

# Purchasing Managers' Indices September (Flash) vs. August 2016

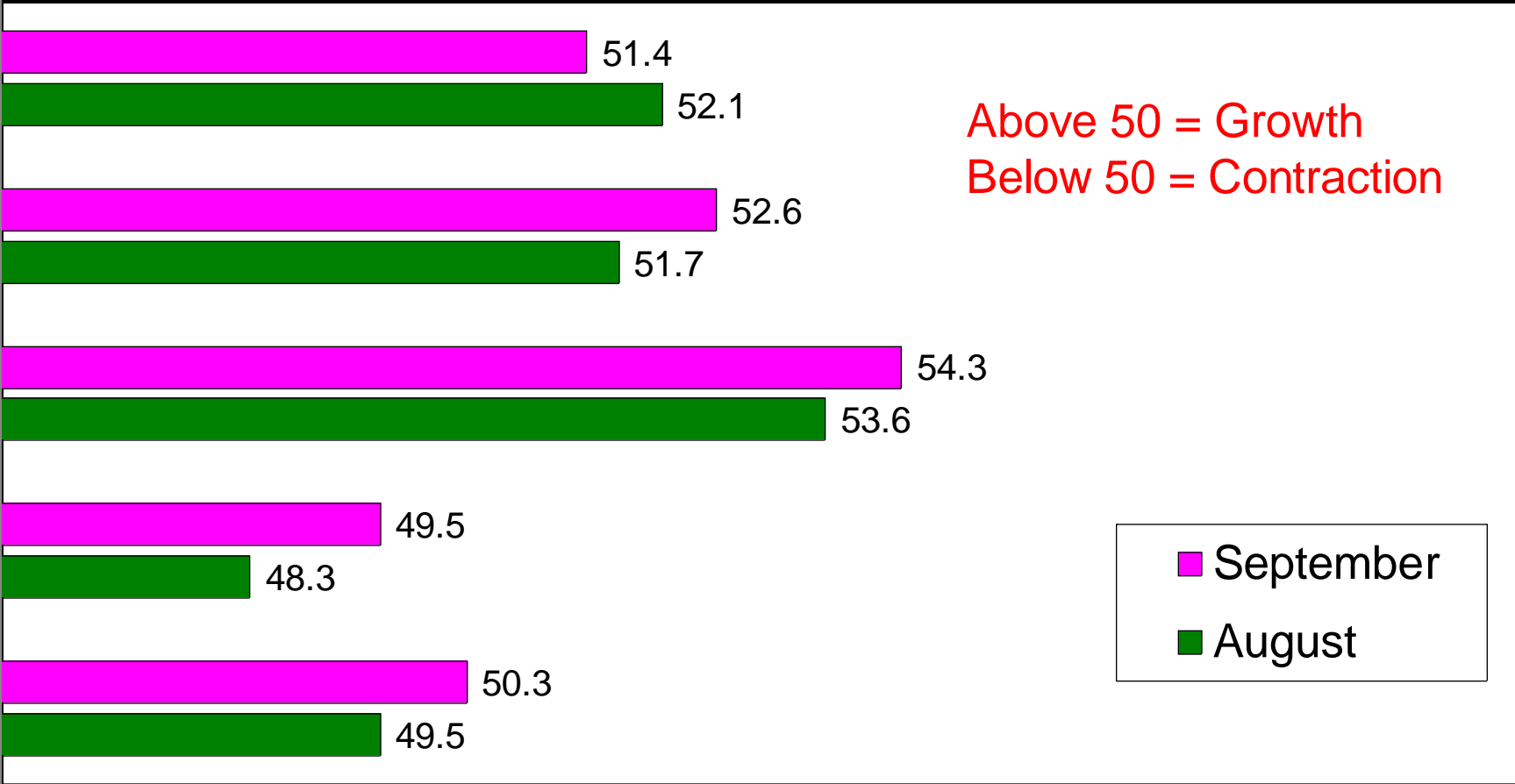




Chart 3

# Eurozone "Purchasing Managers" Index

Diffusion Index, >50 = Growth

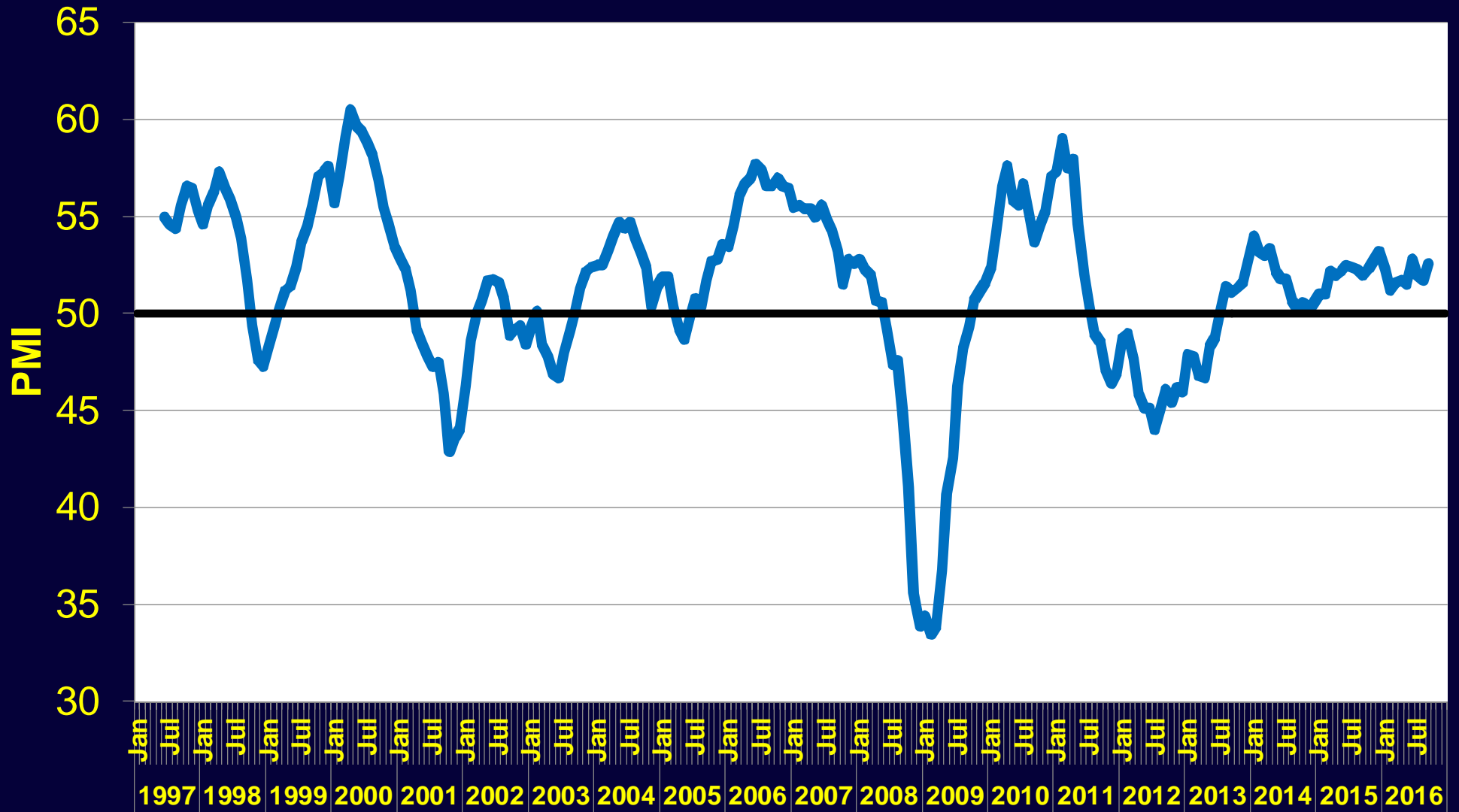


Chart 4

# Japan "Purchasing Managers" Index

Diffusion Index, >50 = Growth

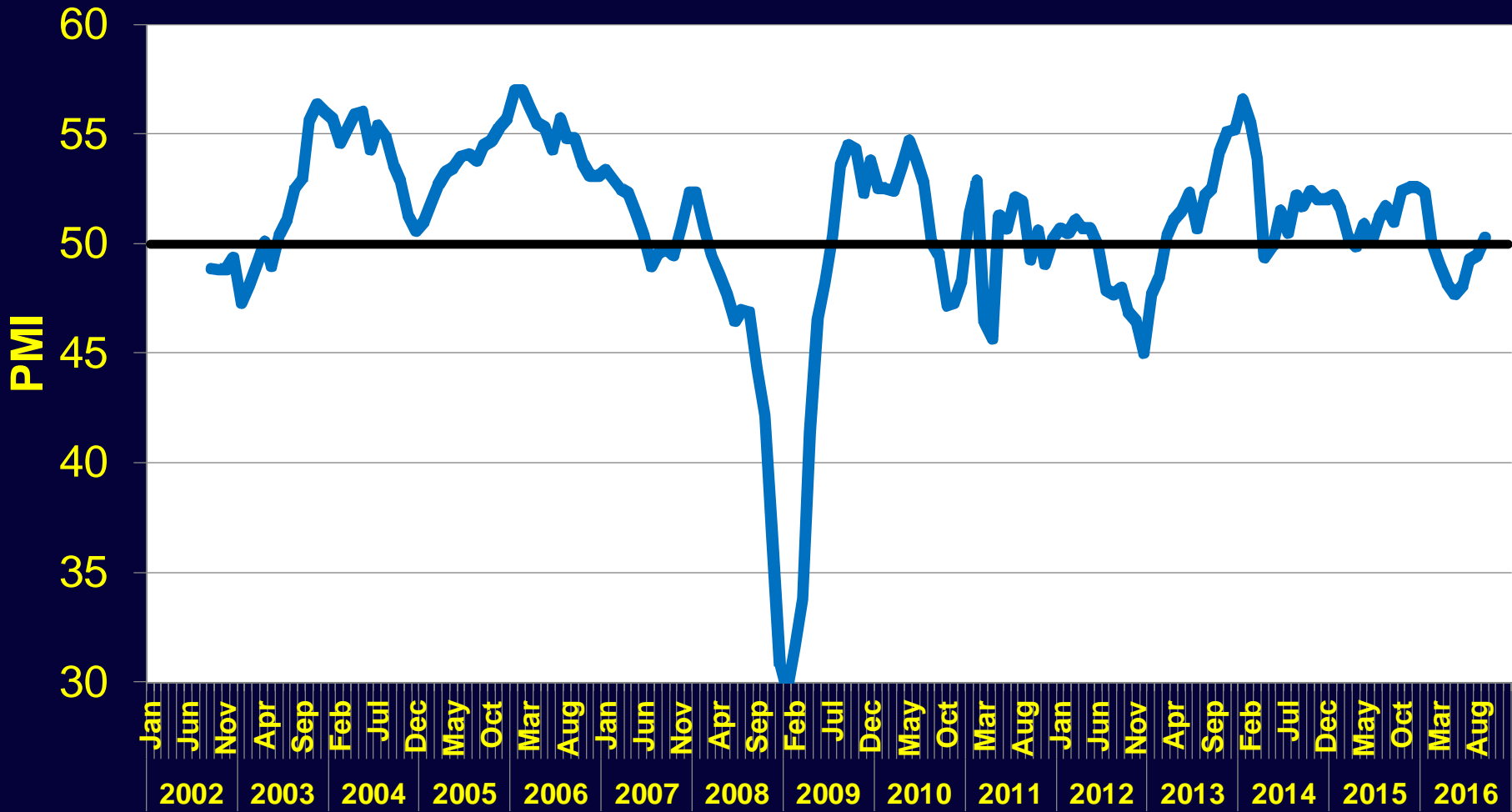


Chart 5 **Japan Electronic Equipment Production by Month 2000 to Present**

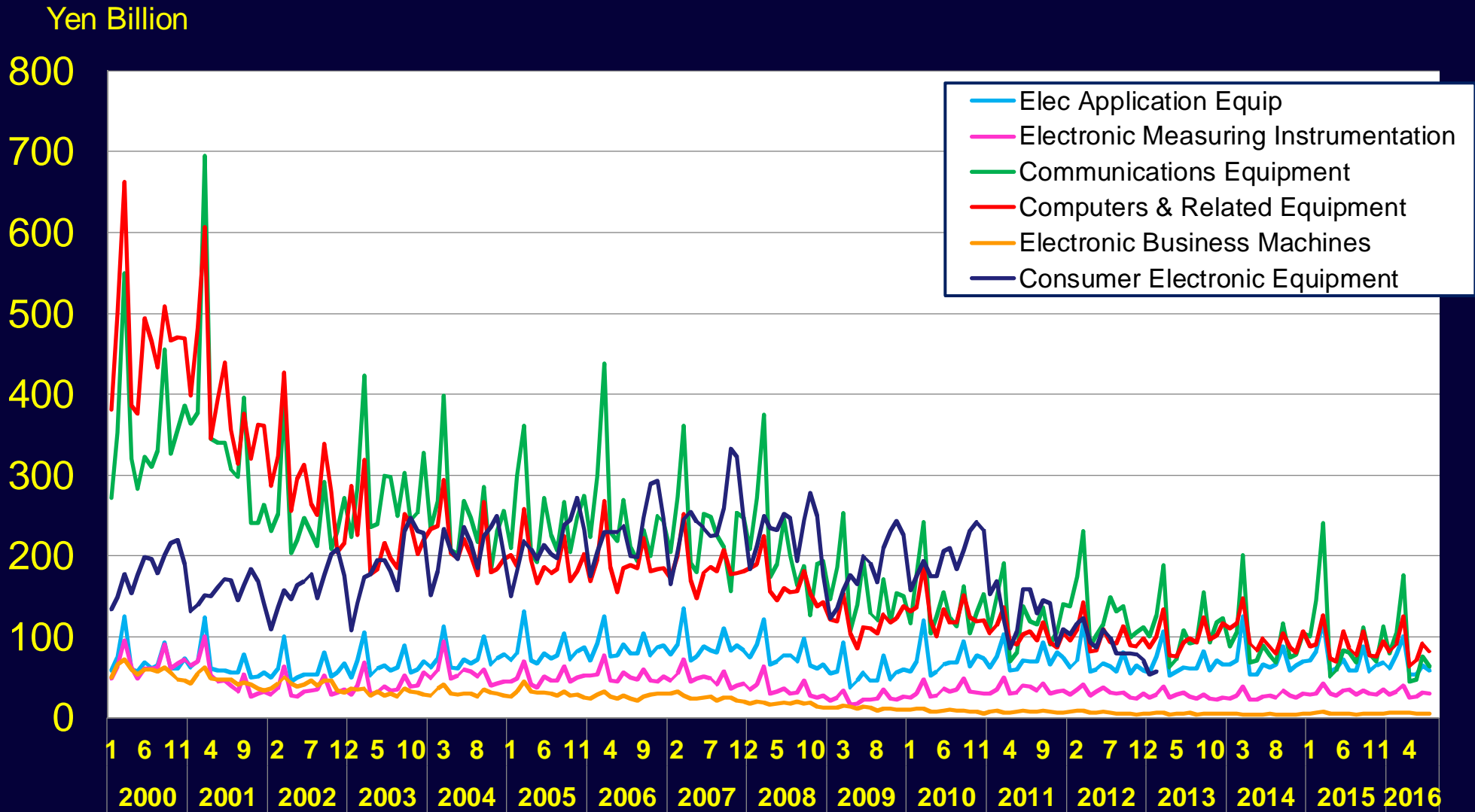
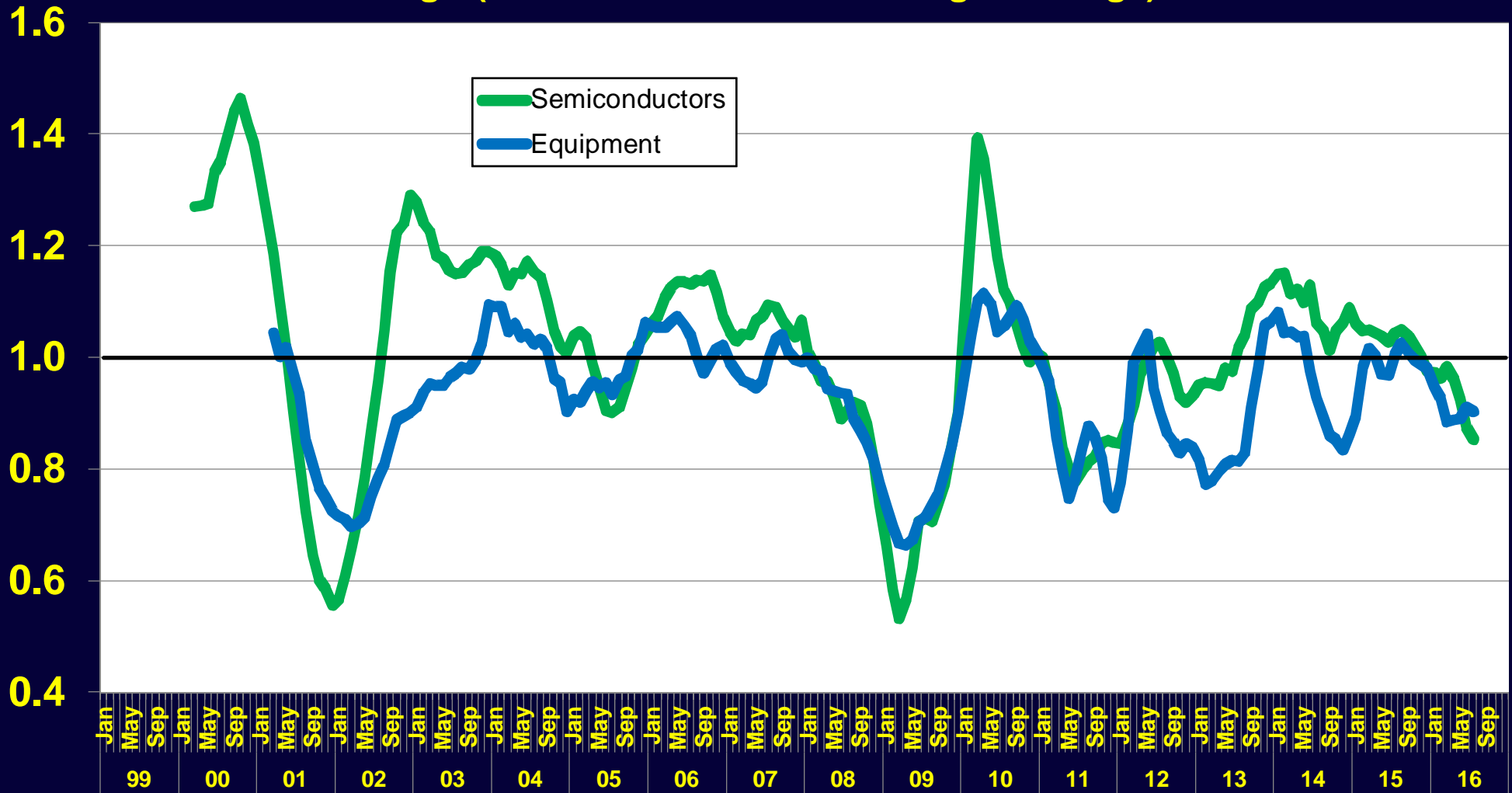




Chart 7

# Semiconductor Shipments to Japan vs. Japanese Electronic Equipment Production

3/12 Rate of Change (Yen converted at fluctuating exchange)



Total \$ Semiconductor Shipments from All Countries to Japan [www.sia-online.org/](http://www.sia-online.org/),  
JEITA [www.jeita.or.jp/](http://www.jeita.or.jp/)

Chart 8

# Japan Integrated Circuit & Discrete Semiconductor Domestic Production

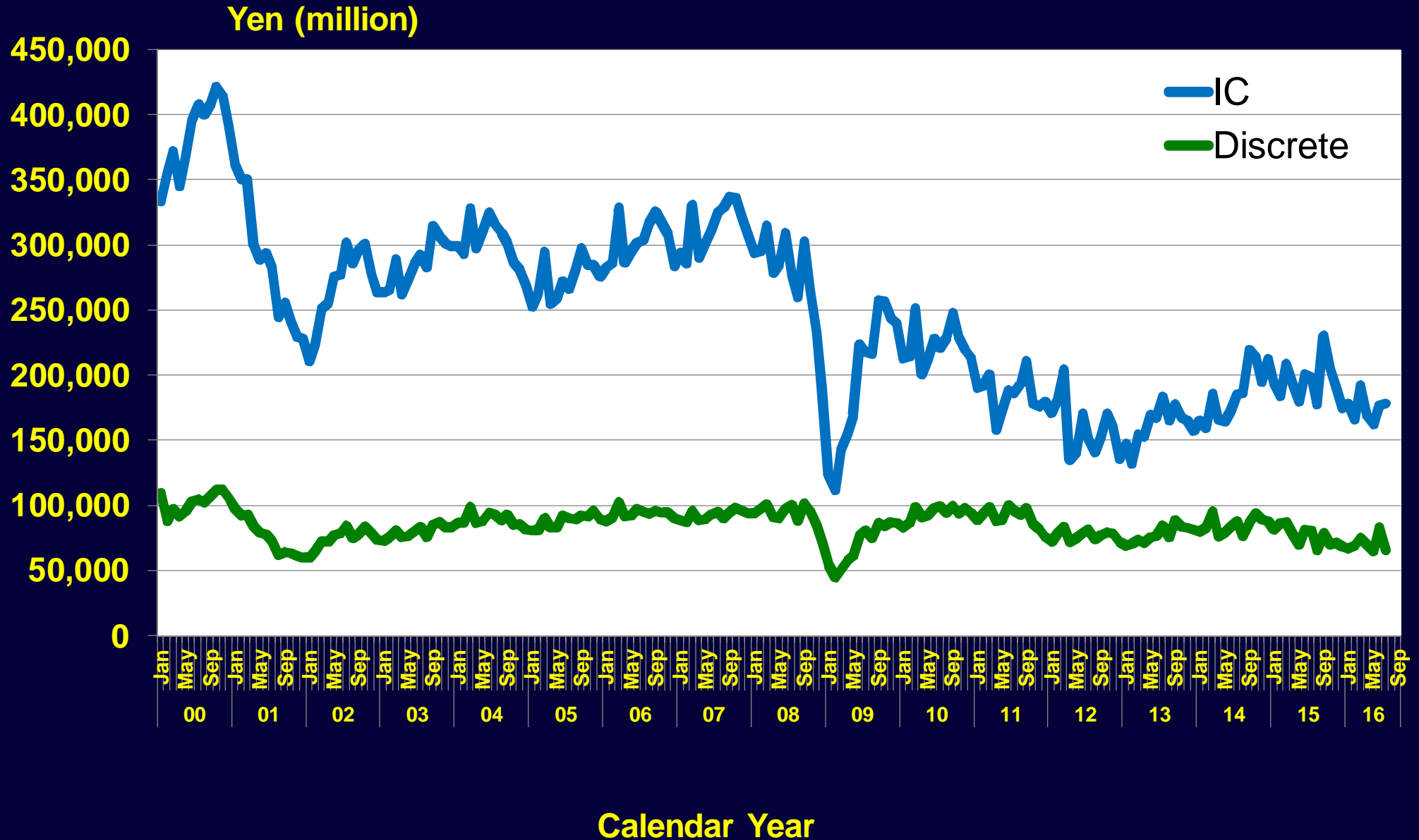




Chart 9

# Semiconductor Capital Equipment Shipments to Japan

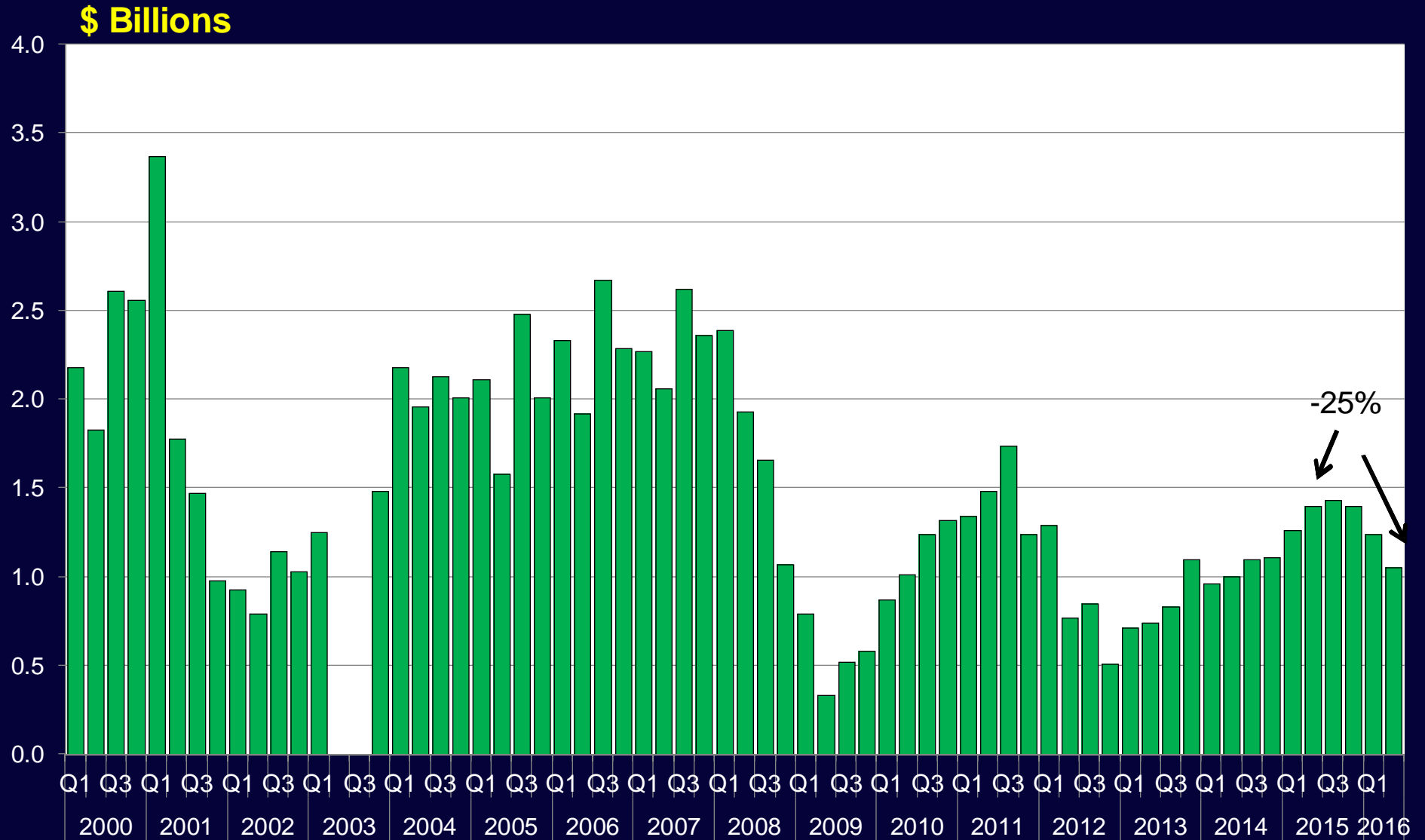
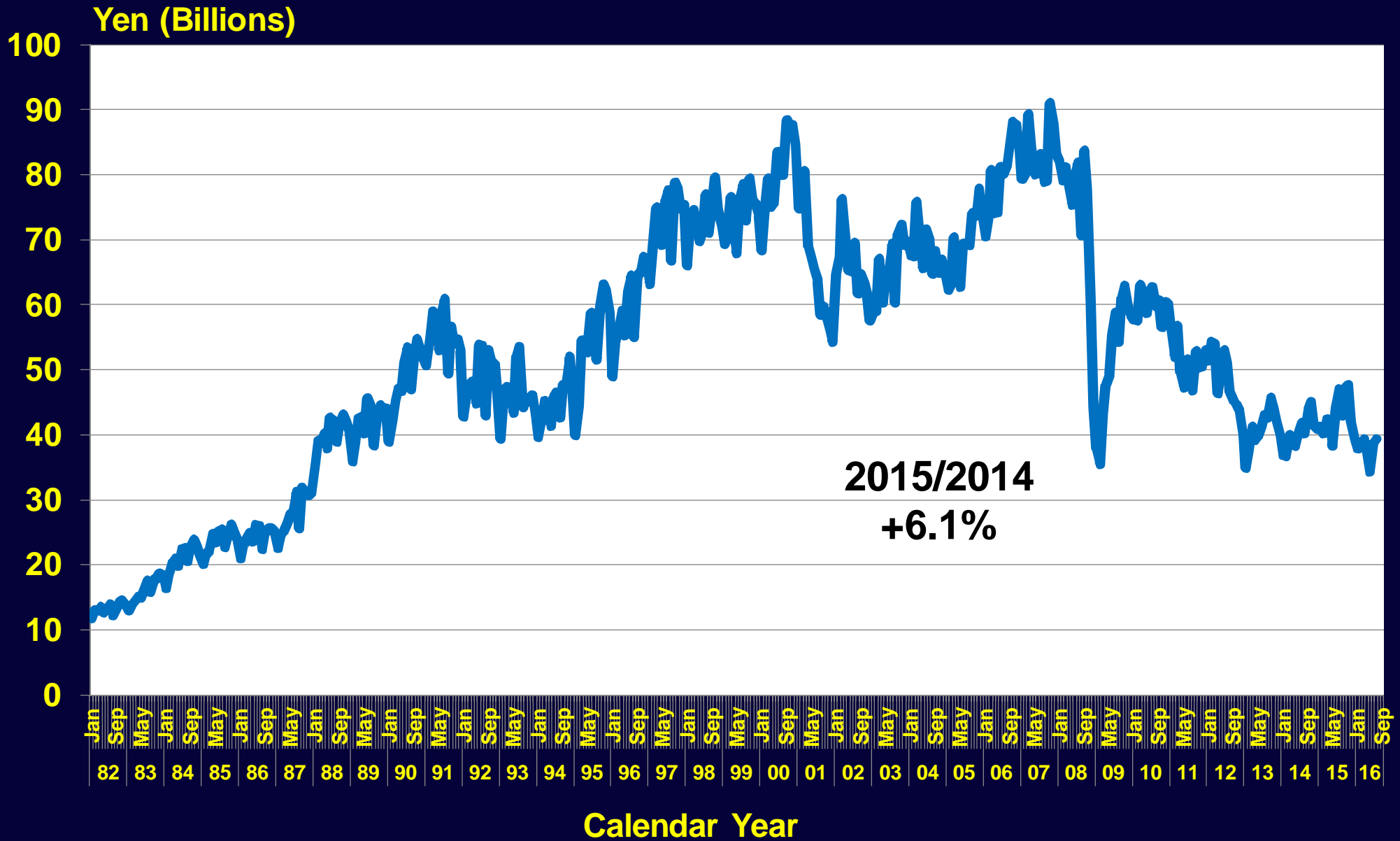


Chart 10

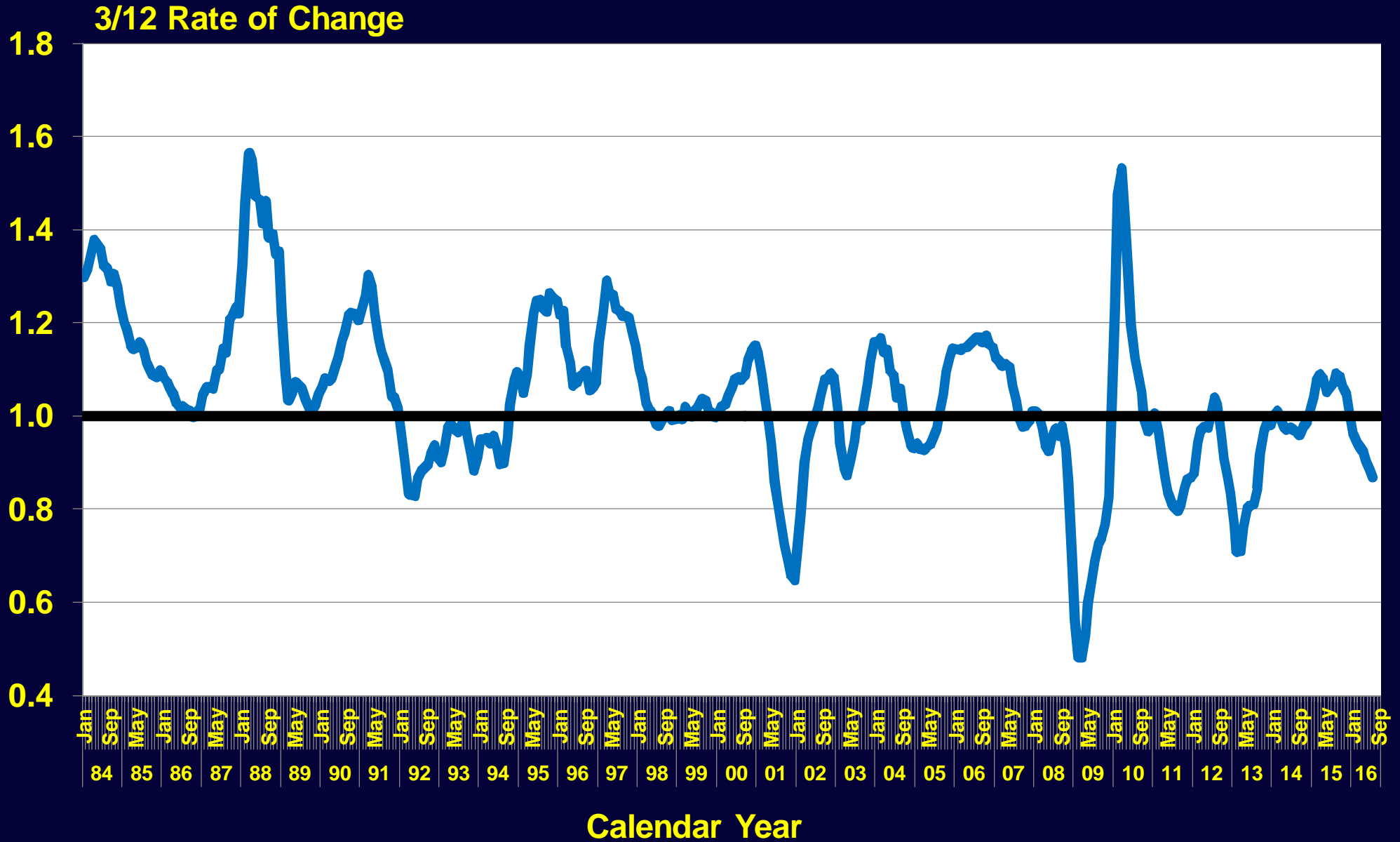
# Japan Passive Component Domestic Production



# Japan PCB Production



# Japan PCB Production



# Japan PMI PCB Leading Indicator vs. Japan PCB Shipments

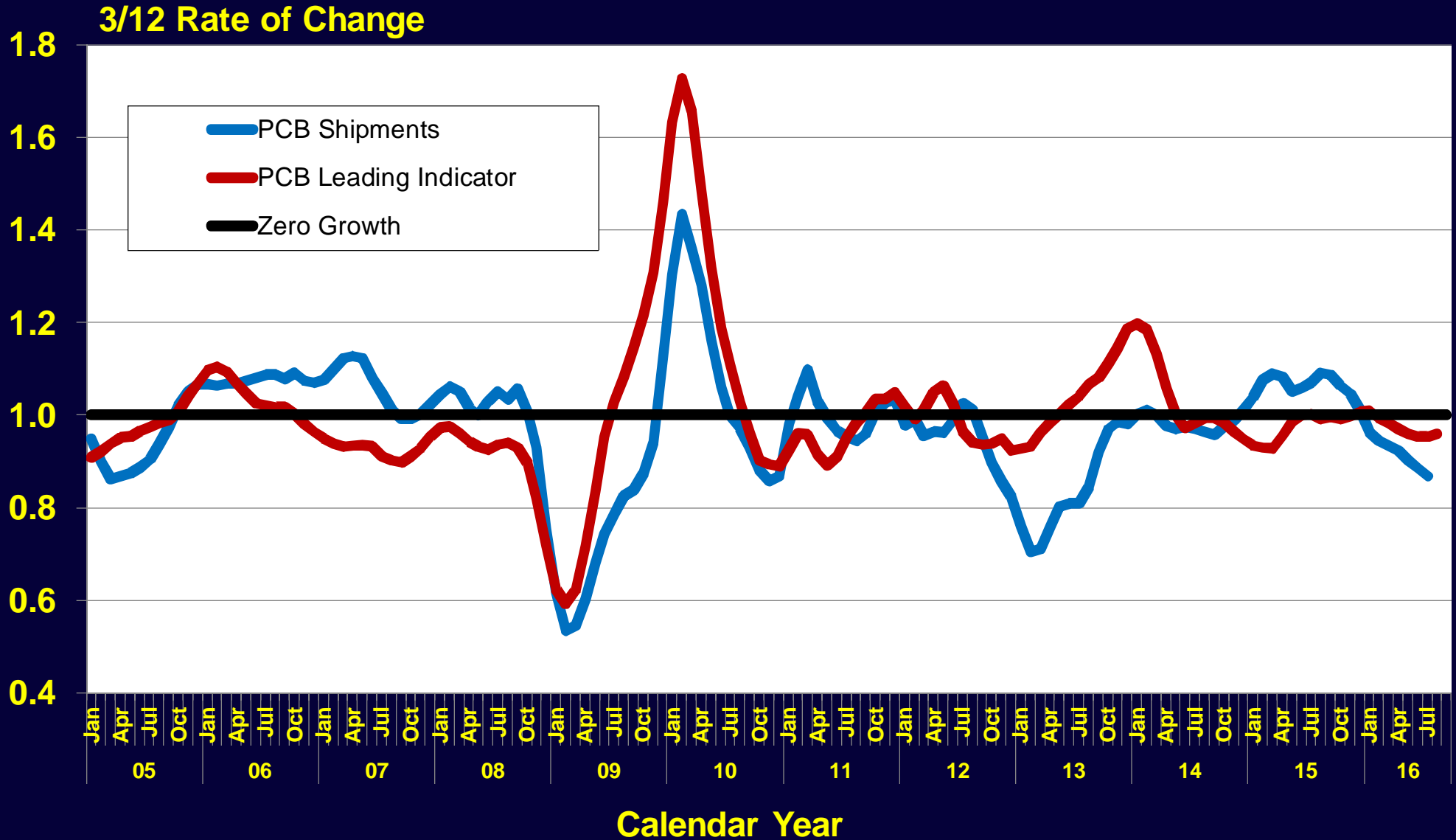


Chart 14

# Japanese Electronic Component & Device Production

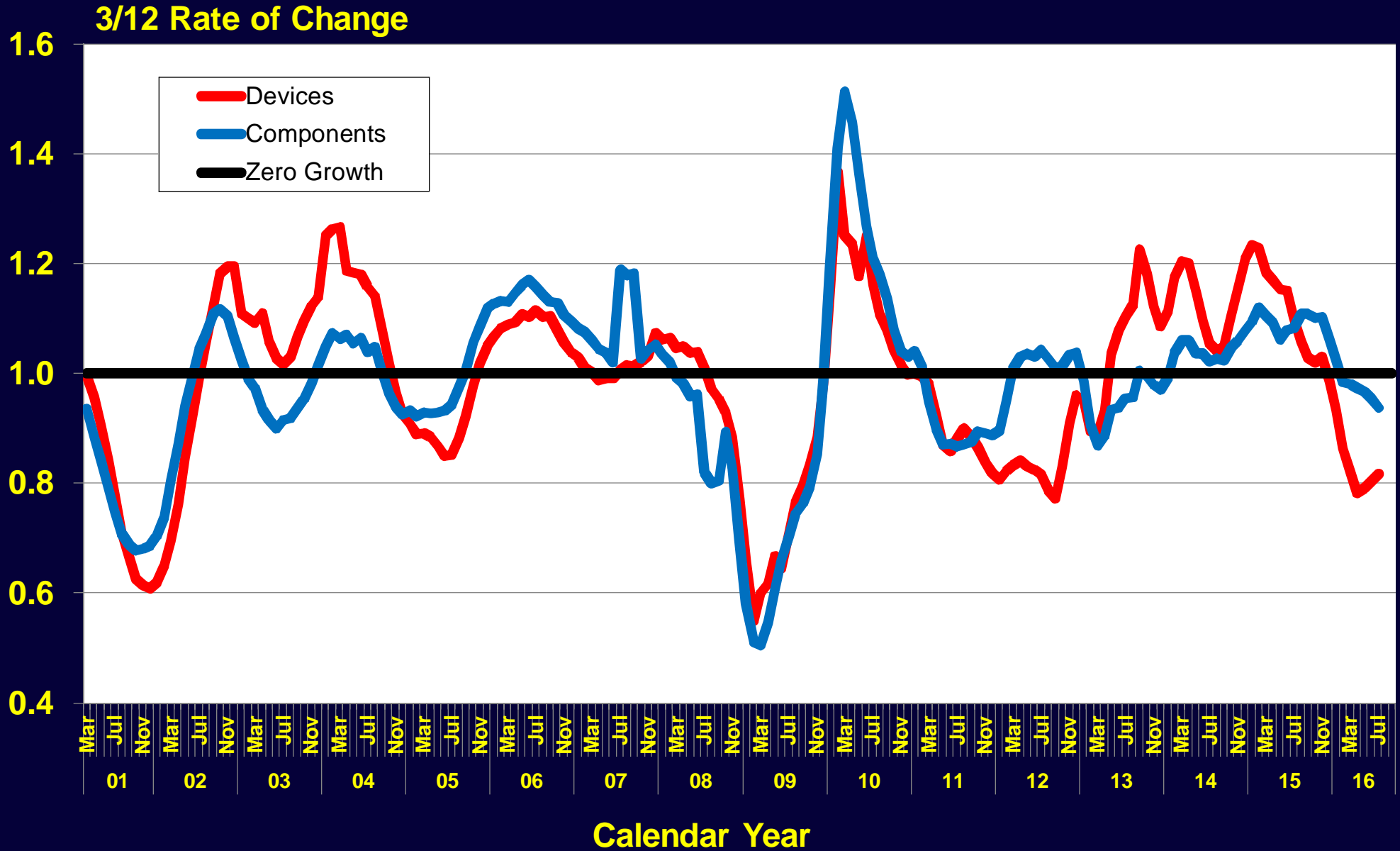
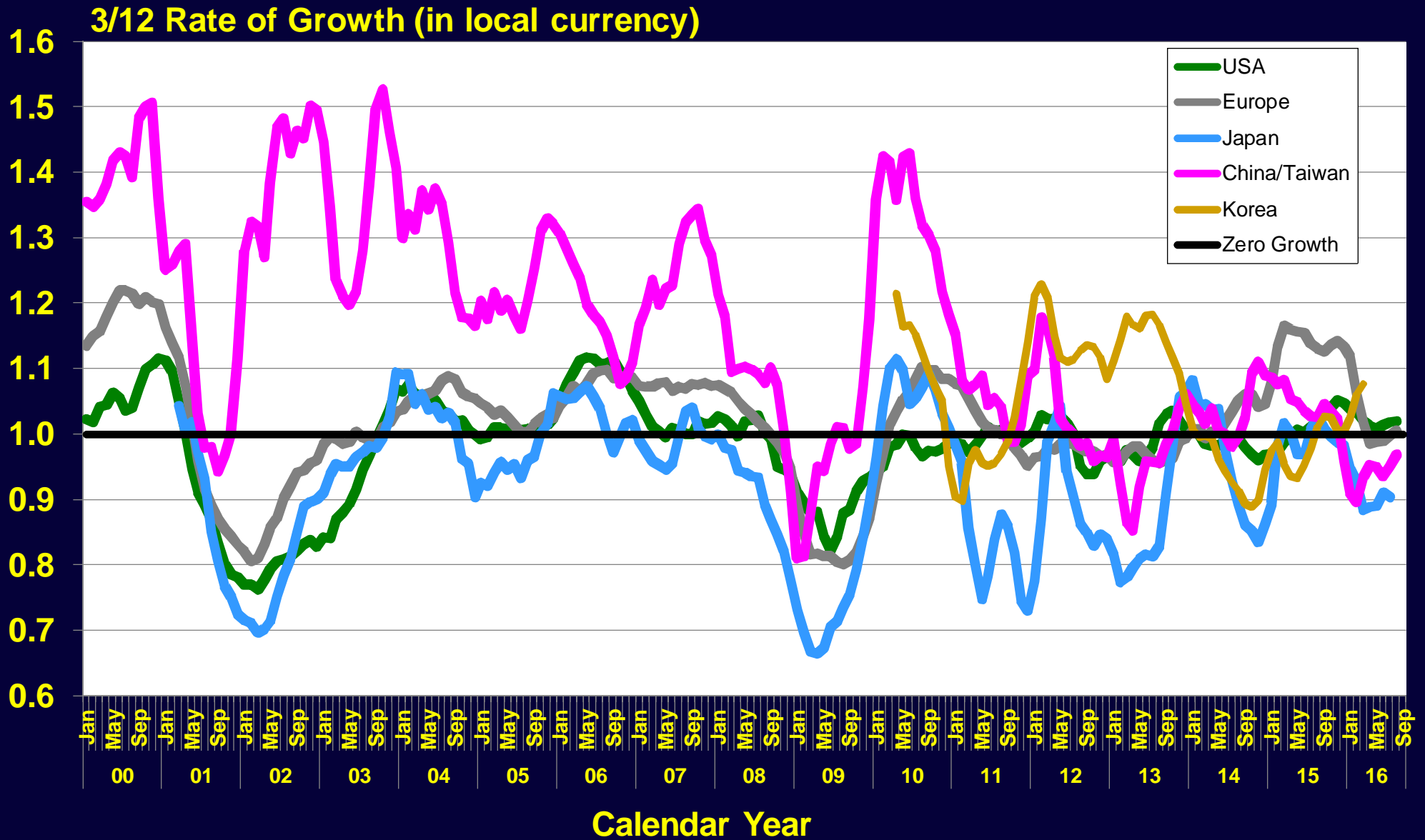


Chart 15

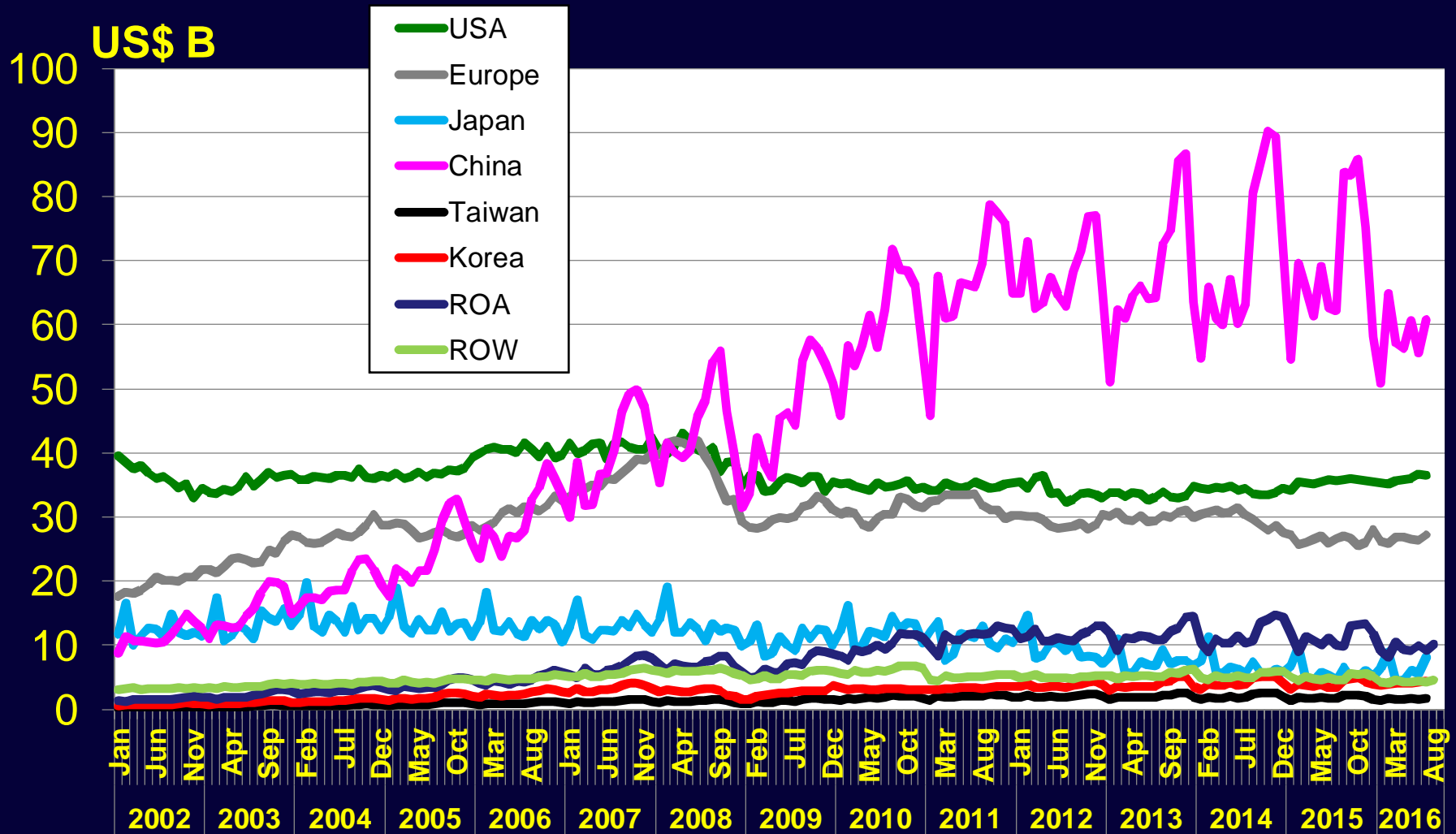
# Regional Electronic Equipment Shipment Growth



Sources: IPC, JPCA, Taiwan/China composite; S Korea composite; Eurostat for Europe

# World Electronic Equipment Monthly Shipments

Converted @ Fluctuating Exchange Rates





# World Electronic Equipment Monthly Shipments

Converted @ Fluctuating Exchange Rates

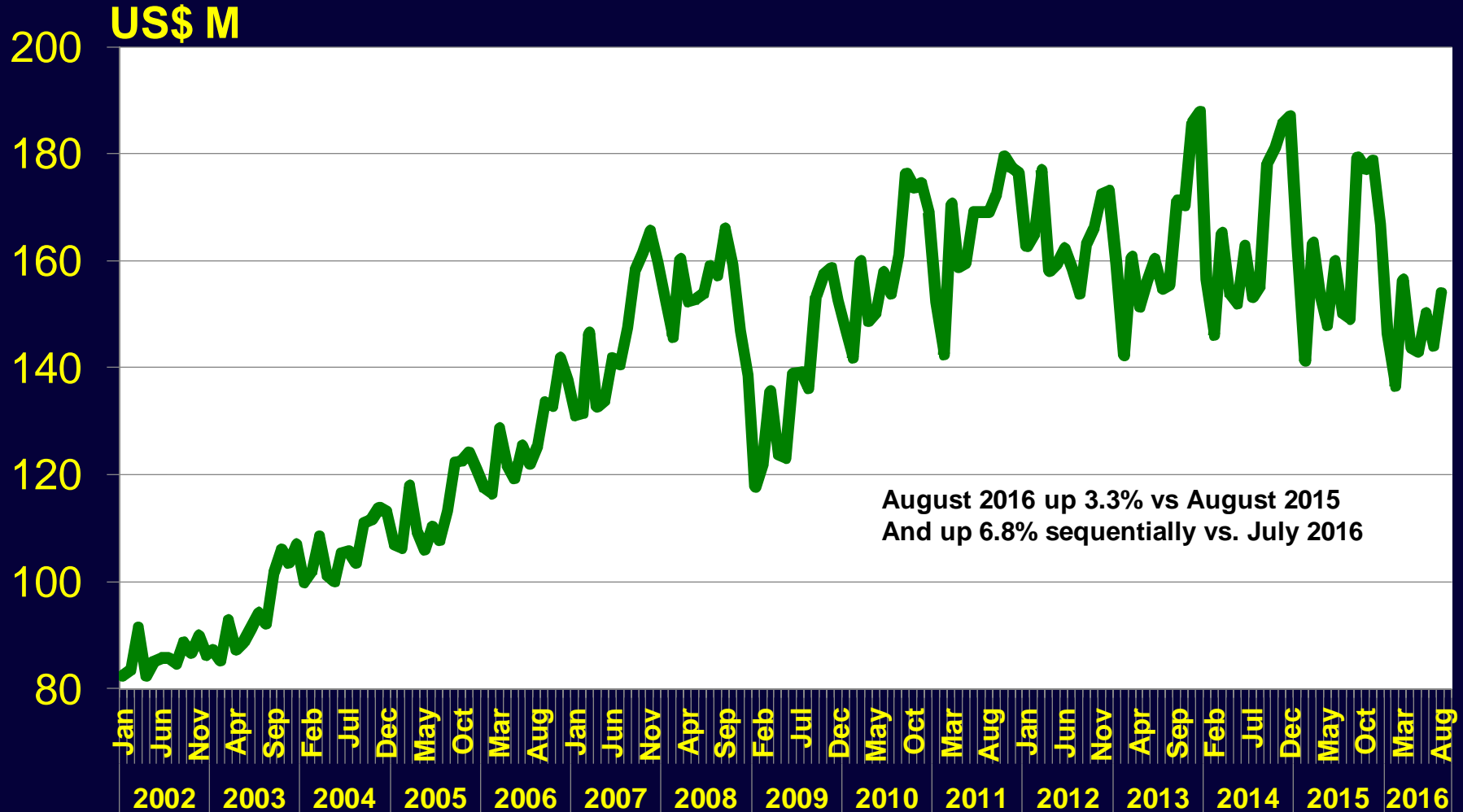
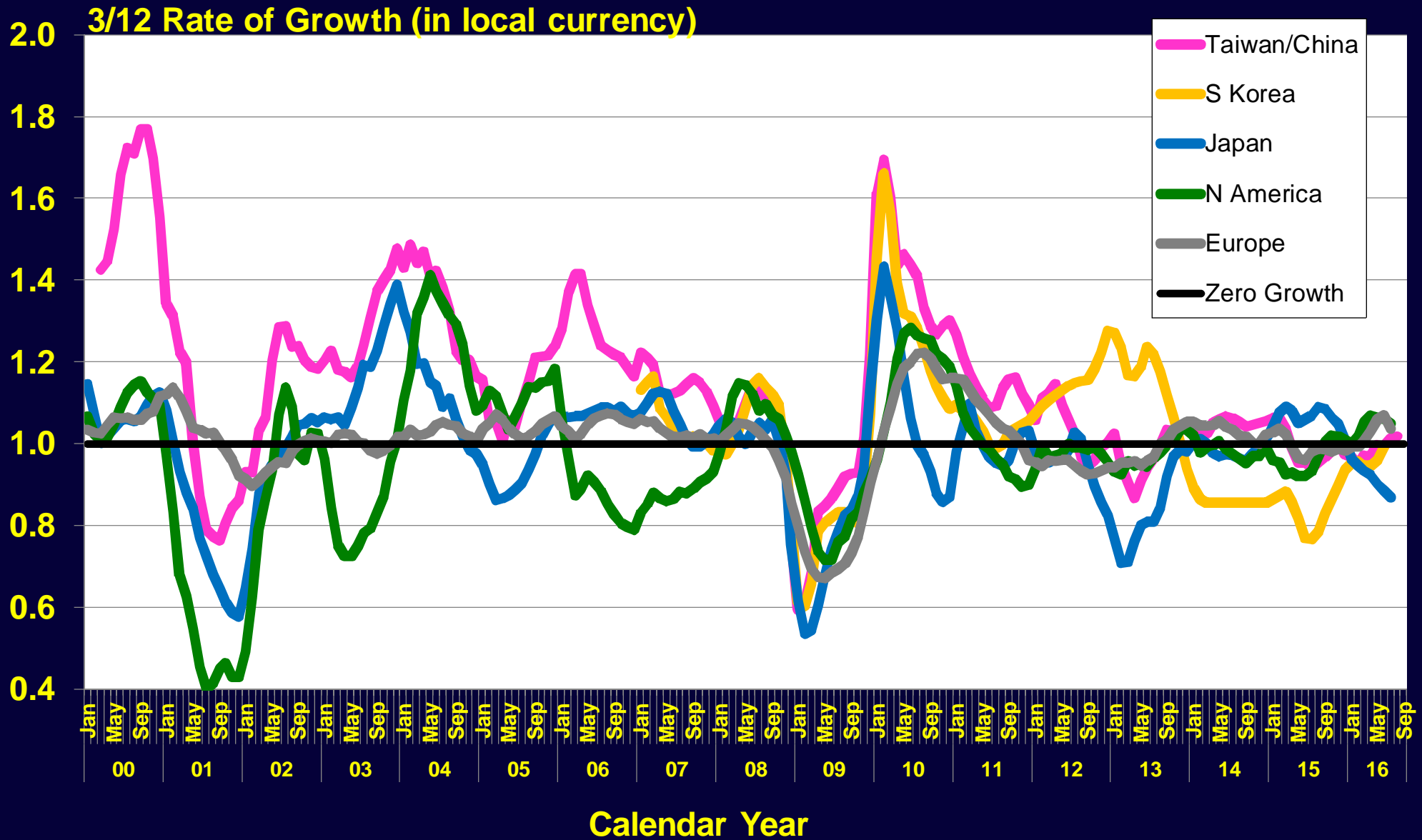


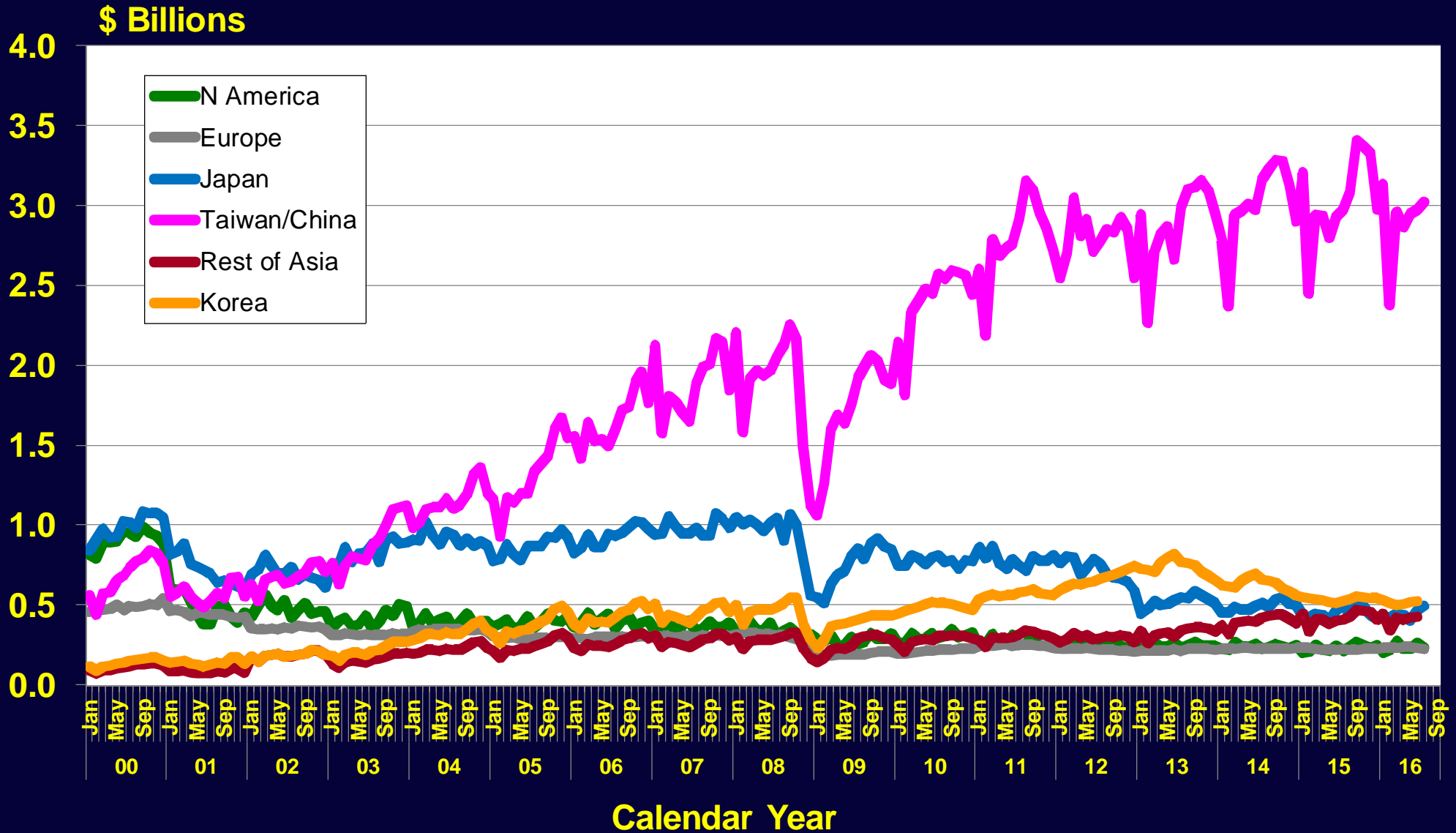
Chart 18

# Regional PCB Shipment Growth



Sources: IPC, JPCA, Taiwan/China composite; Eurostat "wiring devices" for Europe

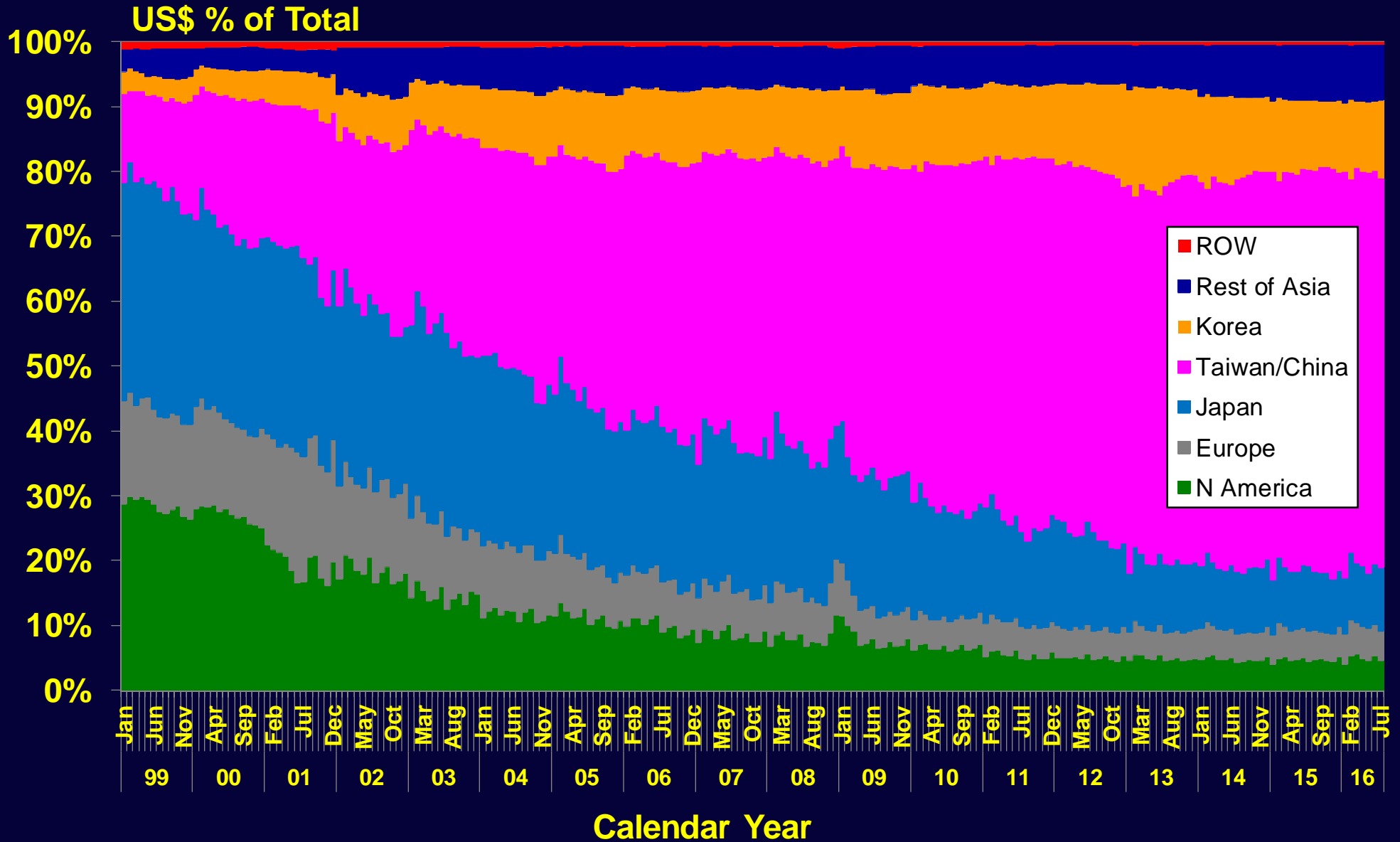
# World PCB Monthly Shipments Converted @ Fluctuating Exchange Rates



Source: Custer Consulting Group

Chart 20

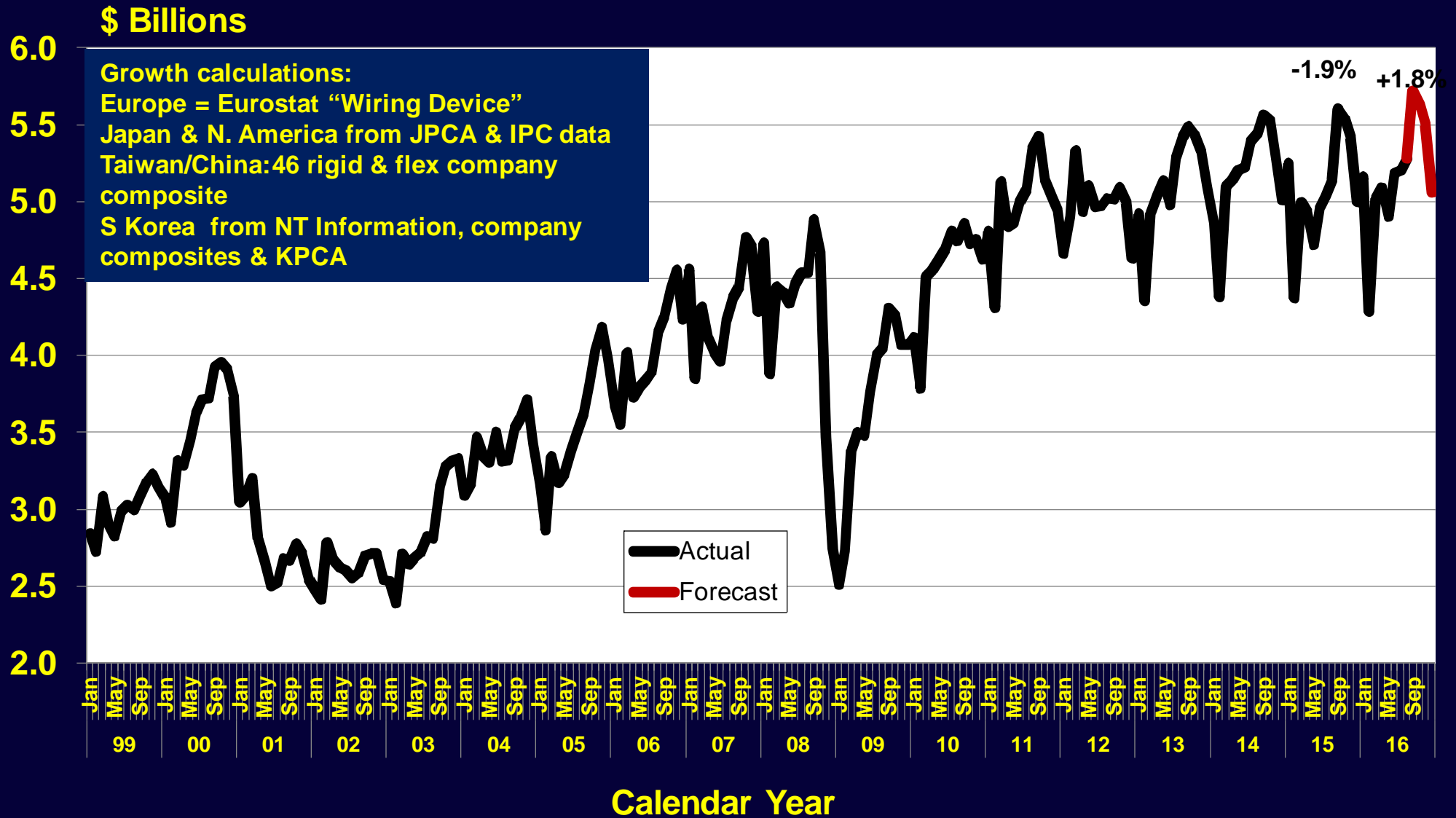
# World PCB Monthly Shipments Converted @ Fluctuating Exchange Rates



Source: Custer Consulting Group

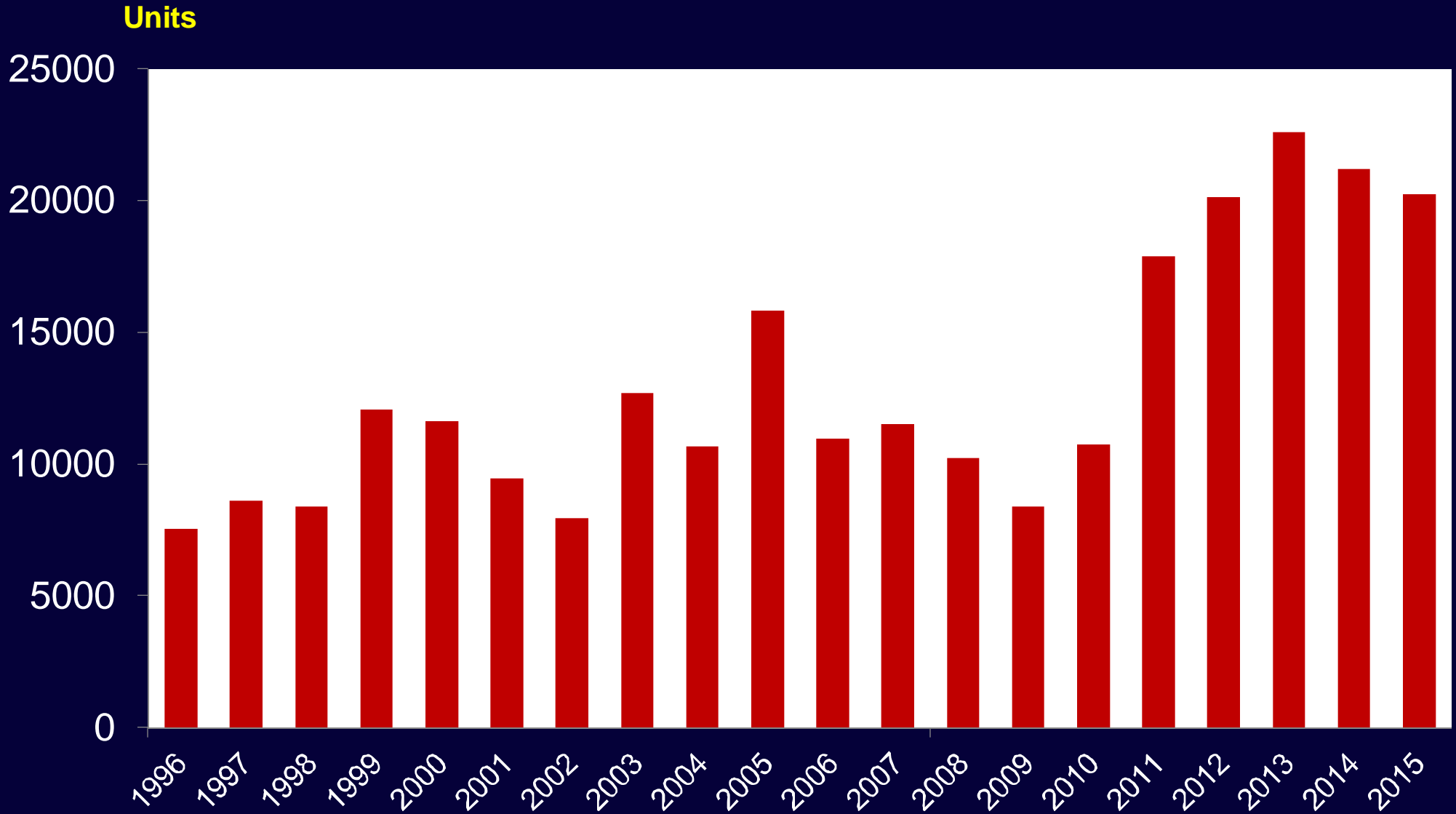
# World PCB Shipments (with forecast)

## Converted @ Fluctuating Exchange Rates

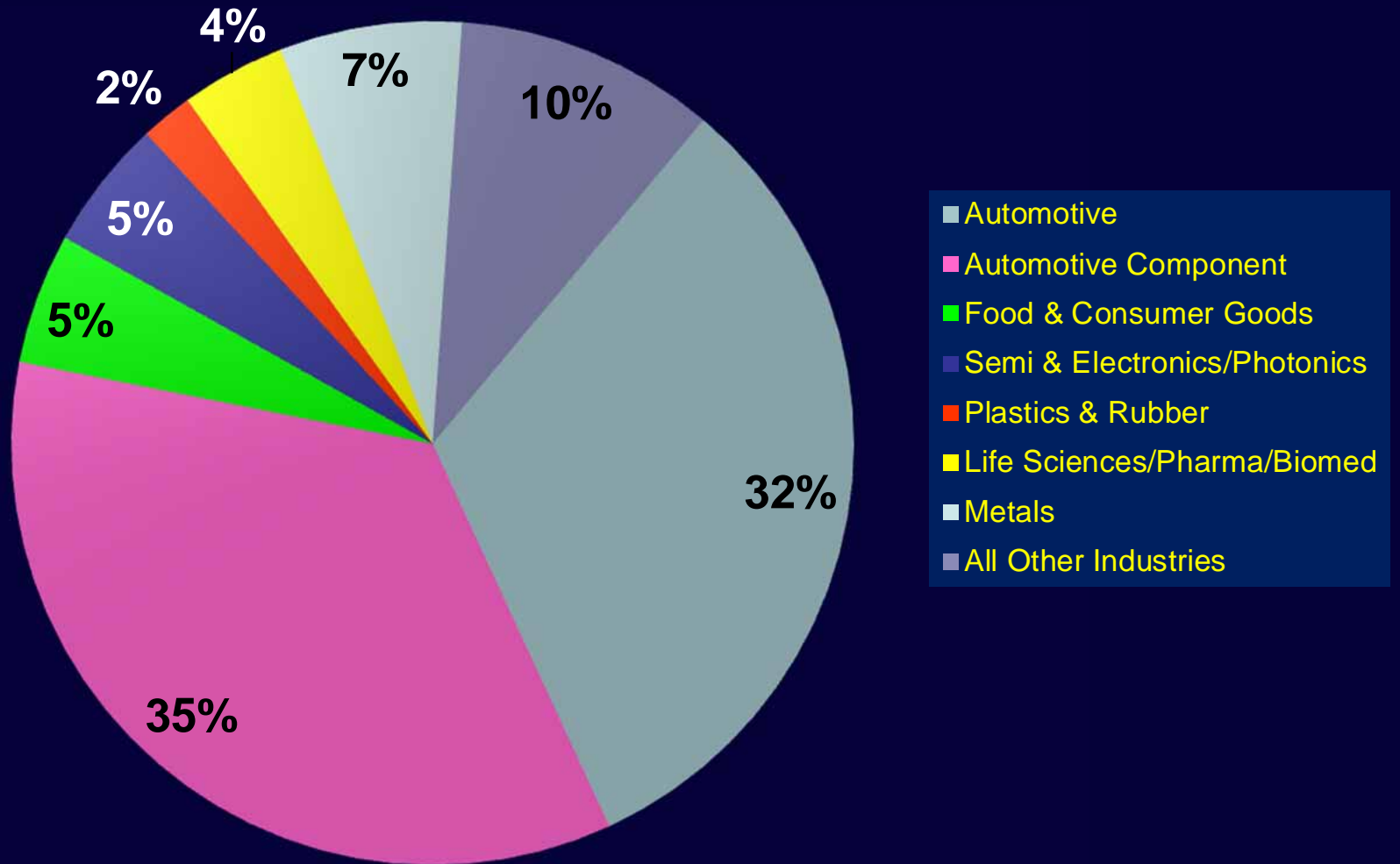


Source: Custer Consulting Group - 2010 base year expanded by monthly growth of N. American, European, Japanese, Korean & Taiwan/China monthly PCB shipments

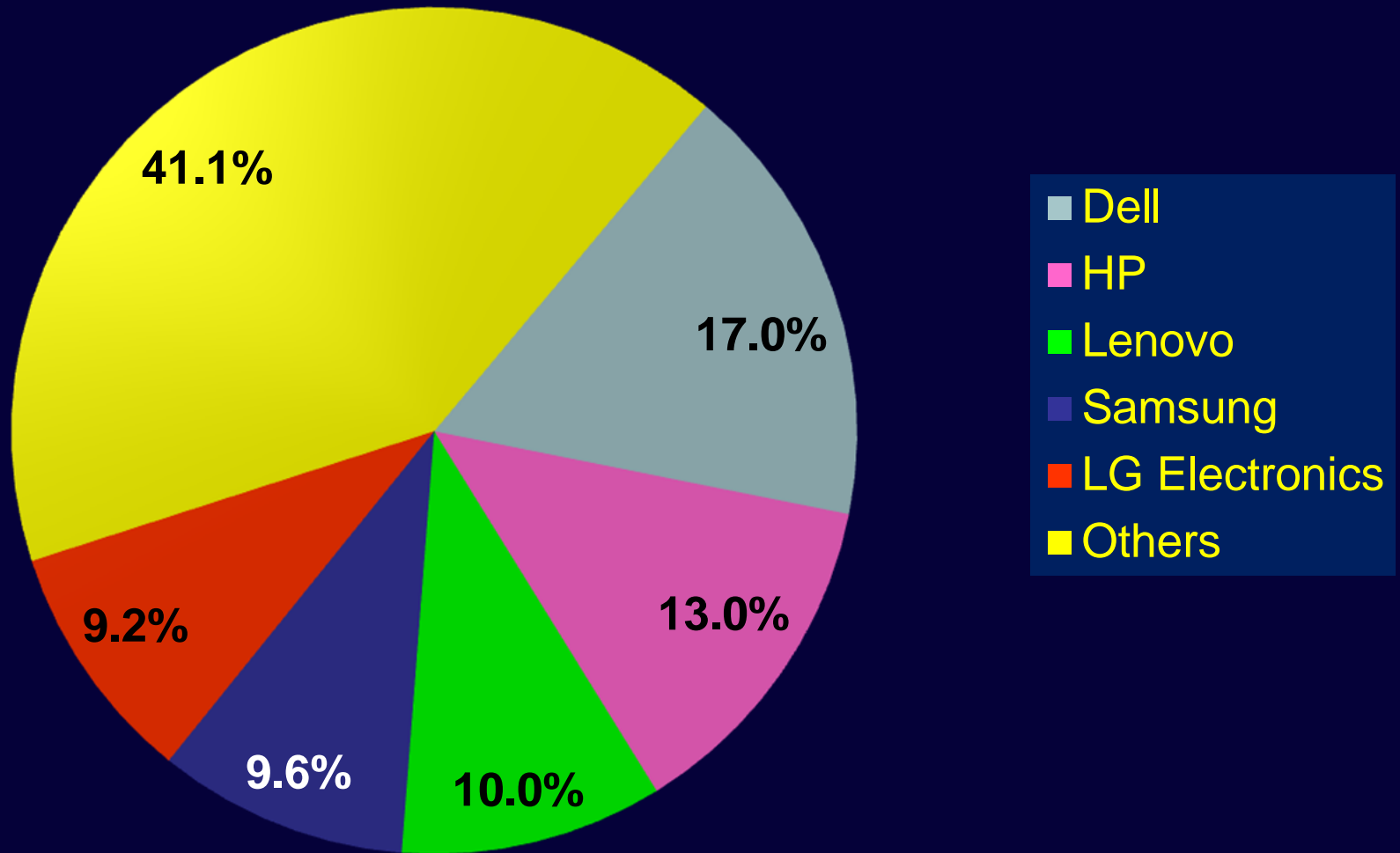
# U.S. Industrial Robot Shipments



# 2016 Robot Orders by Industry 2Q'16



# World PC Monitor Market 2Q'16



**TOTAL: 30.7 Million Units**



# World PC Monitor Shipments

