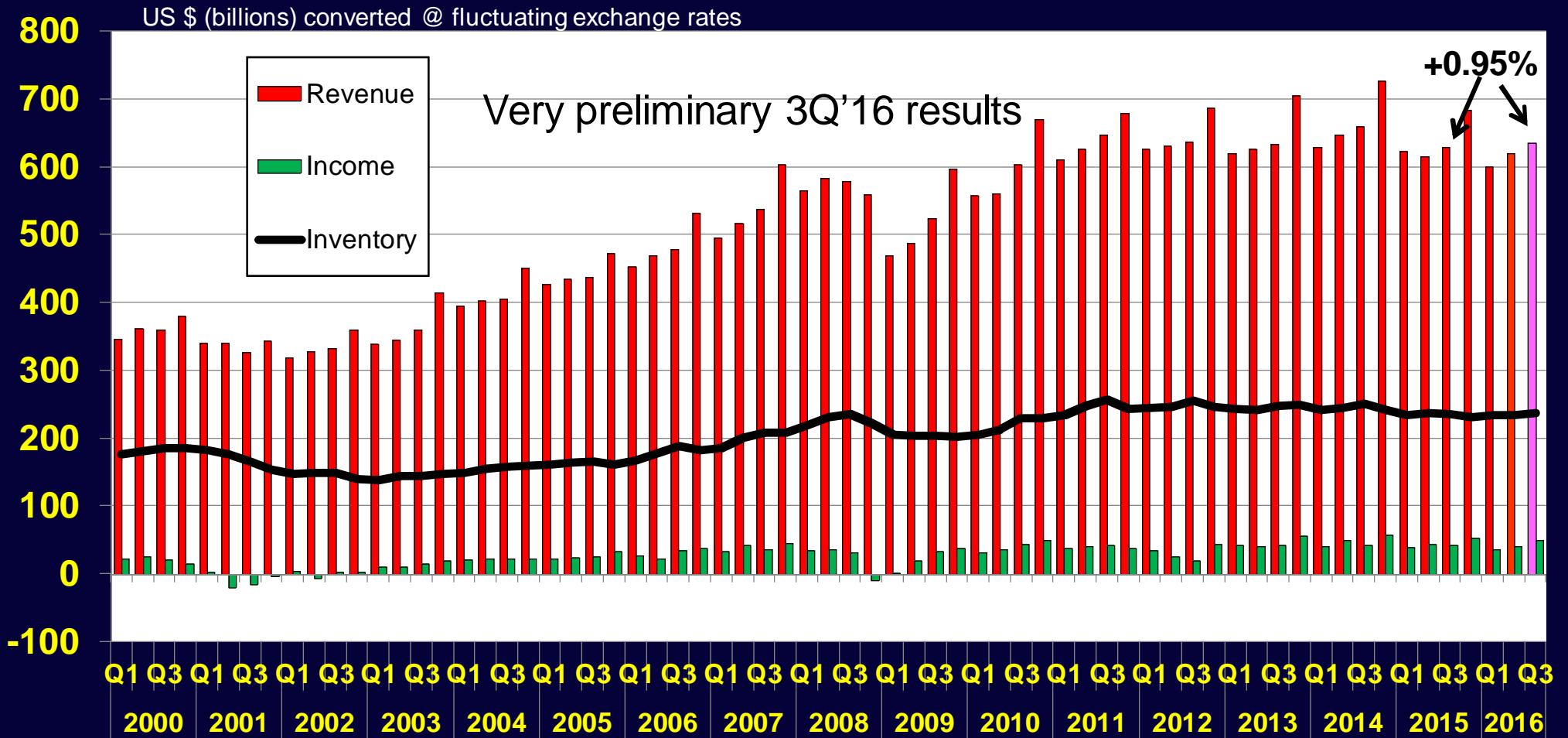


Chart 1

Electronic Equipment Suppliers

Composite of 213 Public Companies

Revenue, Net Income & Inventory

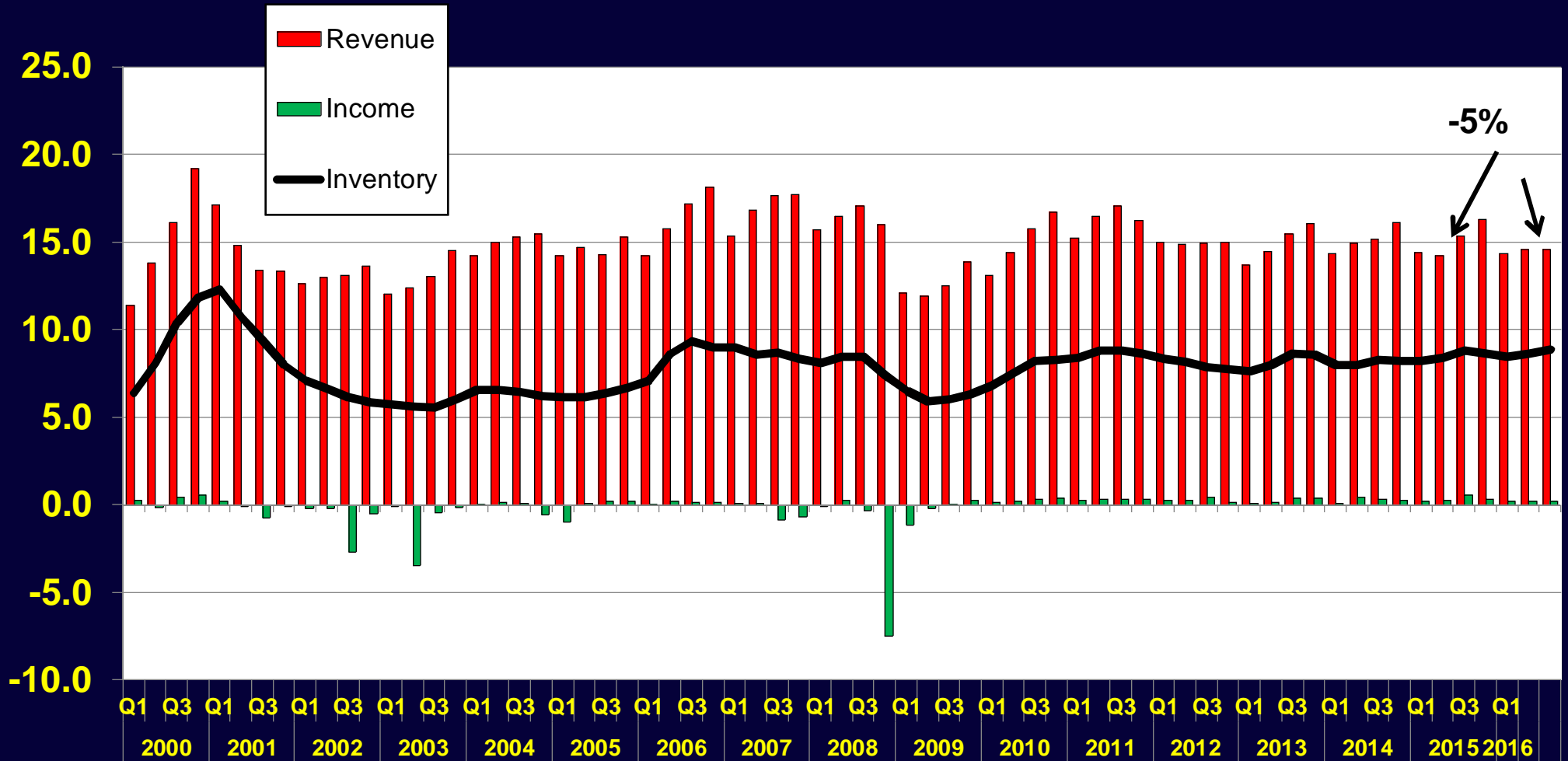


Computer 13, Internet 13, Storage 17, Communication 30, SEMI 40, Medical 21, Instruments 16, Military 21, Business & Office 6, Consumer 21, Automotive 15

Large U.S EMS Providers

Composite of 6 Public Companies

Revenue, Net Income & Inventory



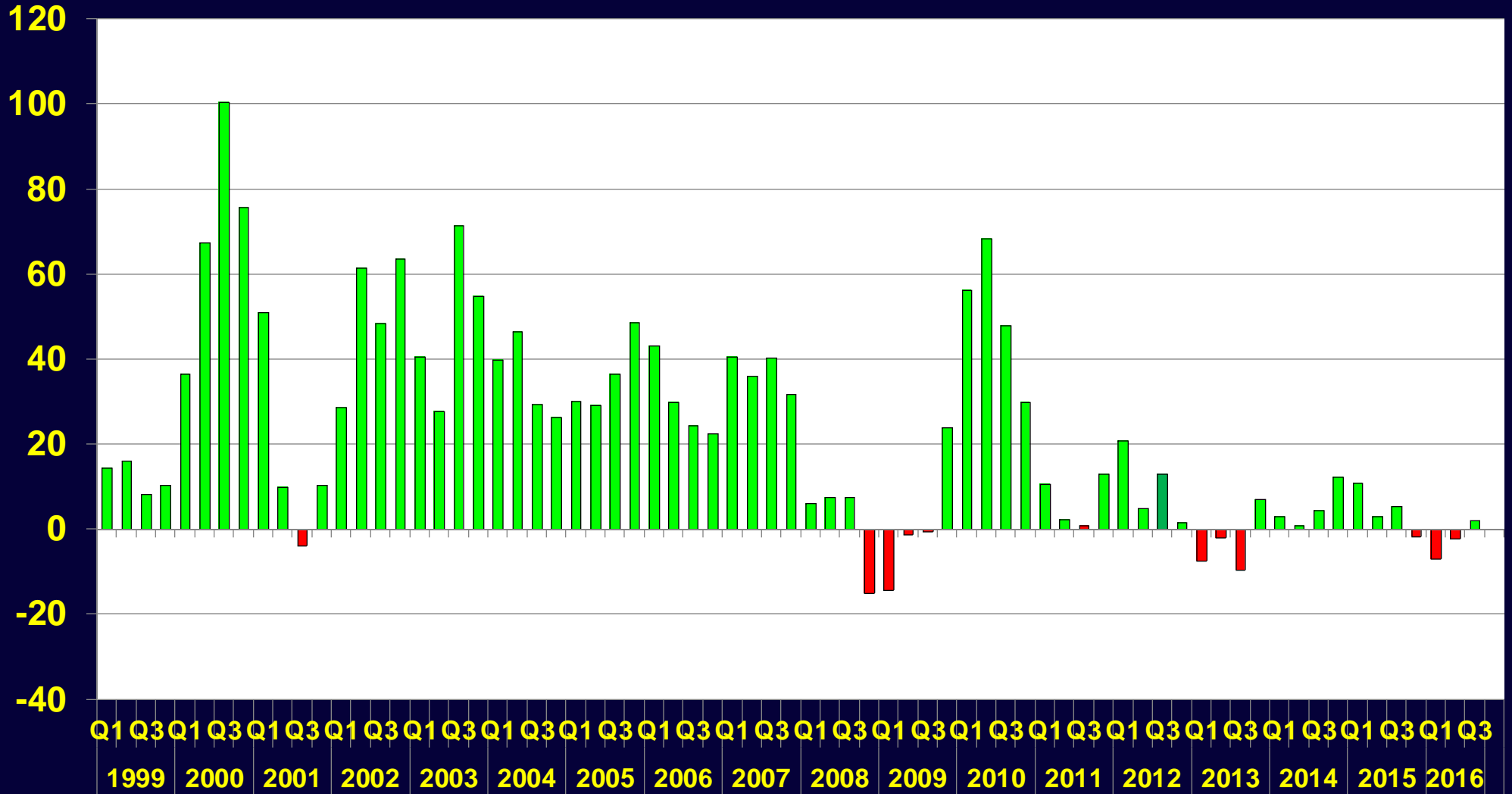
Benchmark+Pemstar, Celestica, Flex+Solectron, Jabil, Plexus, Sanmina

Chart 3

Large ODM Companies

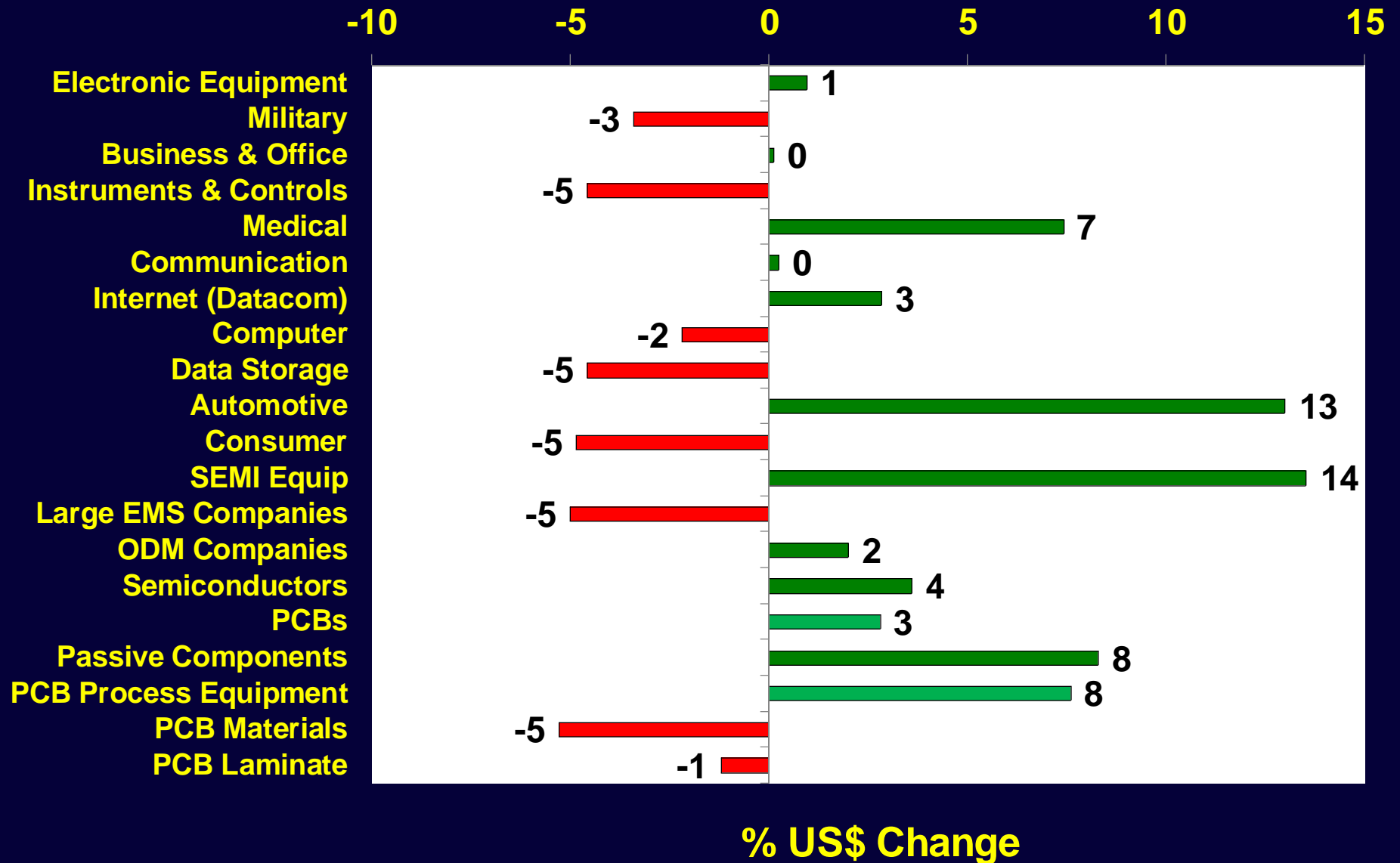
Composite of 10 Public Manufacturers

Quarterly Revenue Growth



Asustek Computer, Compal Electronics, Foxconn, Chimei Innolux, Inventec, Inventec Appliance, Lite On Technology, Mitac International, Pegatron, Quanta Computer, Wistron

Chart 4 **Global Electronic Supply Chain Growth**
3Q'16 vs. 3Q'15 (very preliminary estimate)



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

World Semiconductor Shipments

Monthly US\$

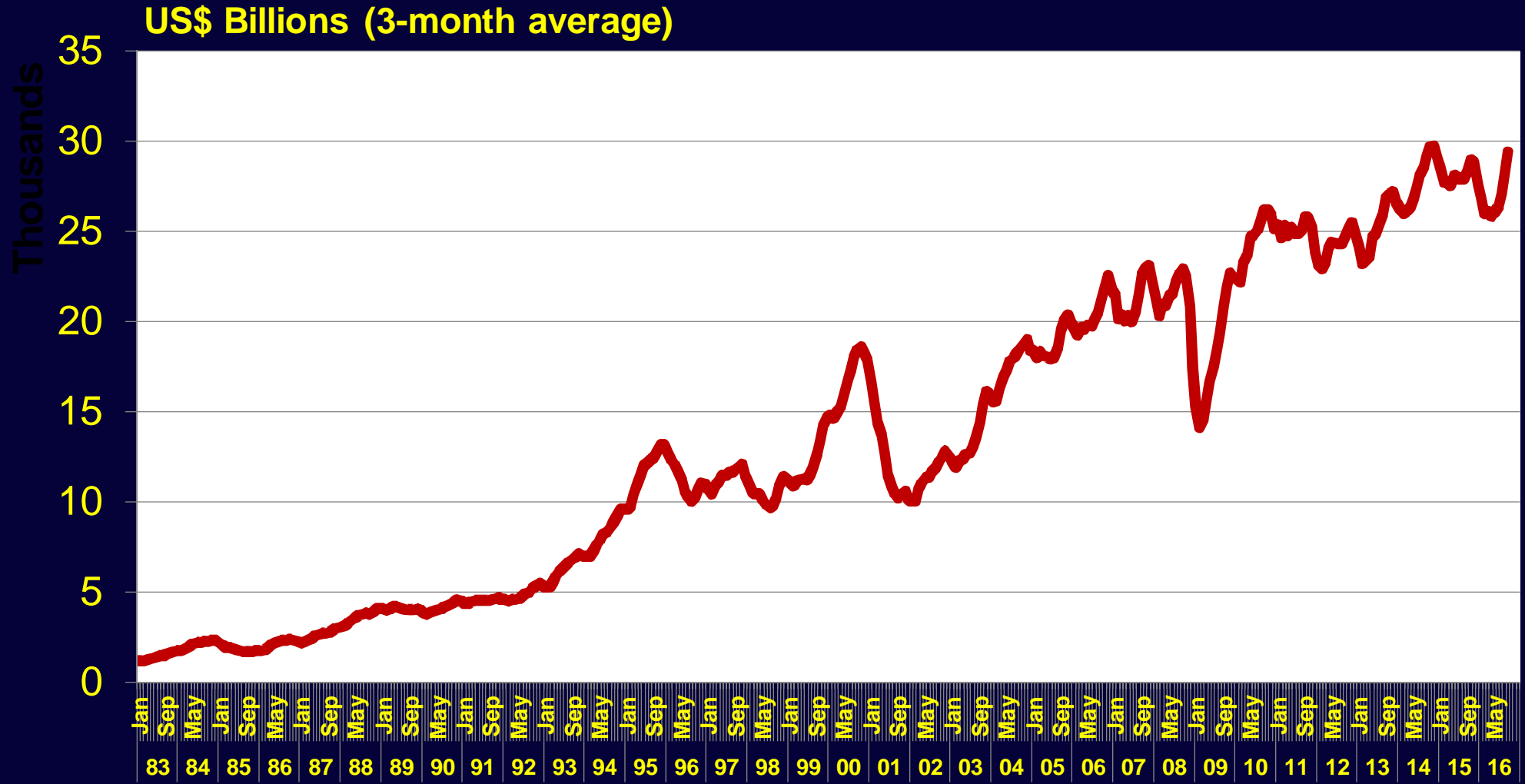


Chart 6

CCG Semiconductor Leading Indicator vs. Global Semiconductor Shipments

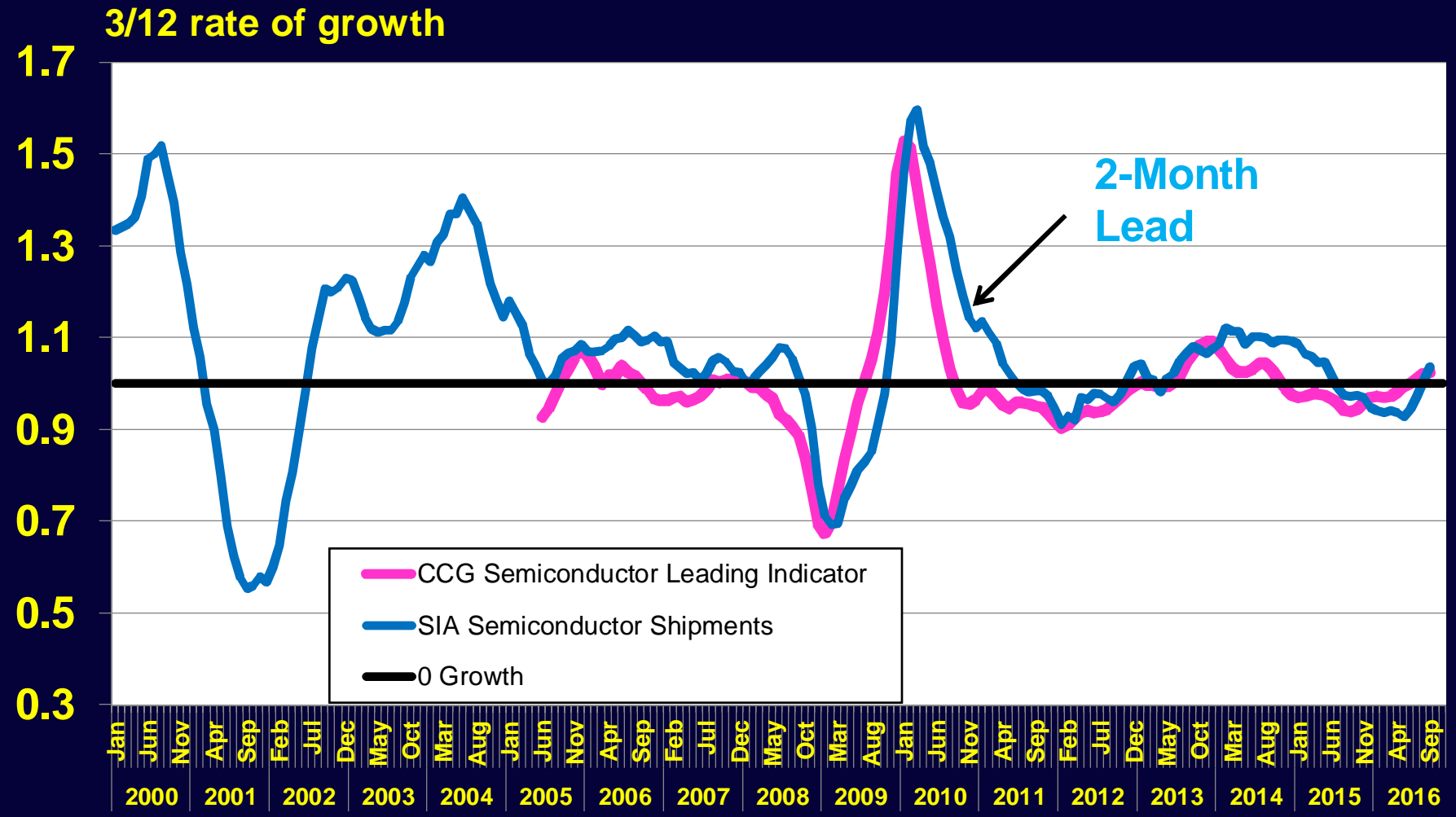


Chart 7

Total Semiconductor Shipments to an Area

Monthly Shipments - Reporting Firms

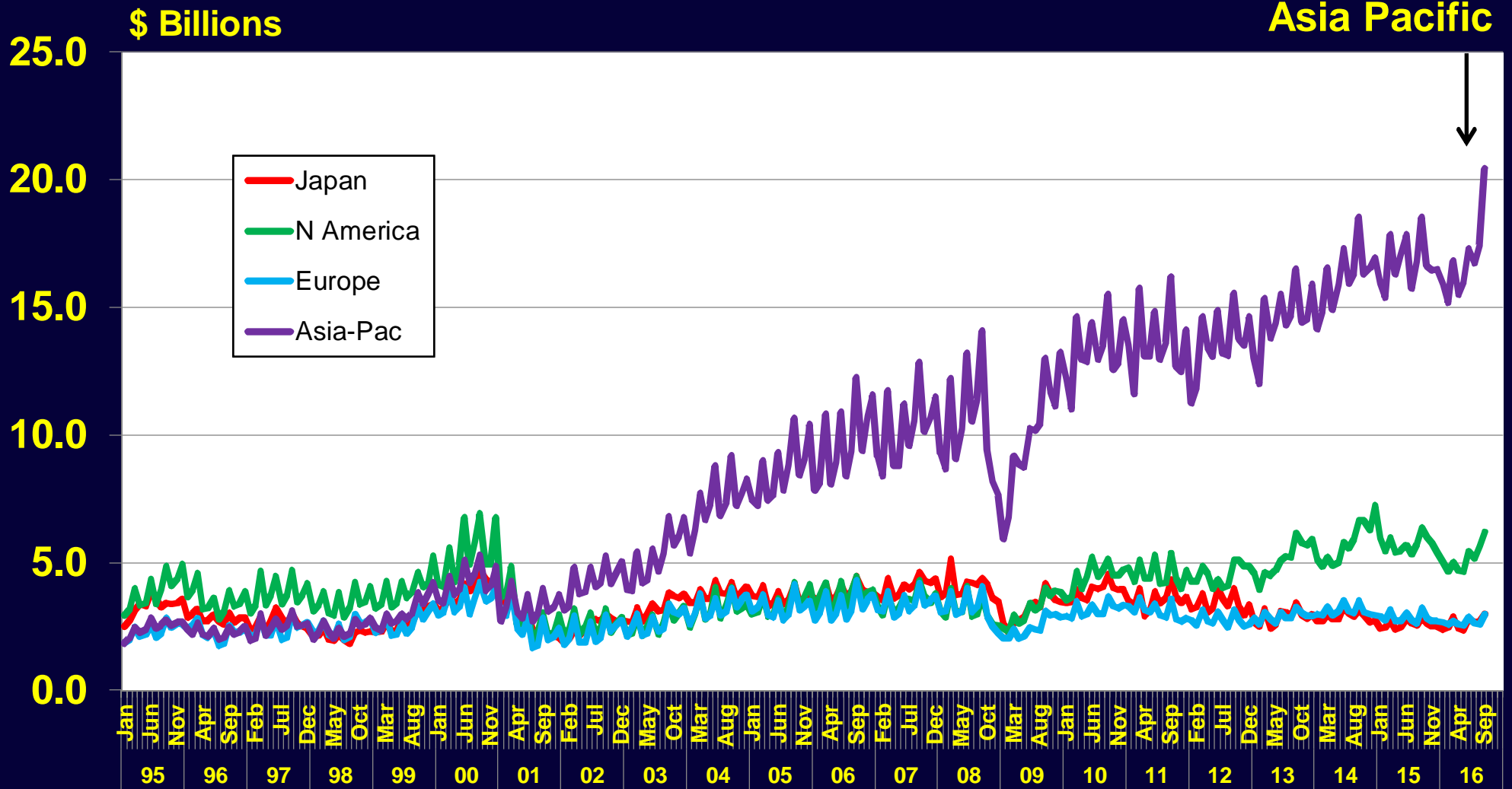
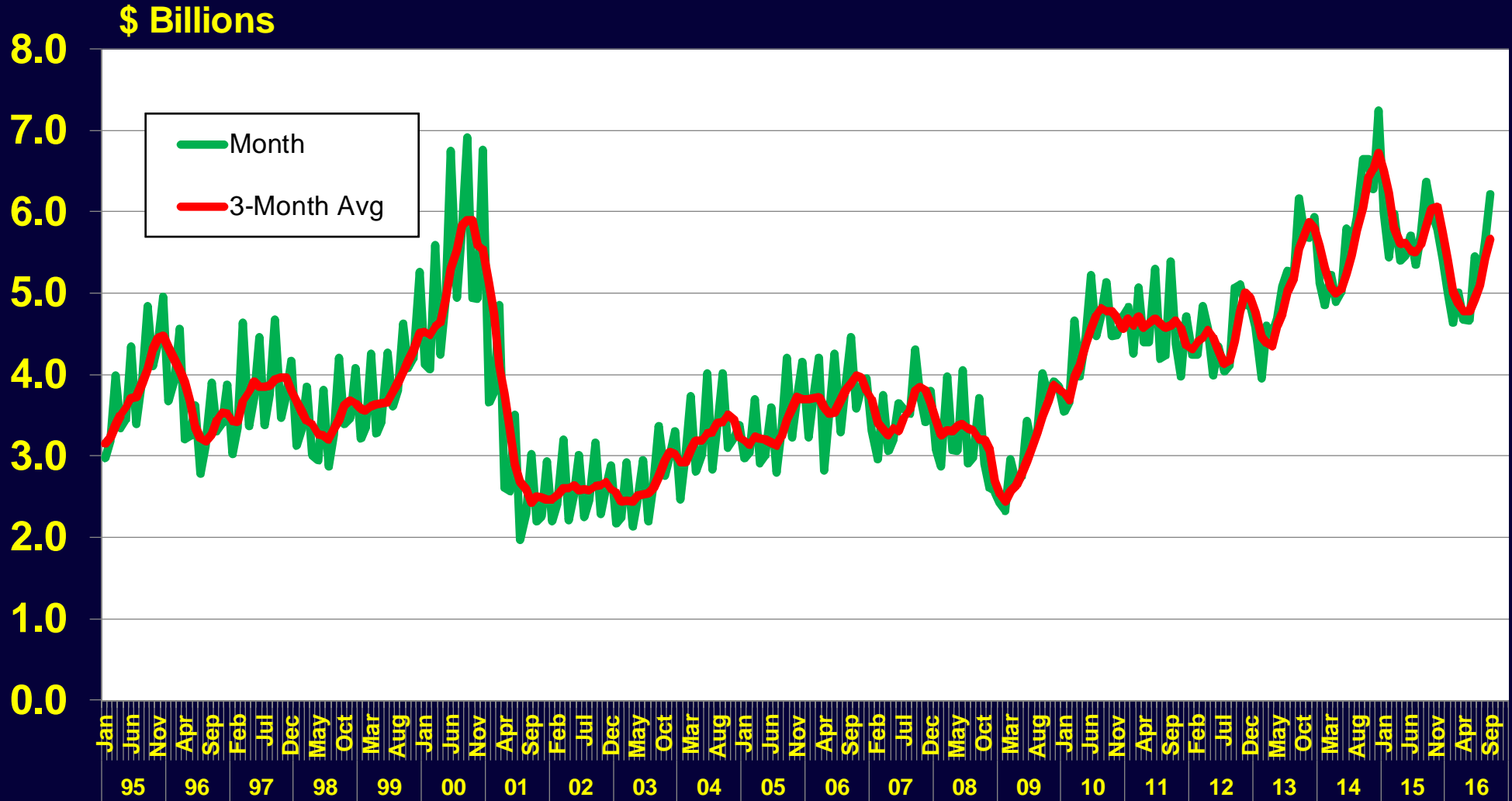


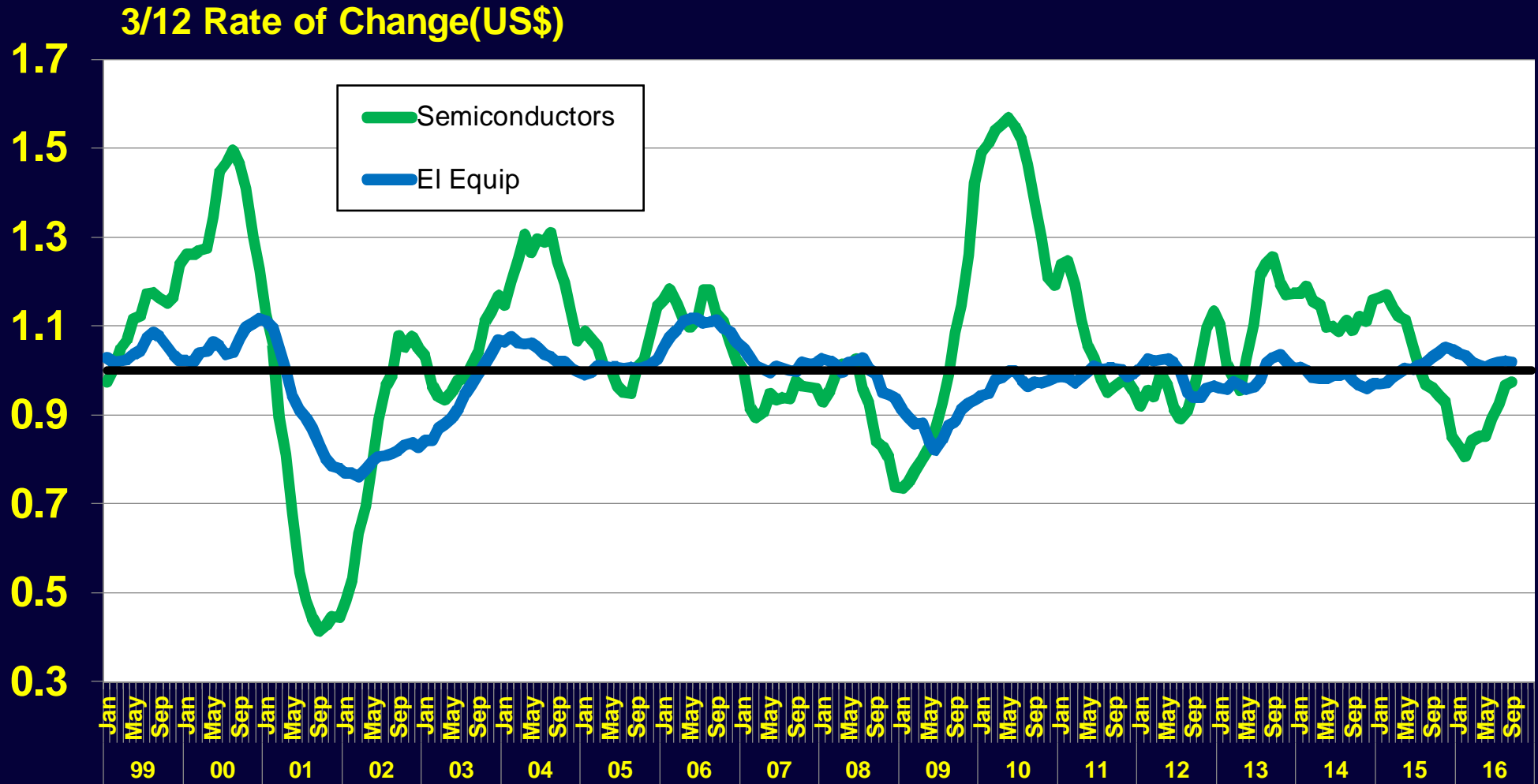
Chart 8

N American Semiconductor Shipments

Monthly & 3-Month Average Shipments



Semiconductor Shipments to N. America vs. U.S Electronic Equipment Production



Total \$ Semiconductor Shipments from All Countries to N. America www.sia-online.org/
U.S. Electronic Equipment Shipments www.census.gov/indicator/www/m3/

Chart 10

Monthly Semiconductor Shipments \$ Billions (3-month avg in US\$)

	<u>9/15</u>	<u>9/16</u>	<u>% CH</u>
Americas	5.82	5.68	- 2.4%
Europe	2.87	2.76	- 4.0%
Japan	2.69	2.80	+ 4.2%
China	8.45	9.47	+ 12.0%
Asia Pacific / All Other	8.58	8.73	+ 1.7%
Total	28.41	29.43	+ 3.6%

Chart 11

U.S. Electronic Equipment Orders & Shipments

Computer, Communications, Measurement & Control and Military

\$ Billions (monthly, seasonally adjusted)

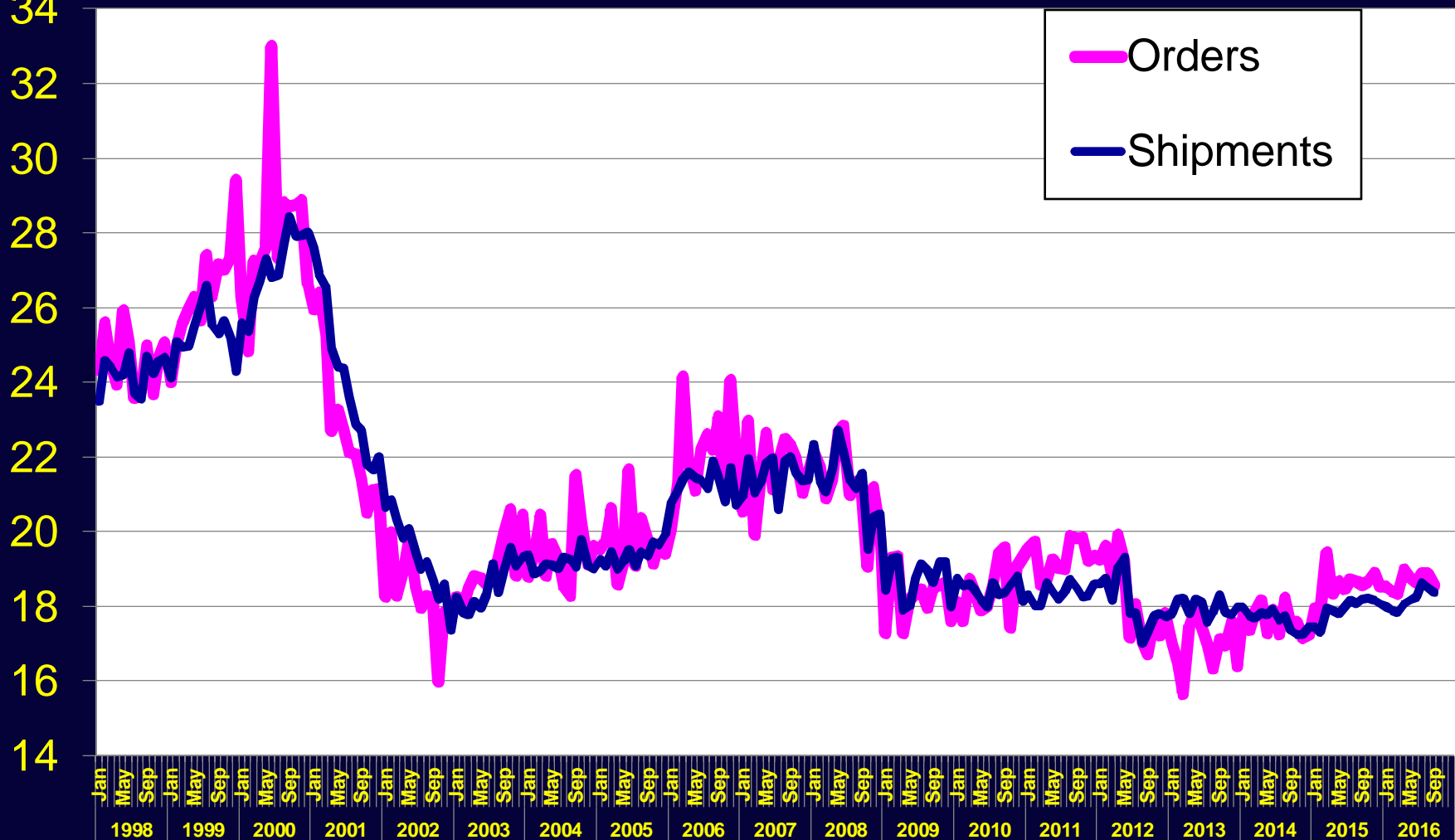
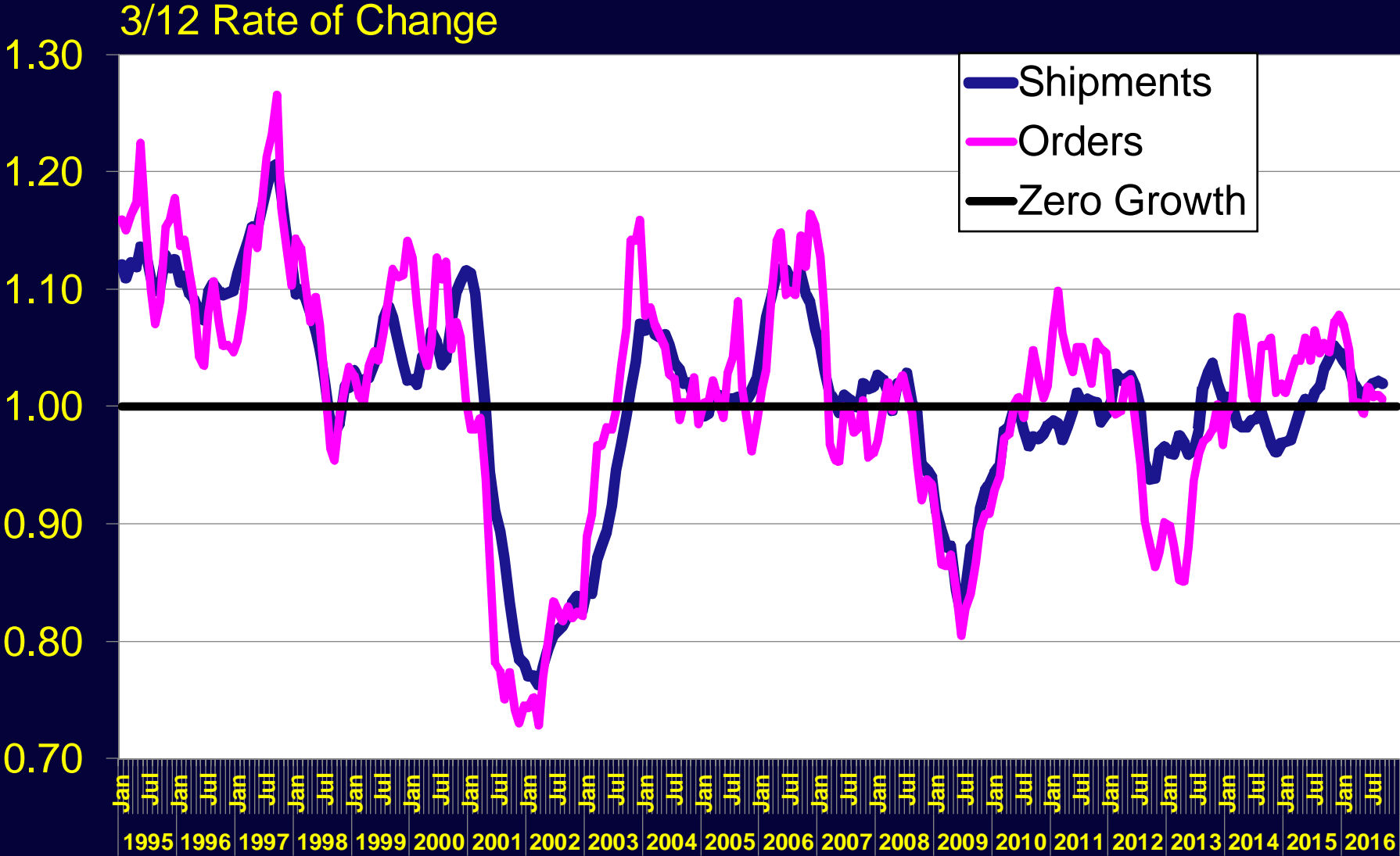


Chart 12

U.S. Electronic Equipment Order & Shipment Growth

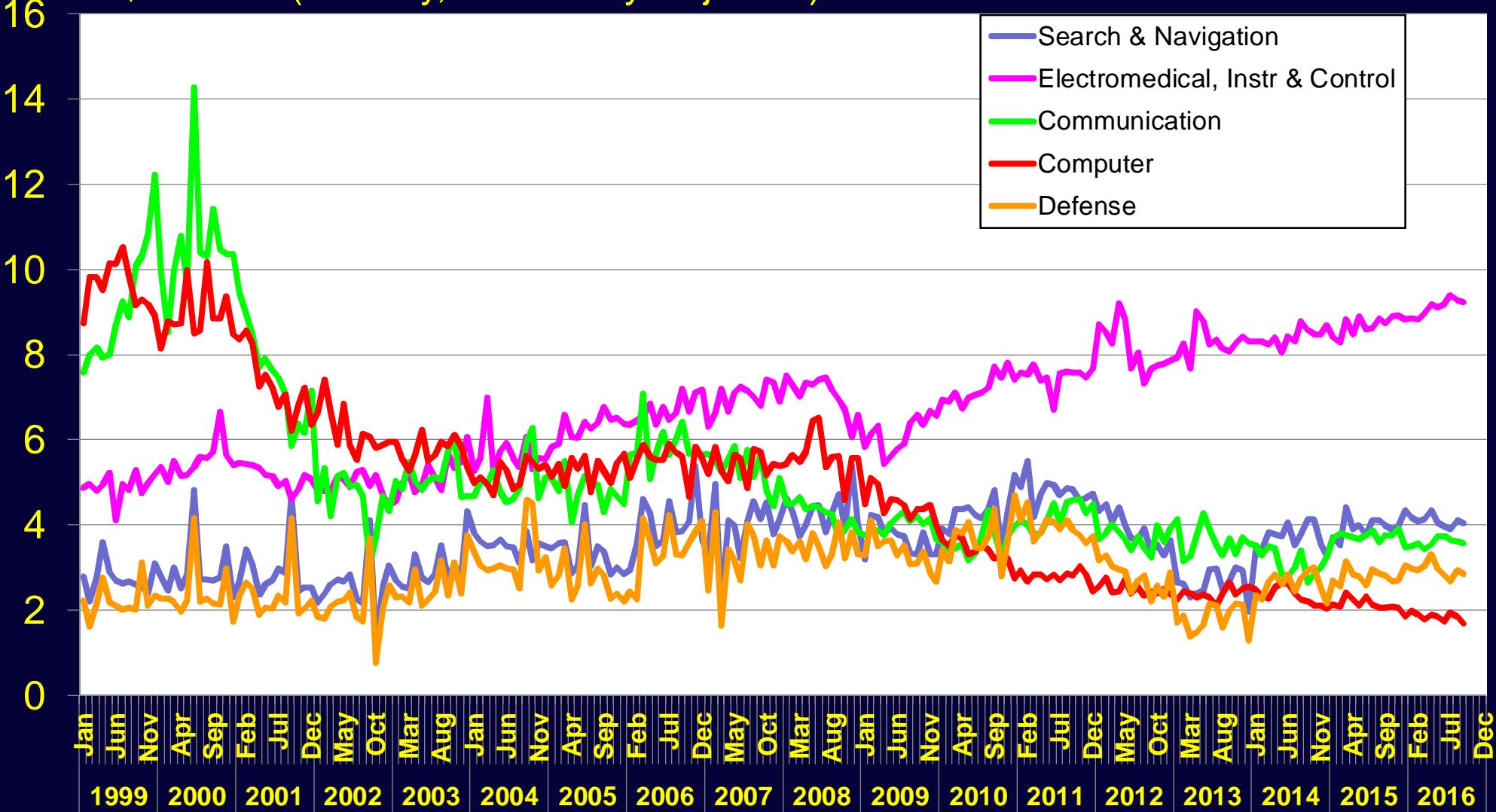
Computer, Communications, Measurement & Control and Military



U.S. Electronic Equipment Orders

Monthly Data

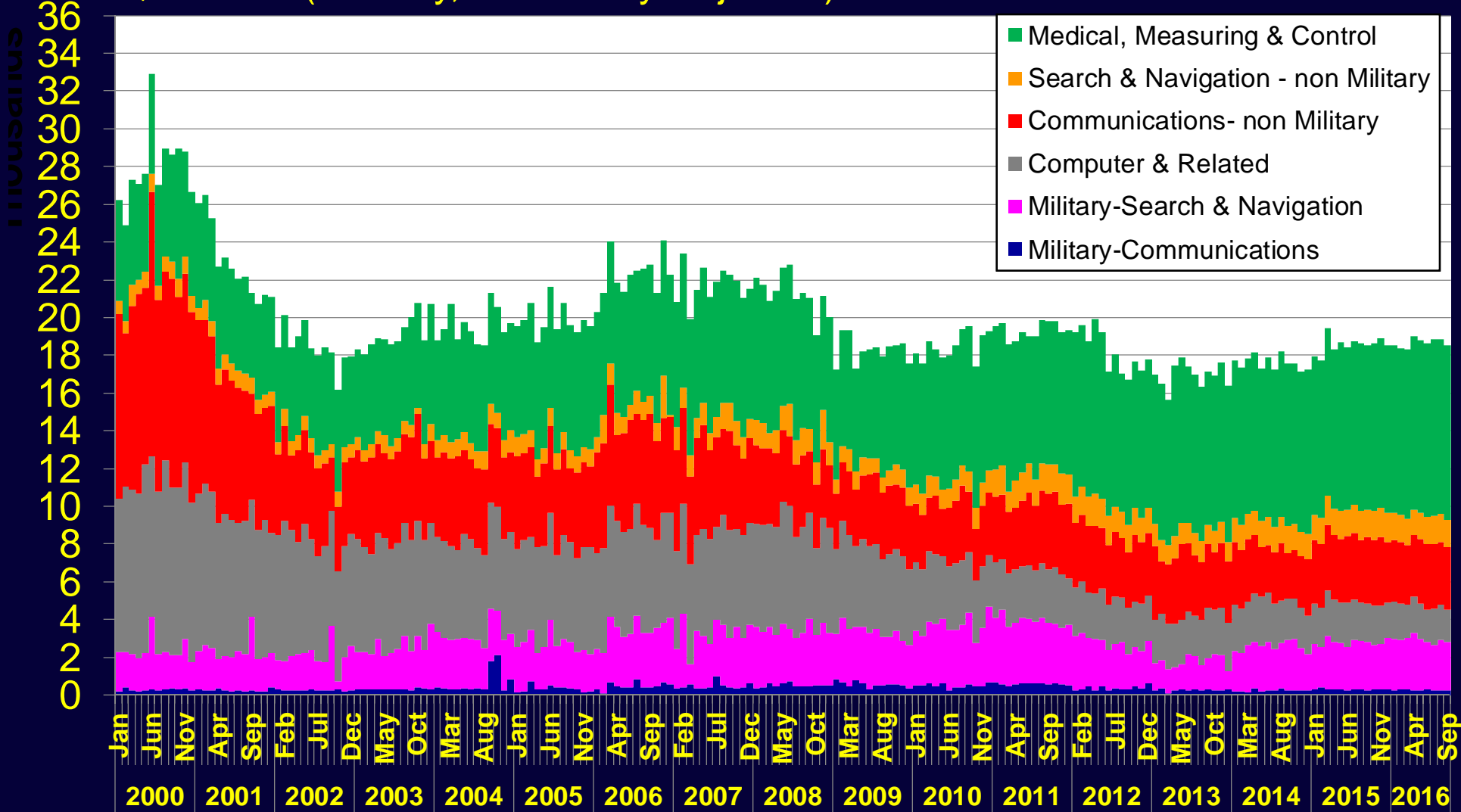
\$ Billions (monthly, seasonally adjusted)



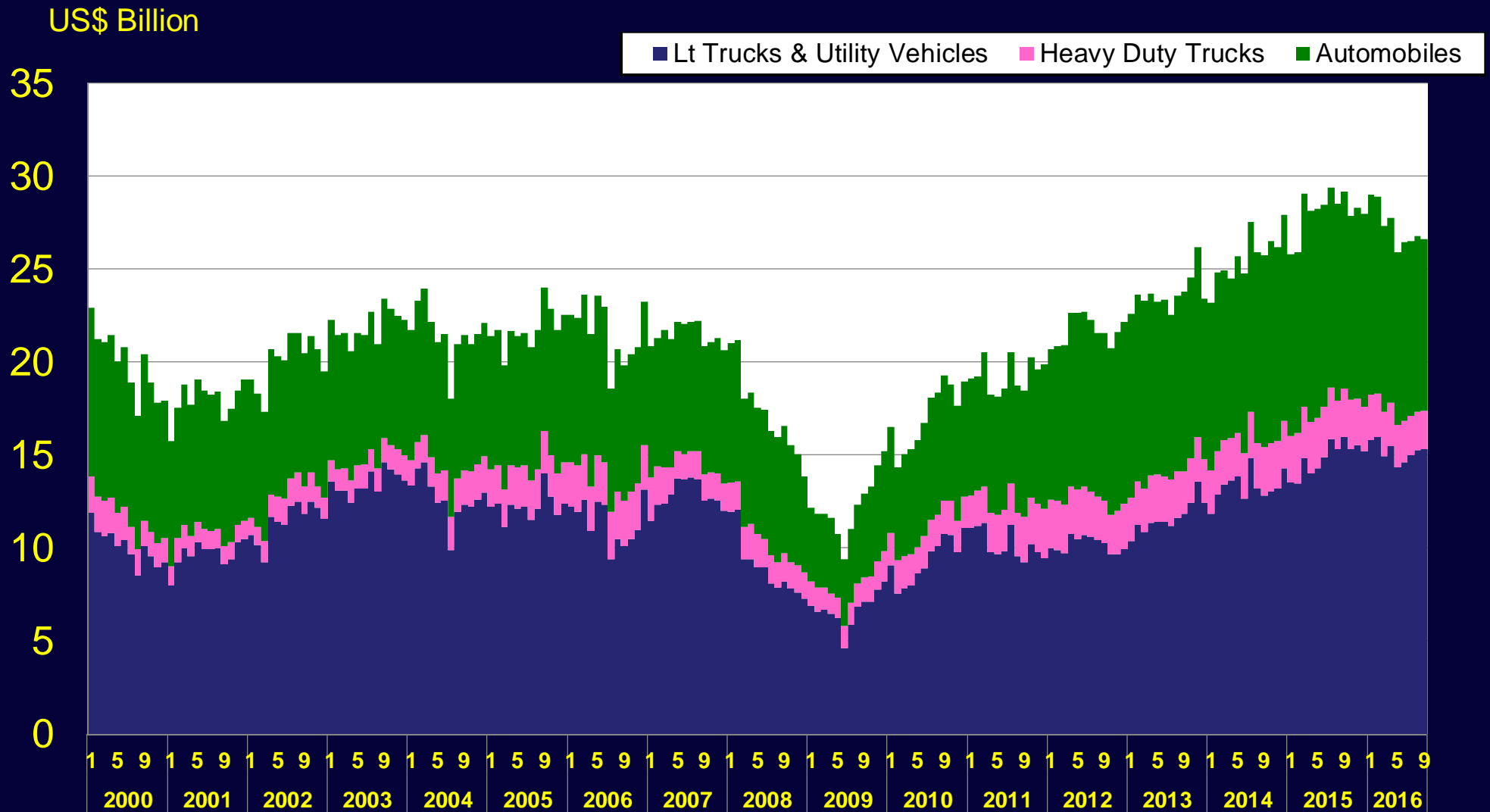
U.S. Electronic Equipment Orders

Monthly Data

\$ Billions (monthly, seasonally adjusted)



U.S. Vehicle Shipments



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

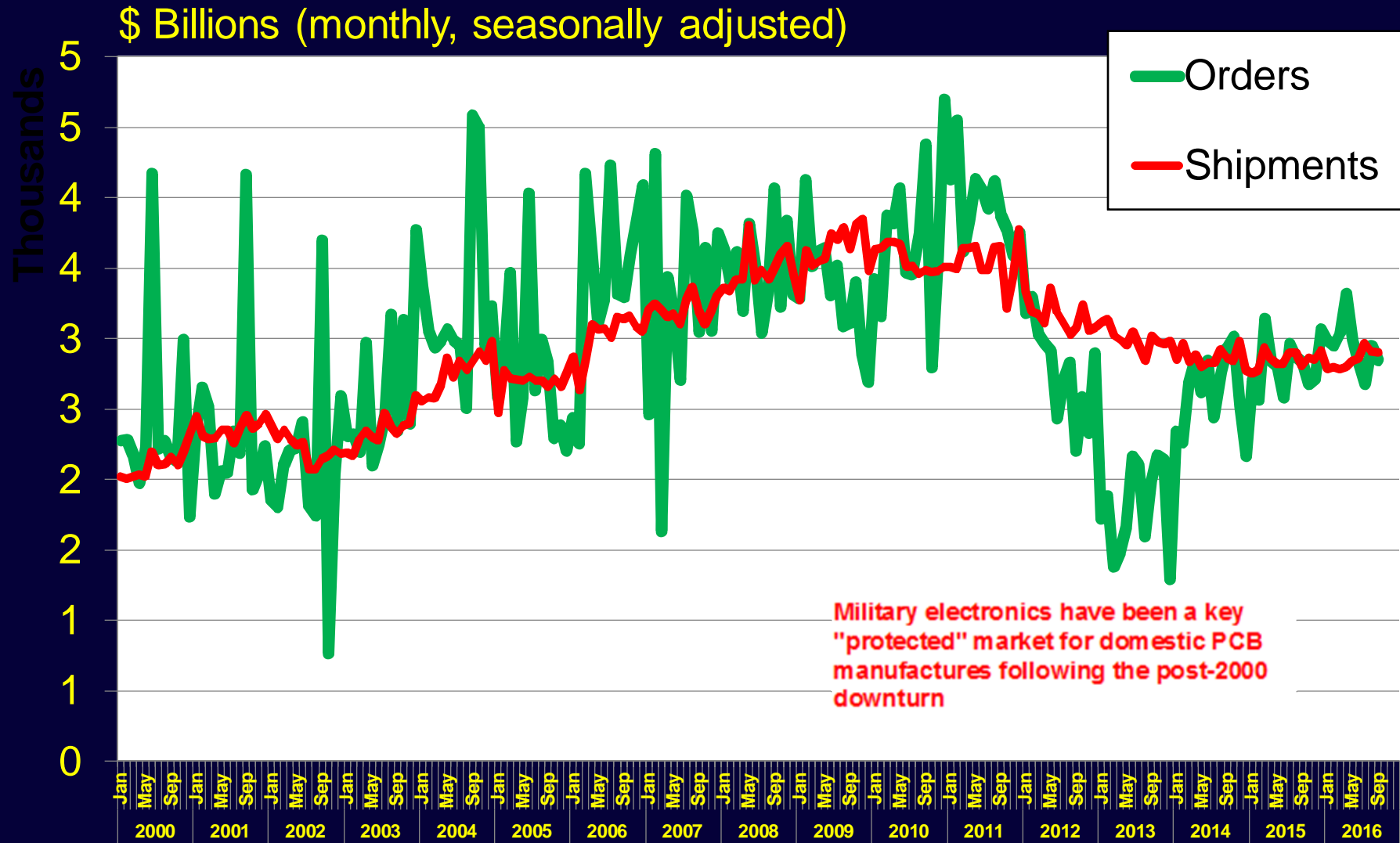
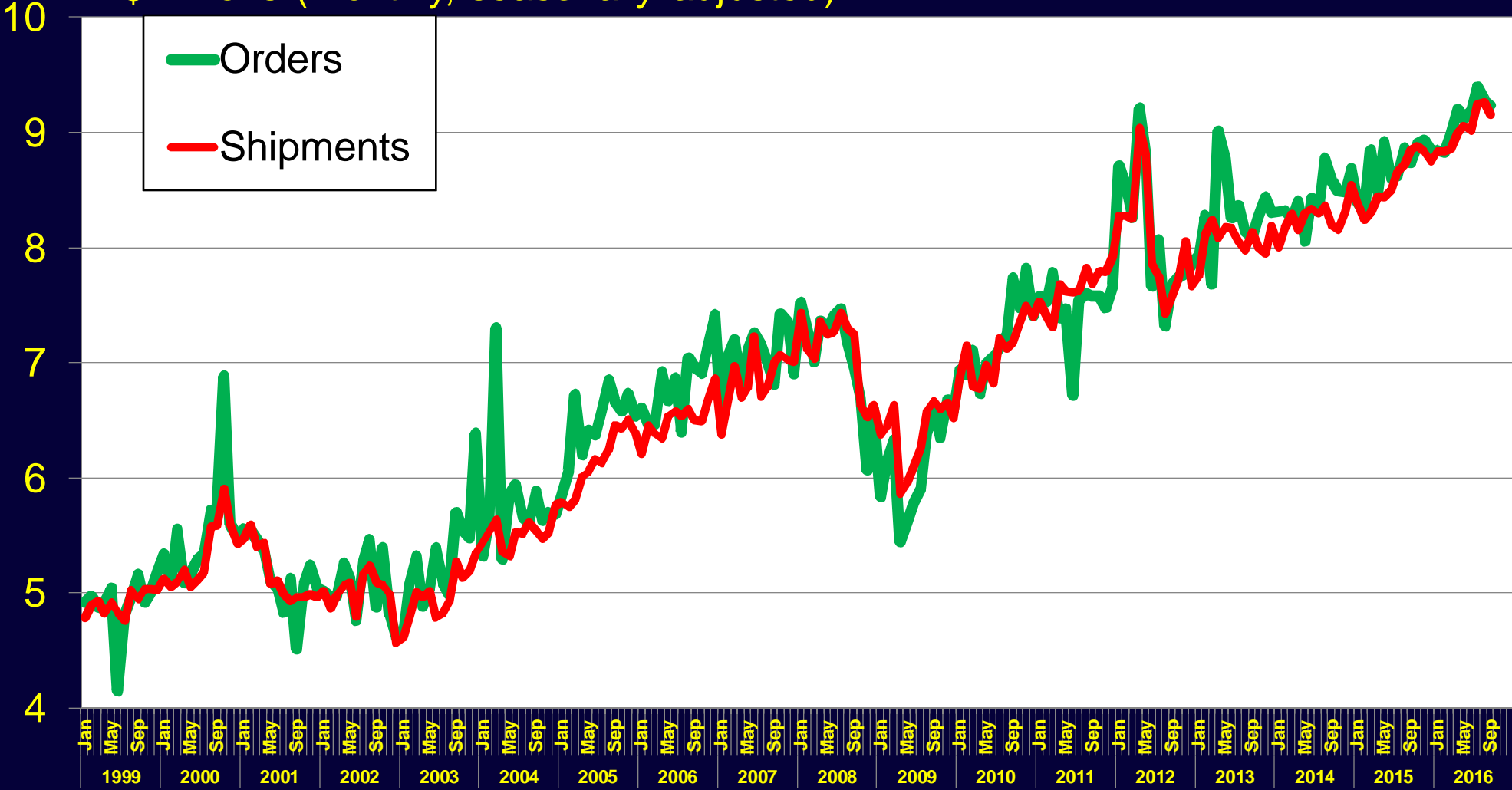


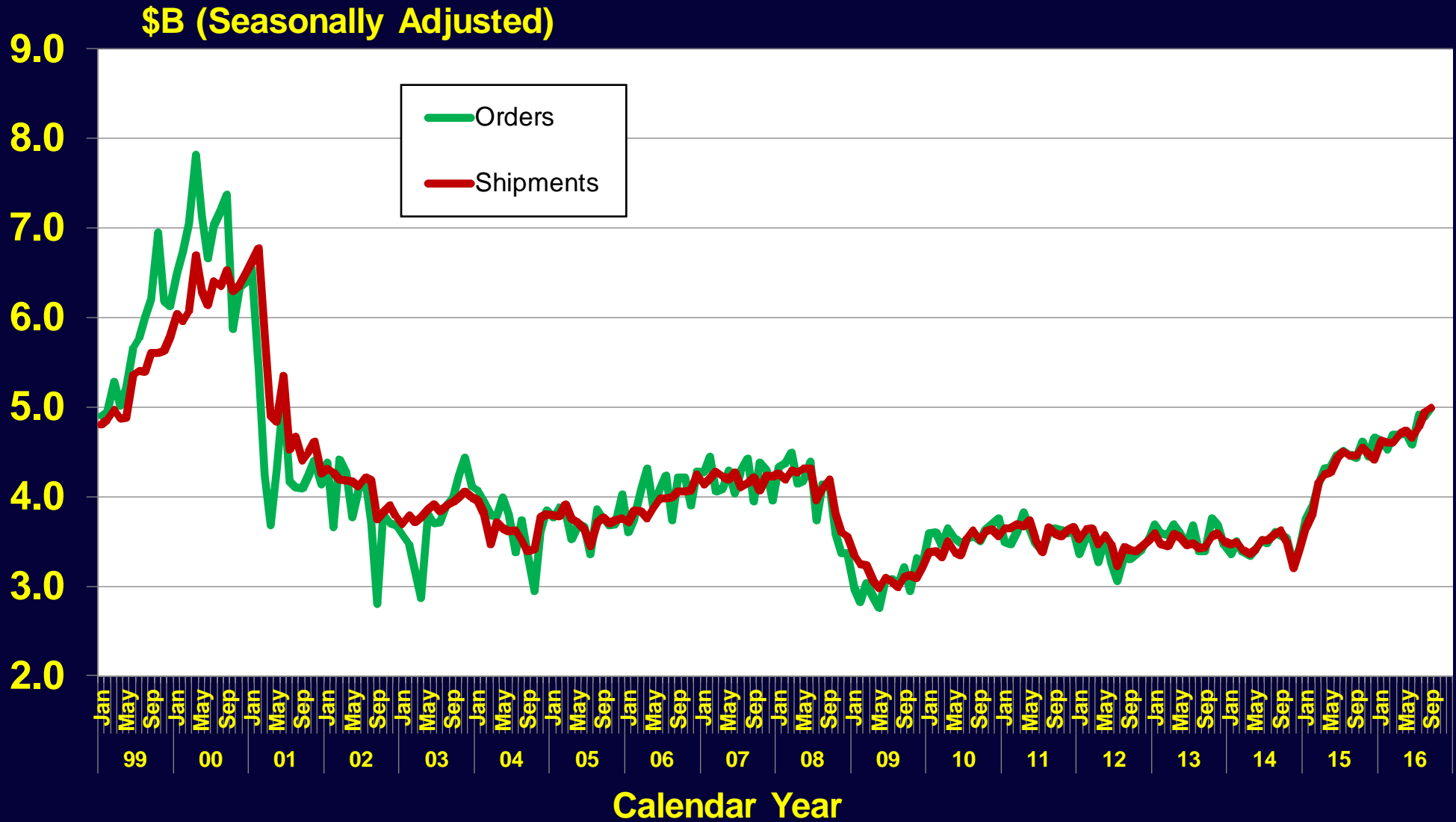
Chart 17

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

\$ Billions (monthly, seasonally adjusted)



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



U.S. Passive Component Orders & Shipments

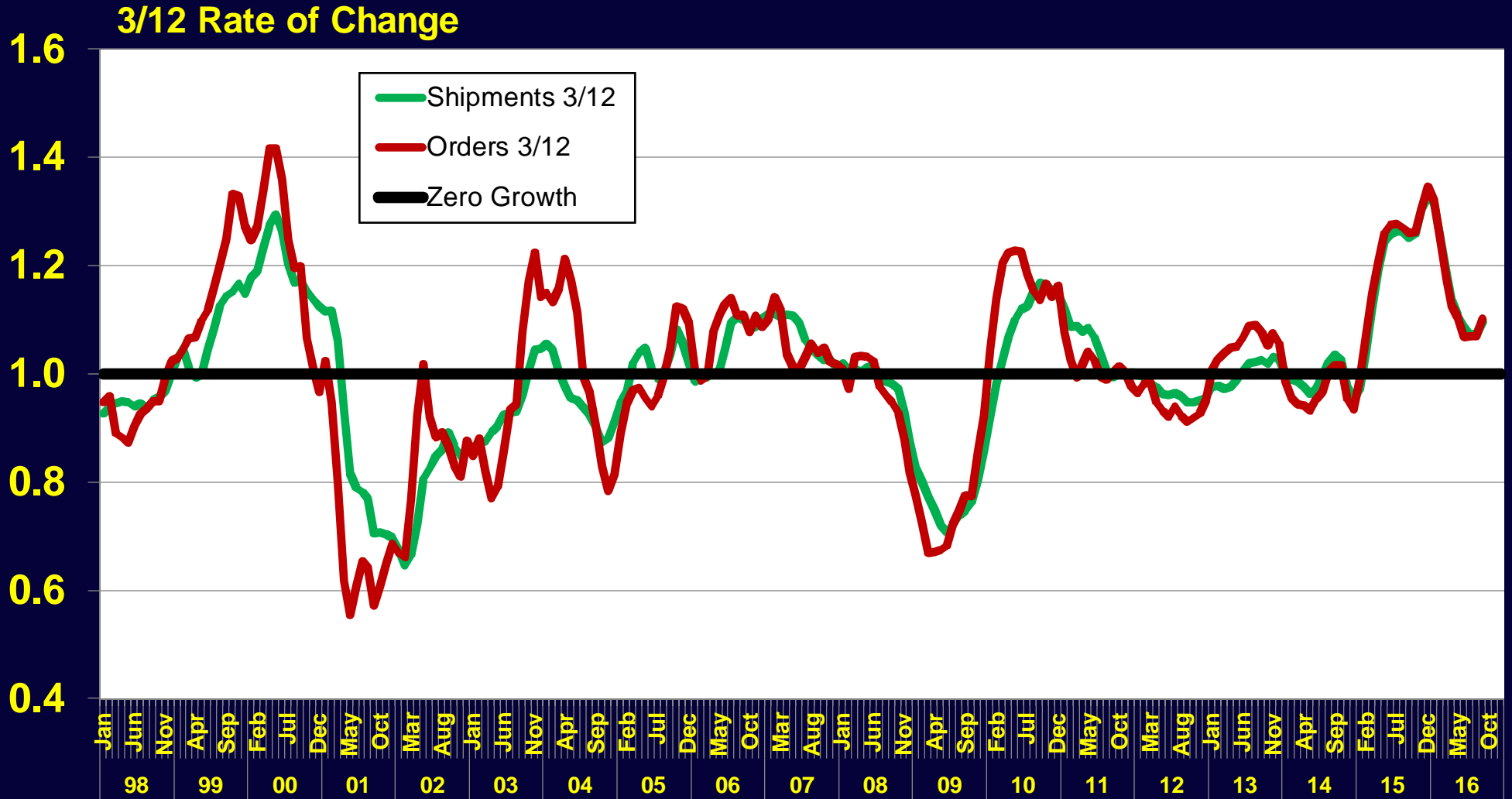


Chart 20

Present Growth Rates (%)

U.S. Economy & Electronics Industry

	Latest Month	Annual Growth	3-Month Growth
Electronic Component \$			
Rigid & Flex PCB Orders (N Amer)	9/16	97.8	97.7
Rigid & Flex PCB Shipments (N Amer)	9/16	103.0	100.0
Electronic Component Orders	9/16	116.3	110.2
Electronic Component Shipments	9/16	116.6	109.7
Semiconductor Shipments to N America	9/16	89.0	97.5
U.S. Electronic Equipment Orders \$			
Computer & Related	9/16	87.7	87.6
Communication	9/16	101.9	96.5
Medical, Measurement & Control	9/16	105.2	106.4
Search & Navigation	9/16	105.6	98.7
Defense Capital Goods	9/16	124.6	130.6
Military Electronics	9/16	106.2	97.9
Total Electronic Equipment	9/16	102.6	100.6
U.S. Industrial Production	9/16	98.7	99.0

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

U.S Electronic Supply Chain Shipment Growth 3Q'16 vs. 3Q'15

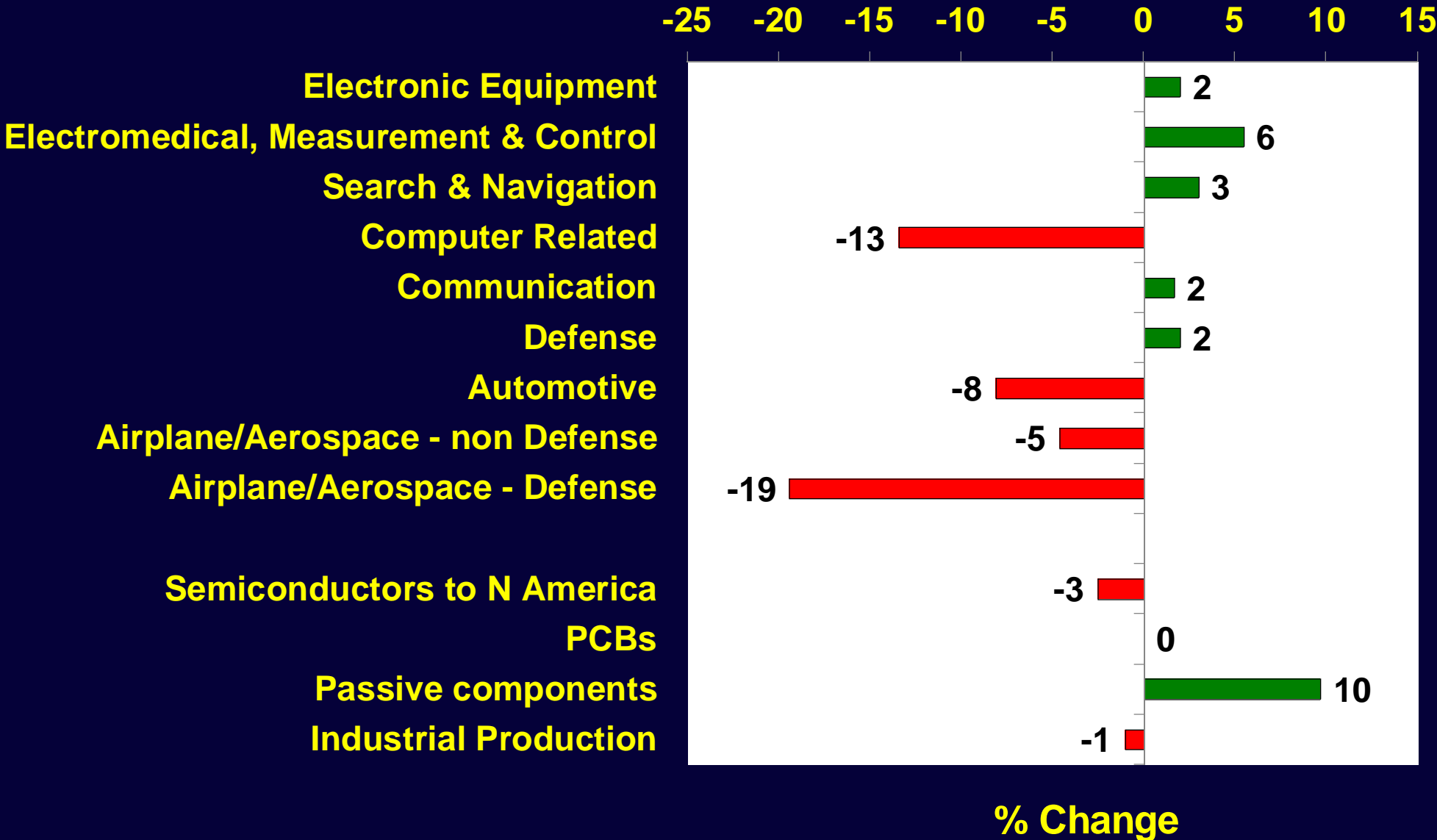
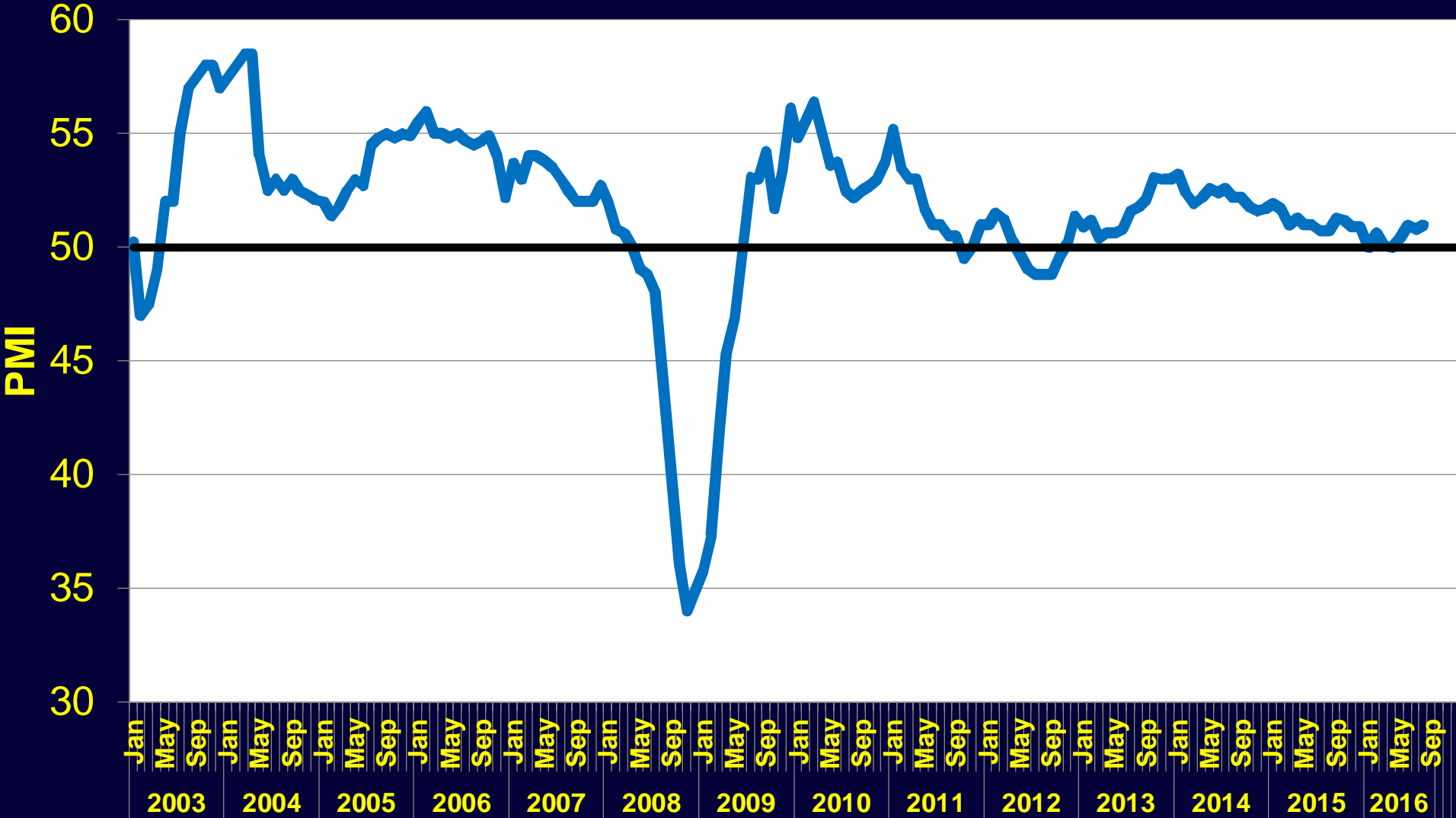


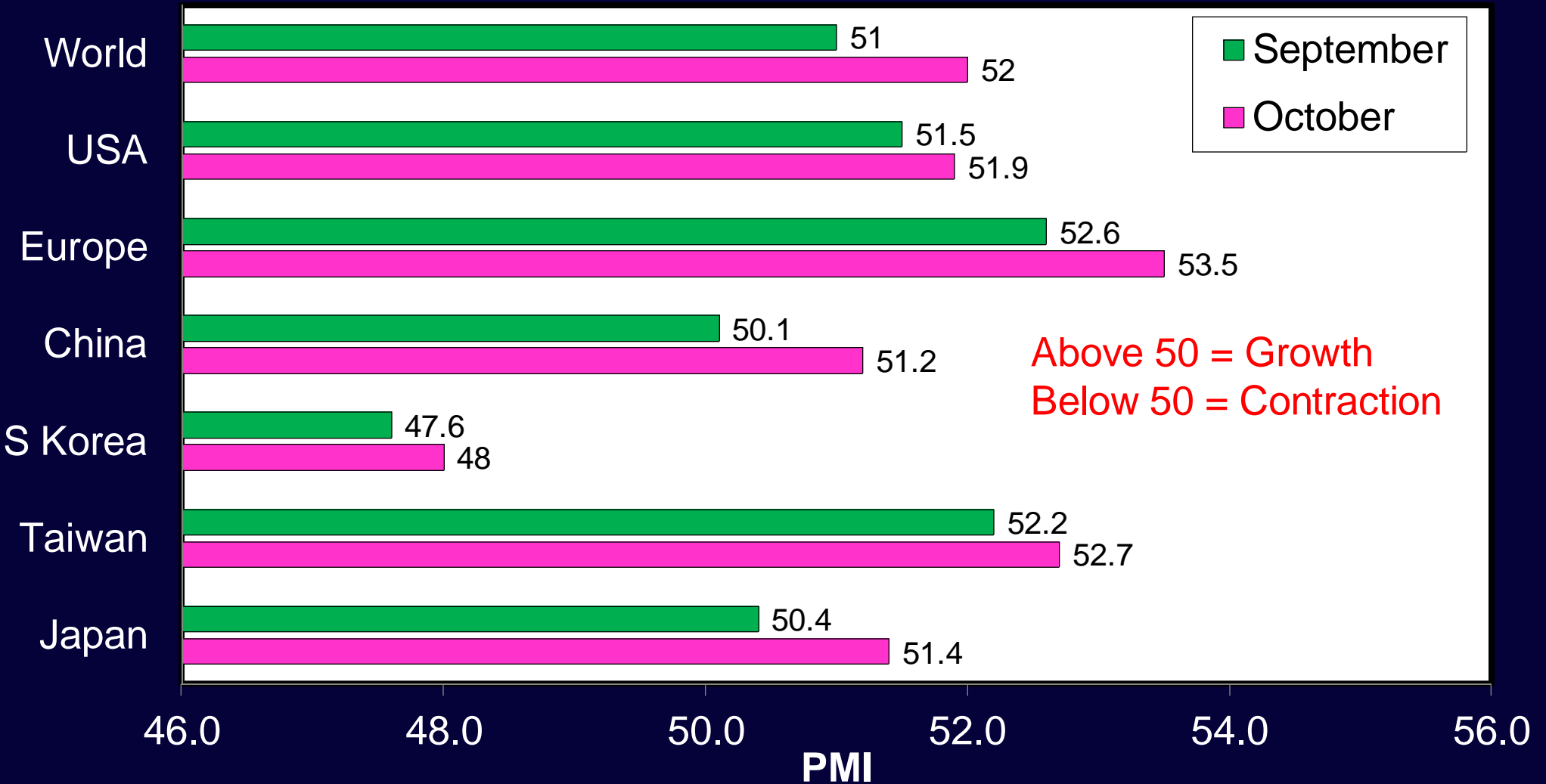
Chart 22

Global "Purchasing Managers" Index

Diffusion Index, >50 = Growth



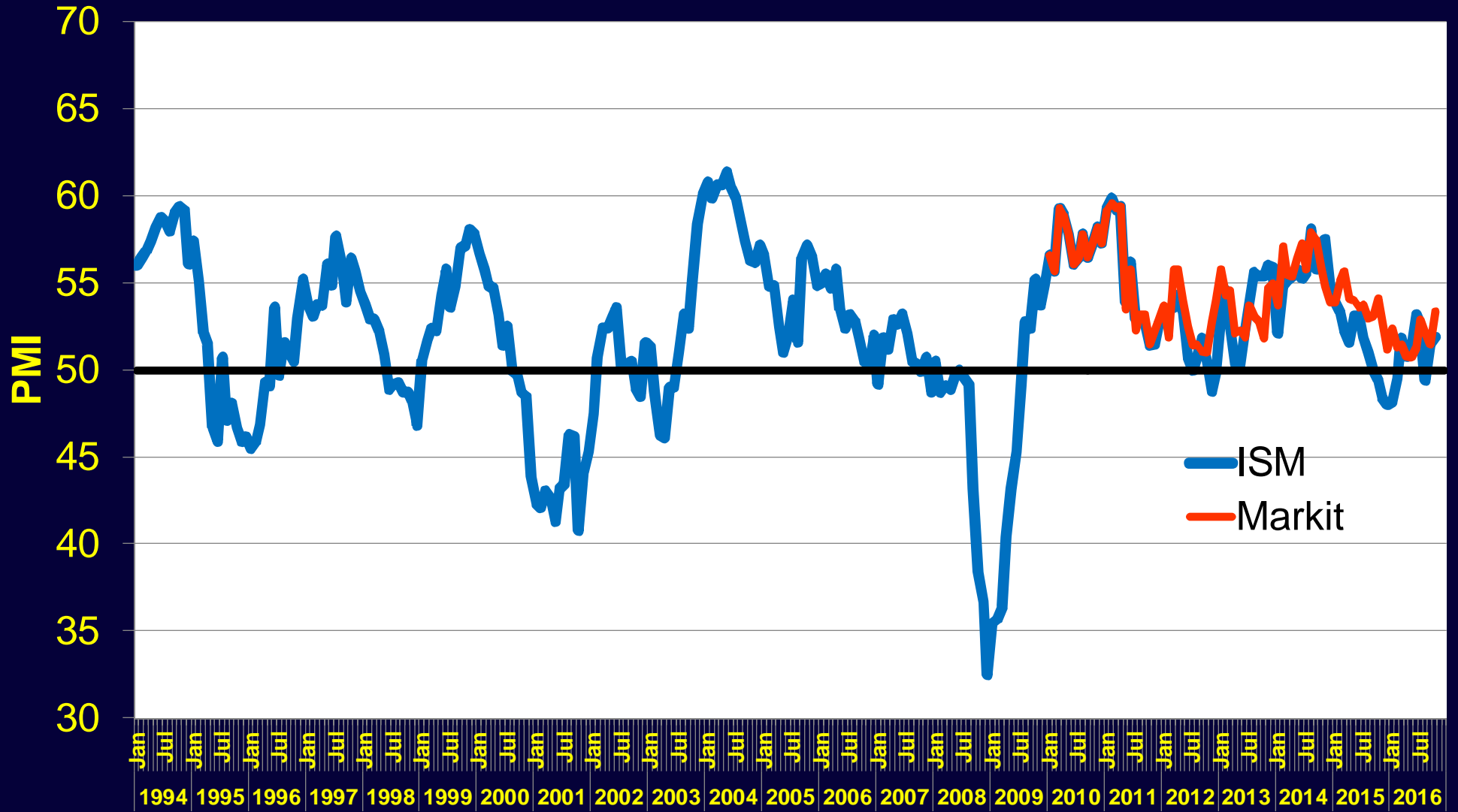
Purchasing Managers' Indices October vs. August 2016



U.S "Purchasing Managers" Indices

ISM vs. Markit Economics

Diffusion Index, >50 = Growth



European Purchasing Managers' Indices August vs. September 2016

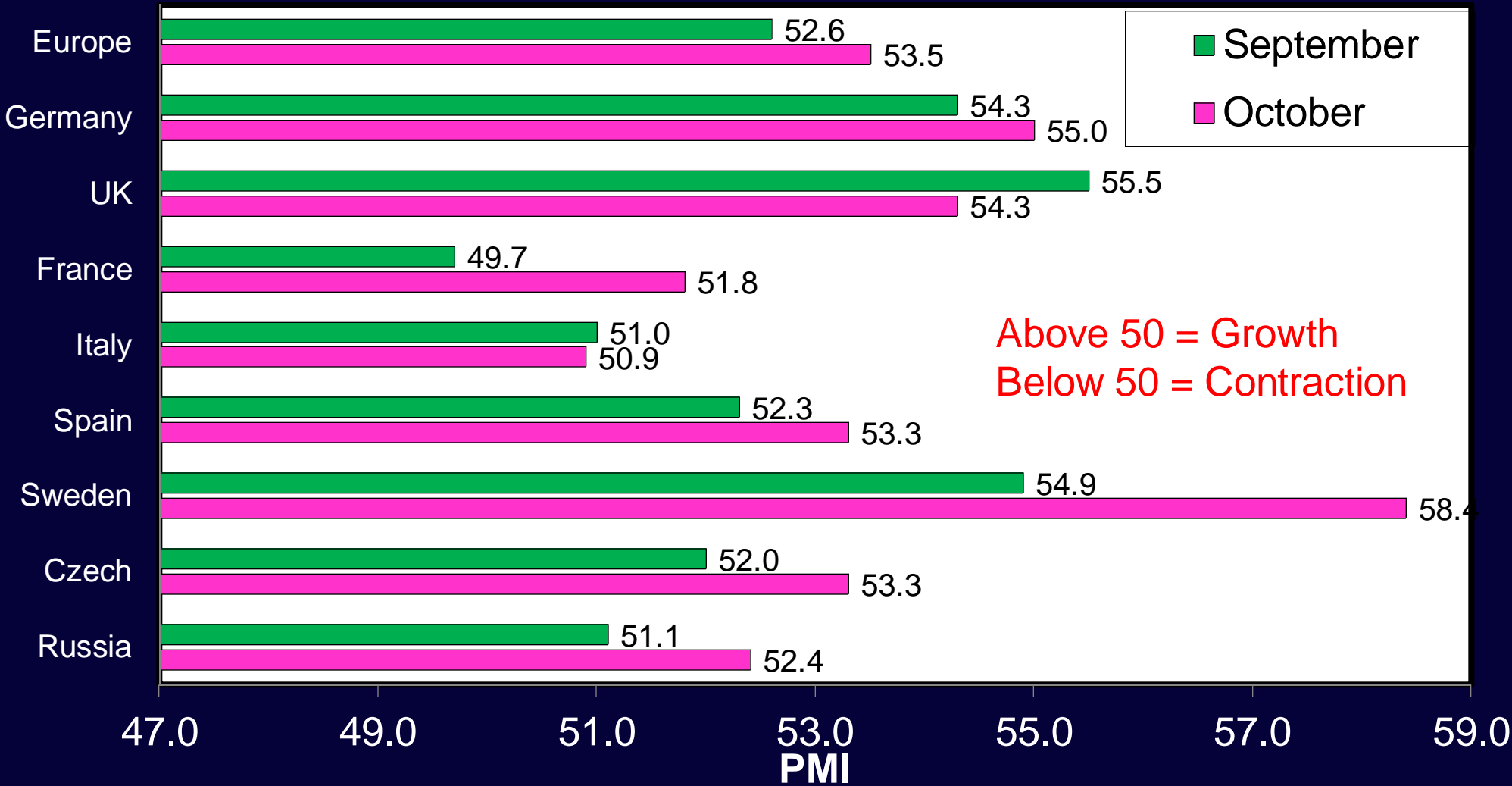


Chart 26

Eurozone "Purchasing Managers" Index

Diffusion Index, >50 = Growth

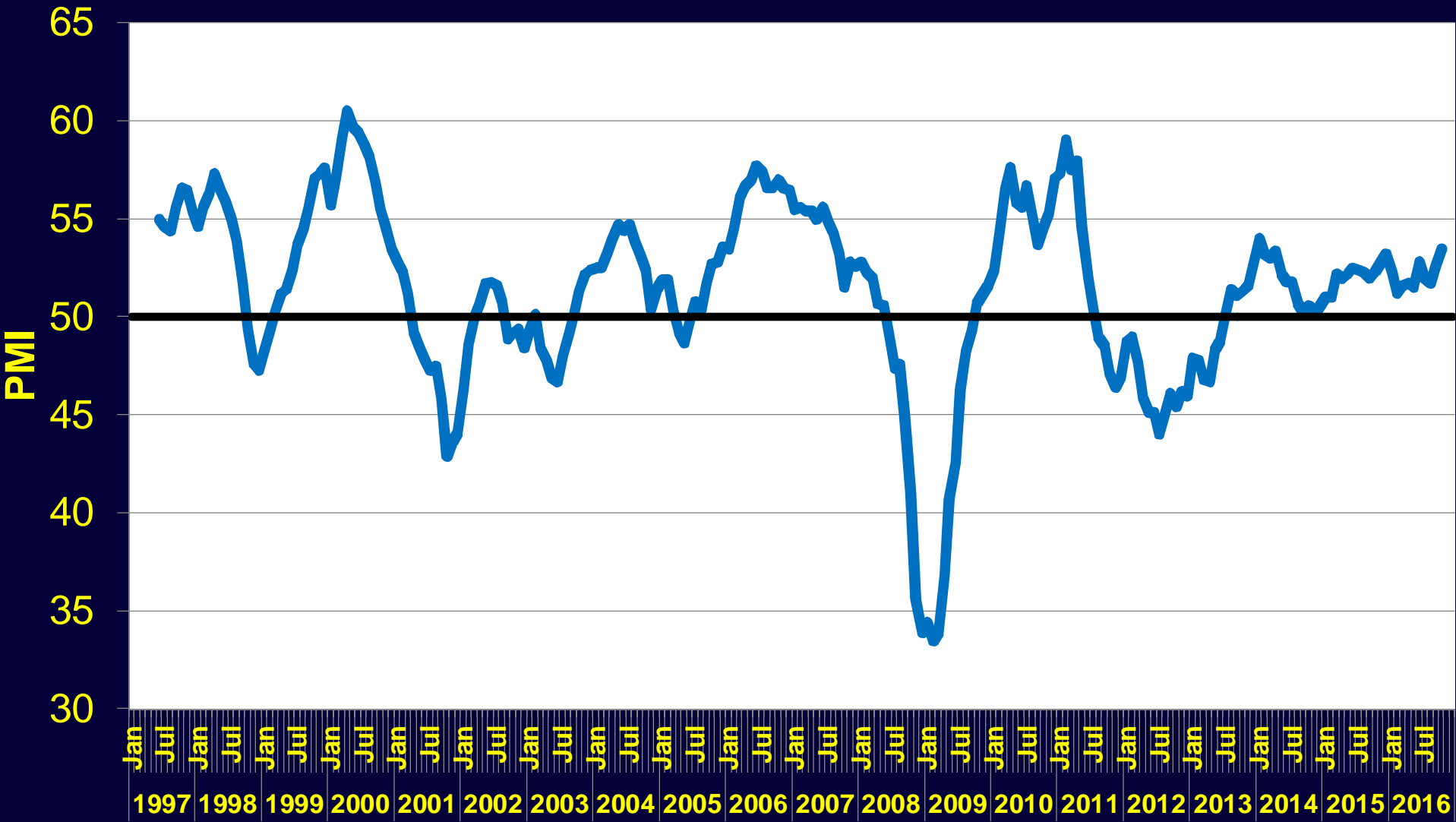


Chart 27

Asian Purchasing Managers Indices October vs. September 2016

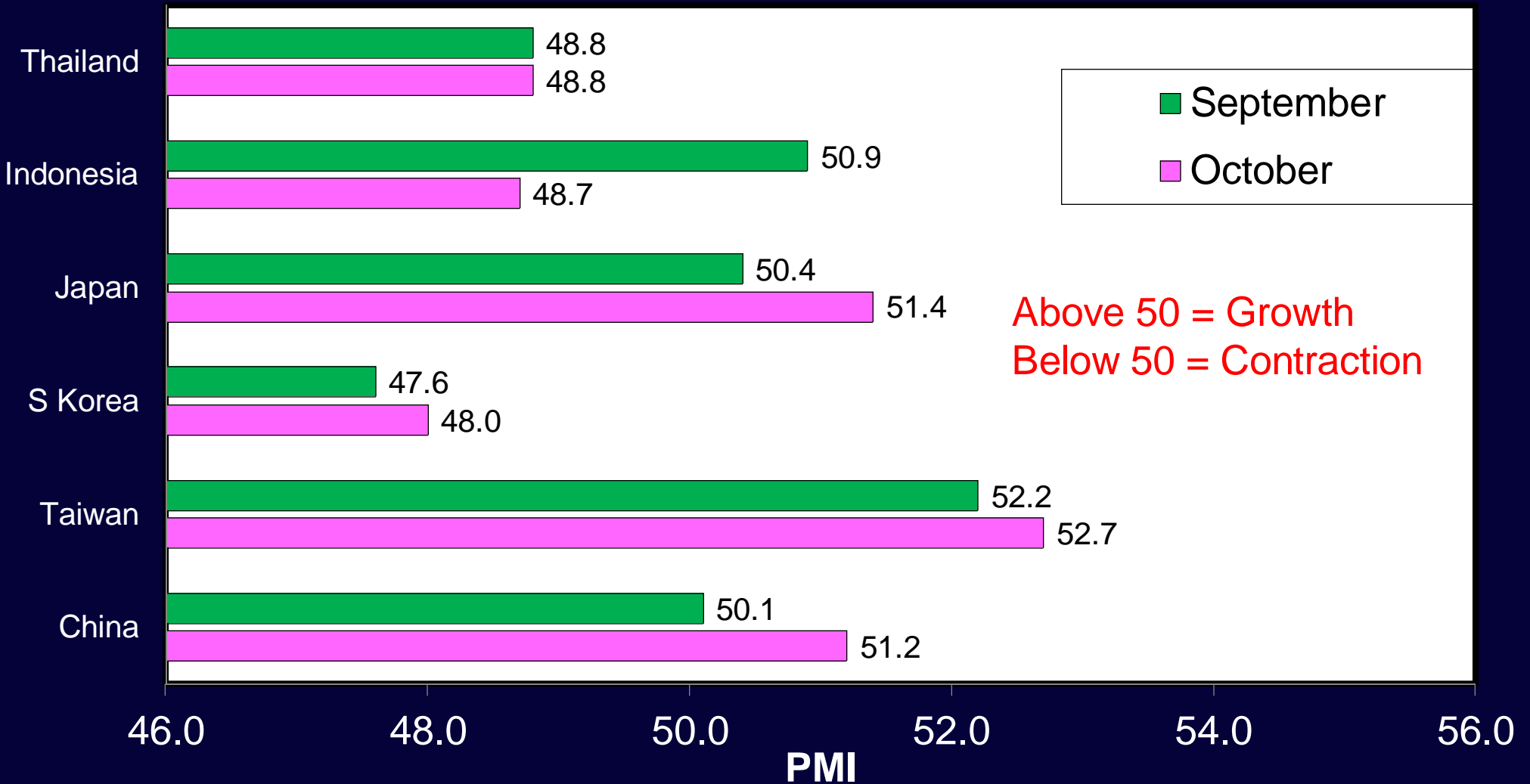
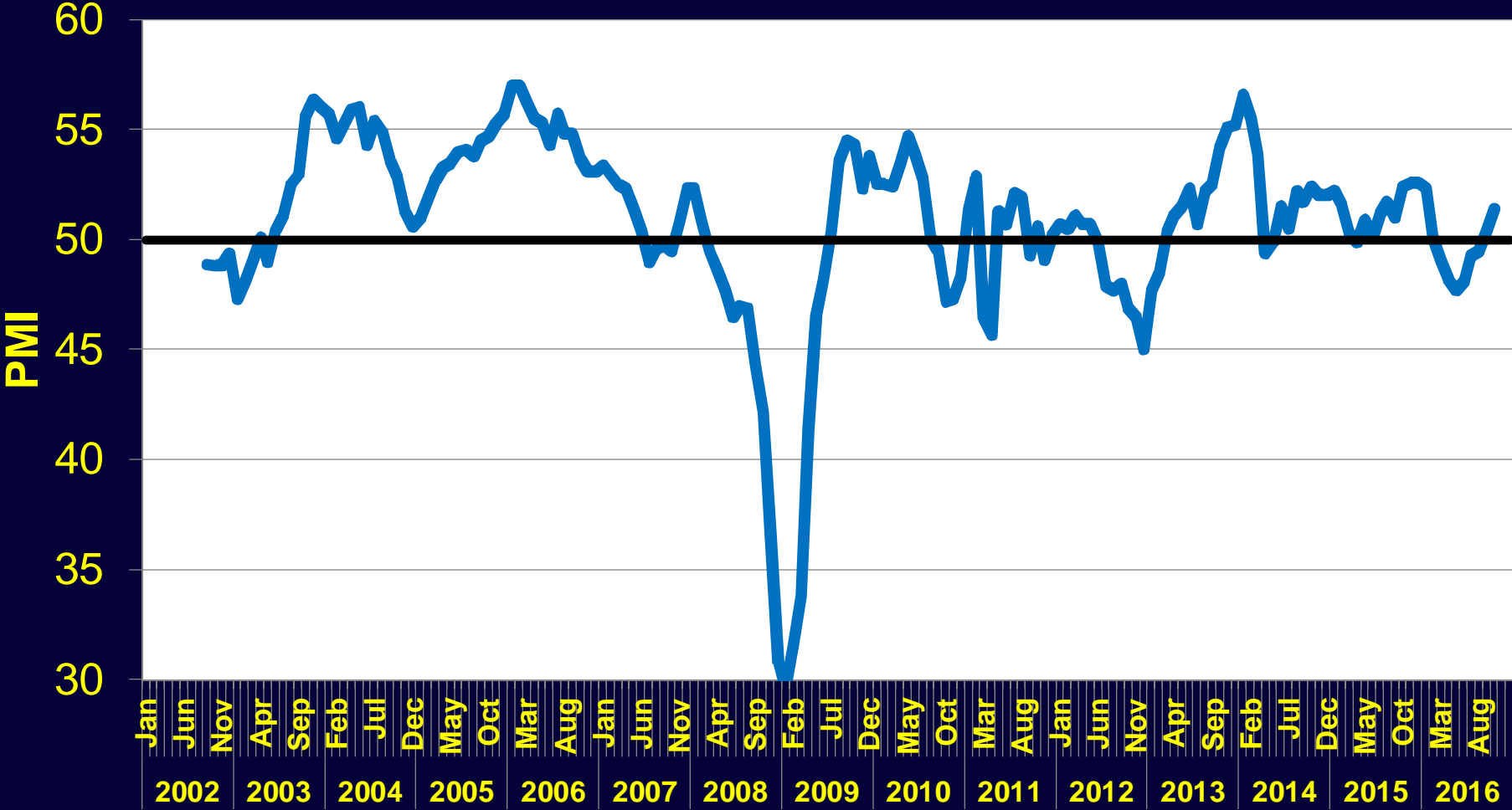


Chart 28

Japan "Purchasing Managers" Index

>50 = Growth



China "Purchasing Managers" Index

>50 = Growth

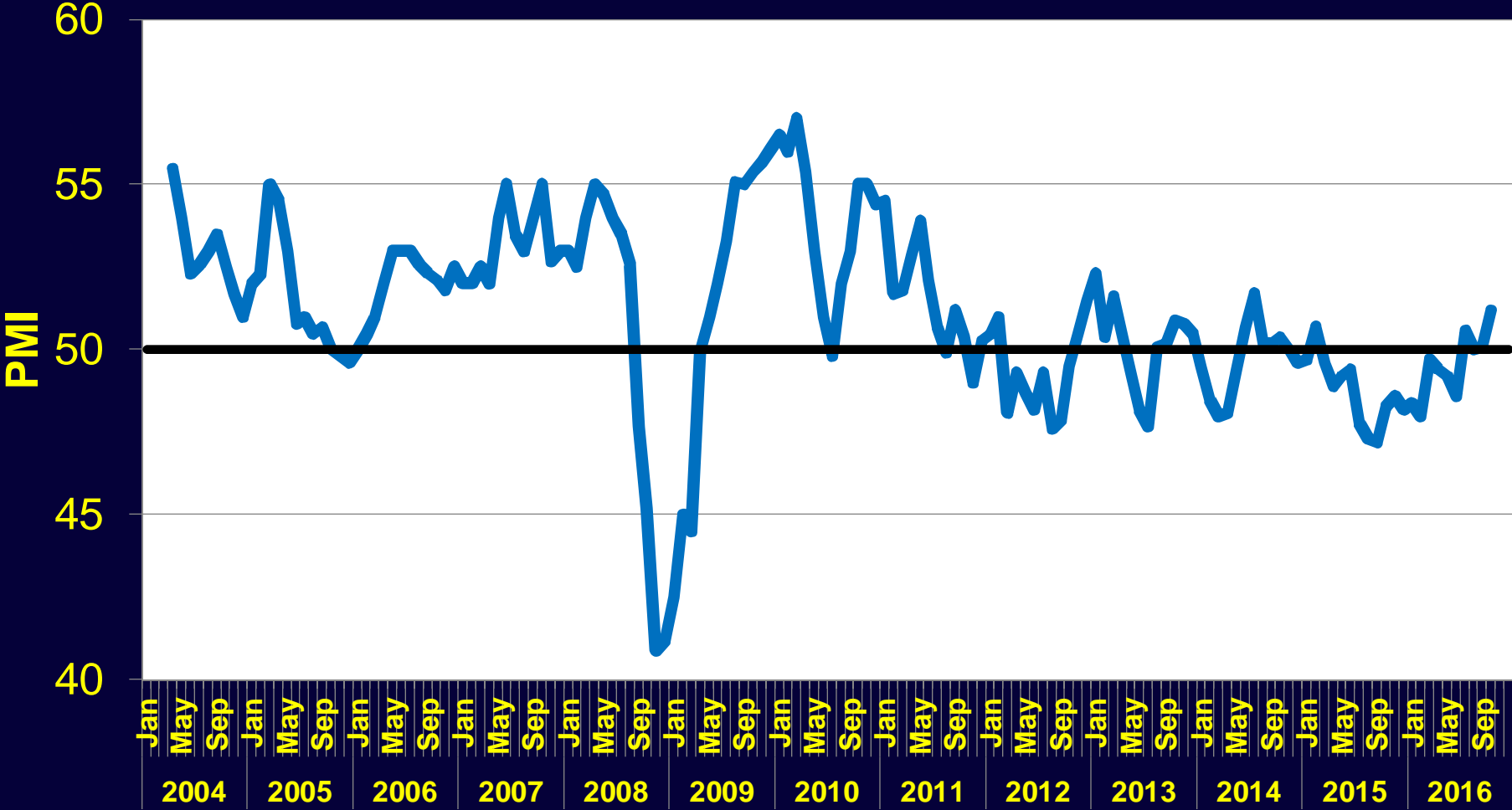


Chart 30

Taiwan "Purchasing Managers" Index

>50 = Growth

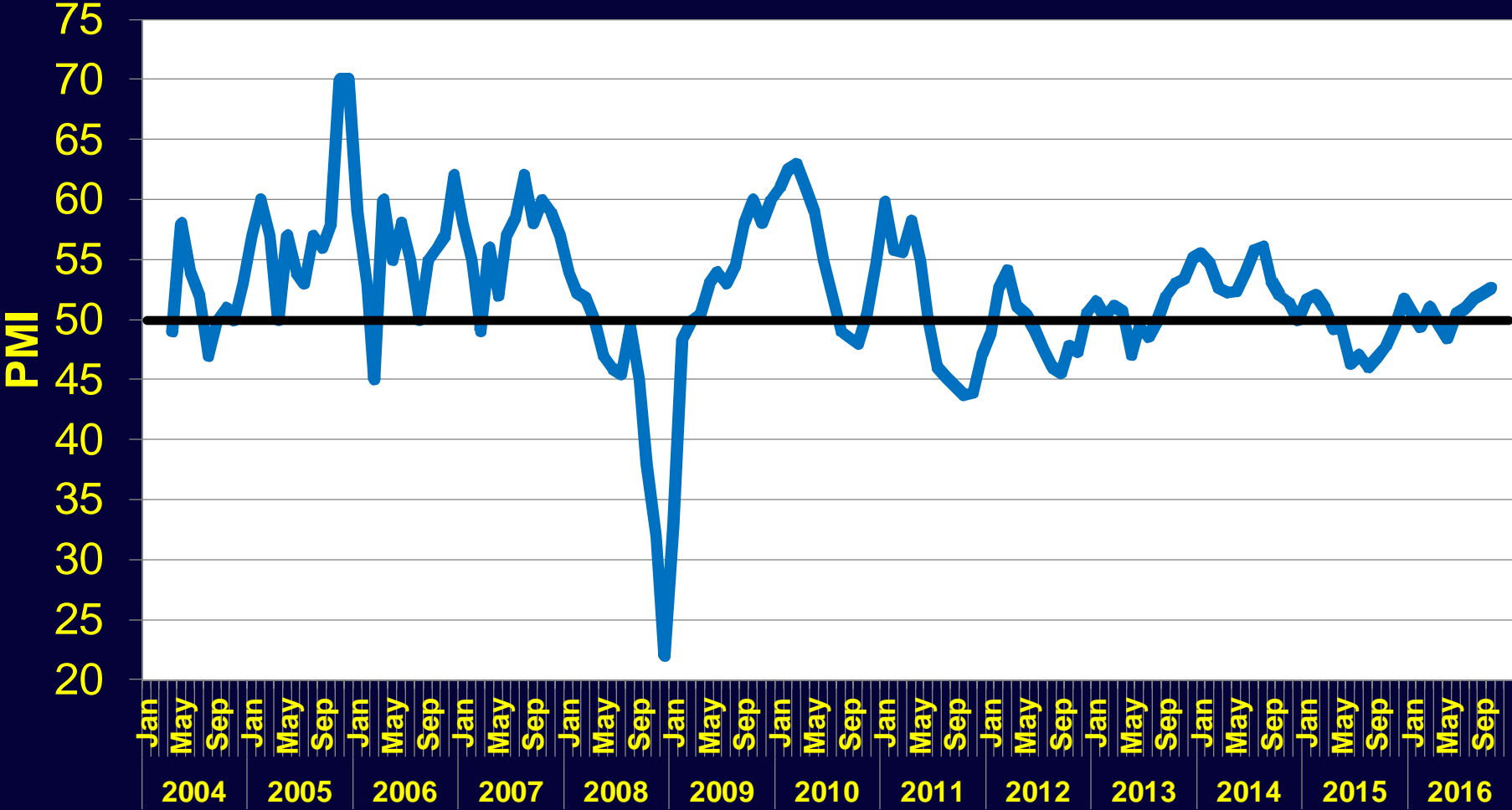
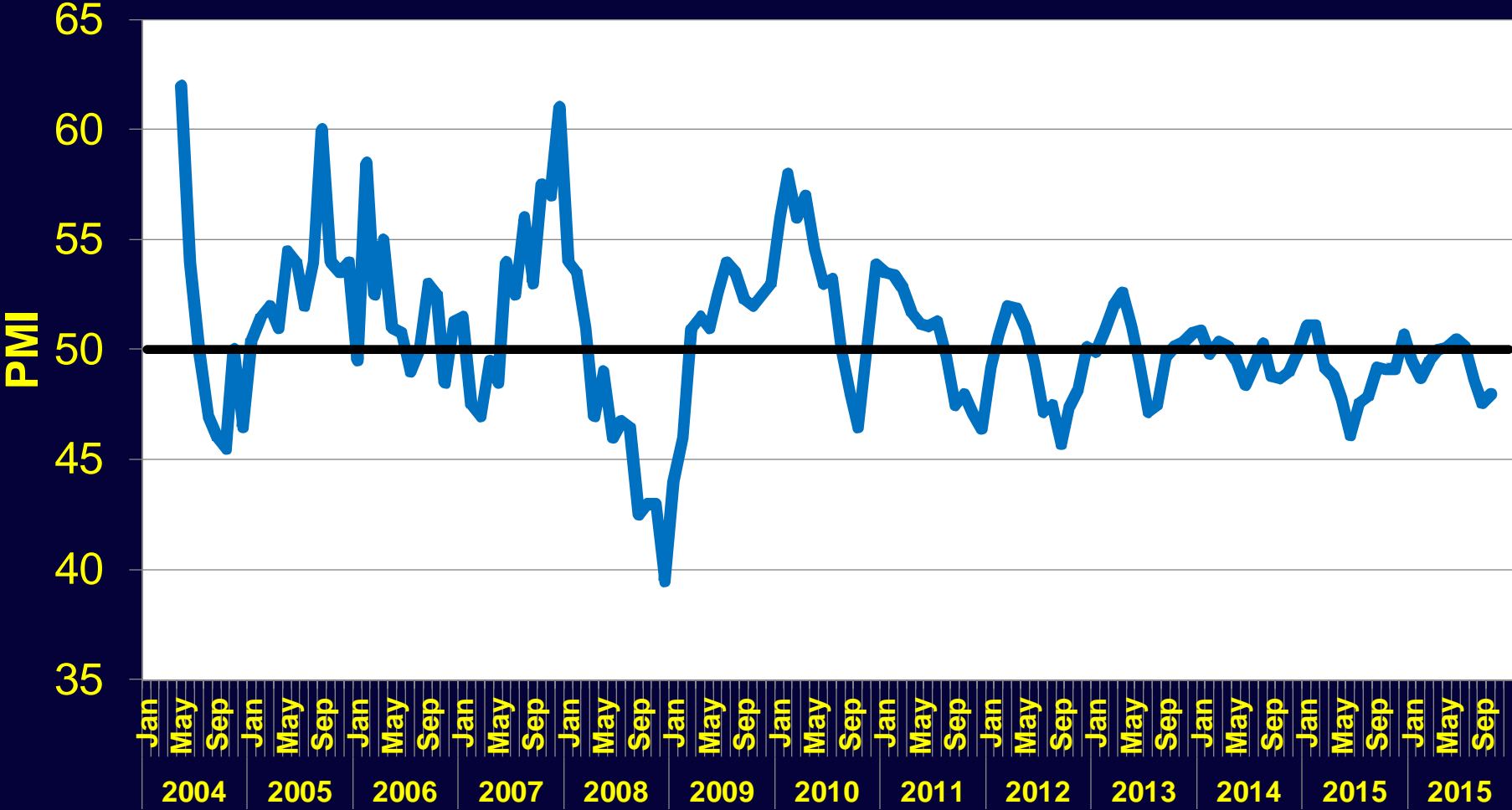


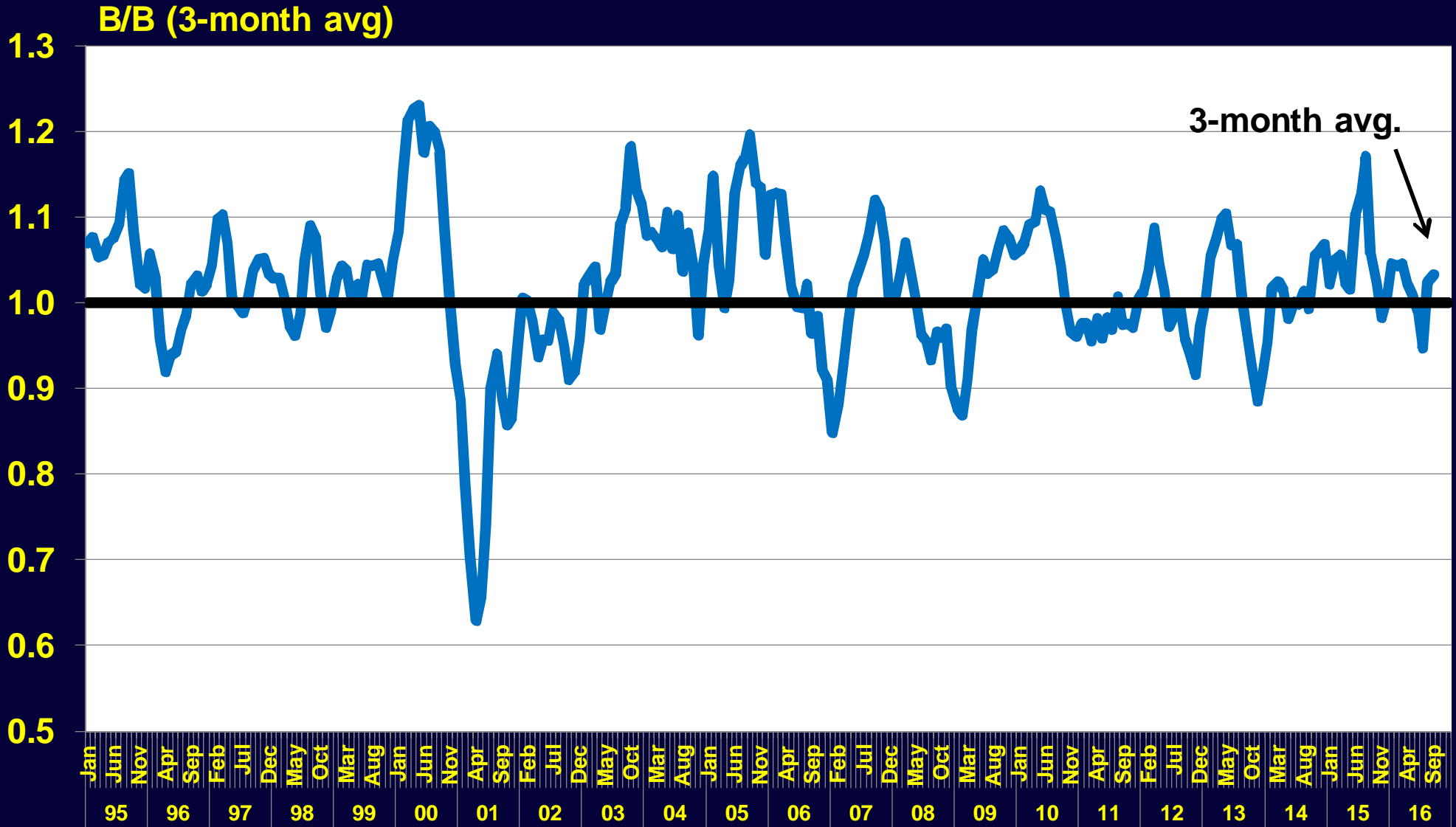
Chart 31

S Korea "Purchasing Managers" Index

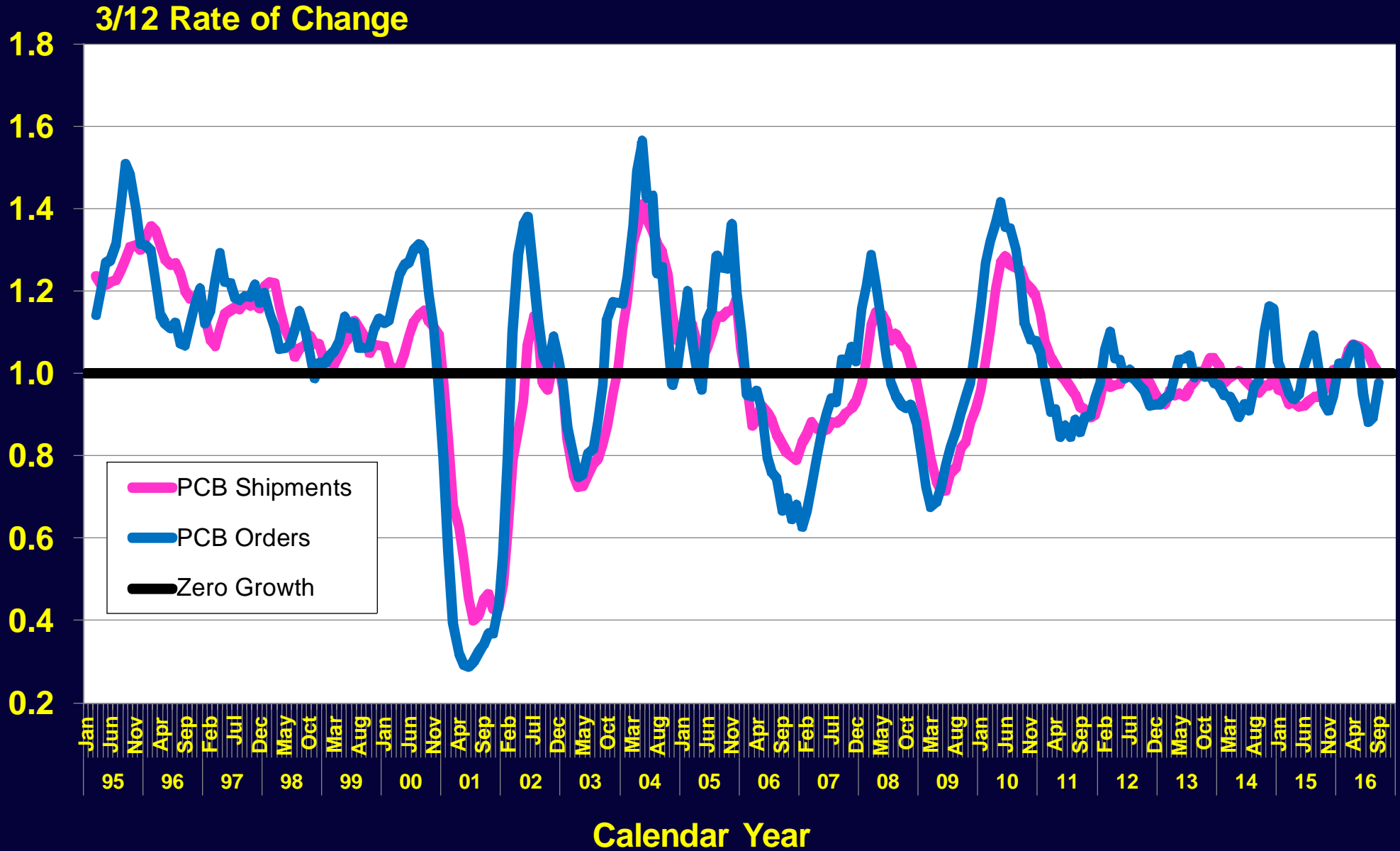
>50 = Growth



Rigid & Flexible PCB Book/Bill N. America

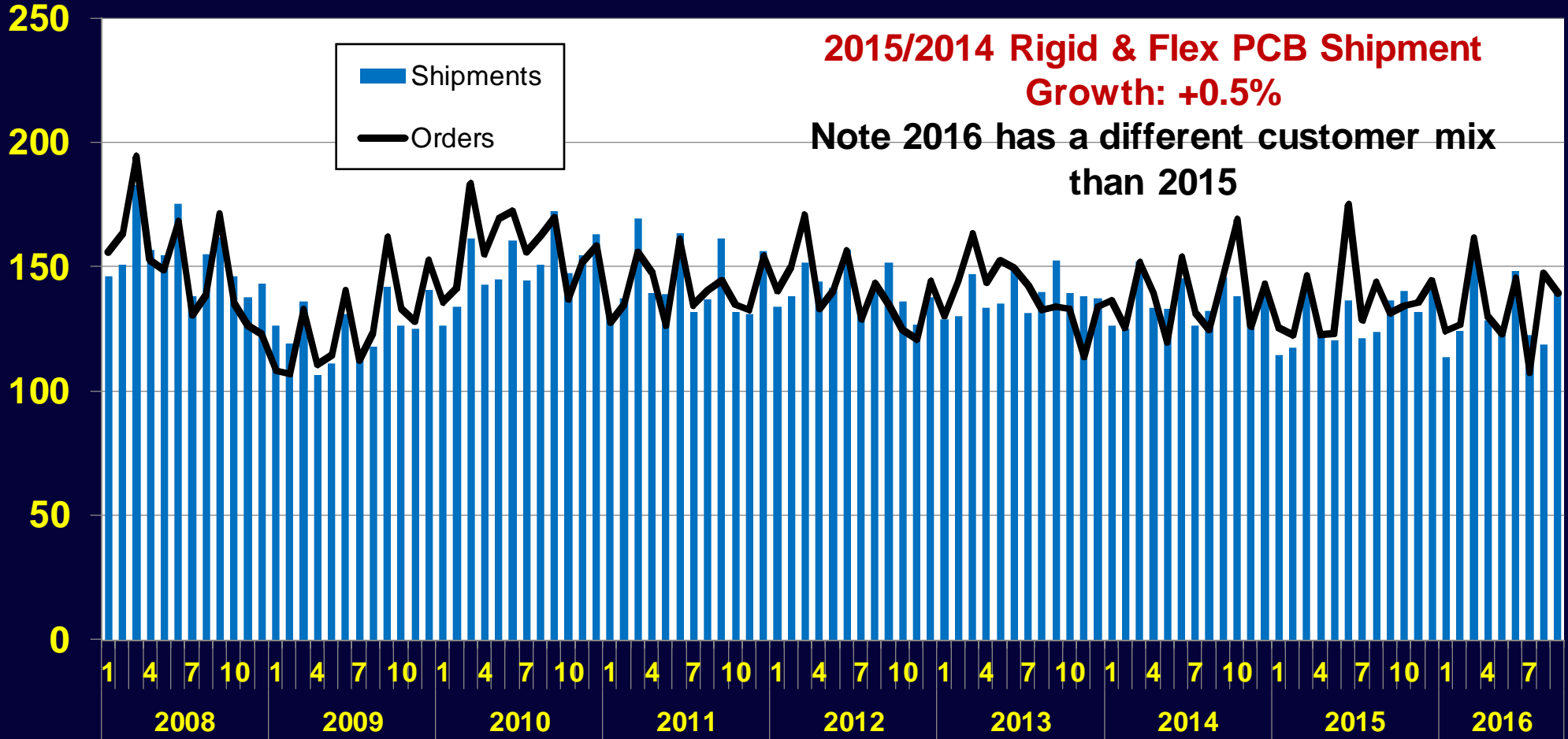


N. America Rigid & Flexible PCB Orders & Shipments



N American Rigid & Flexible PCB Shipments & Orders

\$M (statistical sample of about 50% of producers)

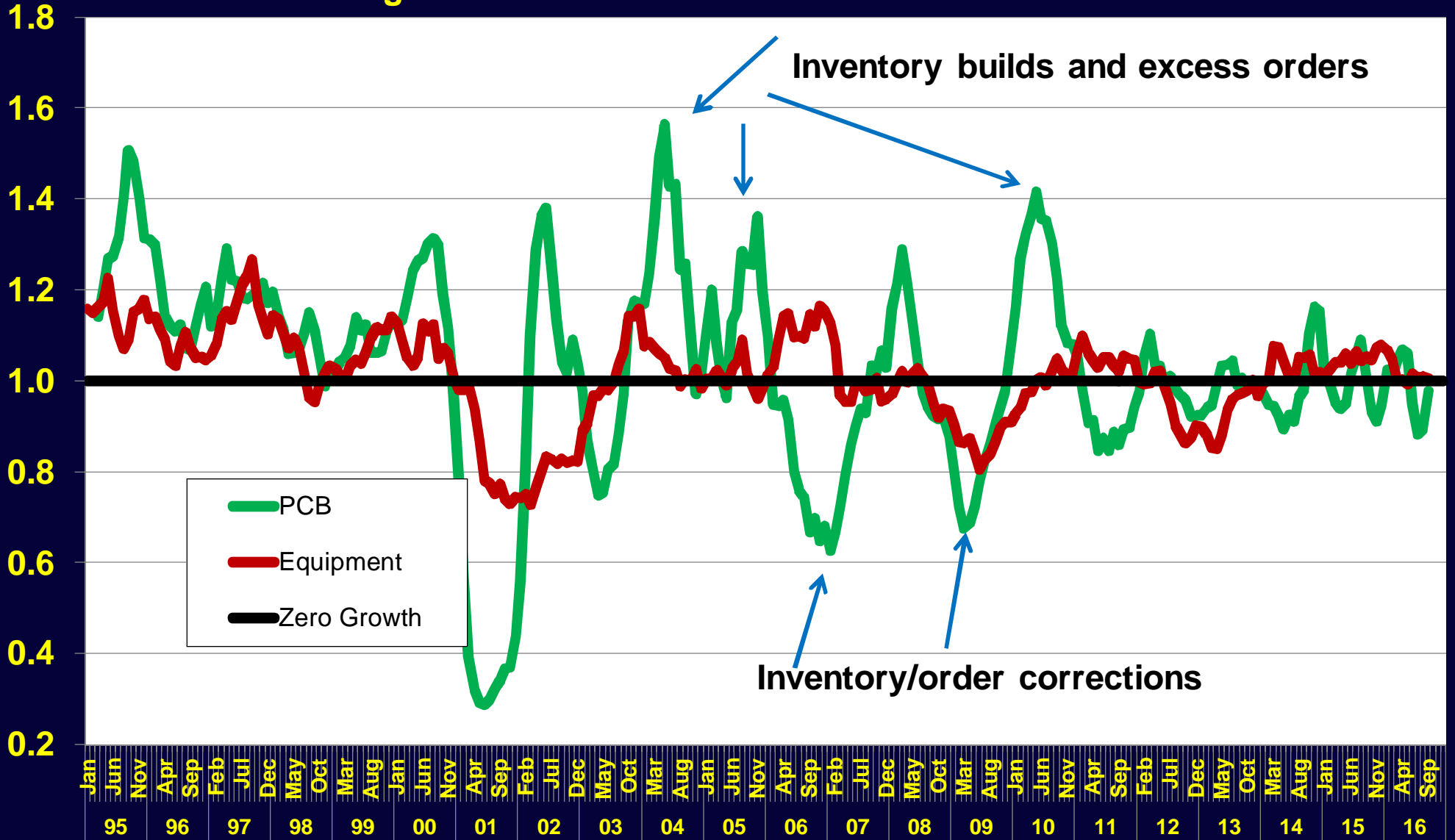


Note: IPC survey captures "market" not domestic production. About 15% of the above represents imported boards resold by N American PCB producers in survey.

U.S. Electronic Equipment vs. Rigid & Flex PCBs

\$ Order Growth

3/12 Rate of Change



U.S. Electronic Equipment vs. Electronic Component Order Growth

"Components" exclude Semiconductors

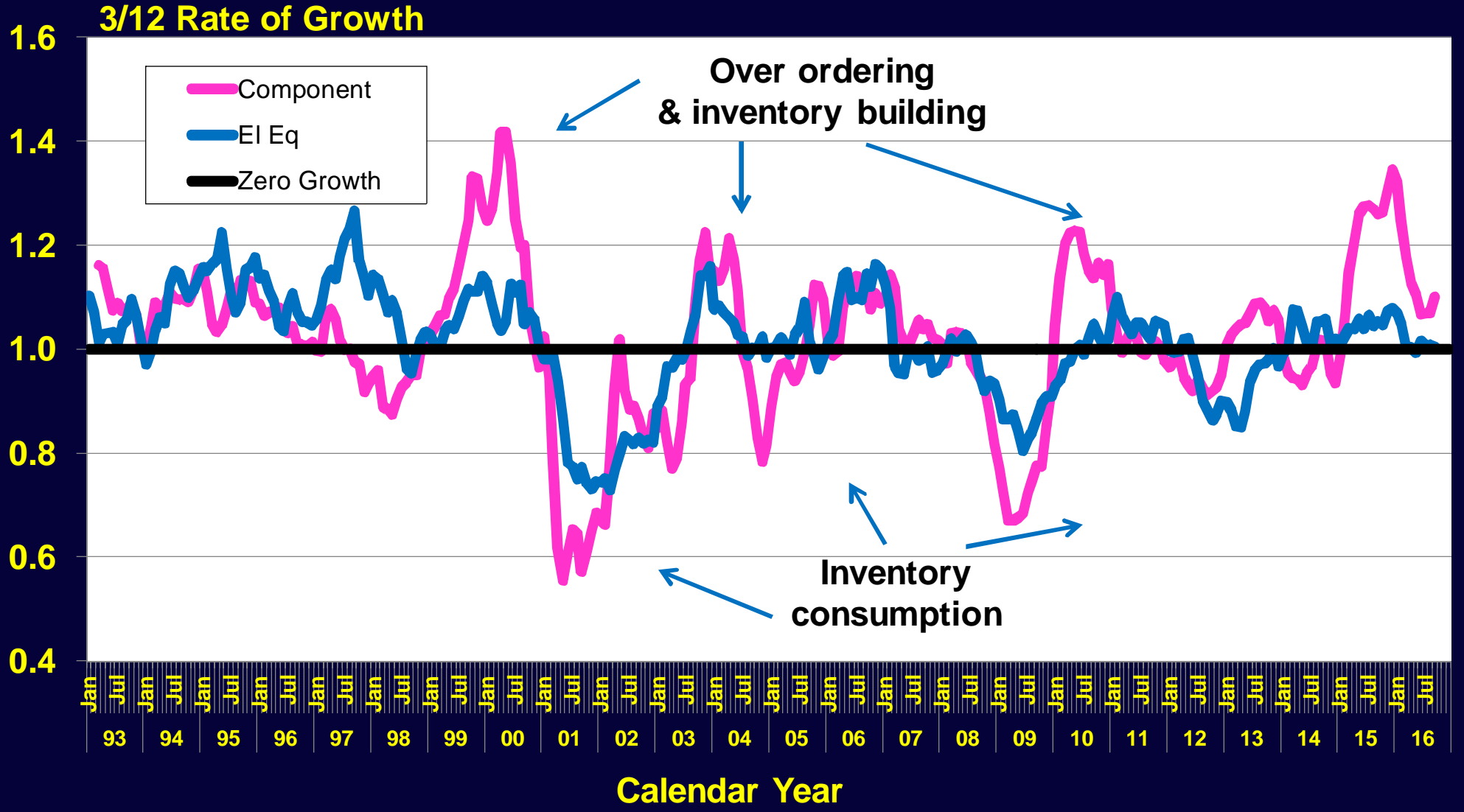
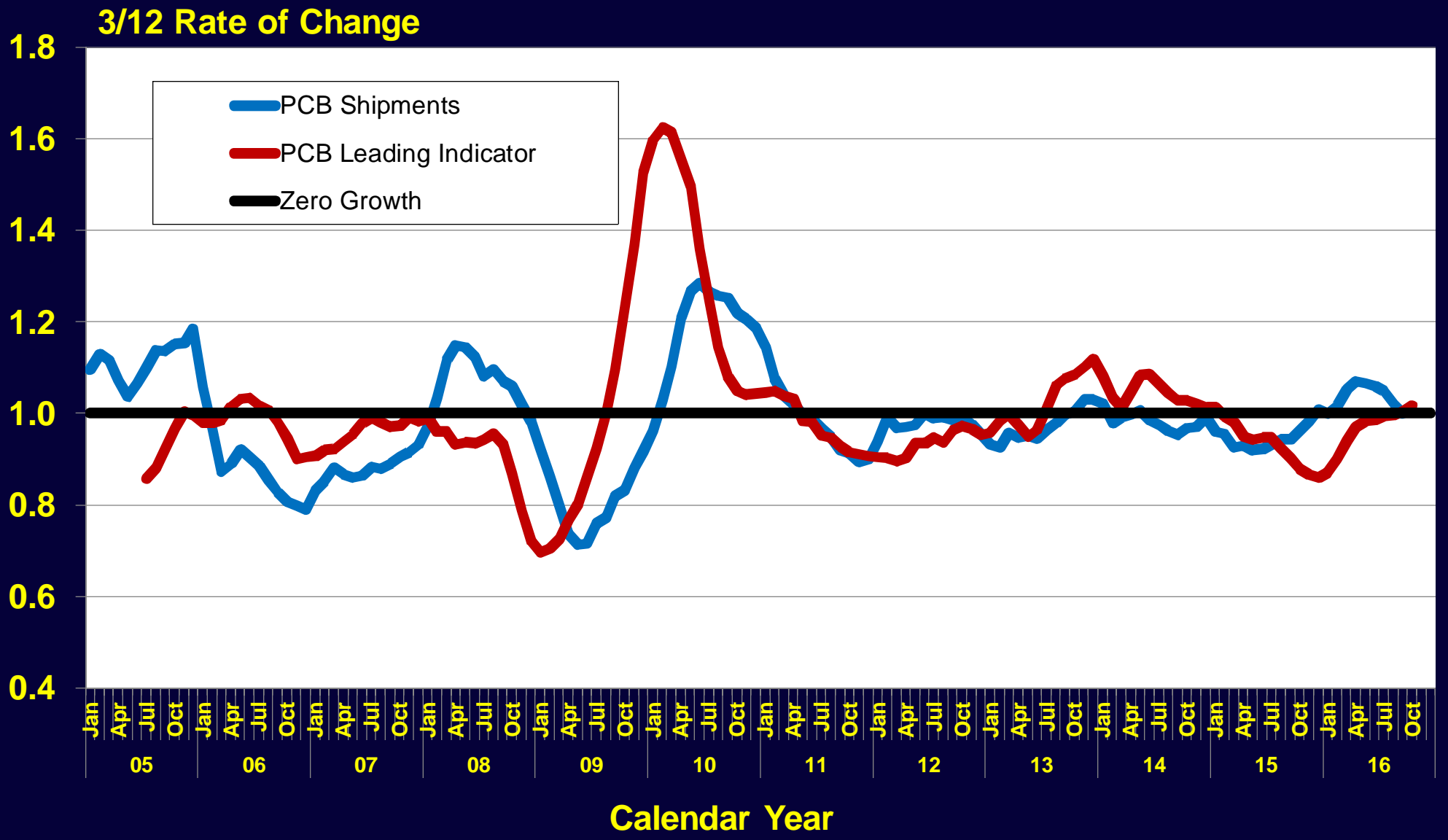


Chart 37

N America CCG PCB Leading Indicator vs. N America Rigid & Flex PCB Shipments



Source: Custer Consulting Group