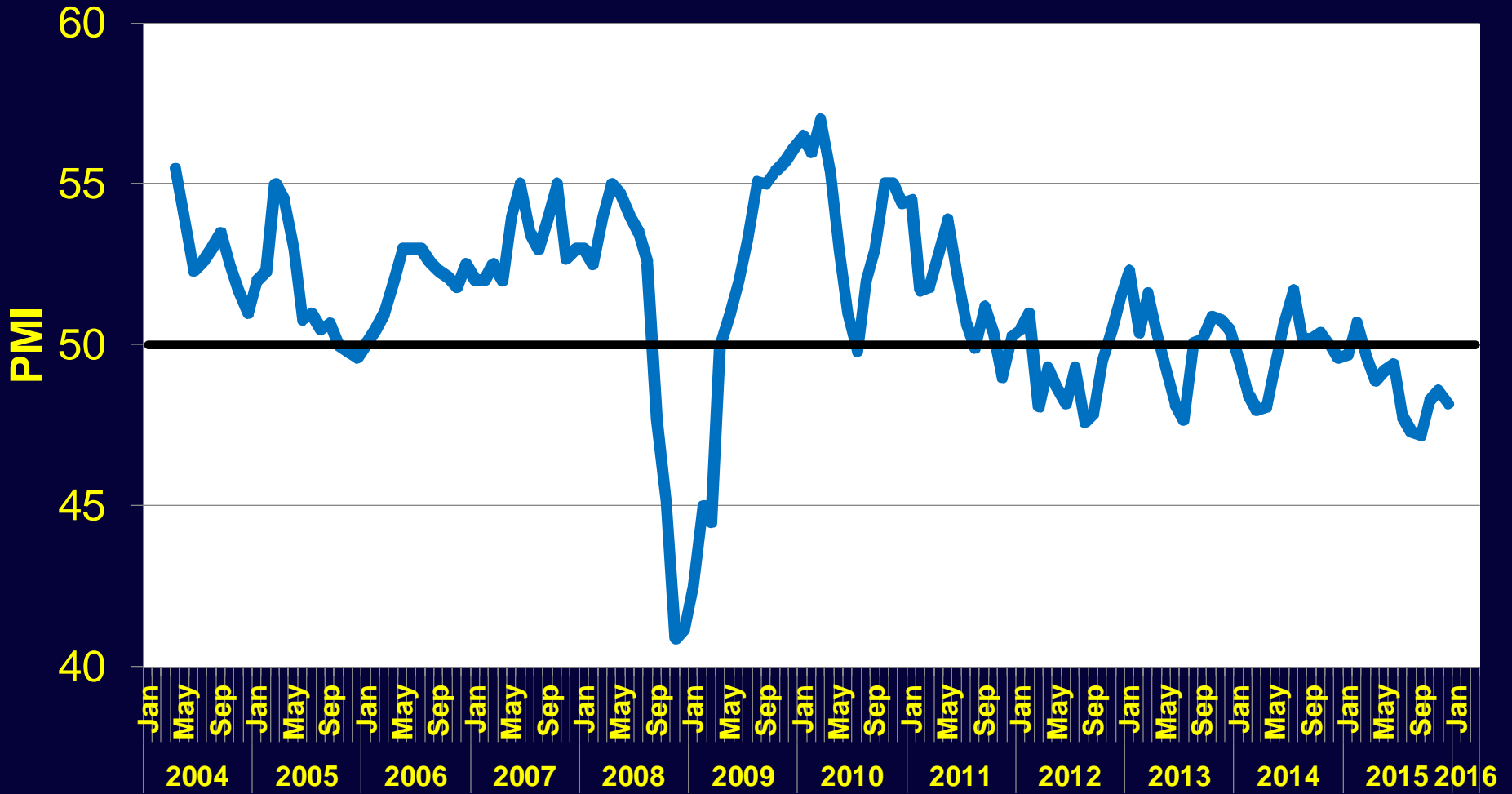
# European Purchasing Managers' Indices November vs. December 2015





# China "Purchasing Managers" Index

Diffusion Index, >50 = Growth



# Asian Purchasing Managers' Indices November vs. December 2015

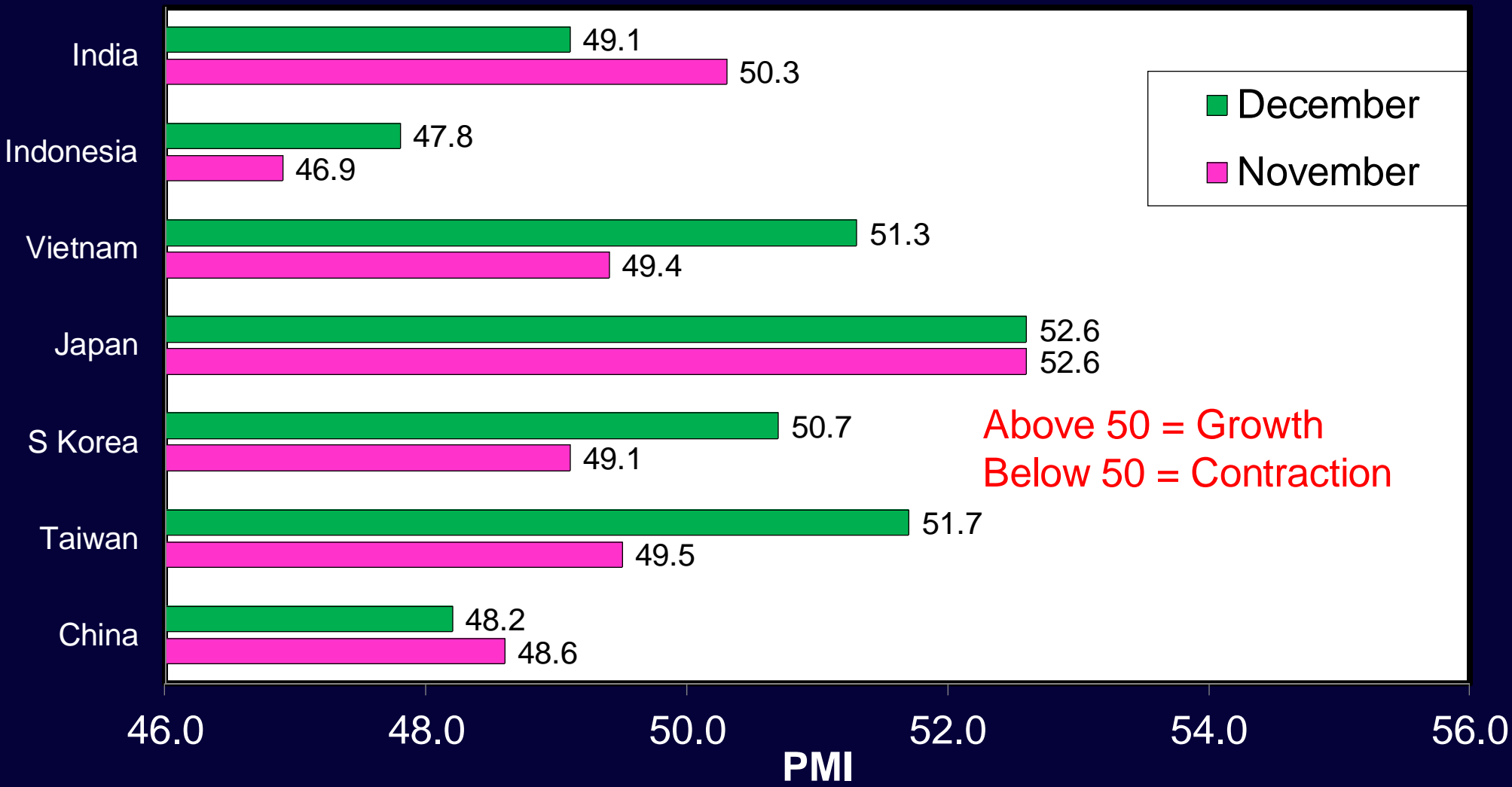
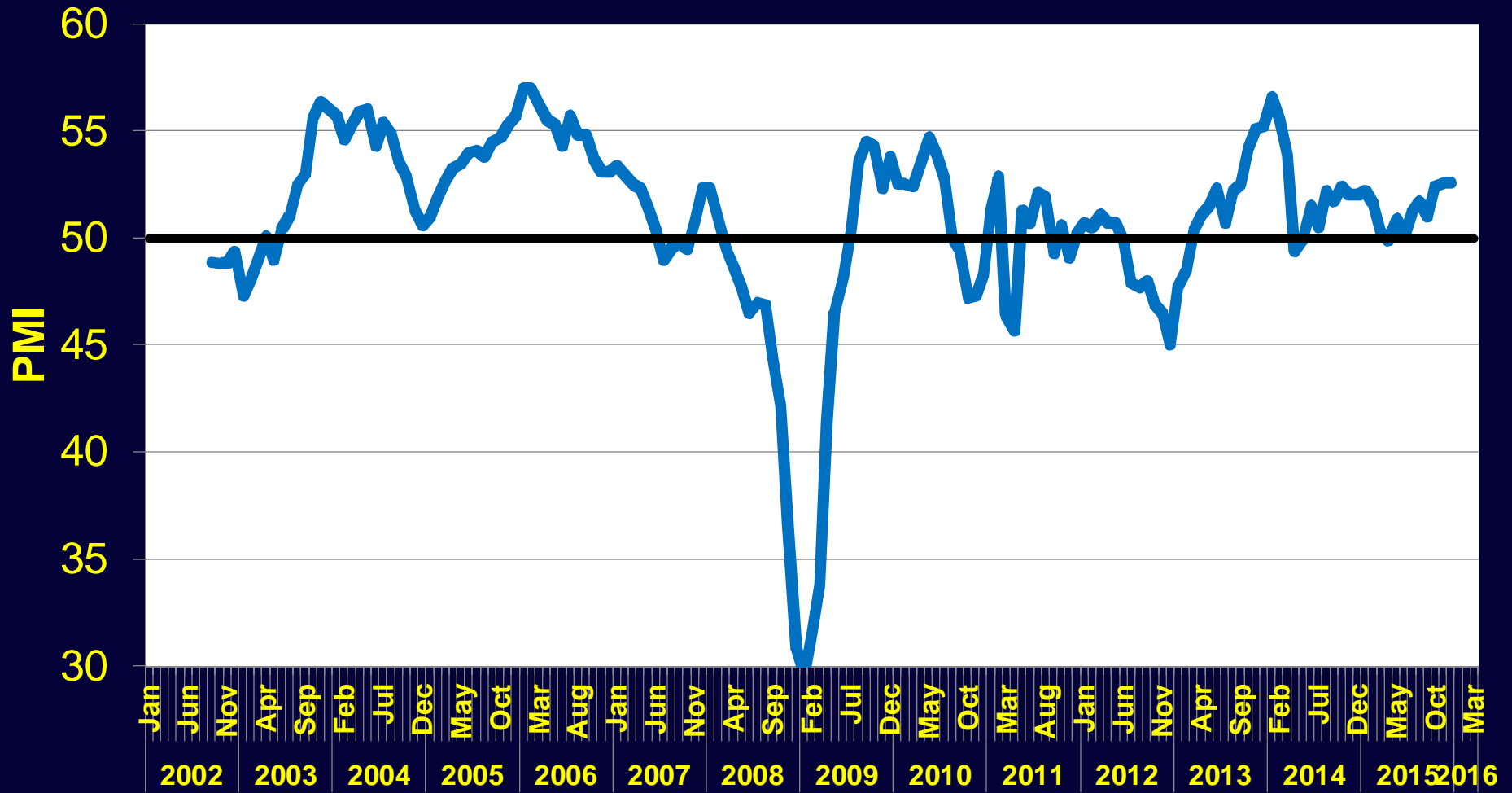


Chart 19

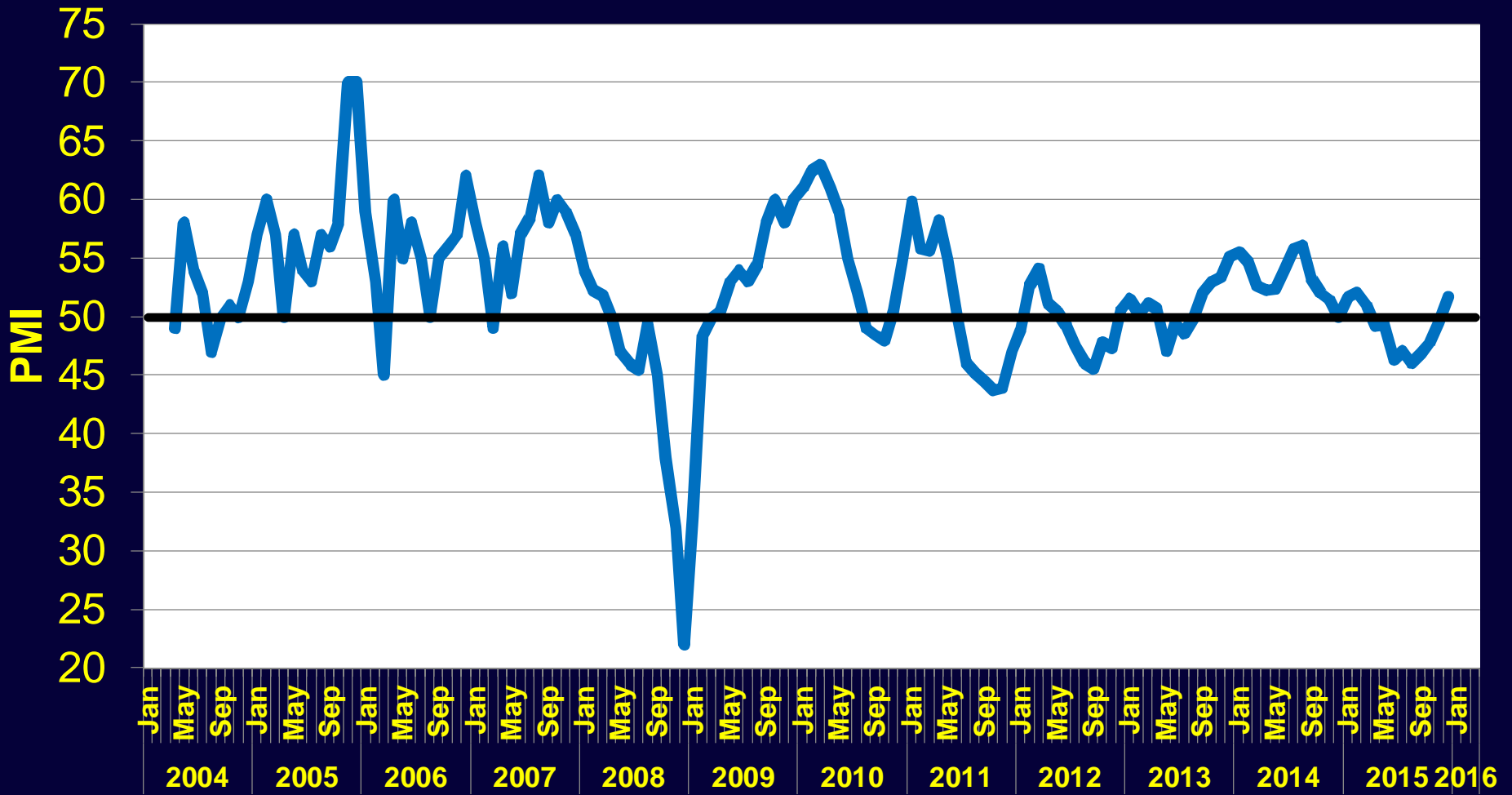
# Japan "Purchasing Managers" Index

Diffusion Index, >50 = Growth



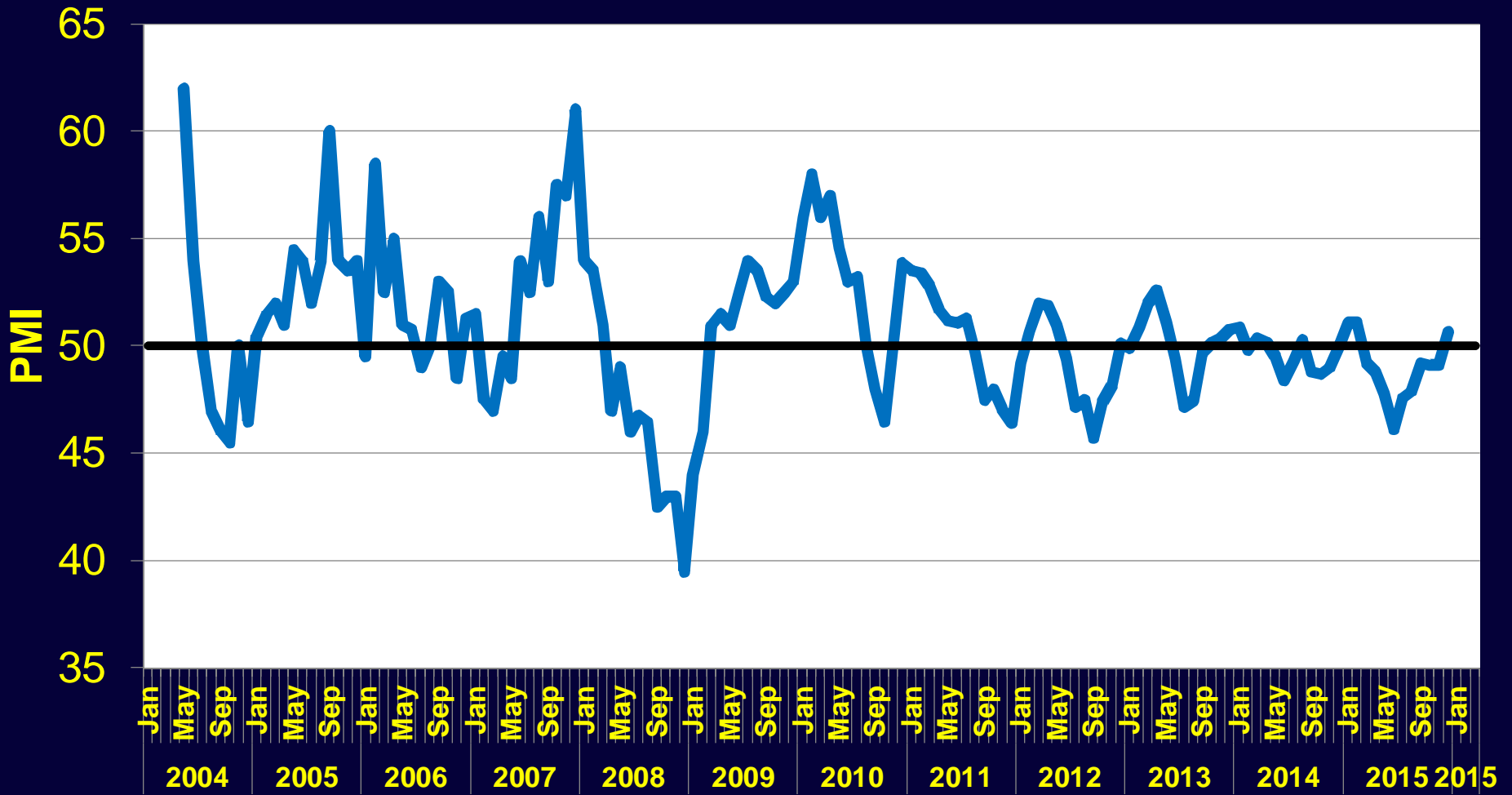
# Taiwan "Purchasing Managers" Index

Diffusion Index, >50 = Growth



# S Korea "Purchasing Managers" Index

Diffusion Index, >50 = Growth



# Monthly Semiconductor Shipments

## \$ Billions (3-month avg in US\$)

	<u>11/14</u>	<u>11/15</u>	<u>% CH</u>
Americas	6.41	6.05	- 7.1%
Europe	3.21	2.90	- 8.0%
Japan	3.01	2.70	- 8.6%
China	8.12	8.58	+ 5.3%
Asia Pacific / All Other	8.94	8.72	- 4.1%
Total	29.68	28.96	- 3.0%

# World Semiconductor Shipments

## Monthly US\$

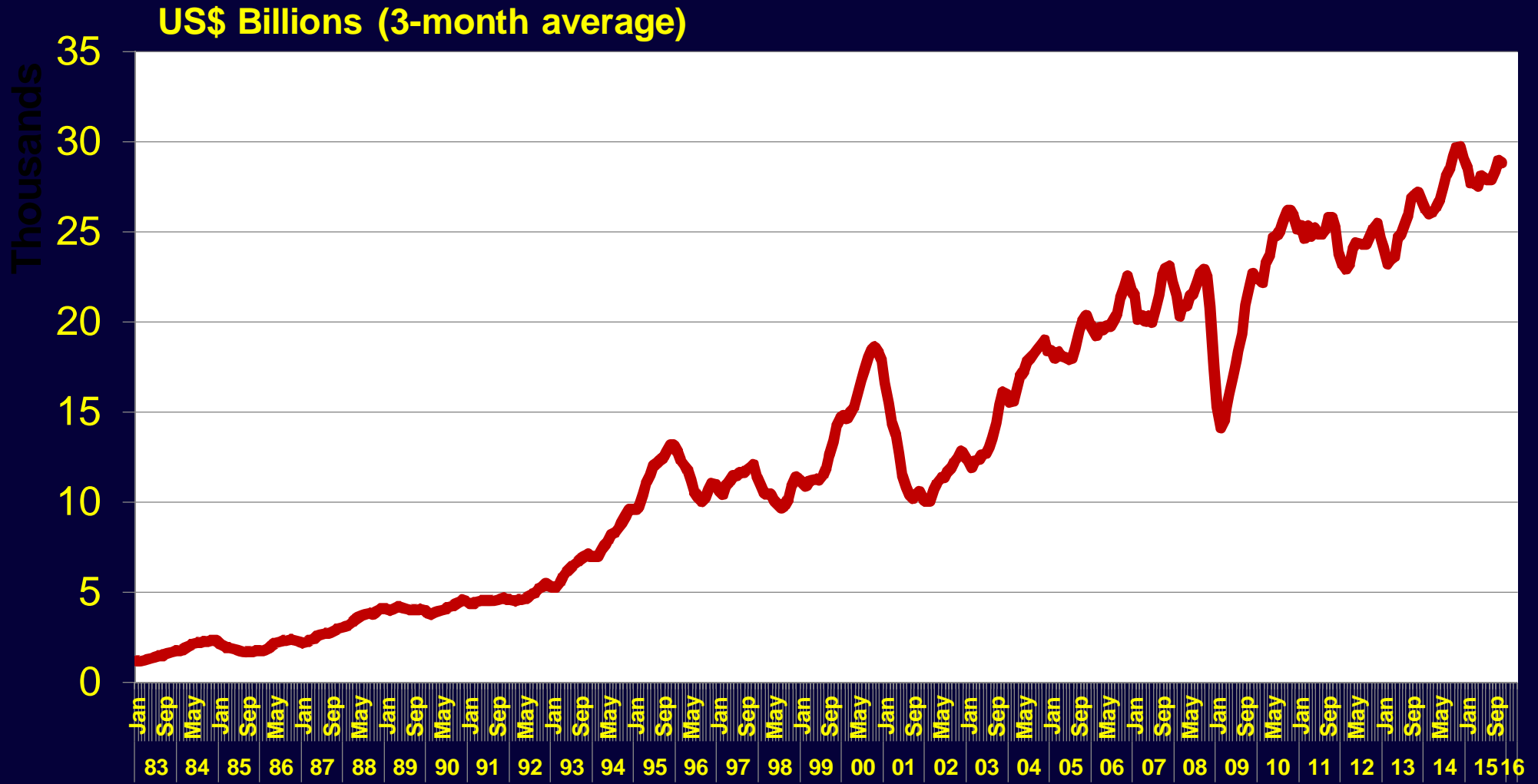
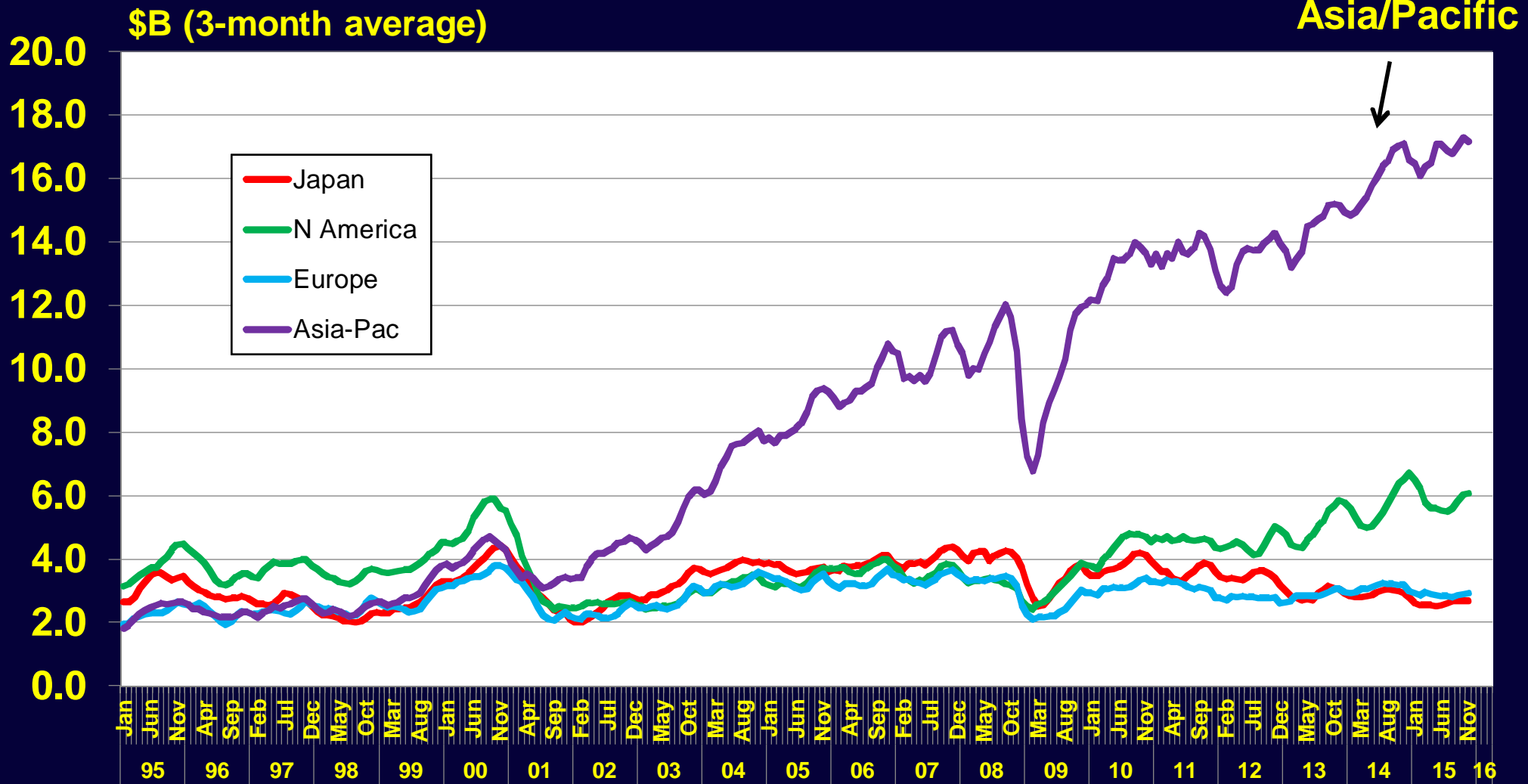


Chart 24

# Total Semiconductor Shipments to an Area

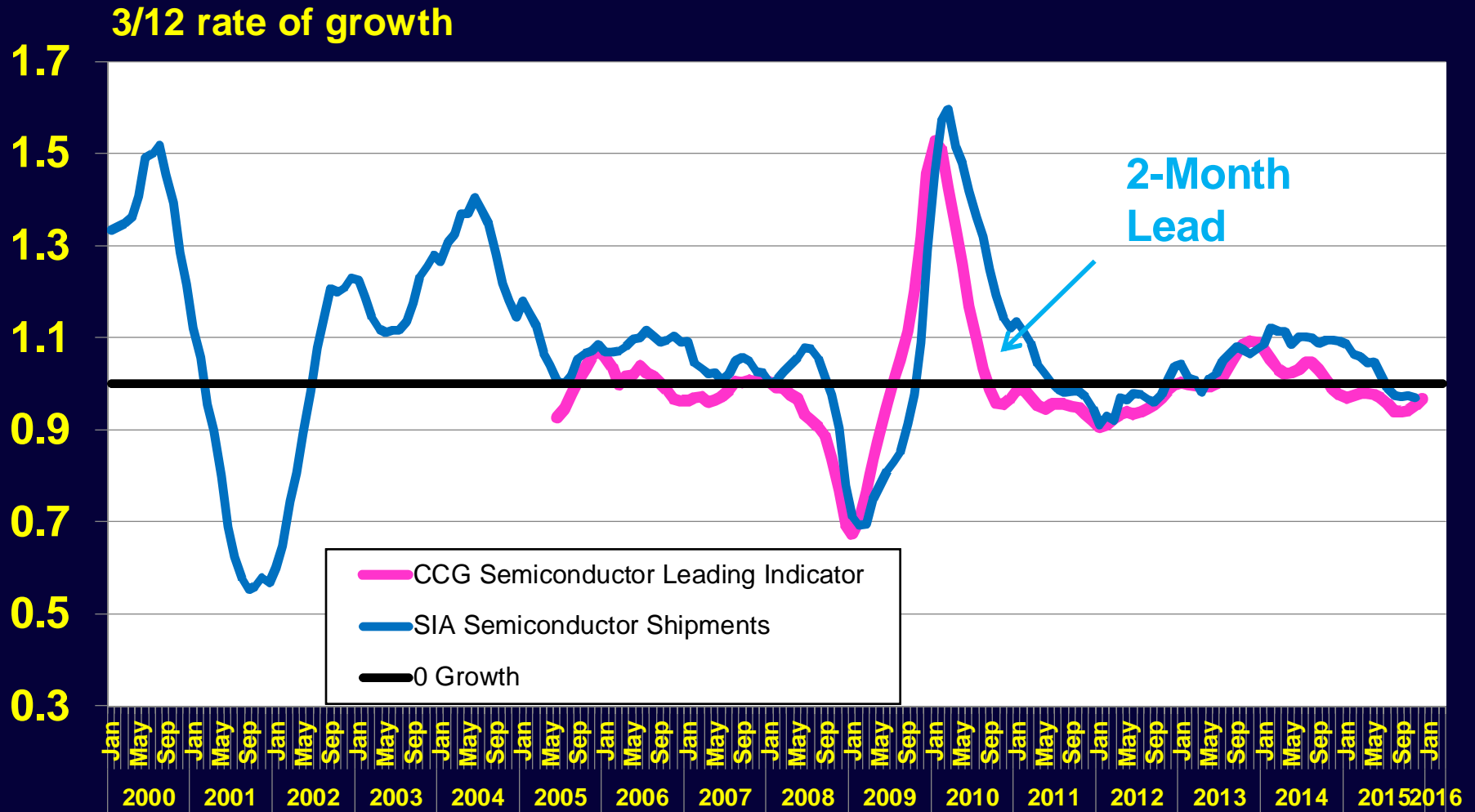
## Monthly Shipments - Reporting Firms



SIA website: [www.sia-online.org/](http://www.sia-online.org/)



# CCG Semiconductor Leading Indicator vs. Global Semiconductor Shipments



# Effect of Exchange Rates on Semiconductor Shipment Growth to Europe

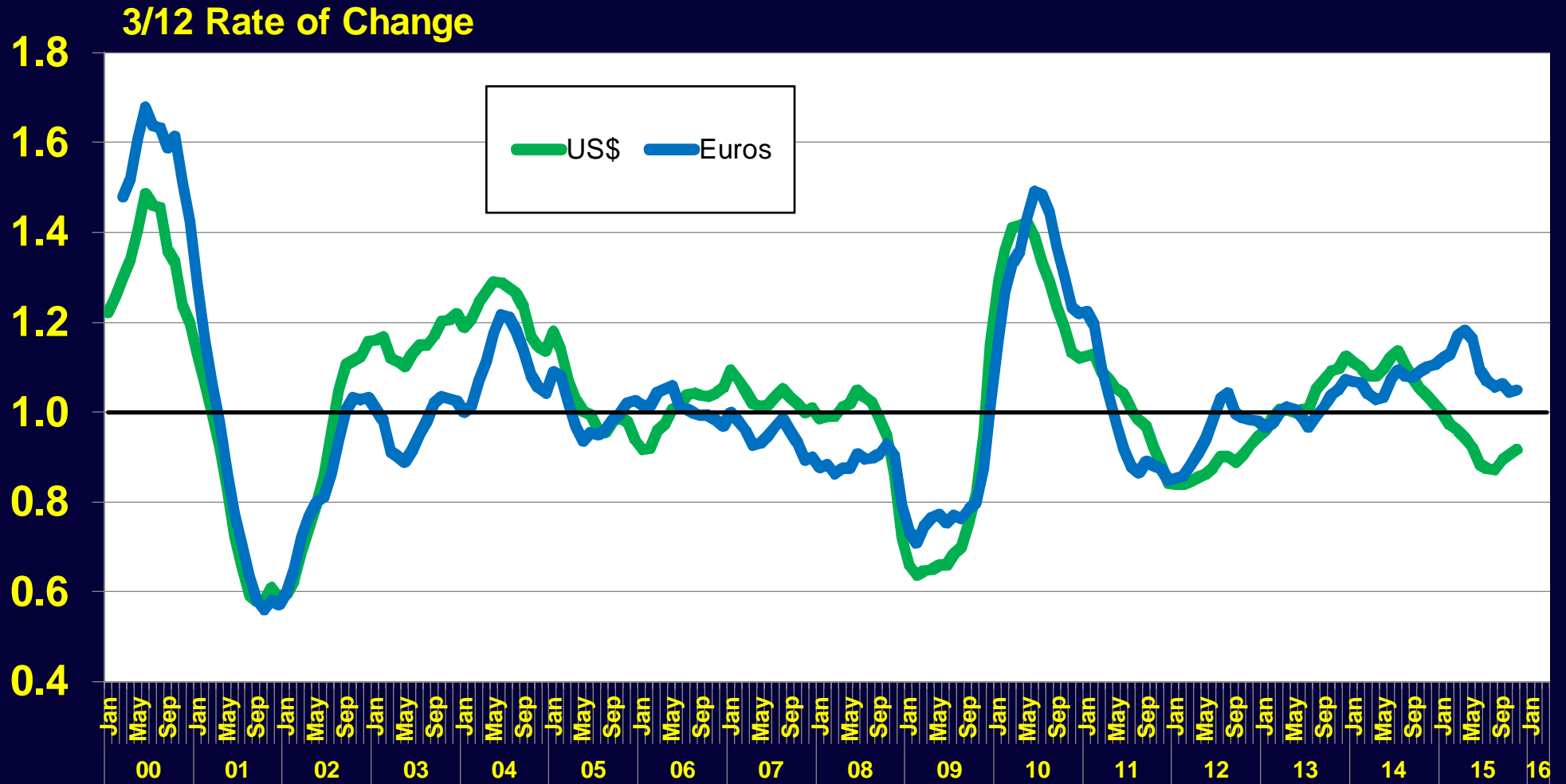
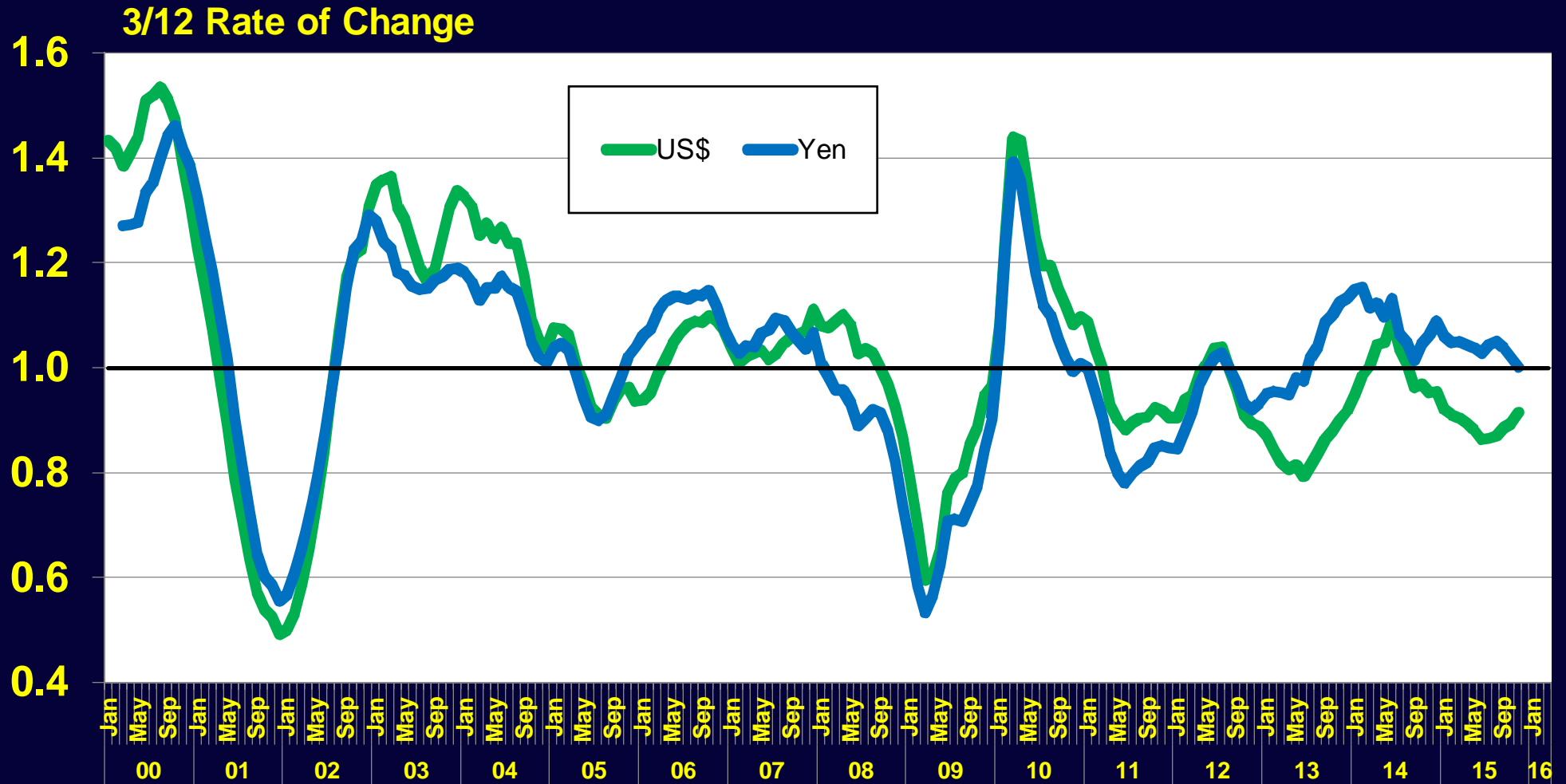


Chart 27

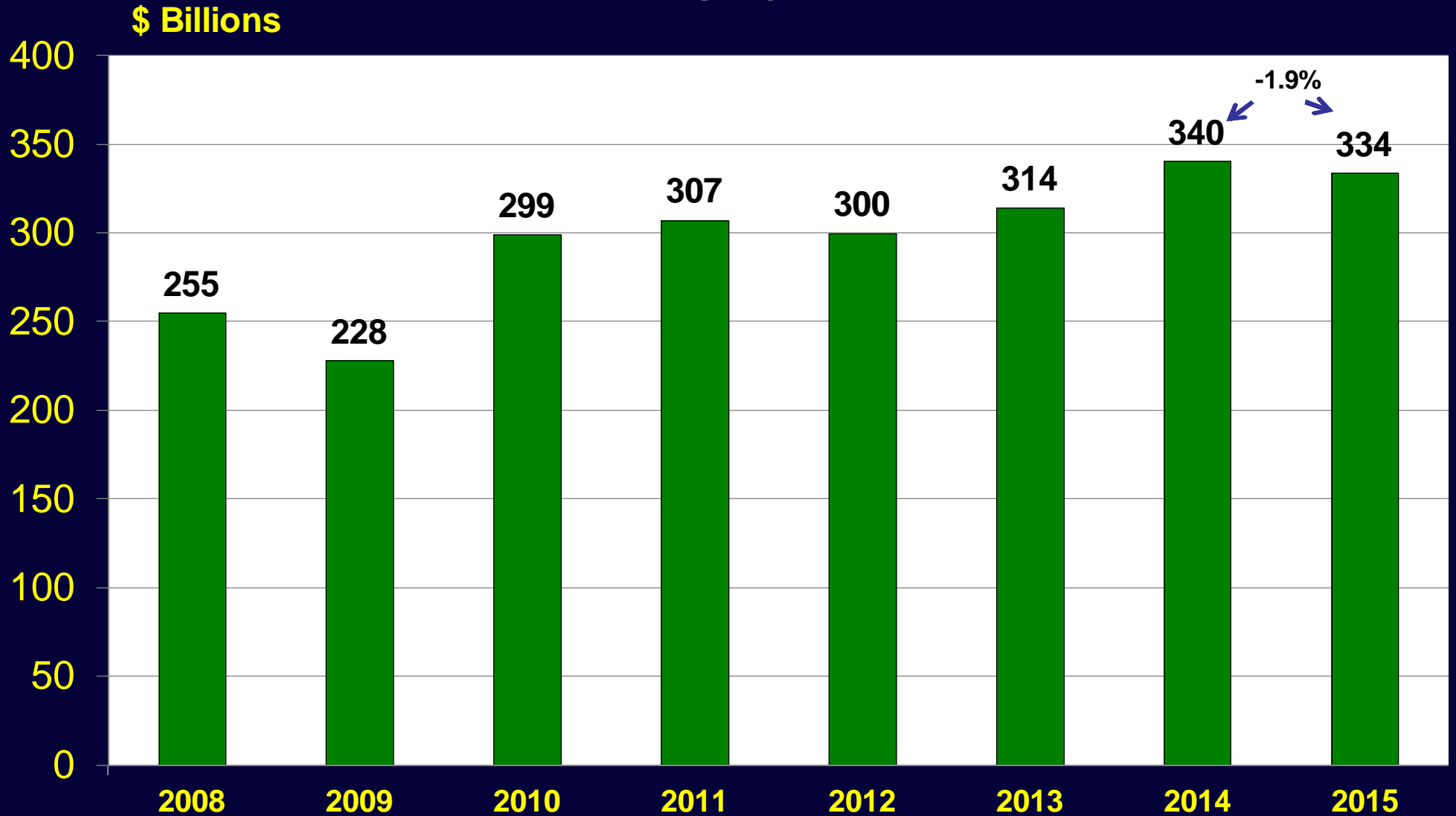
# Effect of Exchange Rates on Semiconductor Shipment Growth to Japan



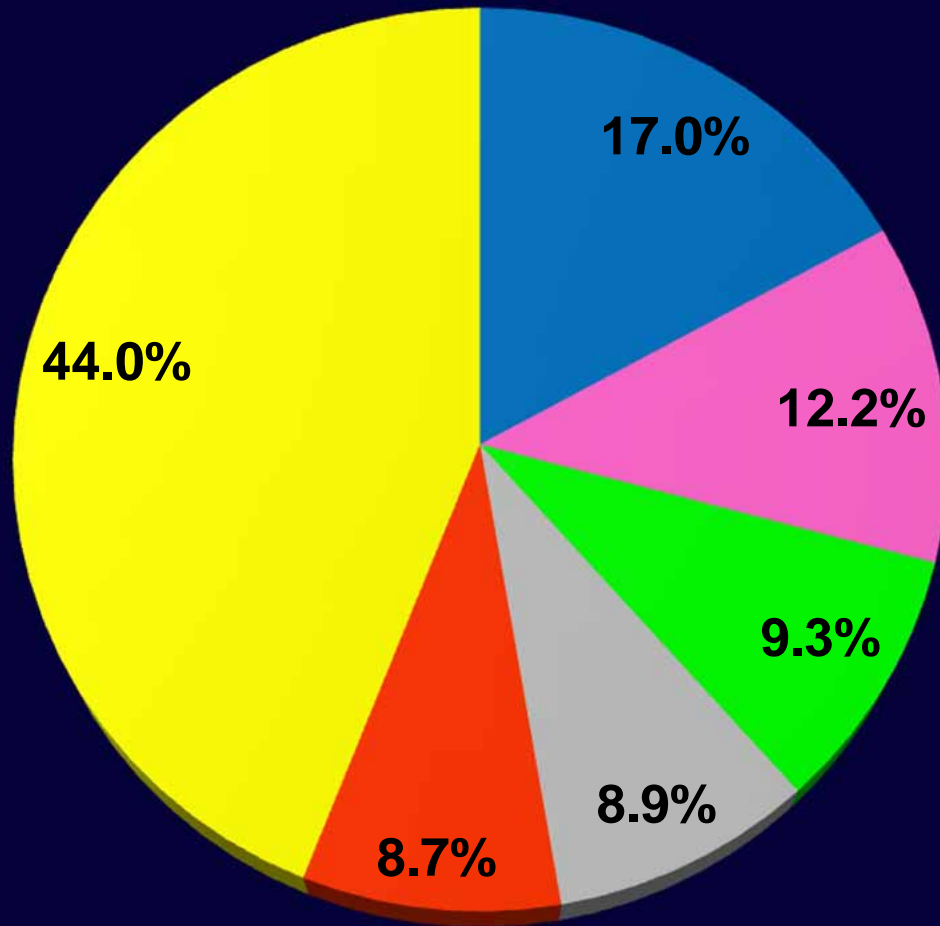
## 2015 Worldwide Semiconductor Vendors Top 10 by Revenue (US\$ millions)

<u>Rank</u>	<u>Maker</u>	<u>2015</u>	<u>2015/2014</u>
1	Intel	51,709	-1.2%
2	Samsung Electronics	38,855	11.8%
3	SK Hynix	16,494	3.1%
4	Qualcomm	15,936	-17.4%
5	Micron Technology	14,448	-11.2%
6	Texas Instruments	11,533	0%
7	Toshiba	9,622	-9.8%
8	Broadcom	8,419	-0.1%
9	STMicroelectronics	6,890	-6.6%
10	Infineon Technologies	6,630	16.5%
	Others	153,182	-3.0%
	<b>Total</b>	<b>333,718</b>	<b>-1.9%</b>

# World Semiconductor Sales Total

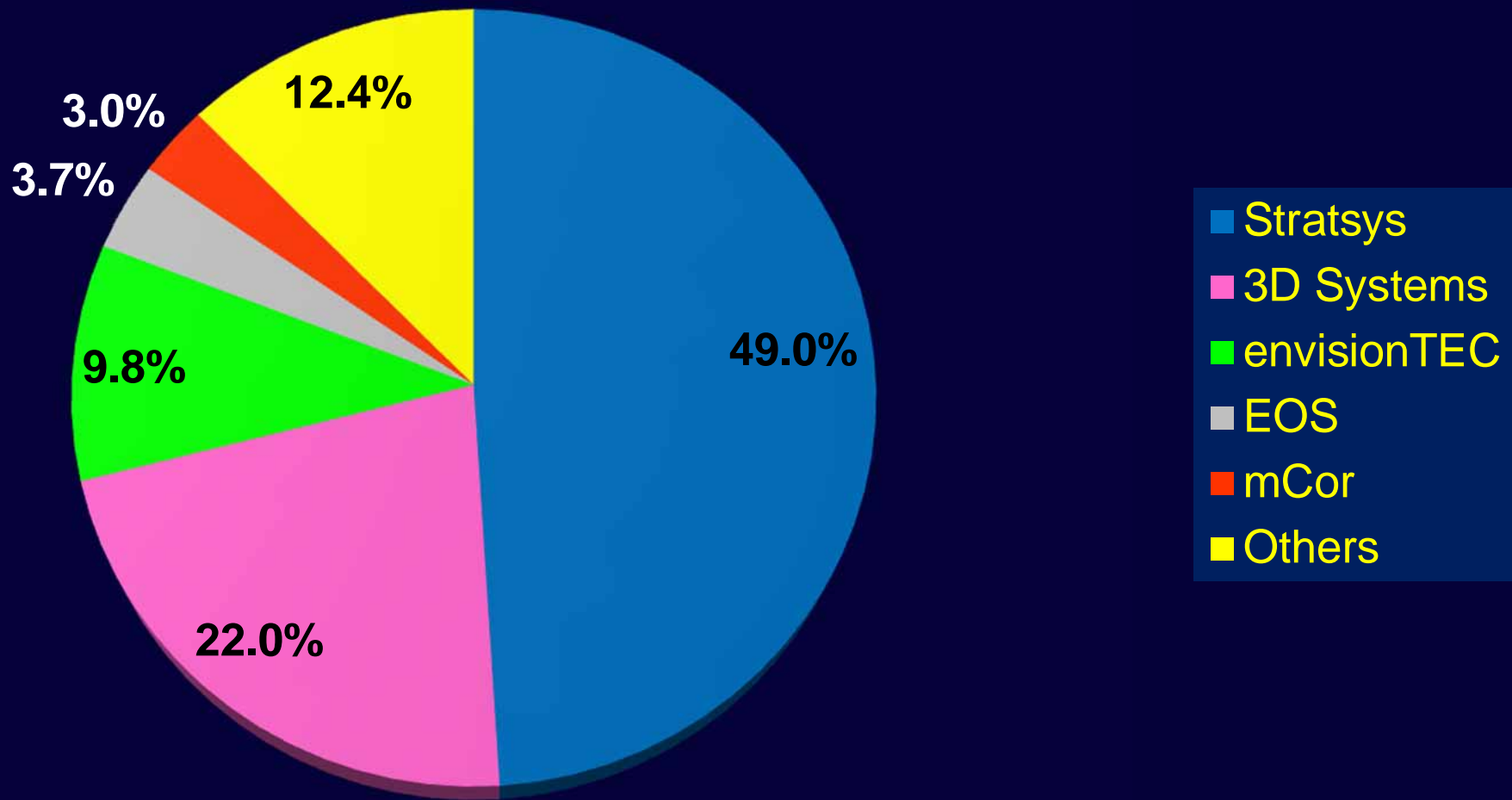


# World 3D Printer Unit Volumes Desktop/Personal Printers 1Q-3Q'15



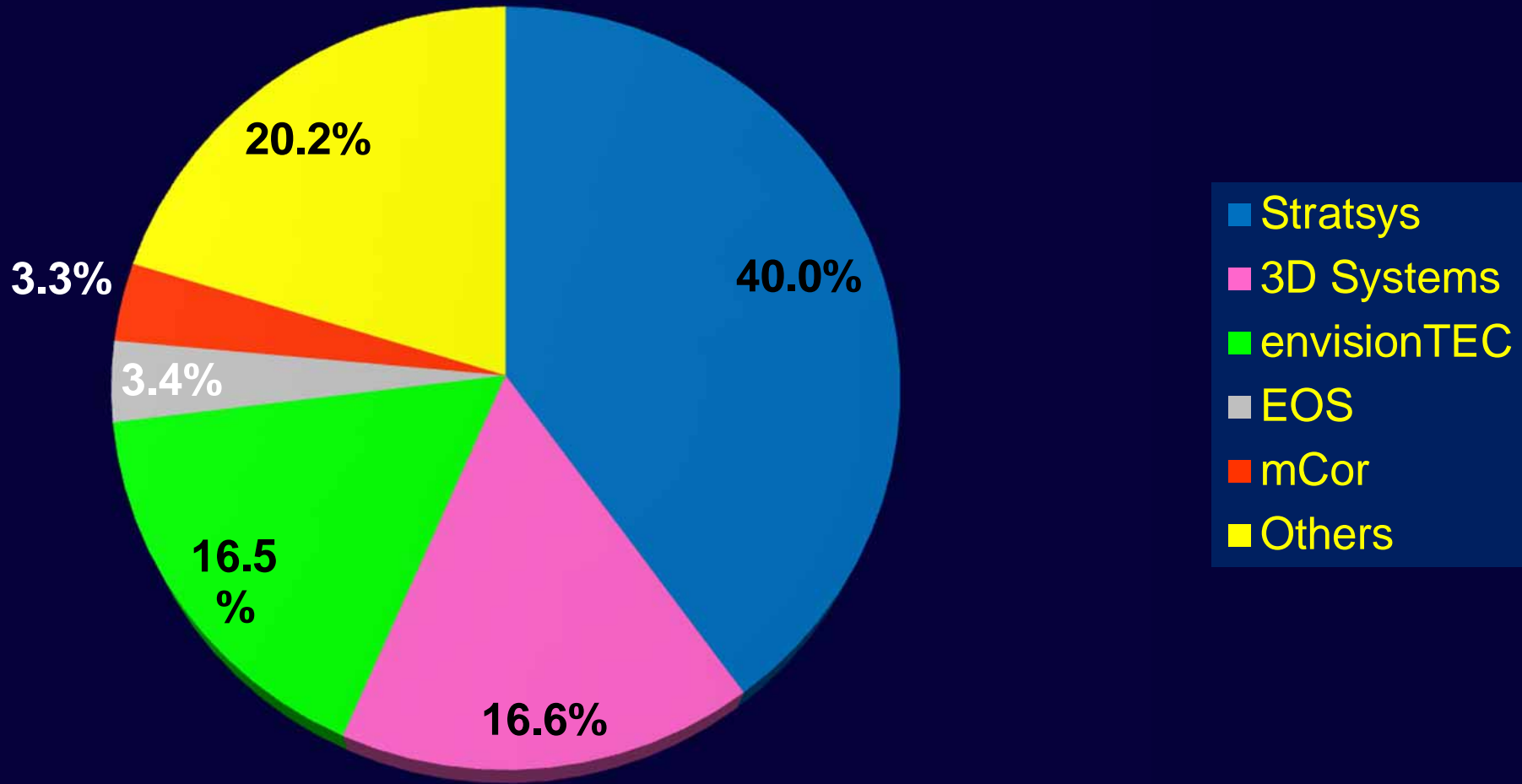
**TOTAL: 166,471 Units**

# World 3D Printer Unit Volumes Industrial/Professional Printers 1Q-3Q'15



**TOTAL: 8,792 Units**

# World 3D Printer Revenues Industrial/Professional Printers 1Q-3Q'15



**TOTAL: \$834,458 M**