

Chart 1

# U.S. Electronic Equipment Book/Bill Ratio

## 3-Month Average

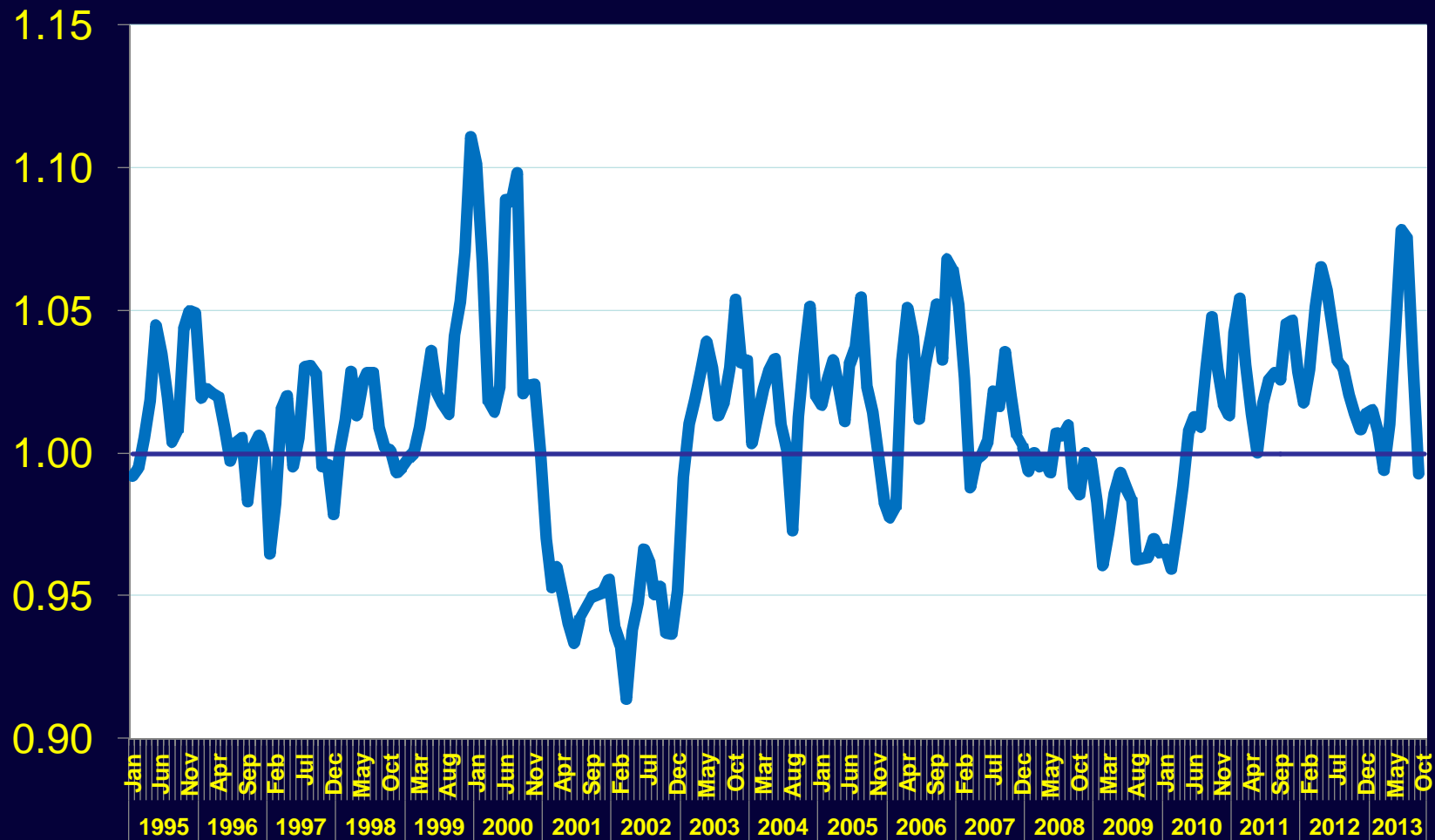


Chart 2

# U.S. Electronic Equipment Orders & Shipments

Computer, Communications, Measurement & Control and Military

\$ Billions (monthly, seasonally adjusted)

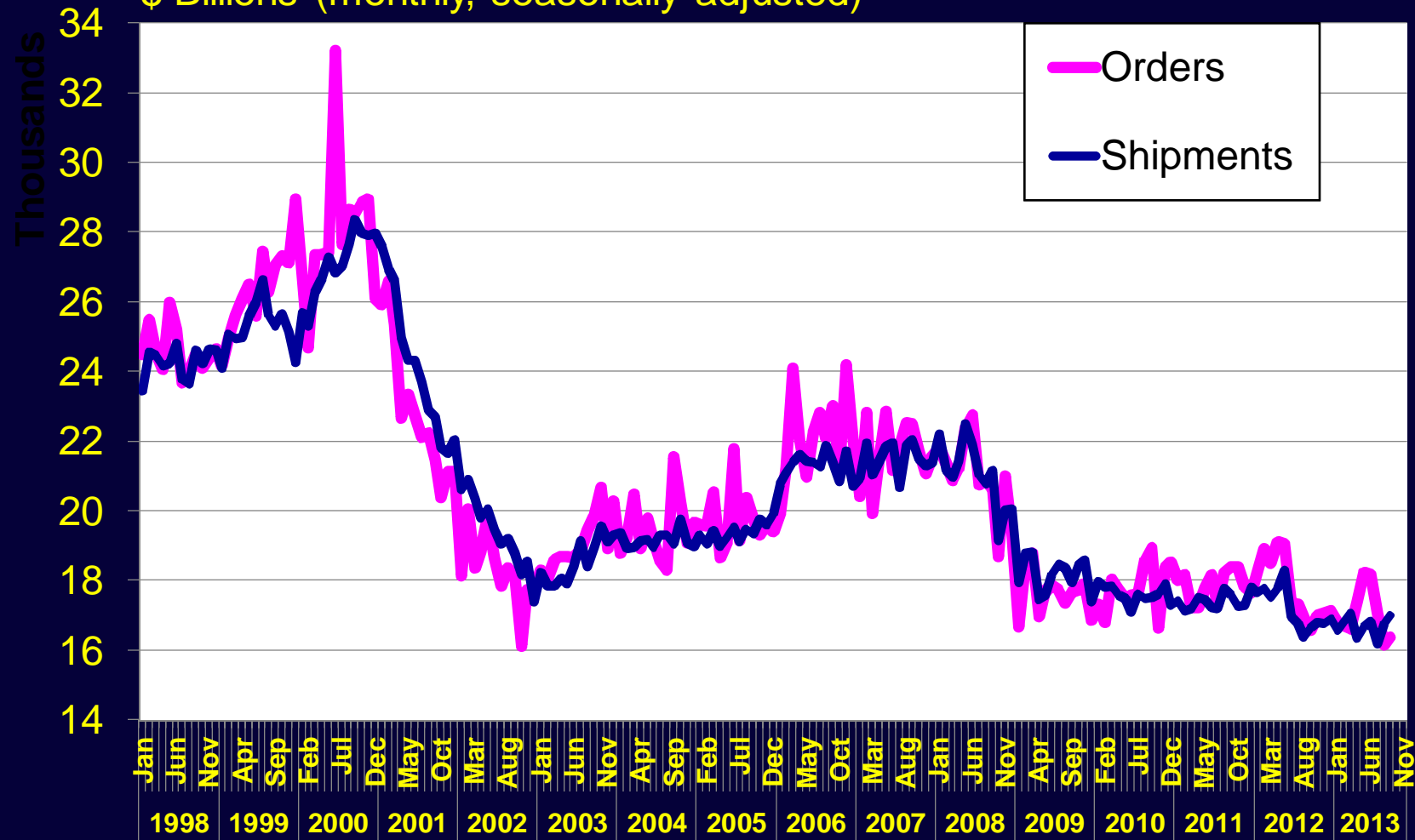


Chart 3

# U.S. Electronic Equipment Orders

## Monthly Data

\$ Billions (monthly, seasonally adjusted)

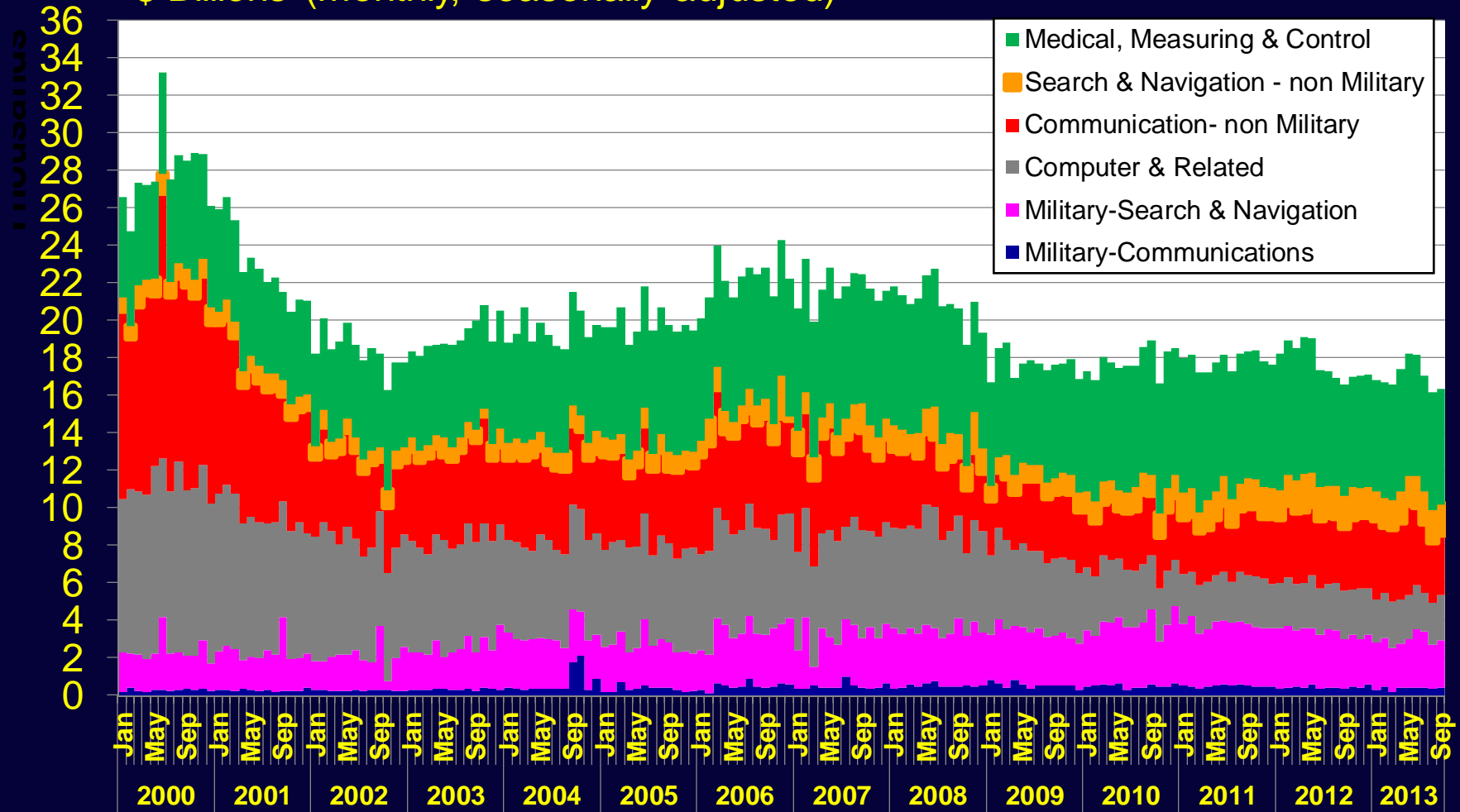


Chart 4

# U.S. Vehicle Shipments

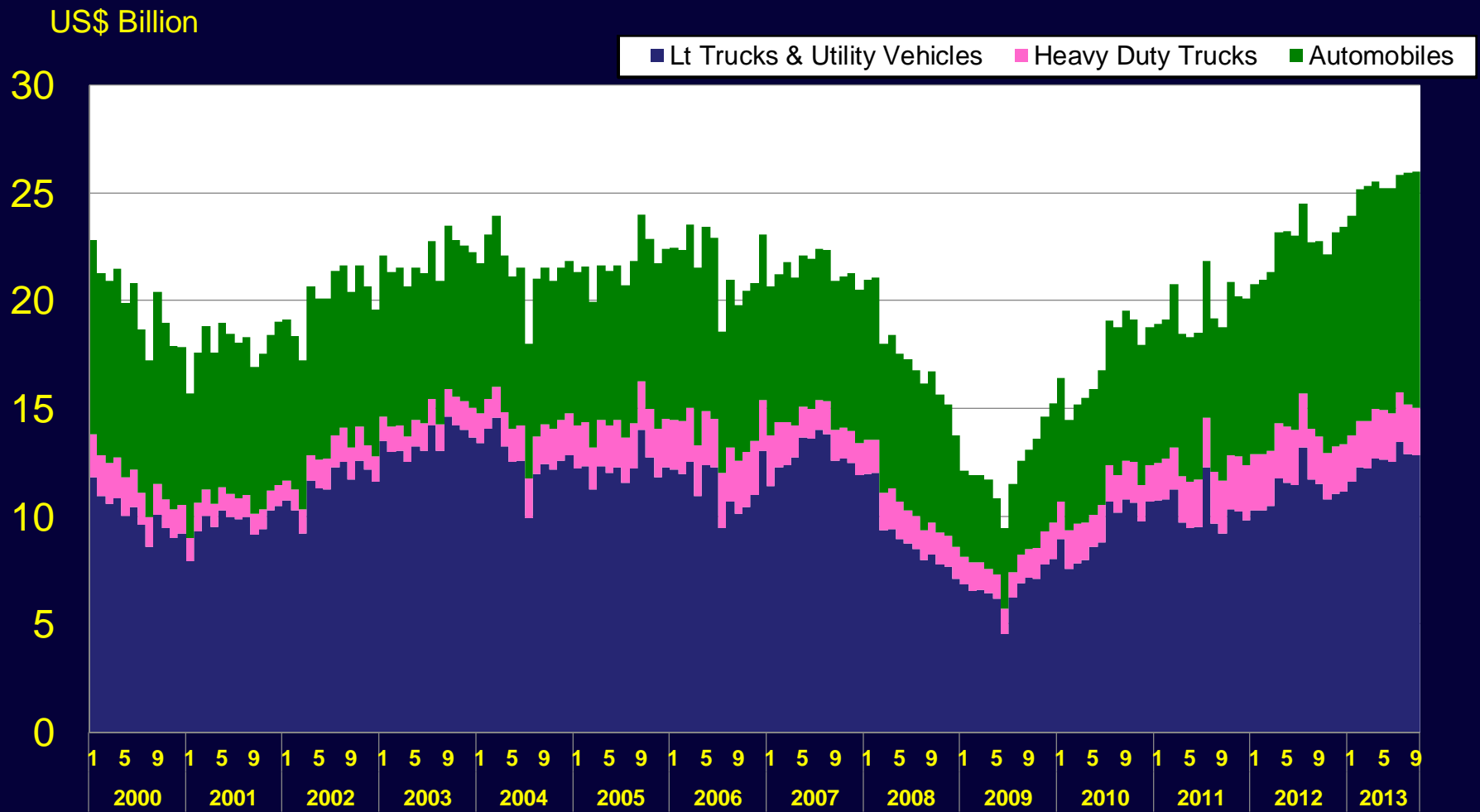


Chart 5

# U.S. Aircraft & Parts Shipments

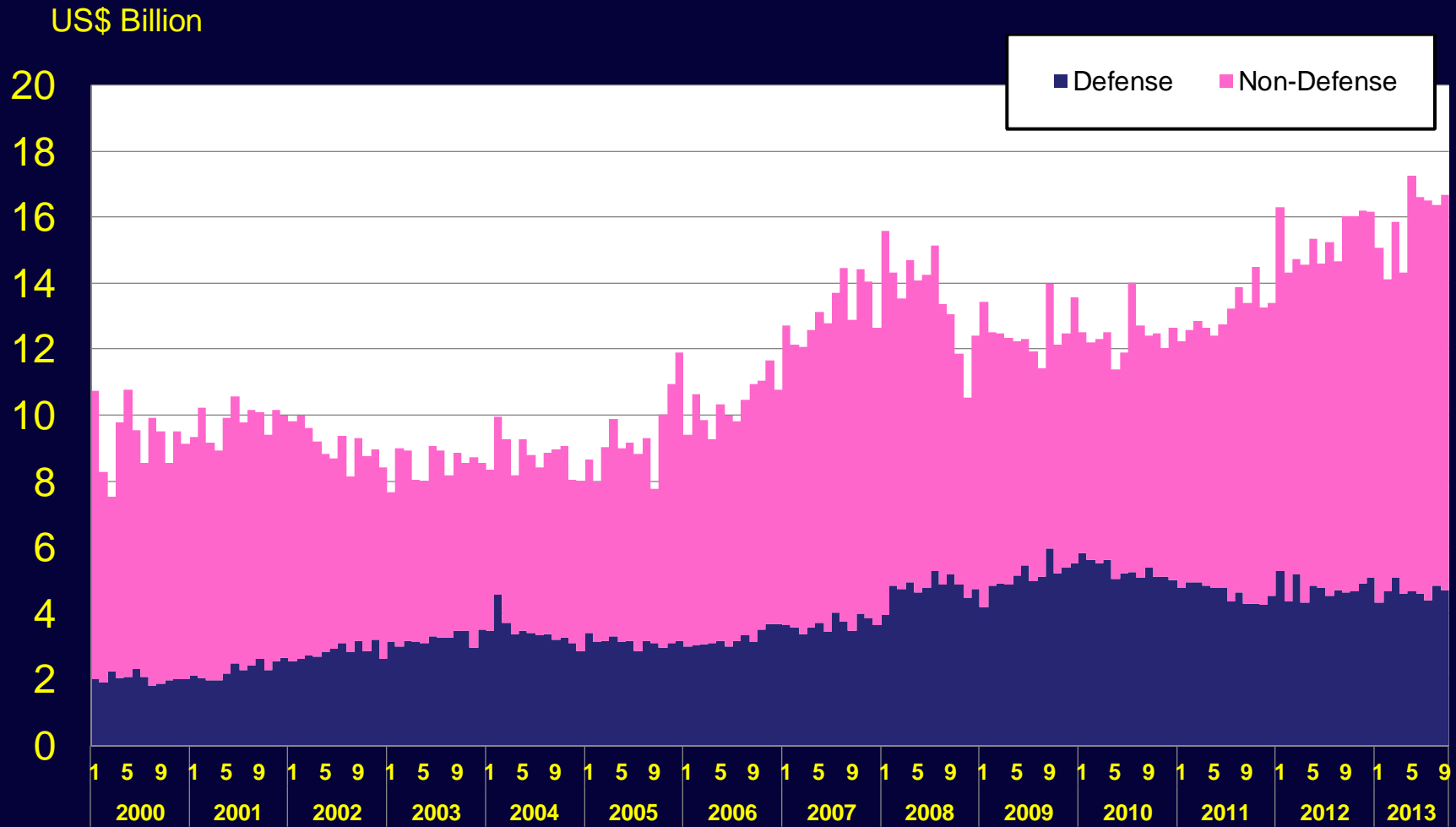


Chart 6

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

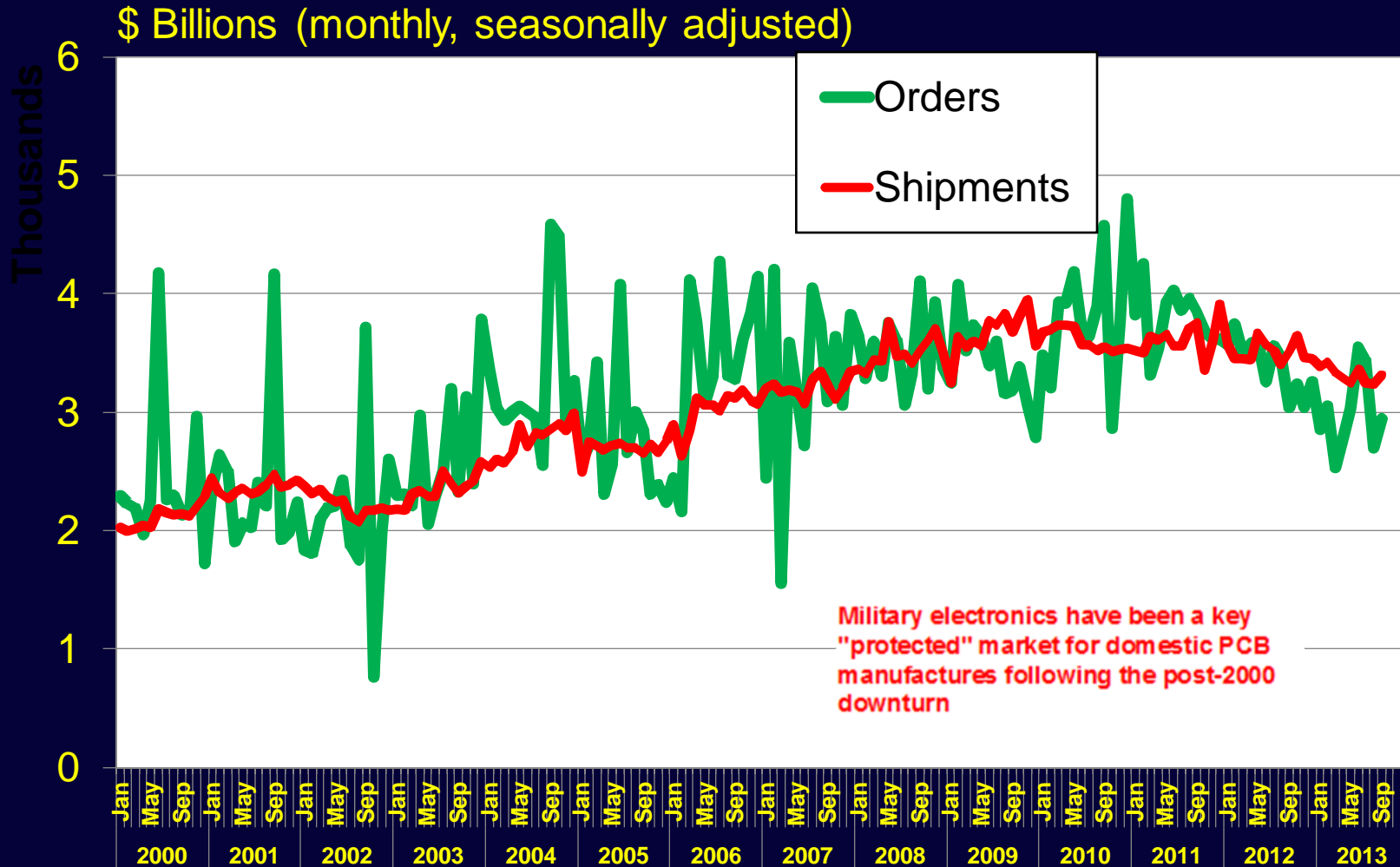


Chart 7

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

\$ Billions (monthly, seasonally adjusted)

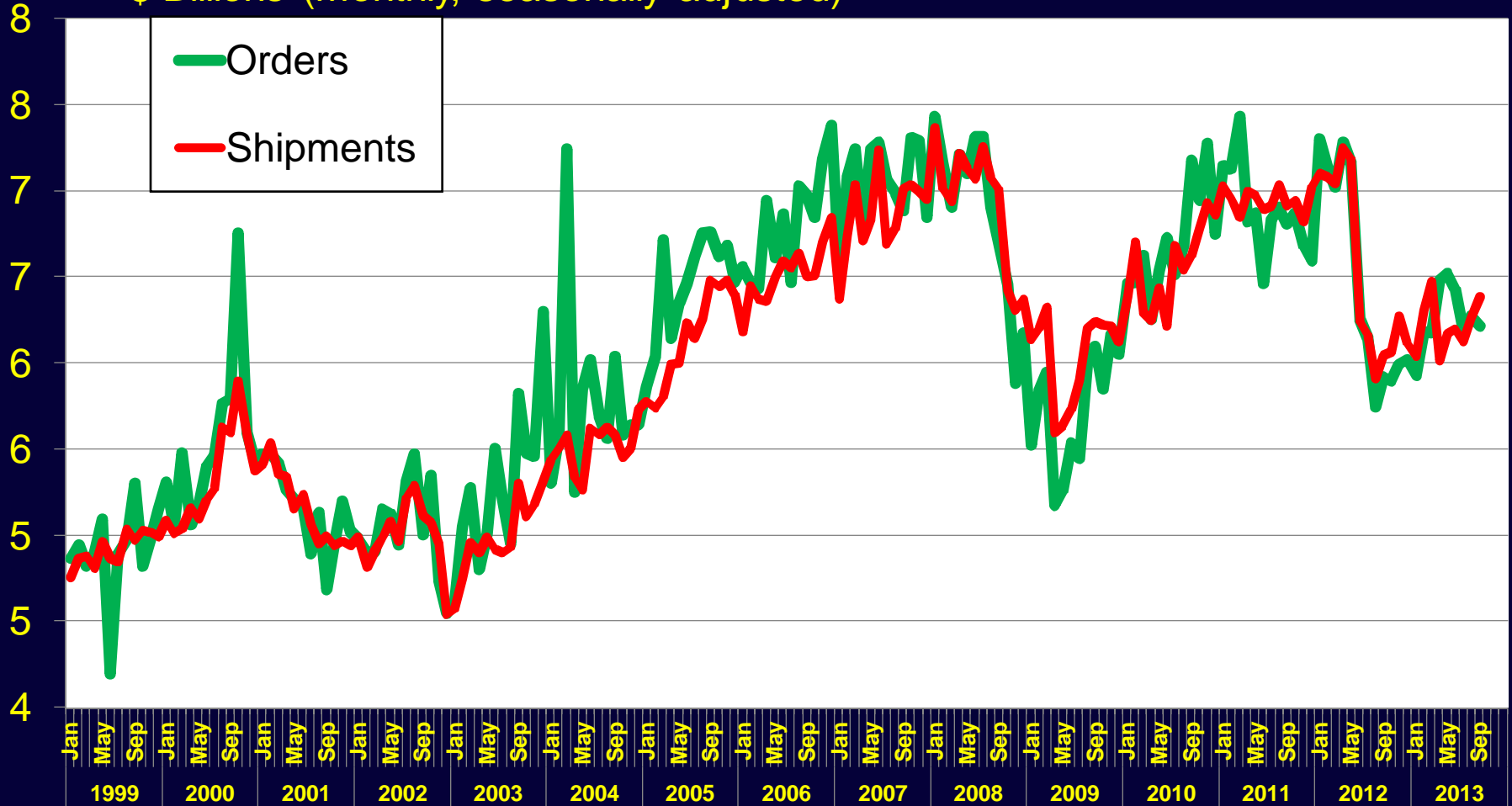


Chart 8

# U.S. Communication Equipment Orders & Shipments

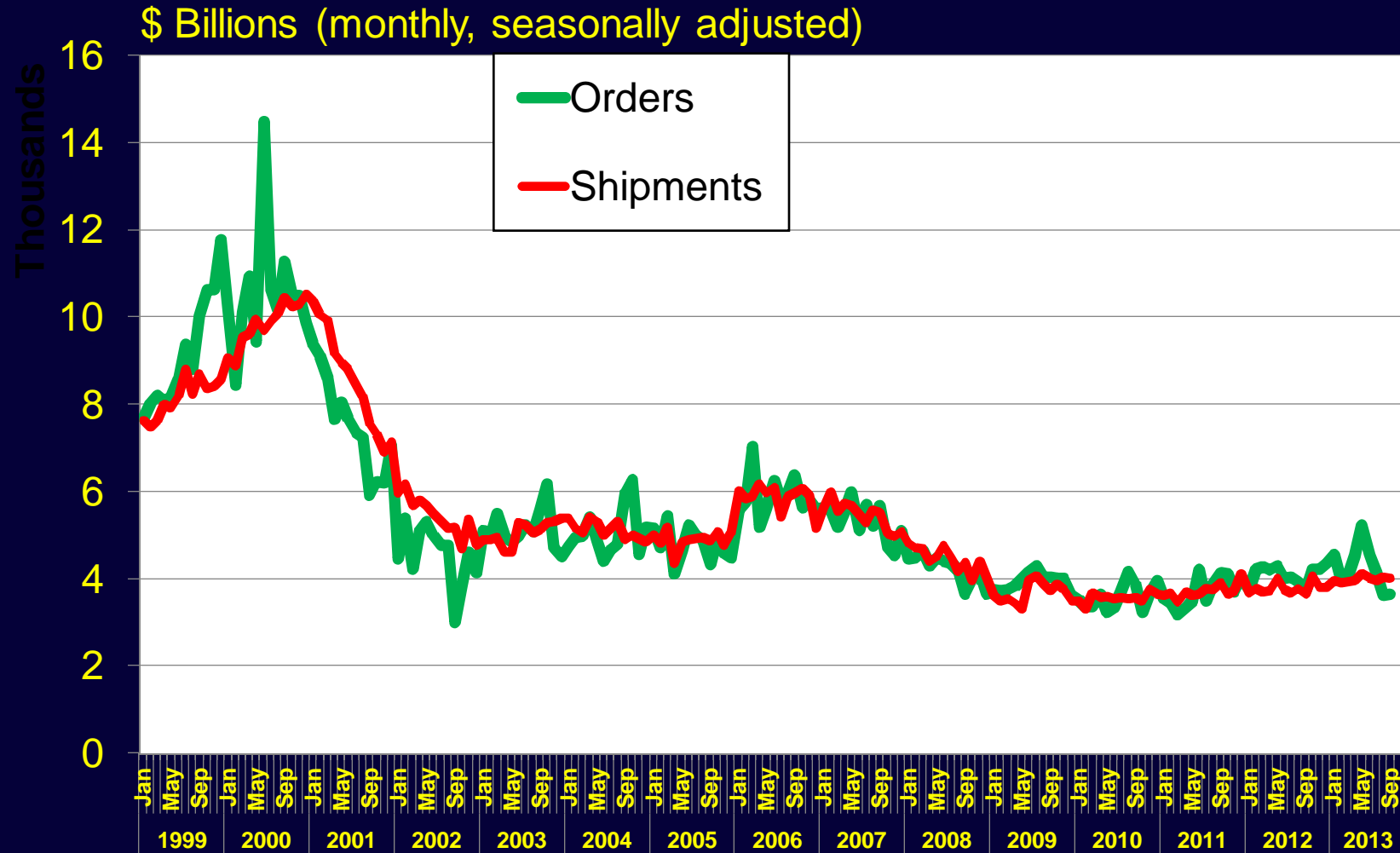




Chart 9

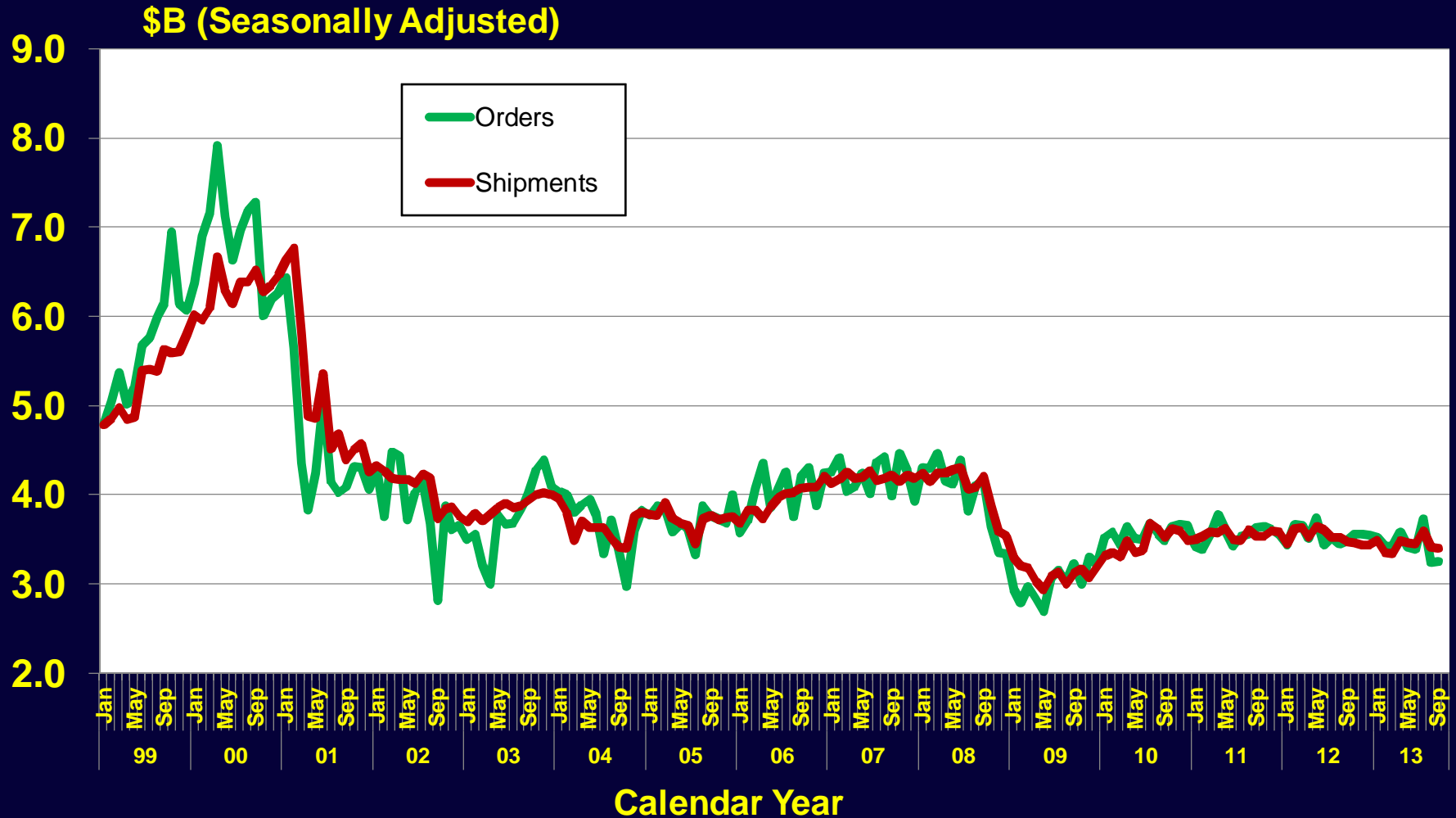
# U.S. Computers & Related Products Orders & Shipments



Chart 10

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

## Orders & Shipments



<http://www.census.gov/indicator/www/m3/>

Chart 11

# Present Growth Rates (%)

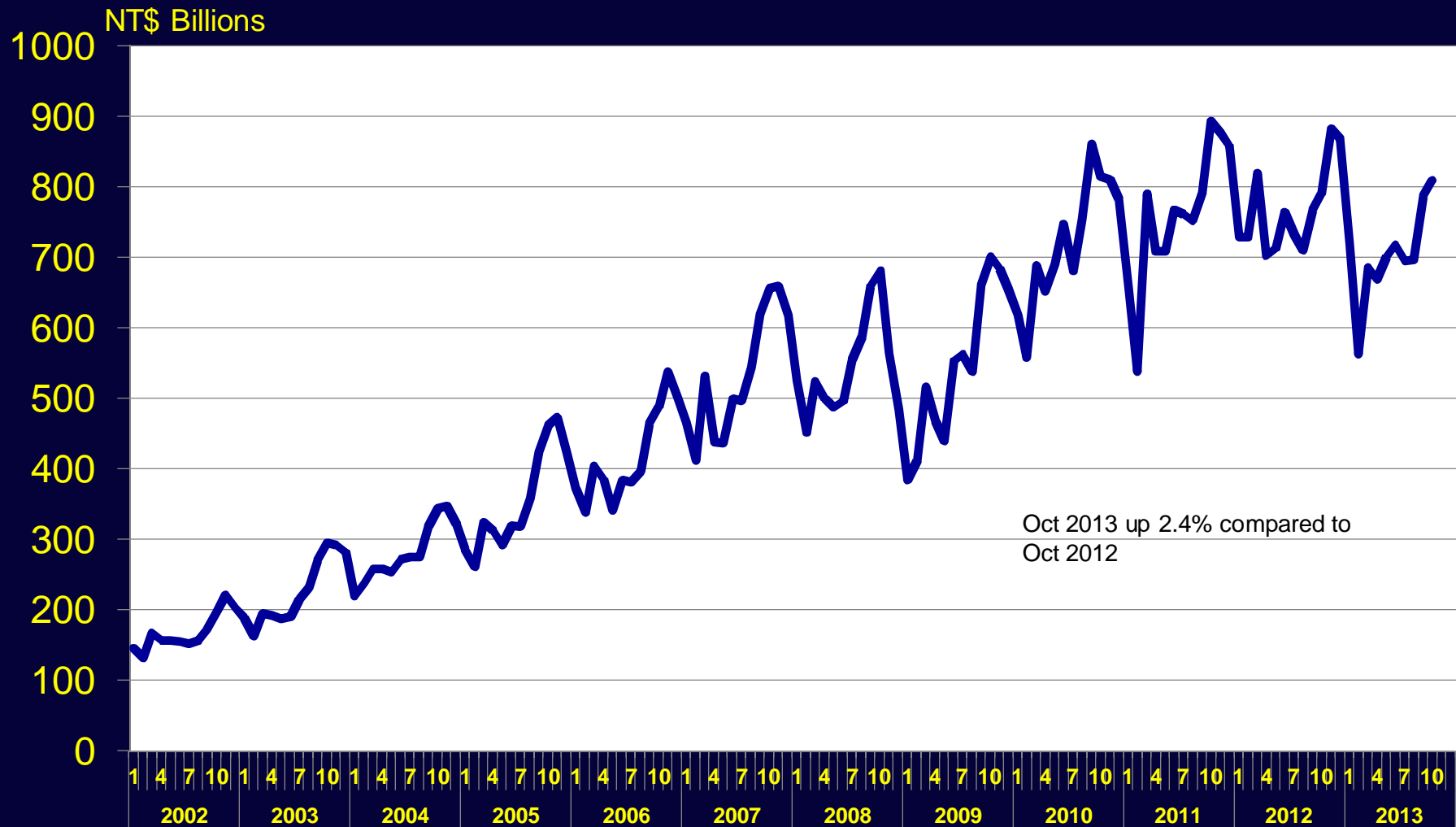
## U.S. Economy & Electronics Industry

	Latest Month	Annual Growth	3-Month Growth
<b>Electronic Component \$</b>			
Rigid & Flex PCB Orders (N Amer)	9/13	97.3	101.0
Rigid & Flex PCB Shipments (N Amer)	9/13	95.8	98.8
Electronic Component Orders	9/13	97.5	97.7
Electronic Component Shipments	9/13	96.7	99.9
Semiconductor Shipments to N America	9/13	111.7	124.3
<b>U.S. Electronic Equipment Orders \$</b>			
Computer & Related	9/13	93.7	89.3
Communication	9/13	105.9	97.7
Medical, Measurement & Control	9/13	92.8	104.9
Search & Navigation	8/13	89.0	93.8
Defense Capital Goods	9/13	100.2	93.7
Military Electronics	9/13	85.7	96.2
Total Electronic Equipment	9/13	94.9	97.6
<b>U.S. Industrial Production</b>	9/13	102.4	102.5

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

# Taiwan/China Electronic Equipment Producers Composite of 101 Manufacturers Consolidated Revenue

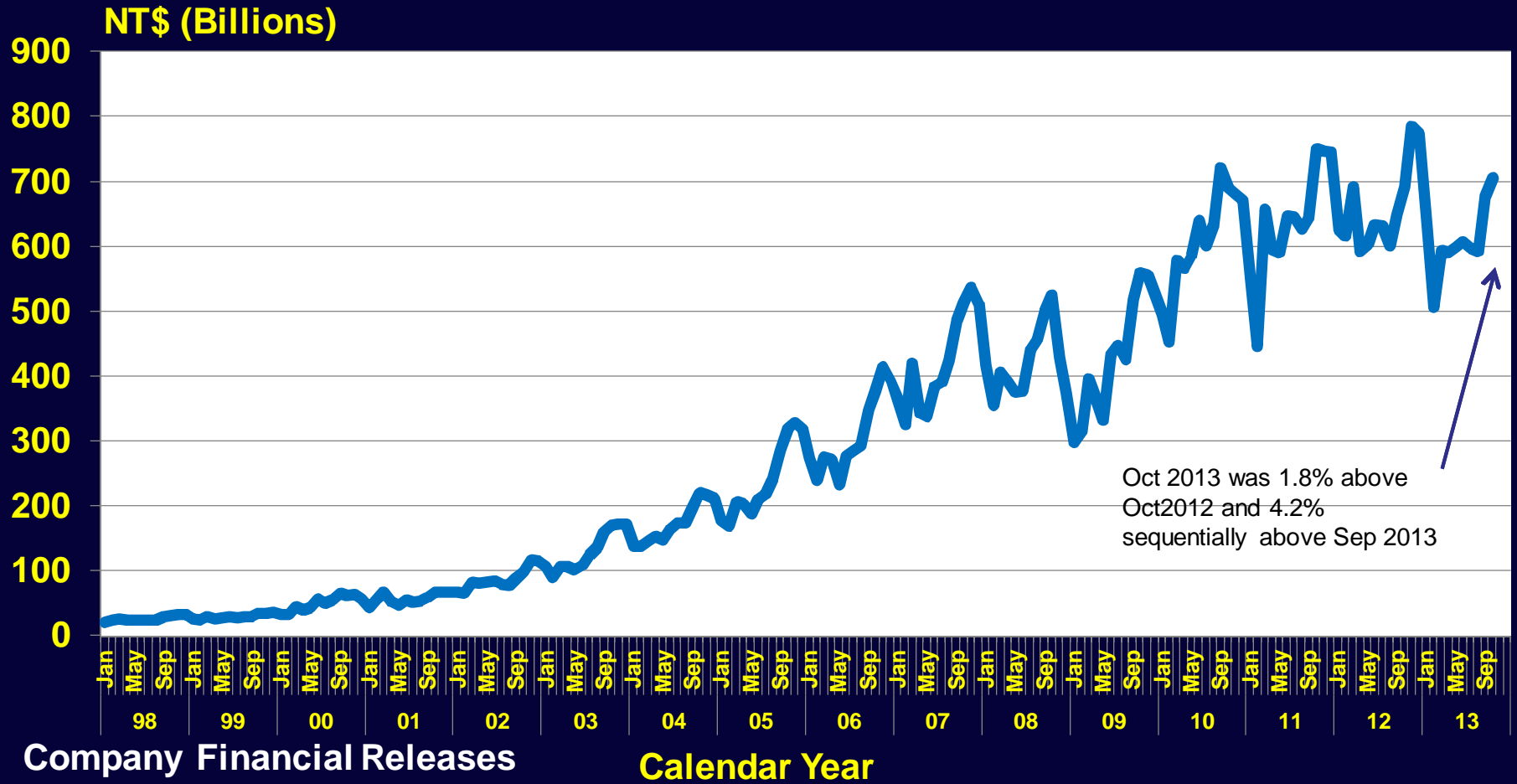
Chart 12



Taiwan listed companies, often with significant manufacturing in China

Chart 13

# Taiwan ODM Companies Composite Sales of 10 Large Manufacturers



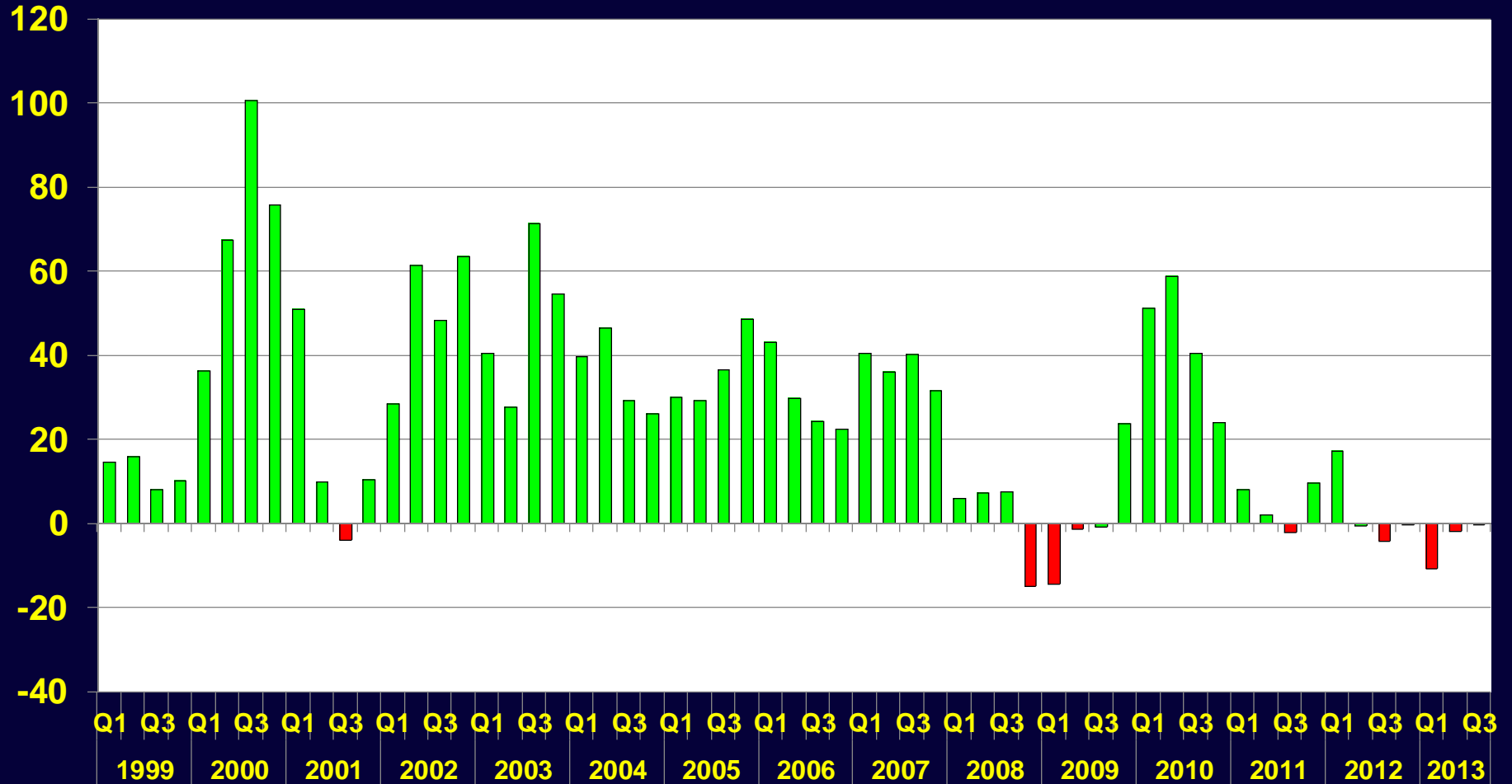
Asustek Computer, Chei Mei, Compal Electronics, Foxconn, Chimei Innolux, Inventec, Inventec Appliance, Lite On Technology, Mitac International, Quanta Computer, Wistron, Chei Mei Display replacing Chei Mei & Innolux Display 3/10 & later

Chart 14

# Large ODM Companies

## Composite of 10 Public Manufacturers

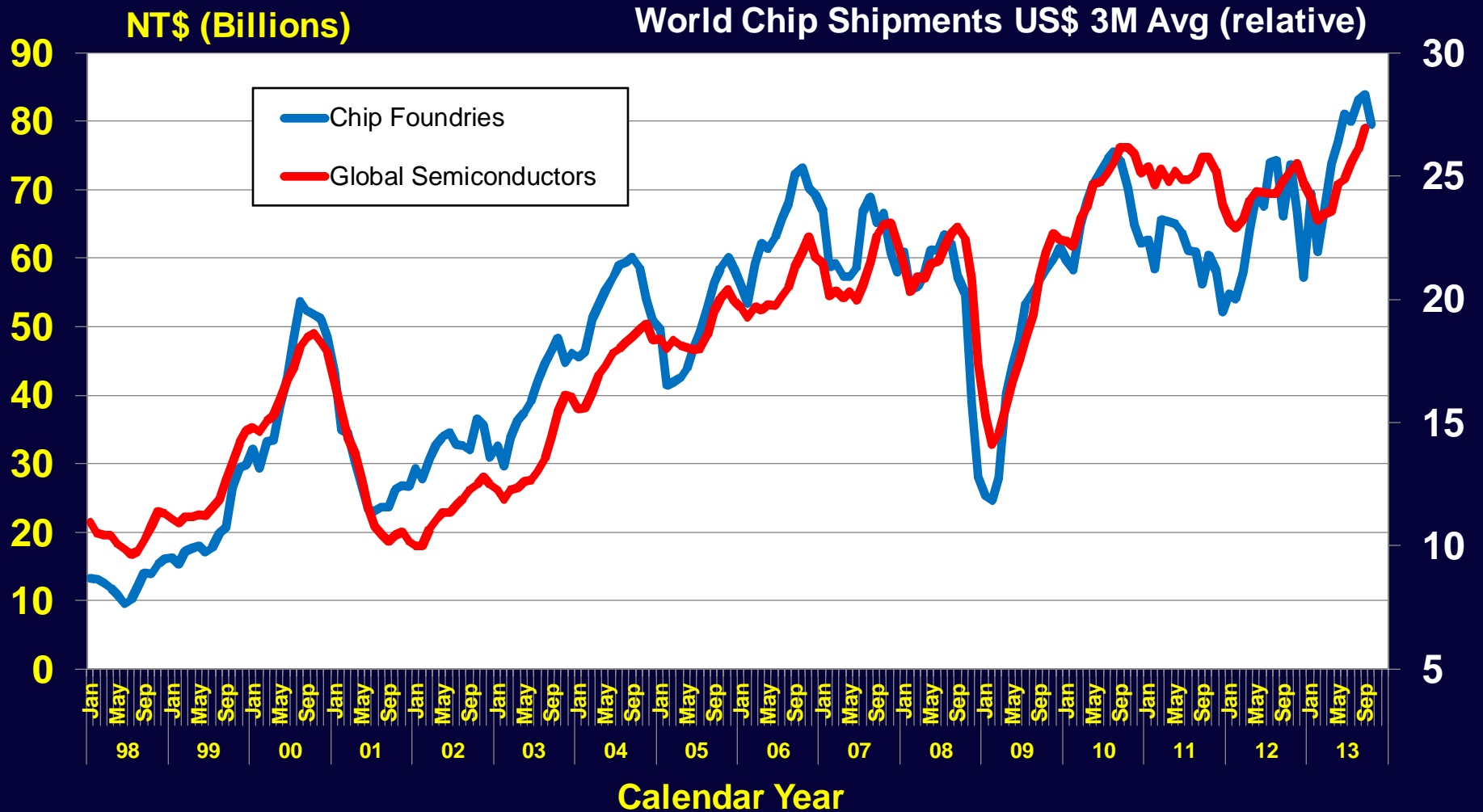
### Quarterly Revenue Growth



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

Chart 15

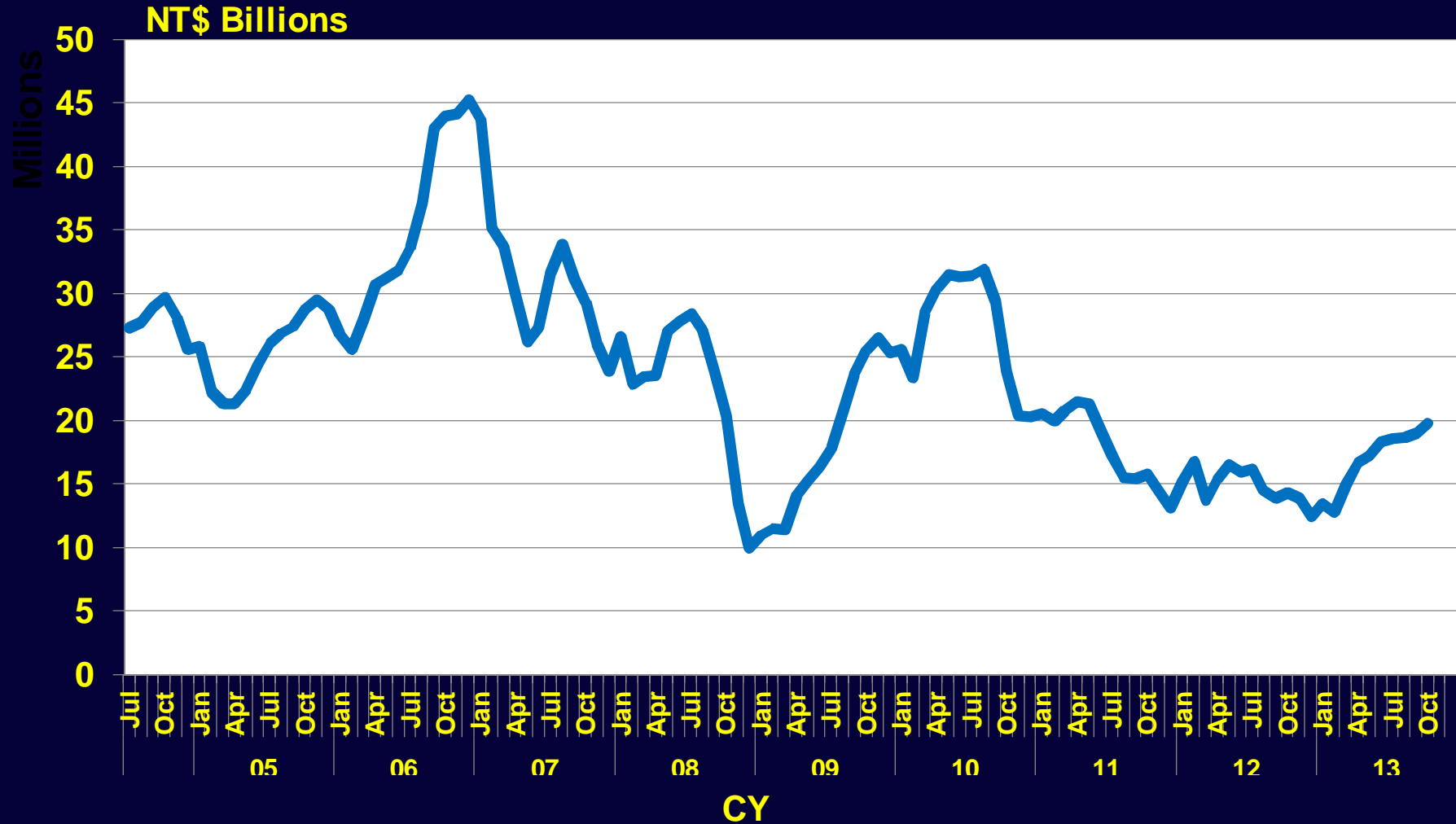
# Taiwan Wafer Foundry Composite vs Global Semiconductor Revenues



14 Taiwan Company Financial Releases & SIA

Chart 16

# Taiwan Memory Companies Composite of 8 Manufacturers



Silicon Integrated Systems, Inotera Memories, Macronix Intl, Mosel Vitelic, NanYa Tech, Powerchip Semiconductor, ProMOS, Winbond Elec



Chart 17

# Taiwan Package & Test Companies Composite of 20 Manufacturers



ASE, Ardentec, ChipMOS Tech, Chipbond Tech, E'dale Tech, Formosa, Advance Tech, Fupo Elec, Greatek Elec, International Semiconductor Tech, King Yuan Elec, Lingsen Precision, Orient Semiconductor, Powertech Tech, Signality System, Sigurg Microelectronics, SPIL, Thalín Semiconductor, Vate Tech, Walton Advanced Tech

Chart 18

# Taiwan Passive Component Companies Composite of 25 Manufacturers



Chilsin Electronics, Cyntec, (FCE) Feei Cheng Enterprise, Holy Stone Enterprise, 3H (Honey Hope Honesty Enterprise), HJC (Hua Jung Components), Inpaq, Jaan Chem Technological, Kaimei Electronic, King Core Electronics, Laser Tek, Leatec Fine Ceramics, Lelon Electronics, Linton Technology, PTTC (Polytronics Technology Corp), PDC (Prosperity Dielectrics Co), Ralec Electronic, Ta-I Technology, Taiwan Alpha Electronic, Team Young Advanced Ceramics, Teapo Electronic, Thinking Electronic Industrial, WTC (Walsin Technology Corp), Yageo, YCTC (Yeh-Chiang Technology Corp)

Chart 19

# Taiwan Solar/Photovoltaic Panel Companies Composite of 17 Manufacturers

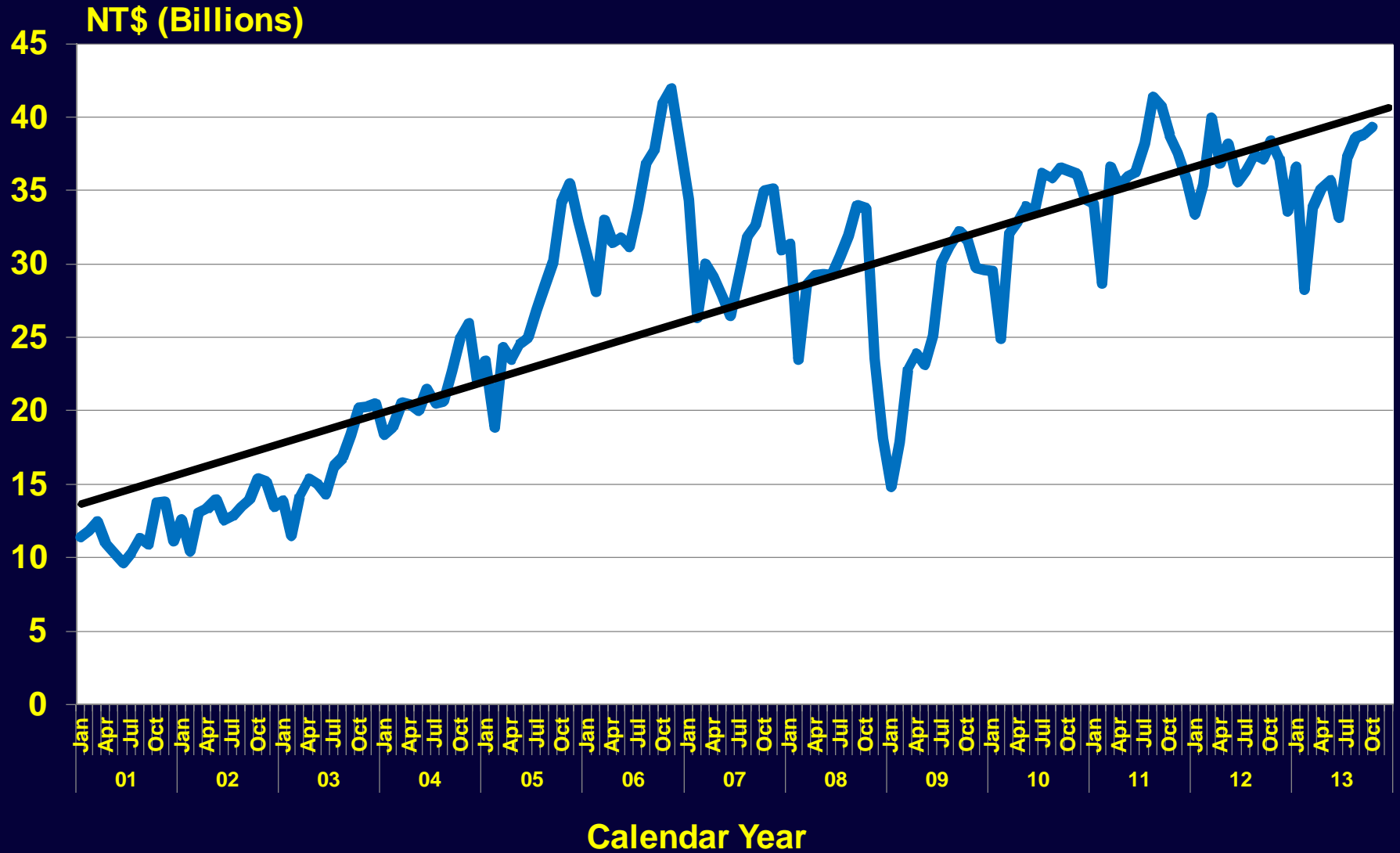


Big Sun Energy Technology, Daxon, DelSolar, e\_TON Solar Tec, Eversol, Gintech, Green Energy Technology (GET), Ligitek, Motech, Neo Solar Power, Phoenixtec Power Co (PPC), Precision Silicon, Sino-American Silicon Products, Sonartech, Sysgration, Tyntek, Wafer Works

Chart 20

# Taiwan Rigid & Flex PCB Shipments

## Broad Composite of 46 Taiwan-listed Manufacturers



Company Financial Releases

Chart 21

# Taiwan Rigid Laminate/Prepreg Vendors Composite of 8 Large Manufacturers



Company Financial Releases

Elite Materials, Top Union Electronics, Taiwan Union Technology, Hwa Woei Laminate, Uniplus Electronics, Iteq, Taiwan Leader Advanced Technology, Shinemore Technology

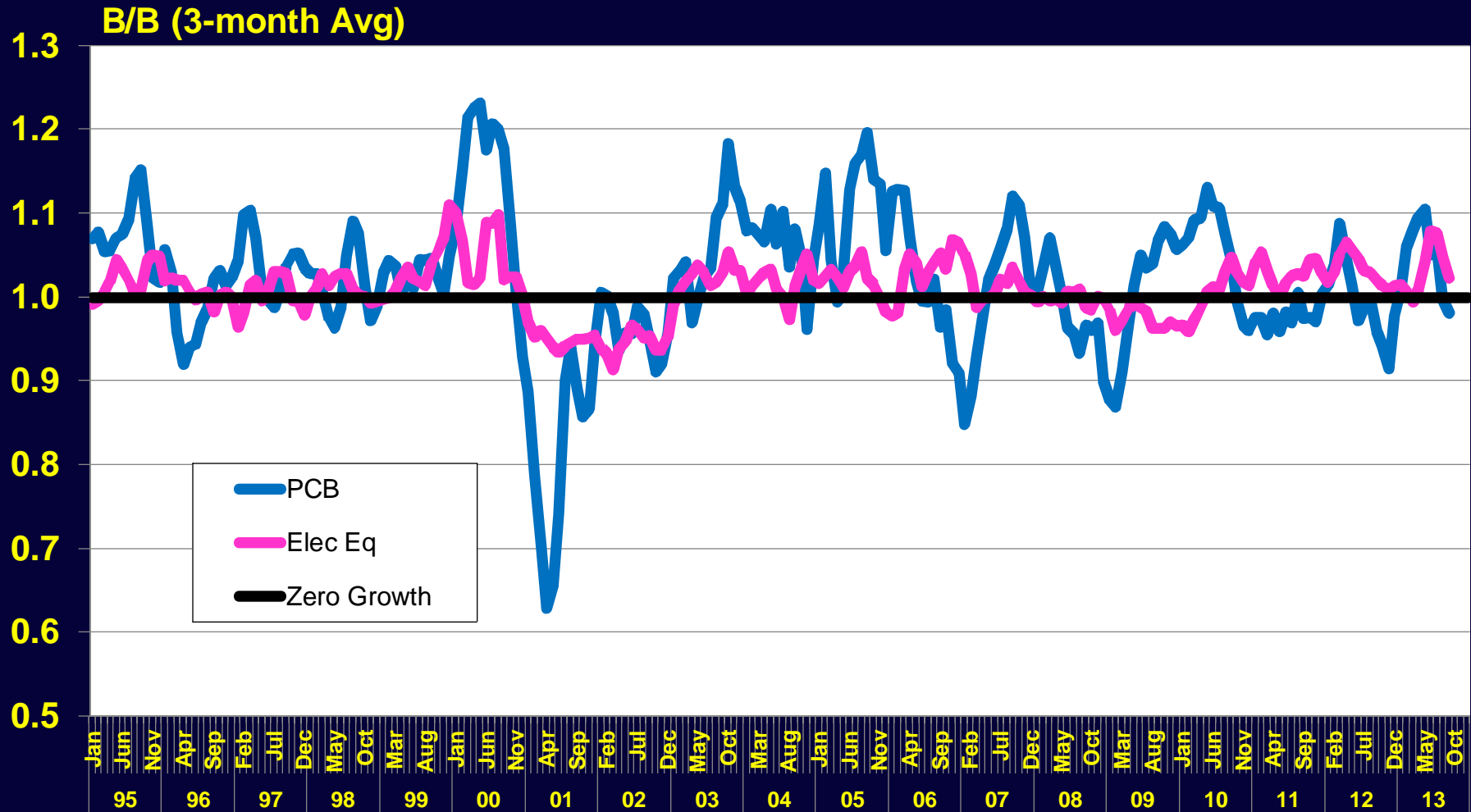
Chart 22

## 2013 Worldwide Semiconductor Sales Leaders (US\$ millions, including Foundries)

<u>Rank</u>	<u>Maker</u>	<u>2013F</u>	<u>2013/2012</u>
1	Intel	48,321	-2%
2	Samsung Electronics	33,590	4%
3	TSMC	19,804	17%
4	Qualcomm	17,145	30%
5	SK Hynix	13,040	44%
6	Toshiba	12,197	9%
7	Texas Instruments	11,474	-5%
8	Micron	10,551	32%
9	STMicroelectronics	8,184	-2%
10	Broadcom	8,110	4%
11	Renesas	7,827	-16%
12	Infineon	5,265	7%
13	AMD	5,244	-3%
14	Sony	4,889	-14%
15	NXP	4,787	11%
16	MediaTek	4,515	34%
17	GlobalFoundries	4,261	6%
18	Freescale	3,942	4%
19	UMC	3,919	5%
20	Nvidia	3,752	-5%
	Total Top 20	230,817	7%

Chart 23

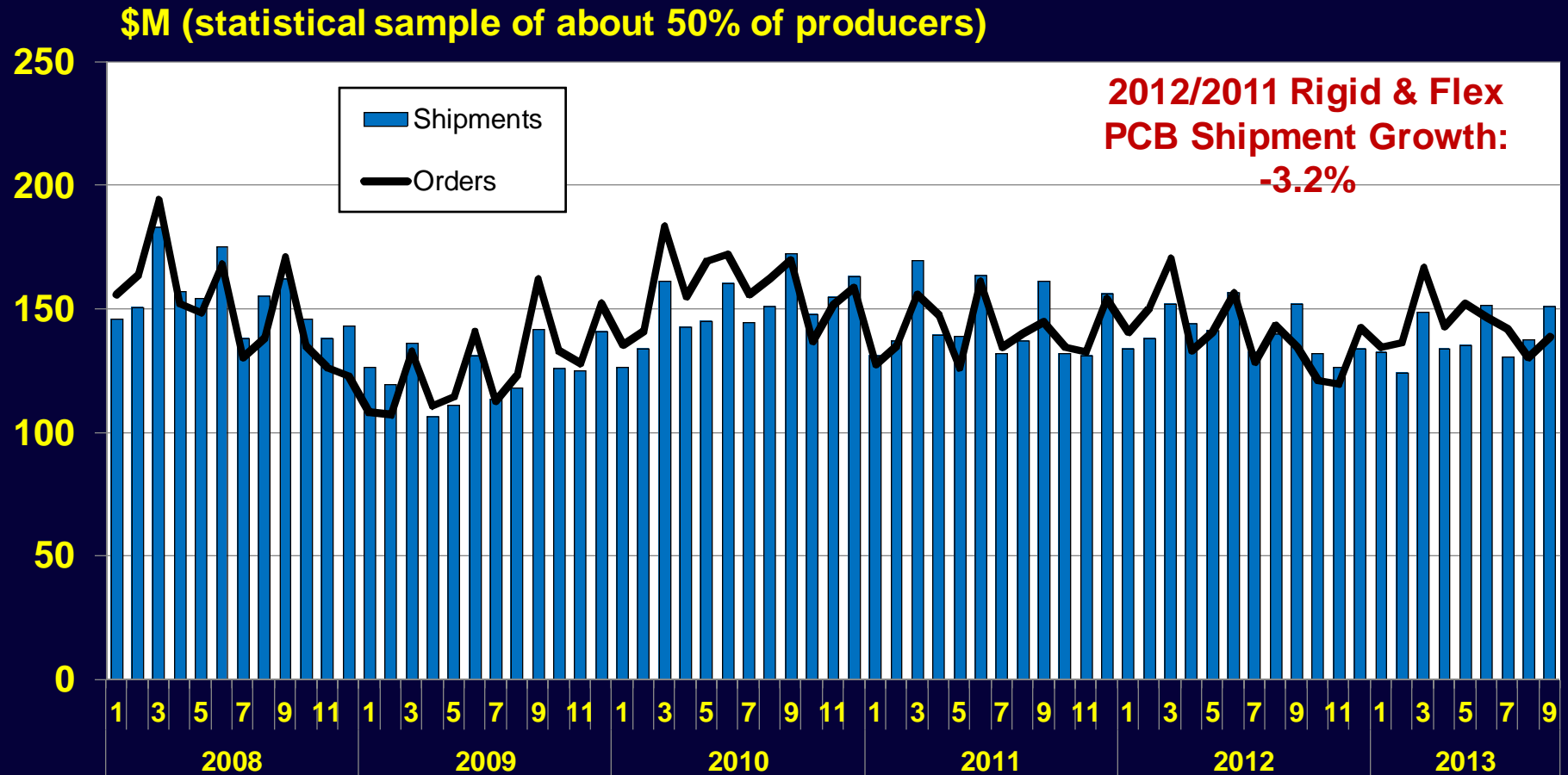
# N American Rigid & Flex PCB & U.S. Electronic Equipment Book/Bill Ratios



IPC, DOC

Chart 24

# N American Rigid & Flexible PCB Shipments & Orders



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



Chart 25

# Global Camera Shipments

## Compact & Interchangeable Lens Cameras

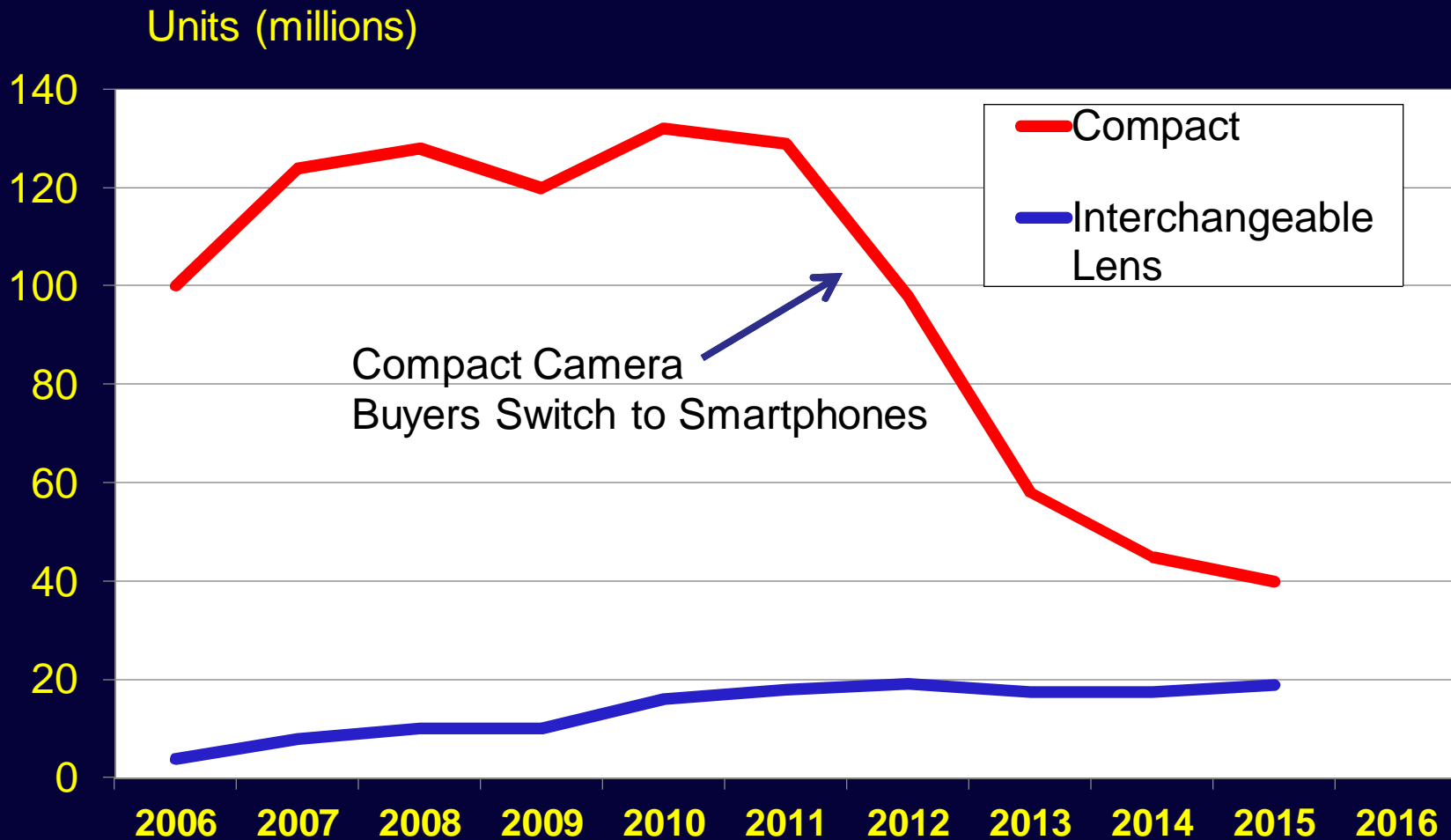


Chart 26

# U.S. GDP Growth % Change vs. Prior Quarter (2005 \$)

