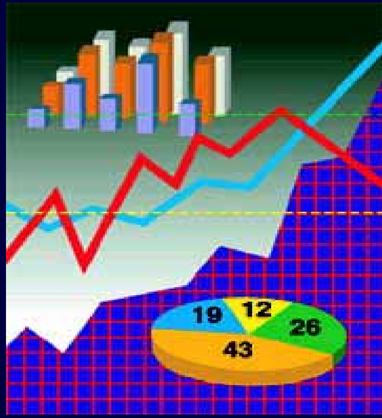


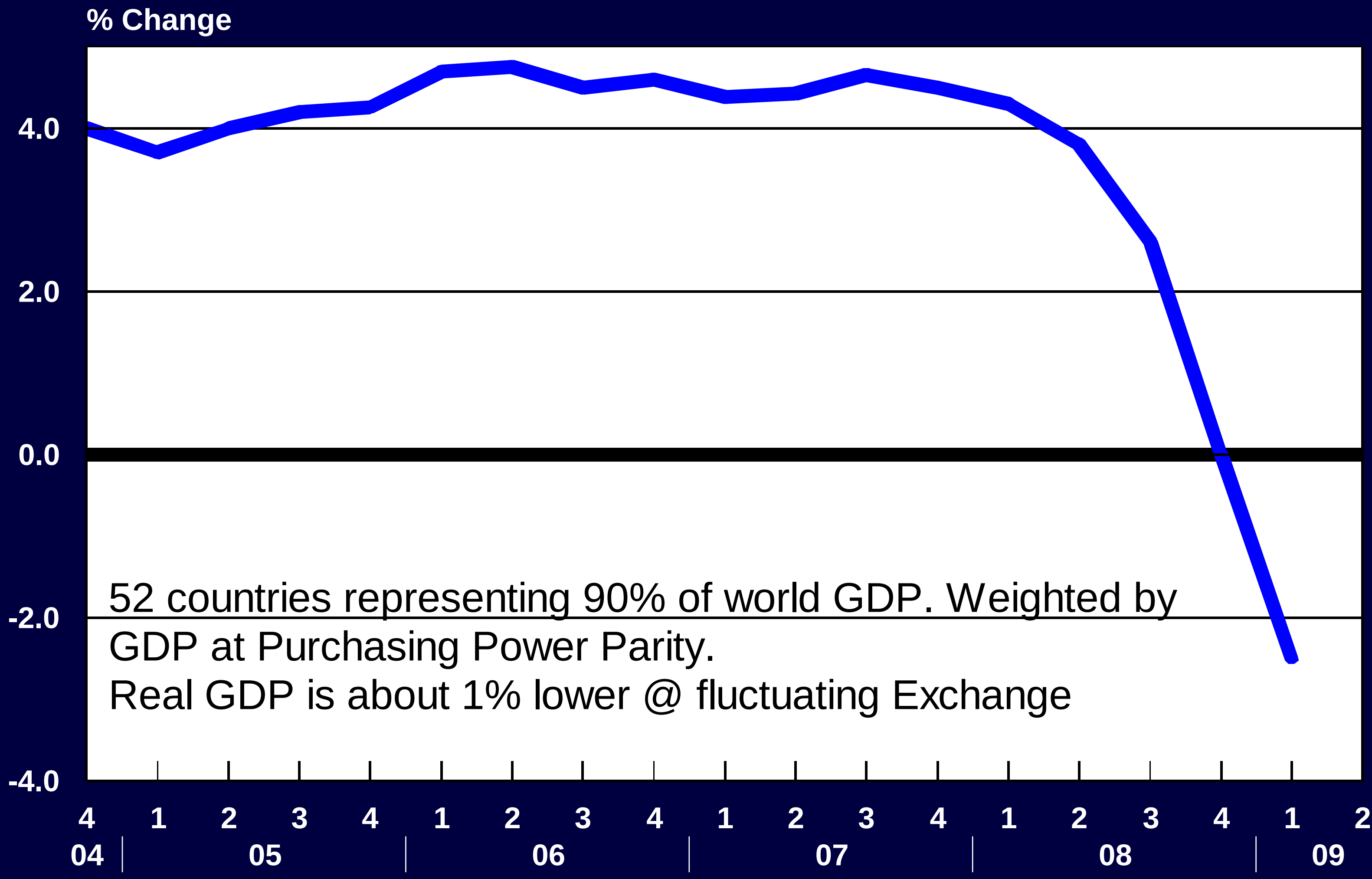
BUSINESS OUTLOOK

GLOBAL ELECTRONICS INDUSTRY

WALT CUSTER
CUSTER CONSULTING GROUP
www.custerconsulting.com
June 2009


The Bottom
ARE WE THERE YET ?..
MIKE LUCKOVICH

World GDP Growth
Quarter-to-Quarter



Economist 6/09

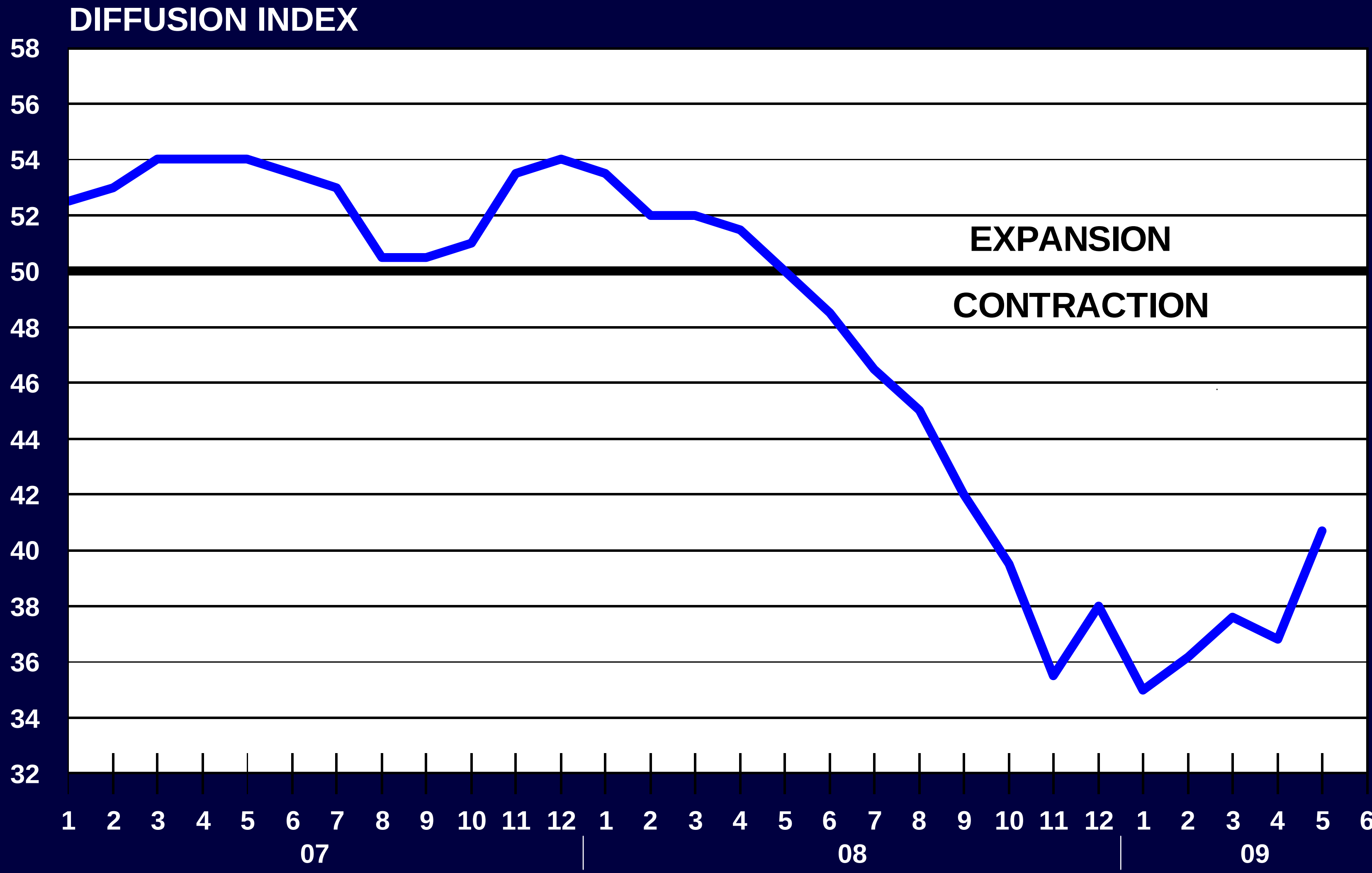
Industrial Production - World

% Change vs. One Year Earlier

BRITAIN	-12.3 Apr
CZECH REPUBLIC	-23.2 Apr
FRANCE	-18.8 Apr
GERMANY	-21.6 Apr
ITALY	-24.2 Apr
NETHERLANDS	-13.2 Apr
RUSSIA	-16.9 Apr
SPAIN	-28.6 Apr
EURO area	-20.2 Mar
CANADA	-8.4 Mar
USA	-13.4 May
CHINA	+8.9 May
INDIA	-2.3 Mar
MALAYSIA	-11.5 Apr
SINGAPORE	-0.5 Apr
S KOREA	-8.2 Apr
TAIWAN	-19.5 Apr
THAILAND	-9.7 Apr
JAPAN	-31.2 Apr

Economist 6/2009 http://www.economist.com Output, prices and jobs

Eurozone. "Purchasing Managers" Index



Markit Economics

G8 prepares for global recovery

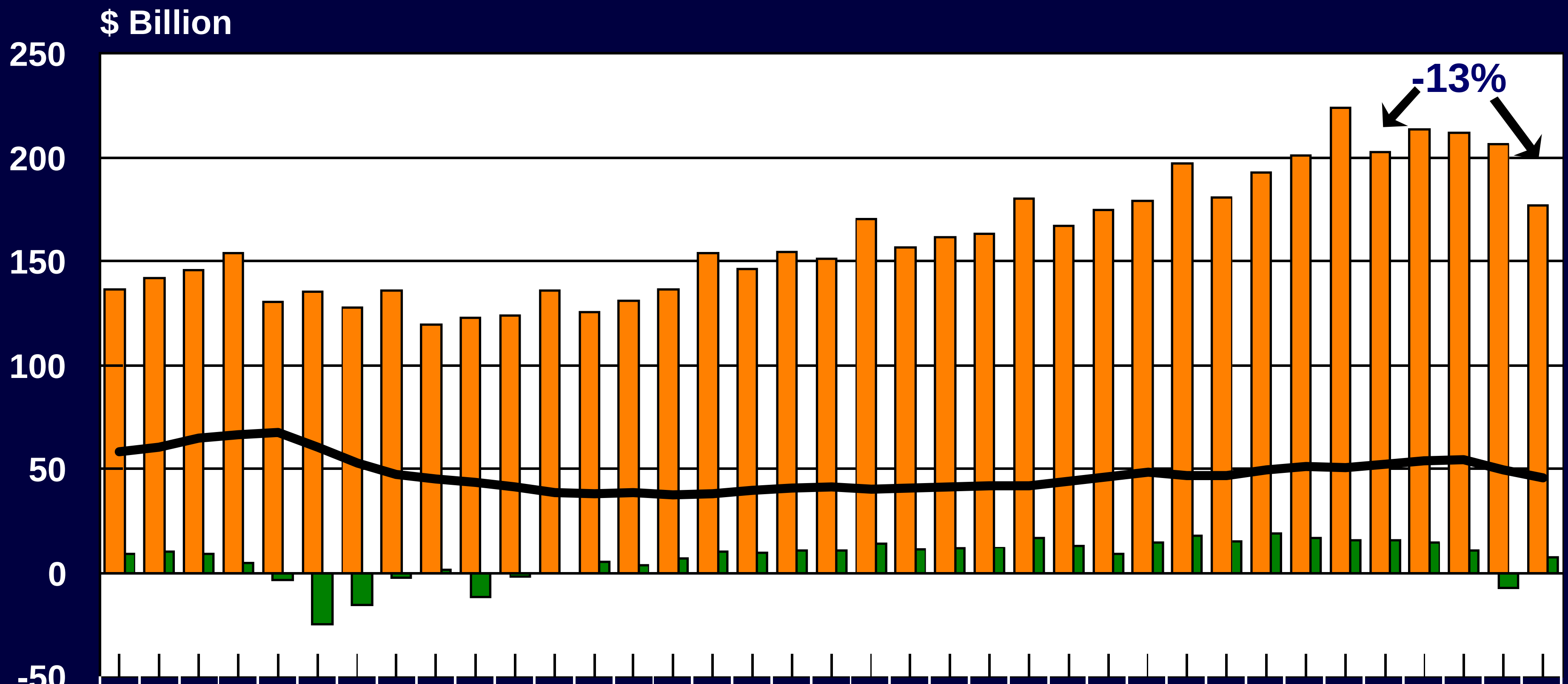
Financial Times
June 13 2009

G8 finance ministers on June 13 agreed that their economies were showing “increased signs of stabilisation” and for the first time started to craft exit strategies to counter the inflationary impact of their stimulus measures.

A draft communique of their ministerial meeting in Lecce, Italy noted a recovery in stock markets, a decline in interest rate spreads, improved business and consumer confidence and better figures in the manufacturing sector.

Electronic Equipment

Electronic Equipment Suppliers
Composite of 61 Public Companies
Revenue, Net Income & Inventory



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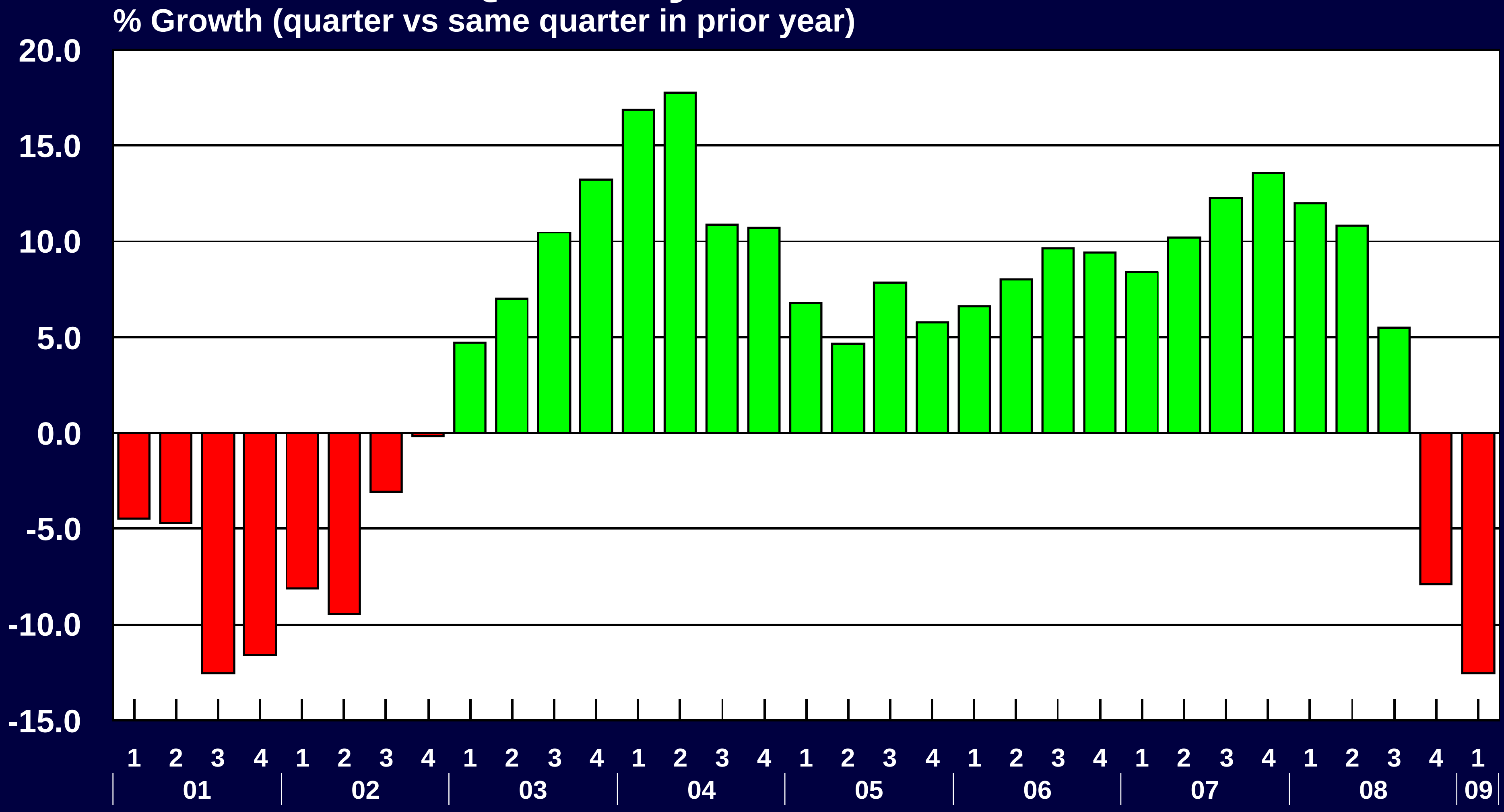
	00				01				02				03				04				05				06				07				08				09
Revenue	137	142	146	154	130	136	128	136	120	123	124	136	125	131	137	154	147	155	152	170	157	162	163	180	167	175	179	197	181	193	201	224	203	213	212	206	177
Income	10	10	9	5	-3	-24	-15	-2	2	-12	-2	0	5	4	7	10	10	11	11	14	12	12	12	17	13	10	15	18	15	19	17	16	16	15	11	-7	8
Inventory	59	61	65	67	68	61	53	48	45	43	42	39	38	39	37	38	40	41	41	41	41	41	42	42	44	47	49	47	47	50	51	51	53	54	54	50	46

Computer 13, Internet 2, Storage 9, Telecom 6, SEMI 14, Medical 4, Instruments 7, Military 6

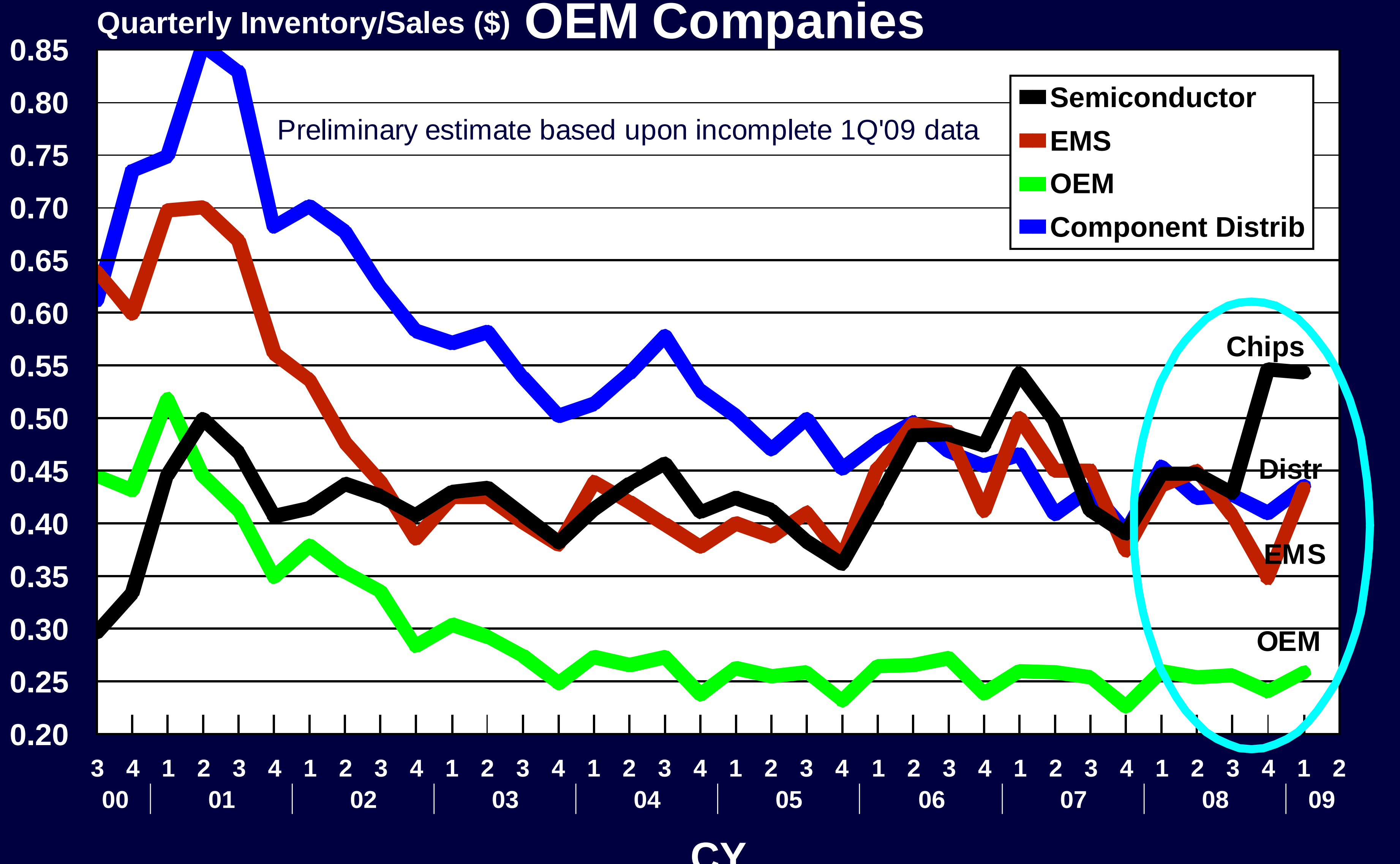
Electronic Equipment Suppliers
Composite of 61 Public Companies
Quarterly Revenue Growth



Computer 13, Internet 2, Storage 9, Telecom 6, SEMI 14, Medical 4, Instruments 7, Military 6

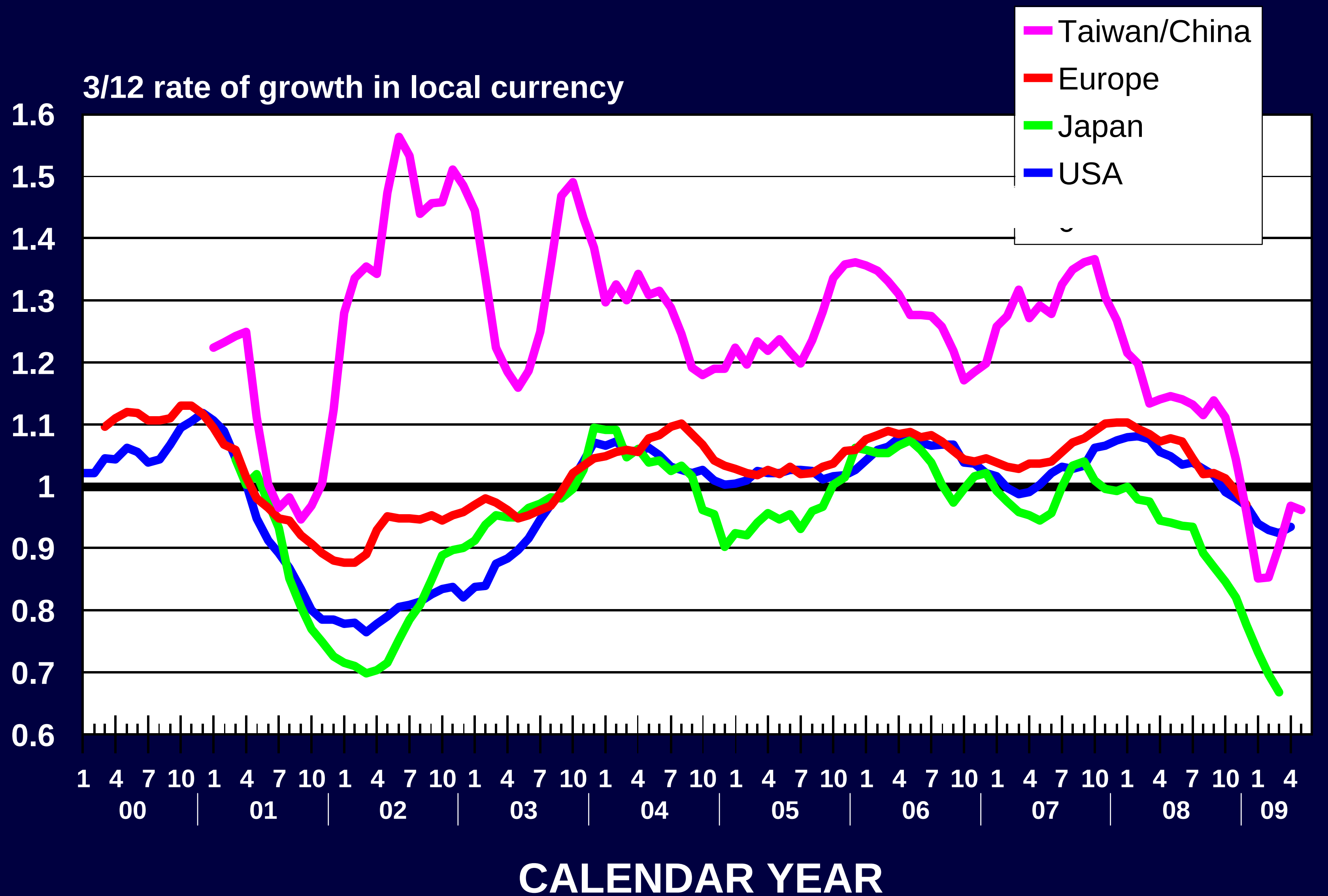
Inventory/Sales Ratio

Large Component Distributors, Semiconductor, EMS & OEM Companies



4 Component Distributor, 18 Semiconductor, 12 EMS and 60 OEM Company Composite

Global Electronic Equipment Shipment Growth



Eurostat Data (NACE Rev 2)
Electronic Equipment Production by Country

C254	weapons & ammunition
C261	electronic components & boards
C2611	electronic components
C2612	loaded electronic boards
C262	computers & peripheral equipment
C263	communication equipment
C264	consumer electronics
C2651	instruments & appliances for measuring, testing and navigation
C266	irradiation, electromedical & electrotherapeutic equipment
C2733	wiring devices
C2751	electric domestic appliances
C2823	office machinery & equipment (except computers & peripherals)
C291	motor vehicles
C2931	electrical & electronic equipment for motor vehicles
C303	air & spacecraft and related machinery
C304	military fighting vehicles

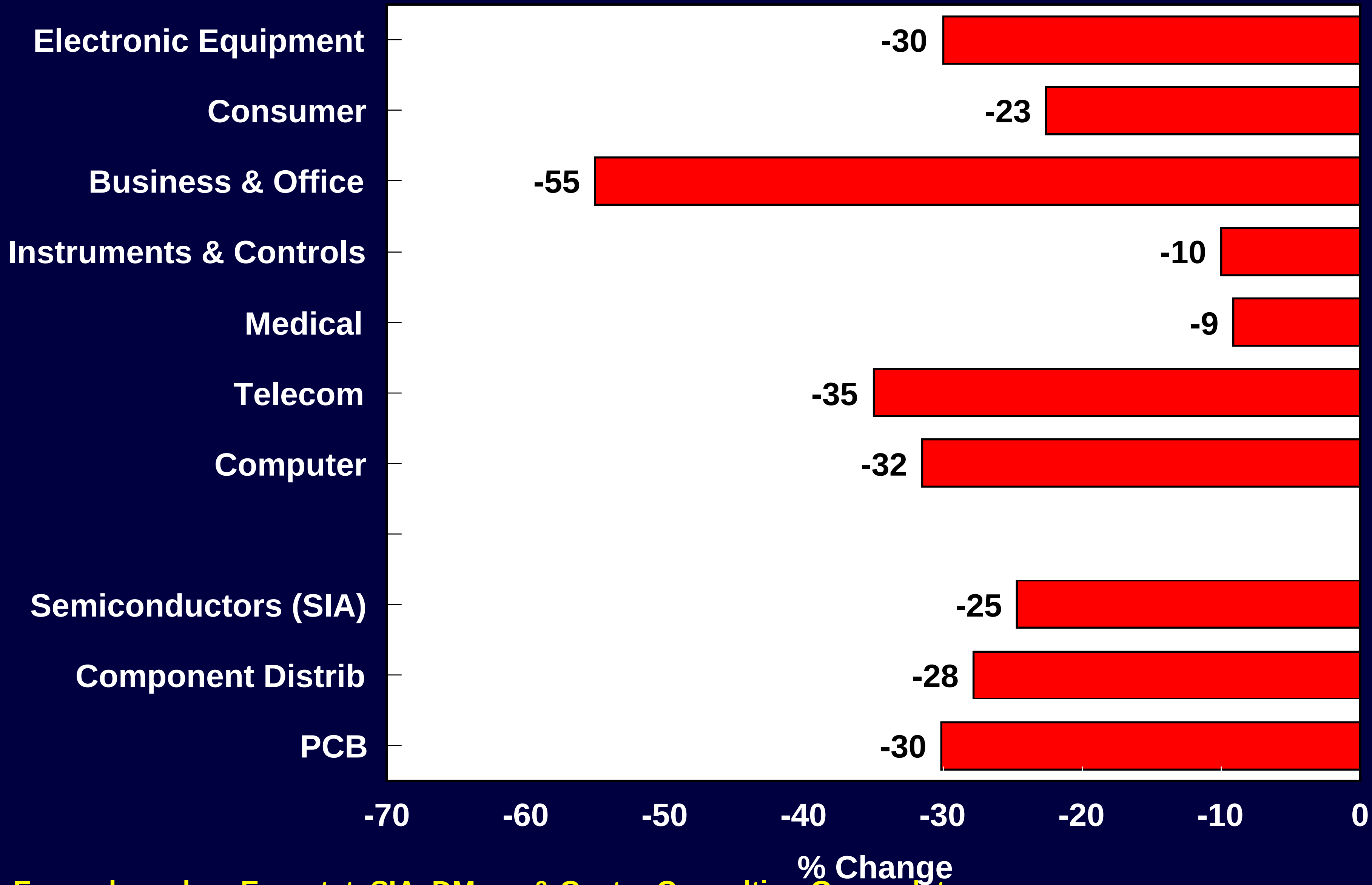
Monthly indices where average month in CY2005=100

PRESENT GROWTH RATES (%)
EUROPEAN ELECTRONICS INDUSTRY

ELECTRONIC EQUIPMENT SHIPMENTS (Index CY 2005 =100)

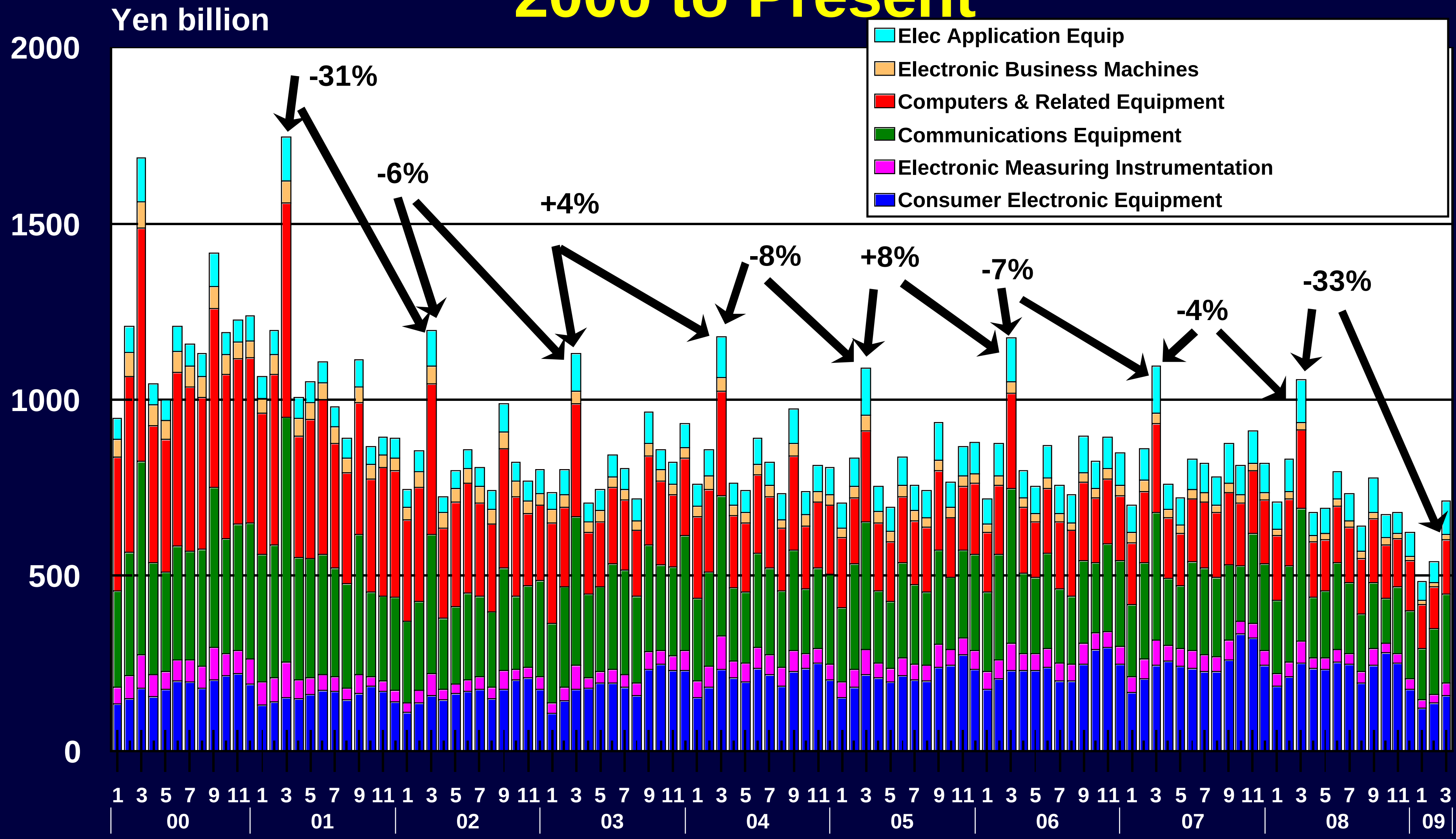
	LATEST MONTH	ANNUAL GROWTH RATE	3-MONTH GROWTH RATE
Components & Boards	4/09	100.0	84.6
Electronic Components	2/09	108.1	94.8
Loaded Electronic Boards	4/09	102.4	99.2
Office Equipment	4/09	80.1	43.9
Computers & Peripherals	4/09	85.0	60.0
Communication Equipment	12/08	94.6	89.3
Consumer Electronics	4/09	90.1	78.3
Electronic Instruments	4/09	94.7	89.2
Medical Electronics	4/09	102.2	92.3
Automotive Electronics	4/09	78.5	69.1
Motor Vehicles	4/09	78.7	59.7
Military Vehicles	12/08	97.7	100.0

European "Electronic Foodchain" Growth
1Q'09 vs. 1Q'08



Euros, based on Eurostat, SIA, DMass & Custer Consulting Group data

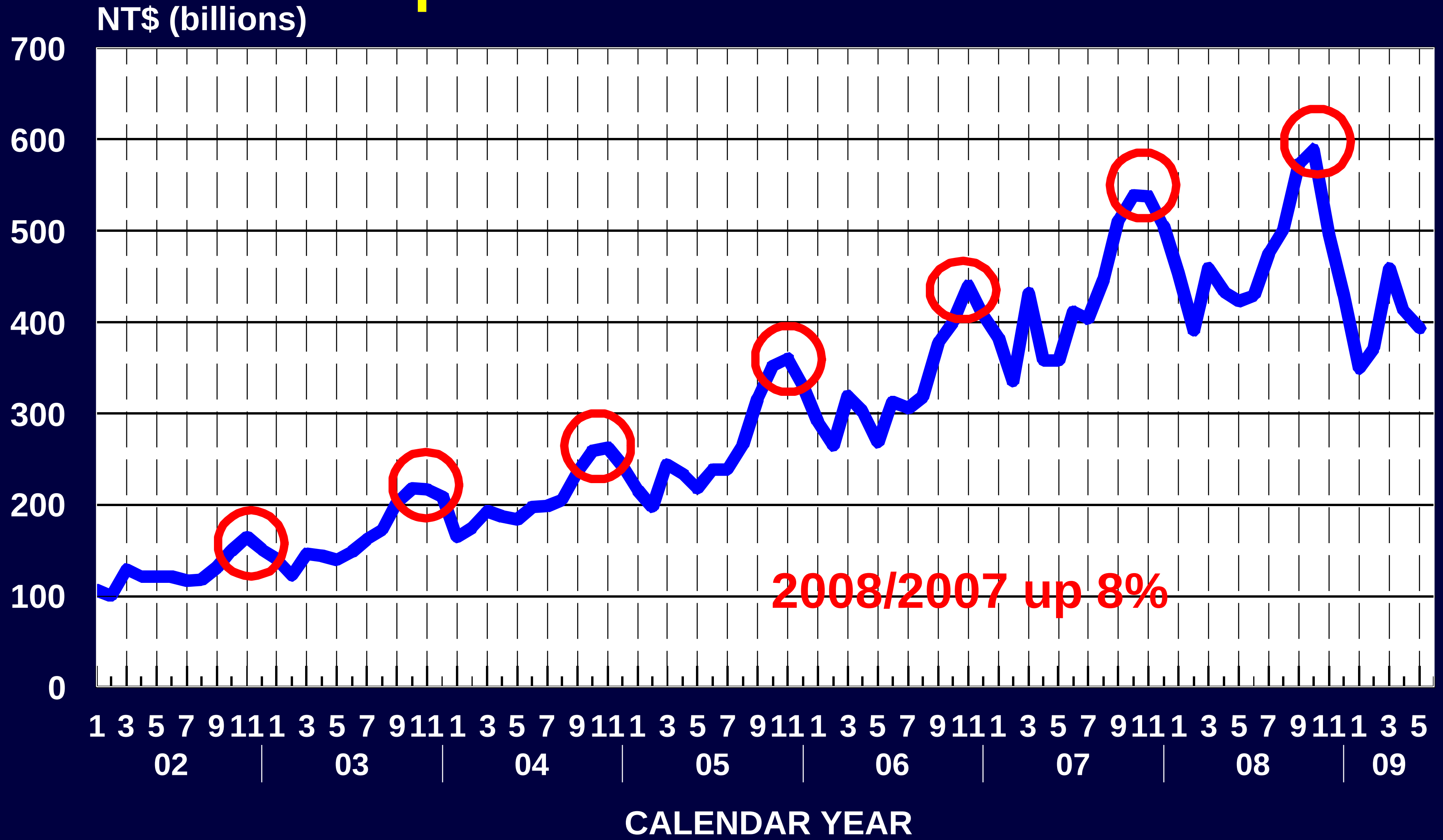
Japan Electronic Equipment Production 2000 to Present



JEITA www.jeita.or.jp/

CALENDAR YEAR

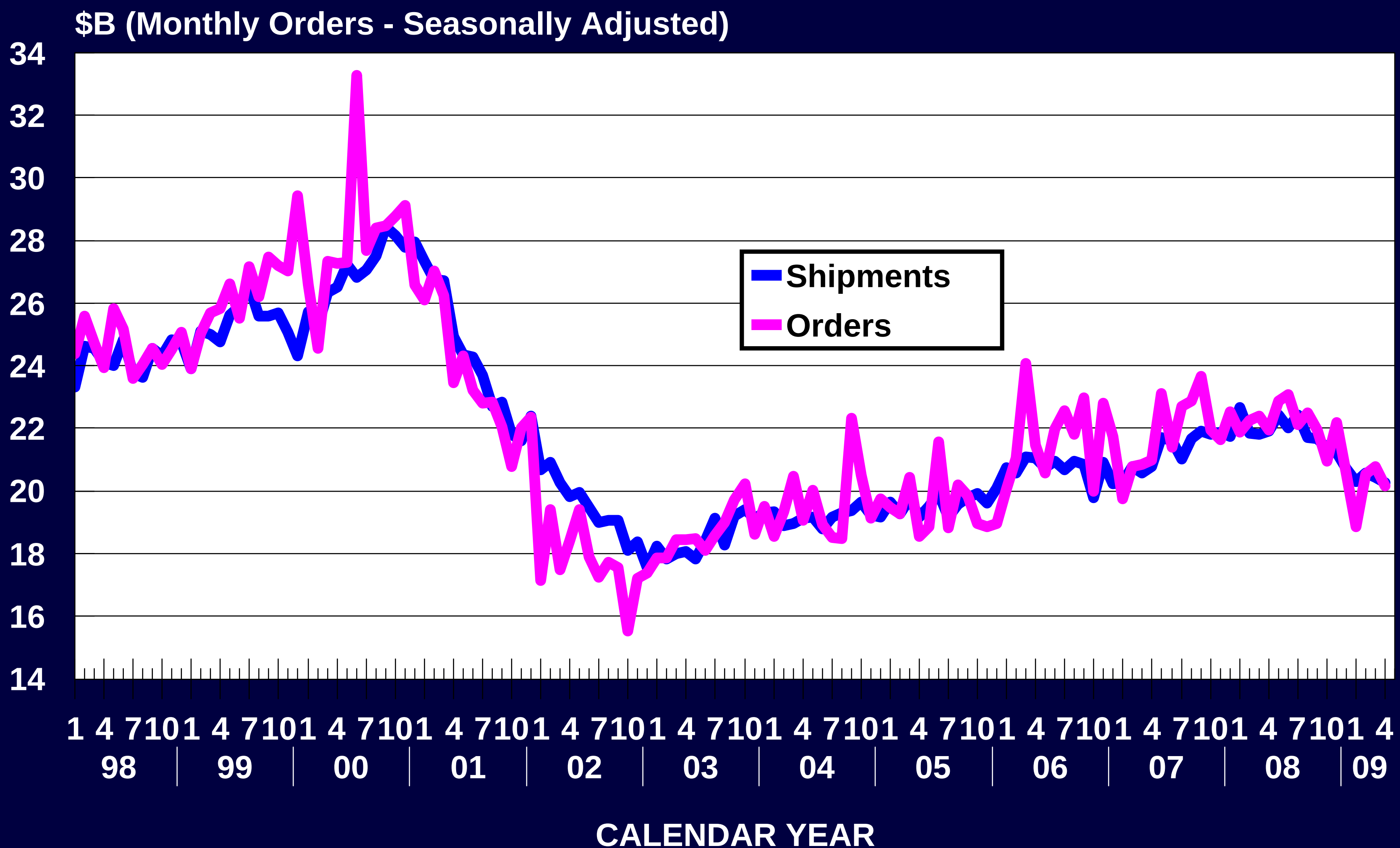
Taiwan/China Electronic Equipment Producers Composite of 101 Manufacturers



Taiwan listed companies, often with significant manufacturing in China

US Electronic Equipment Orders & Shipments

Communications, Computer, Military, Instruments



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

Market Segments

Volume (Shift to Low Cost Areas)

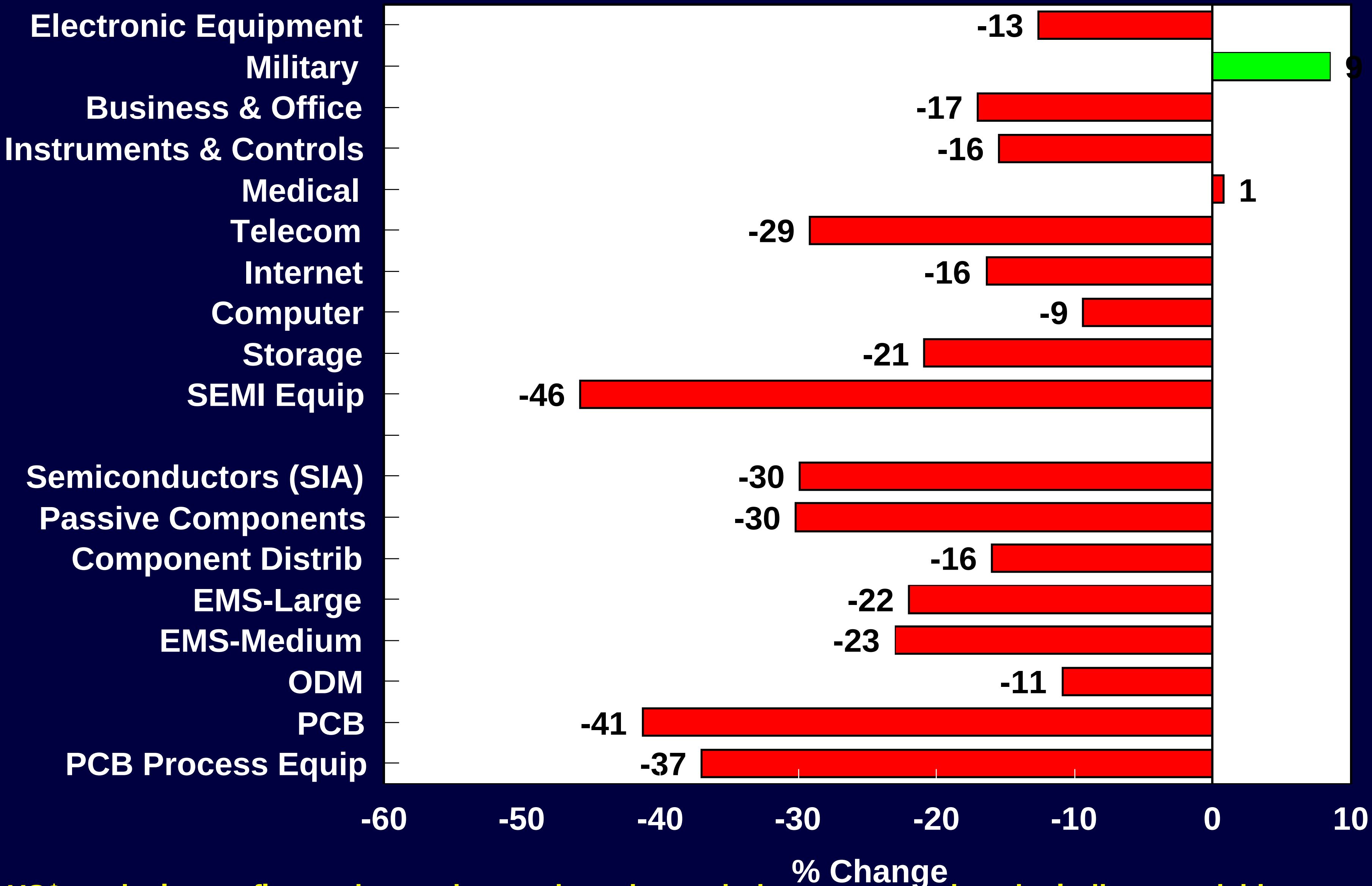
- Personal Computers
- Mobile Phones
- Other Consumer Electronics
- Datacom/Telecom
- Automotive

"Protected"

- Military
- Medical
- Instruments & Controls
- High IP Content

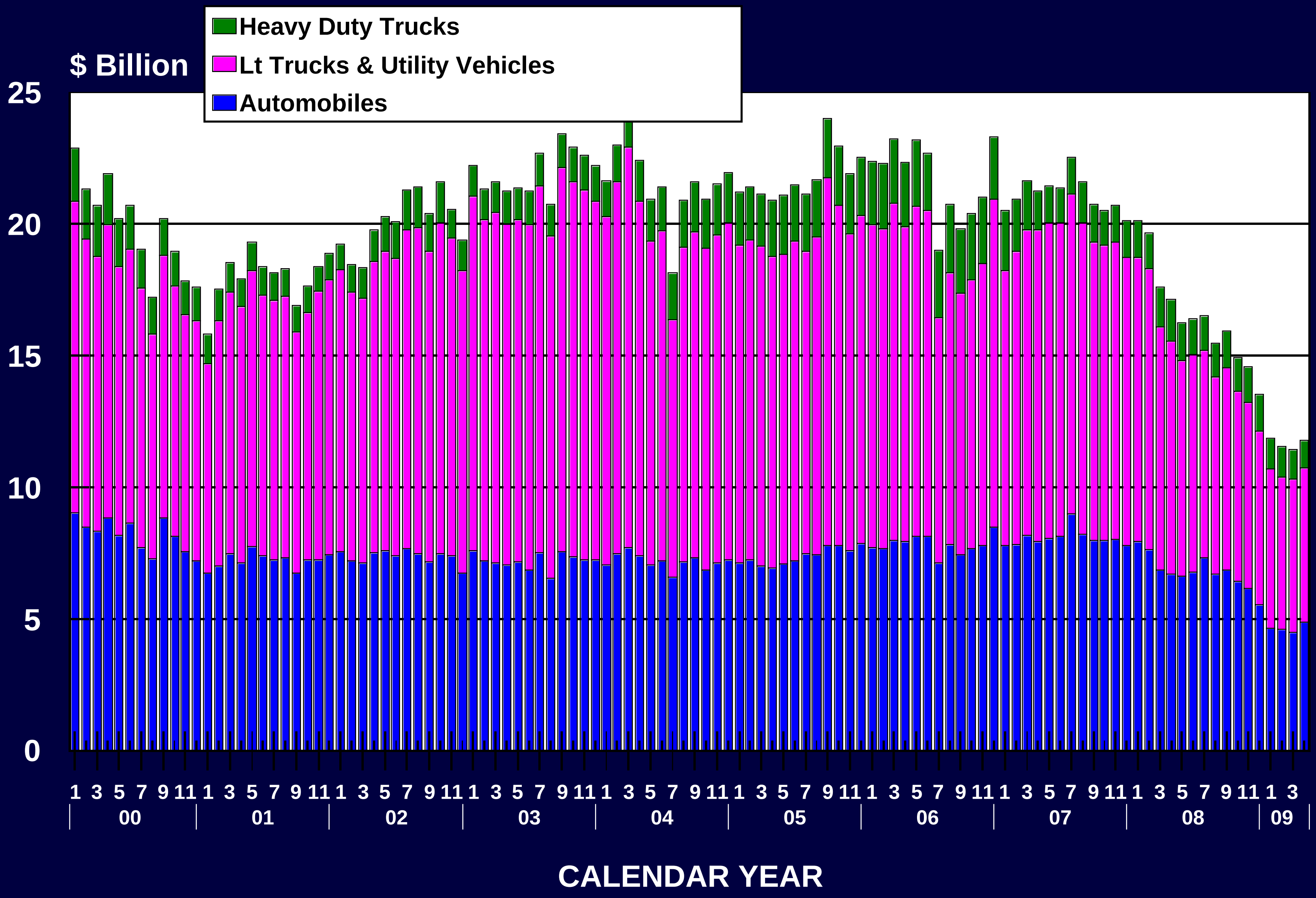
Prototype, Quick Response, Short Run, Need for Local Support

Global "Electronic Foodchain" Growth
1Q'09 vs. 1Q'08



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

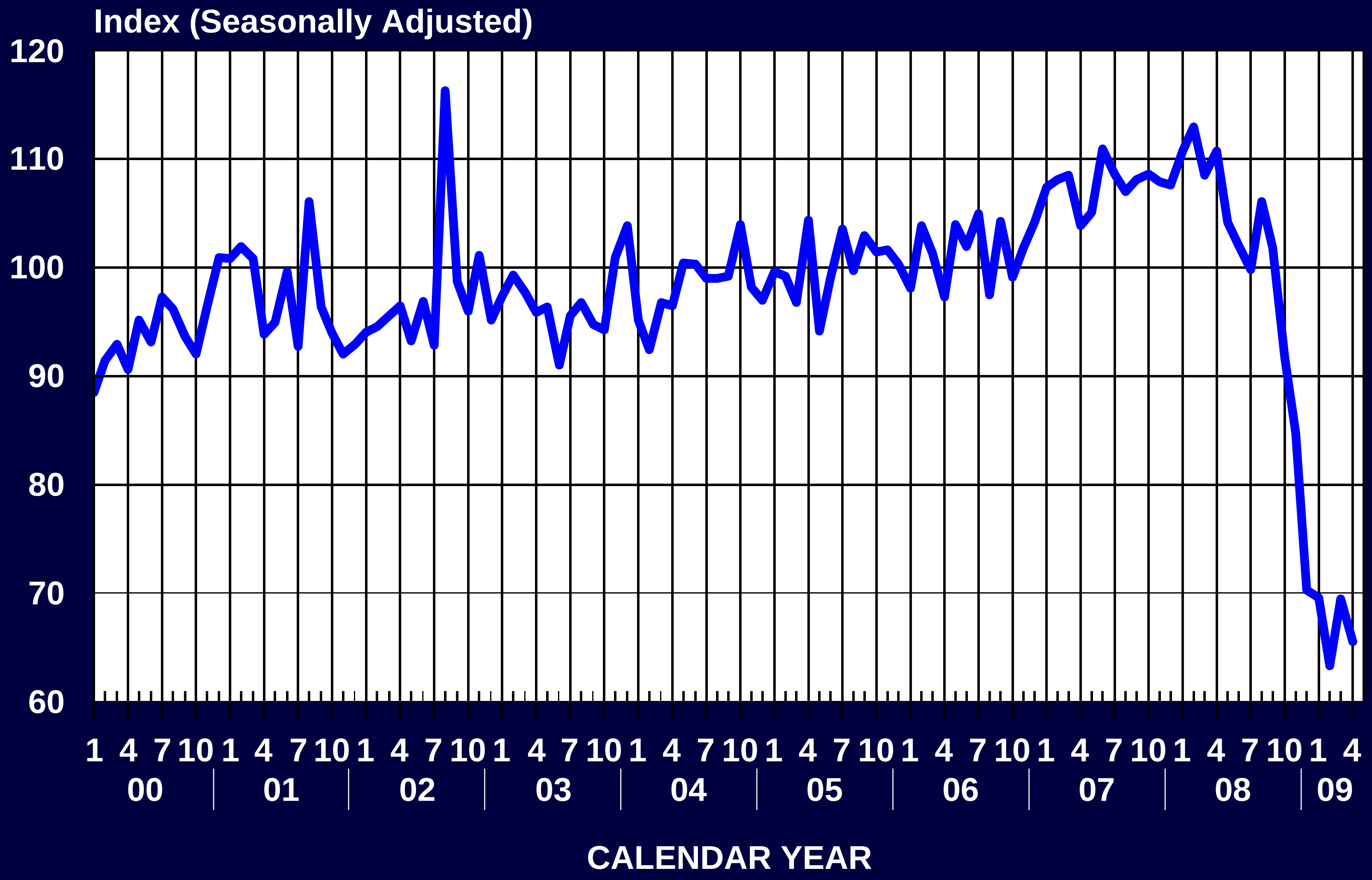
U.S. Vehicle Shipments



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

European Motor Vehicle Production

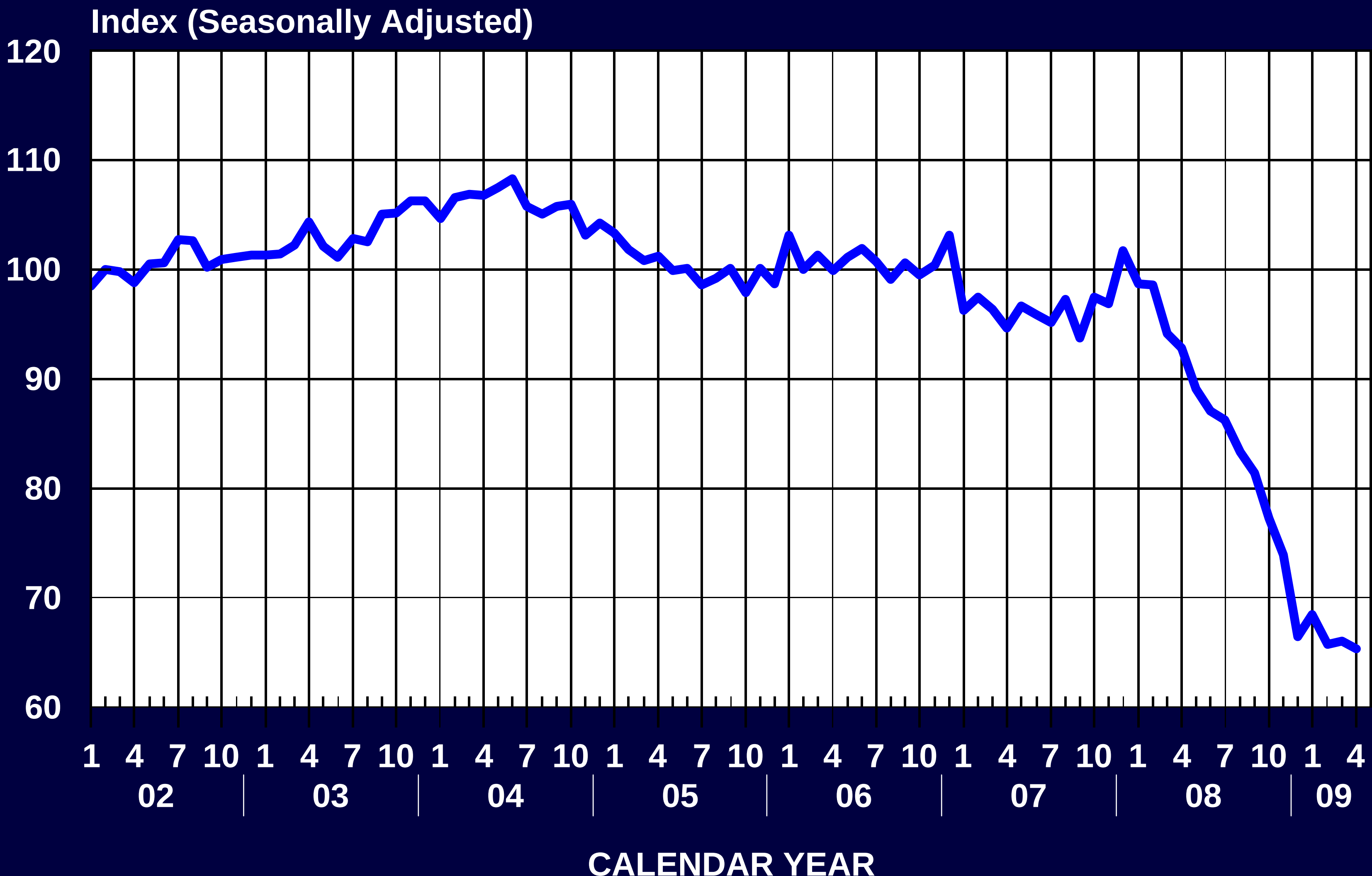
Monthly Index (Year 2005 = 100)



Eurostat

European Automotive Electronics Production

Monthly Index (Year 2005 = 100)



Eurostat

European car sales to increase in 2010 & return to 2008 level by 2014

"Because automotive is among the most important of European industries-perhaps the most important-many governments have passed stimulus packages to help stabilize their auto markets during the recession. The most popular stimulus is the so-called scrappage incentive that gives buyers of new cars a discount if they trade in old cars that generate more air pollution than new, cleaner vehicles."

•Germany's incentive of €2,500 for a new car started in mid January and immediately impacted sales. The nation's auto sales increased by nearly 17% in February, jumped by 40% in March and grew by another 18% in April, compared to the same months in 2008.

•France's incentive, which started in December, 2008, was €1,000 euros, so its impact was less.

•First-quarter auto sales in France declined by 3.9% compared to the same period in 2008, which is actually a relatively strong performance compared to overall double-digit decline in Europe.

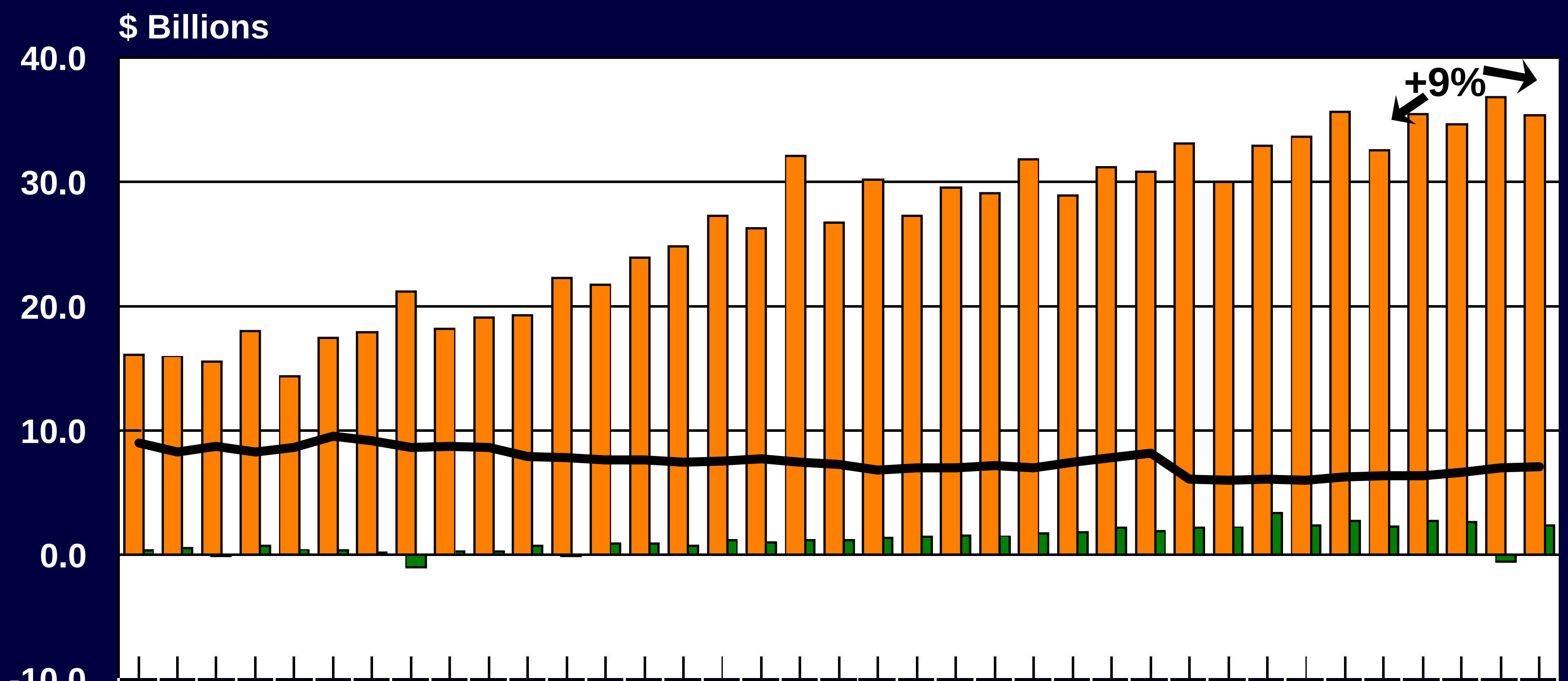
•Europe is the largest auto production region in the world, and is a net exporter of autos.

•European auto production in Q109 compared to Q108 dropped by 46% in France, 33% in Germany, 40% in Italy and more than 50% in the UK.

The good news is that Q109 was most likely the bottom of the downturn for Europe and auto production declines will be smaller in the remaining quarters of 2009.

iSuppli 6/09

Military Equipment
Composite of 6 Public Companies
Revenue, Net Income & Inventory

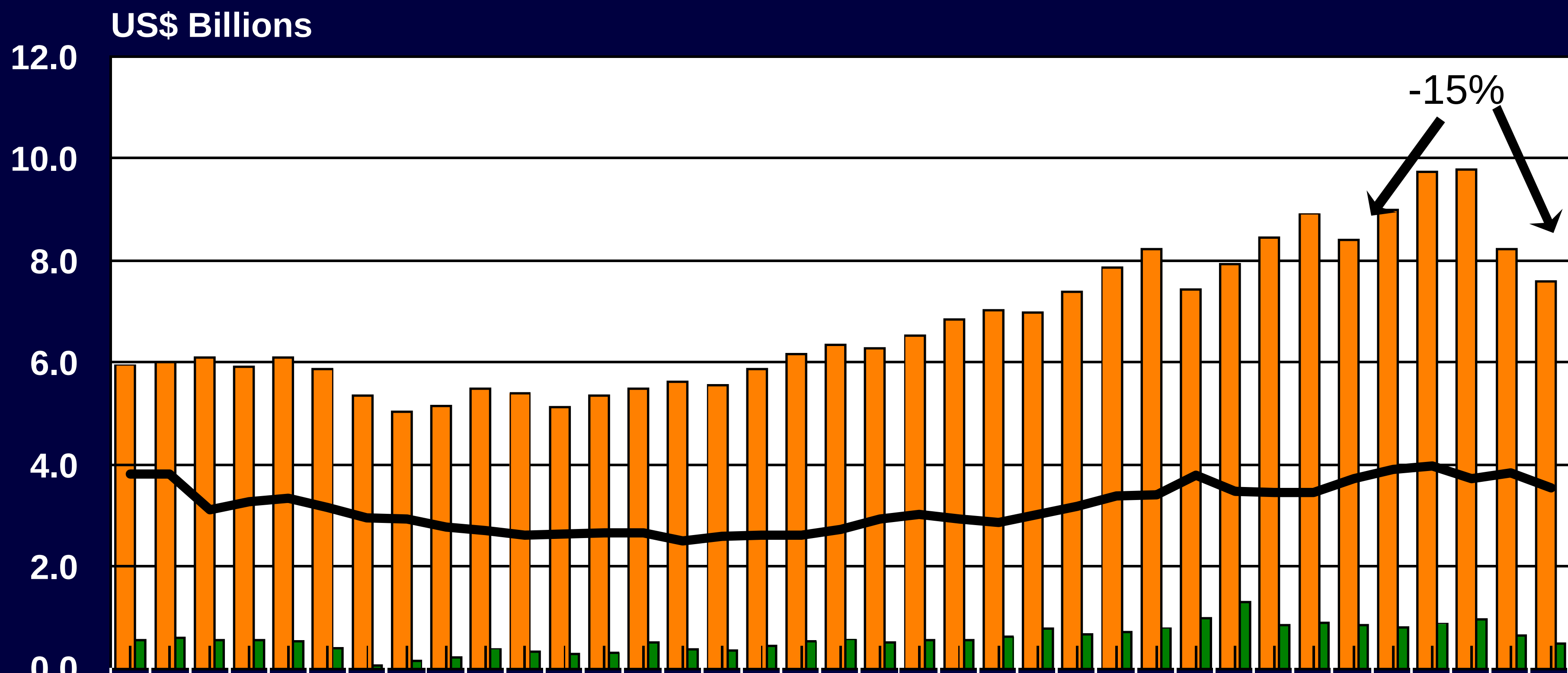


	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
	00				01				02				03				04
Revenue	16.1	15.9	15.5	18.0	14.3	17.5	17.9	21.2	18.2	19.1	19.3	22.3	21.7	23.9	24.8	27.2	26.3
Income	0.3	0.6	-0.1	0.7	0.4	0.4	0.2	-1.0	0.2	0.3	0.7	-0.1	0.9	0.9	0.7	1.2	1.0
Inventory	8.9	8.3	8.7	8.3	8.6	9.6	9.2	8.6	8.7	8.6	7.9	7.8	7.6	7.7	7.4	7.6	7.7

	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
	04			05				06				07				08				09
Revenue	32.1	26.8	30.2	27.3	29.6	29.1	31.9	29.0	31.2	30.8	33.1	30.0	32.9	33.7	35.6	32.6	35.5	34.6	36.8	35.3
Income	1.2	1.2	1.4	1.4	1.5	1.5	1.7	1.8	2.2	1.9	2.2	2.2	3.3	2.4	2.7	2.2	2.7	2.7	-0.6	2.4
Inventory	7.5	7.2	6.8	7.0	7.0	7.2	7.0	7.5	7.8	8.1	6.1	6.0	6.1	6.0	6.3	6.4	6.3	6.6	7.0	7.1

General Dynamics, Harris, Lockheed, Northrop Grumman, Raytheon, Rockwell Collins

Instruments & Control Equipment
Composite of 6 Public Companies
Revenue, Net Income & Inventory



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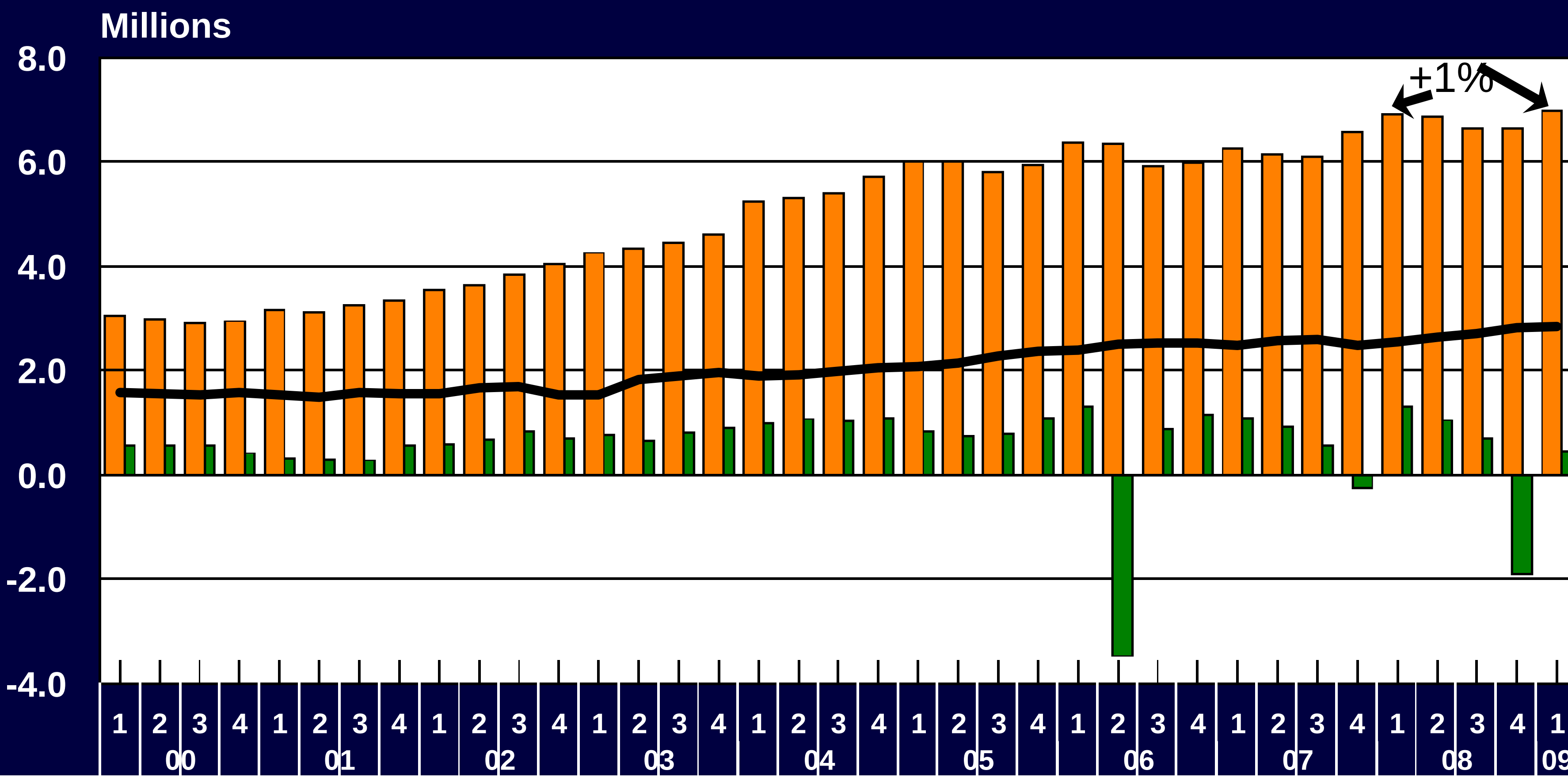
	00				01				02				03				04				05				06				07				08				09
Revenue	6.0	6.0	6.1	5.9	6.1	5.9	5.4	5.0	5.2	5.5	5.4	5.1	5.4	5.5	5.6	5.6	5.9	6.2	6.3	6.3	6.5	6.8	7.0	7.0	7.4	7.9	8.2	7.4	7.9	8.4	8.9	8.4	9.0	9.7	9.8	8.2	7.6
Income	0.6	0.6	0.6	0.6	0.5	0.4	0.1	0.1	0.2	0.4	0.3	0.3	0.3	0.5	0.4	0.4	0.4	0.5	0.6	0.5	0.6	0.6	0.6	0.8	0.7	0.7	0.8	1.0	1.3	0.9	0.9	0.9	0.8	0.9	1.0	0.6	0.5
Inventory	3.8	3.8	3.1	3.3	3.3	3.2	3.0	2.9	2.8	2.7	2.6	2.6	2.7	2.7	2.5	2.6	2.6	2.6	2.7	2.9	3.0	2.9	2.9	3.0	3.2	3.4	3.4	3.8	3.5	3.4	3.5	3.7	3.9	4.0	3.7	3.8	3.5

Ametek, Emerson Electric, Keithley Instruments, PerkinElmer, Rockwell Automation, Teledyne

Medical Equipment
Composite of 4 Public Companies
Revenue, Net Income & Inventory



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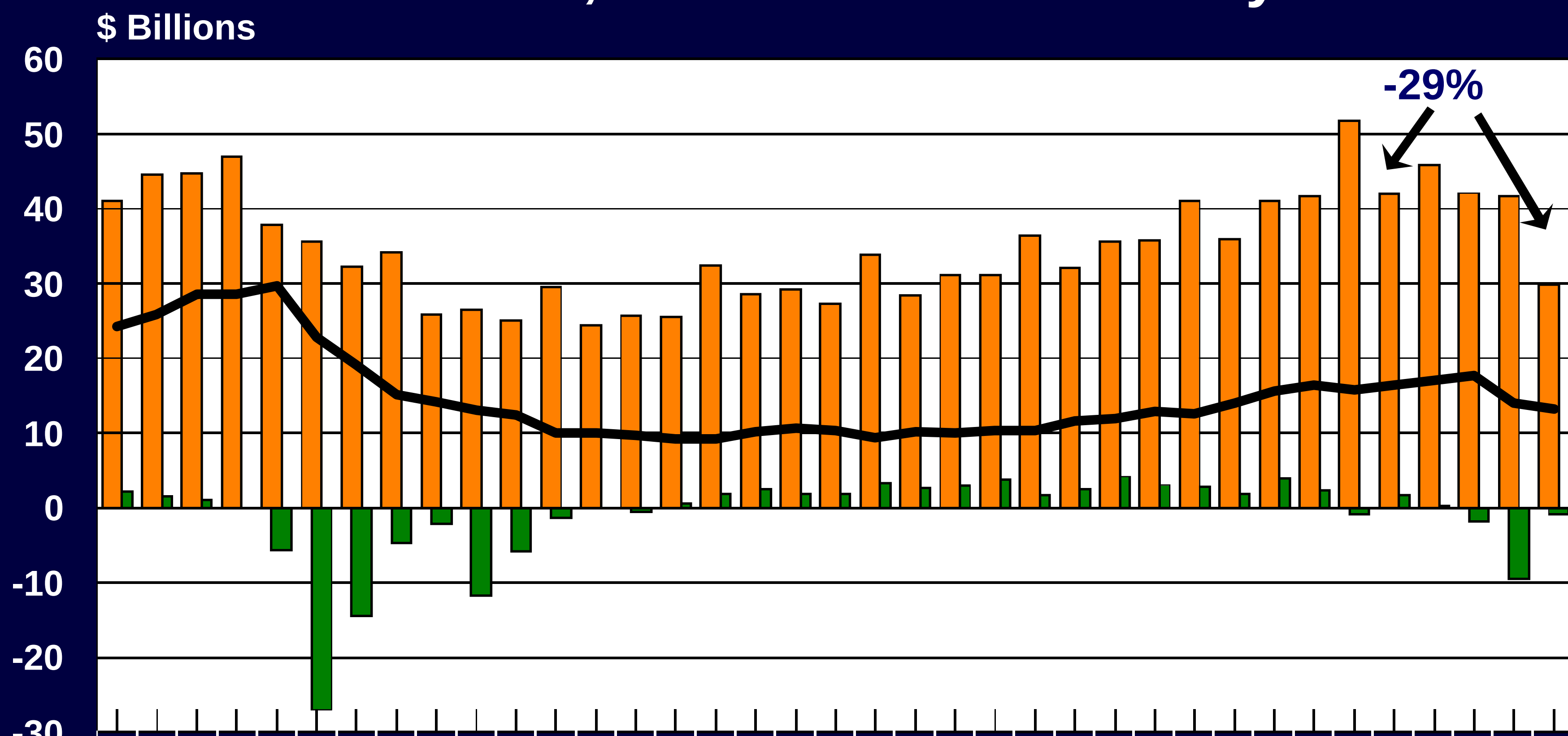
	00				01				02				03				04				05				06				07				08				09
Revenue	3.0	3.0	2.9	2.9	3.2	3.1	3.2	3.3	3.5	3.6	3.8	4.0	4.3	4.3	4.4	4.6	5.2	5.3	5.4	5.7	6.0	6.0	5.8	5.9	6.4	6.3	5.9	6.0	6.3	6.1	6.1	6.6	6.9	6.9	6.6	6.6	7.0
Income	0.6	0.6	0.6	0.4	0.3	0.3	0.3	0.6	0.6	0.7	0.8	0.7	0.8	0.6	0.8	0.9	1.0	1.1	1.0	1.1	0.8	0.7	0.8	1.1	1.3	-3.5	0.9	1.1	1.1	0.9	0.6	-0.3	1.3	1.0	0.7	-1.9	0.4
Inventory	1.6	1.5	1.5	1.6	1.5	1.5	1.6	1.5	1.6	1.7	1.7	1.5	1.5	1.8	1.9	2.0	1.9	1.9	2.0	2.1	2.1	2.1	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.6	2.6	2.5	2.5	2.6	2.7	2.8	2.8

Boston Scientific + Guidant, Medtronic, St Jude Medical

Large "Communications" Equipment Suppliers Composite of 5 Public Companies

Revenue, Net Income & Inventory

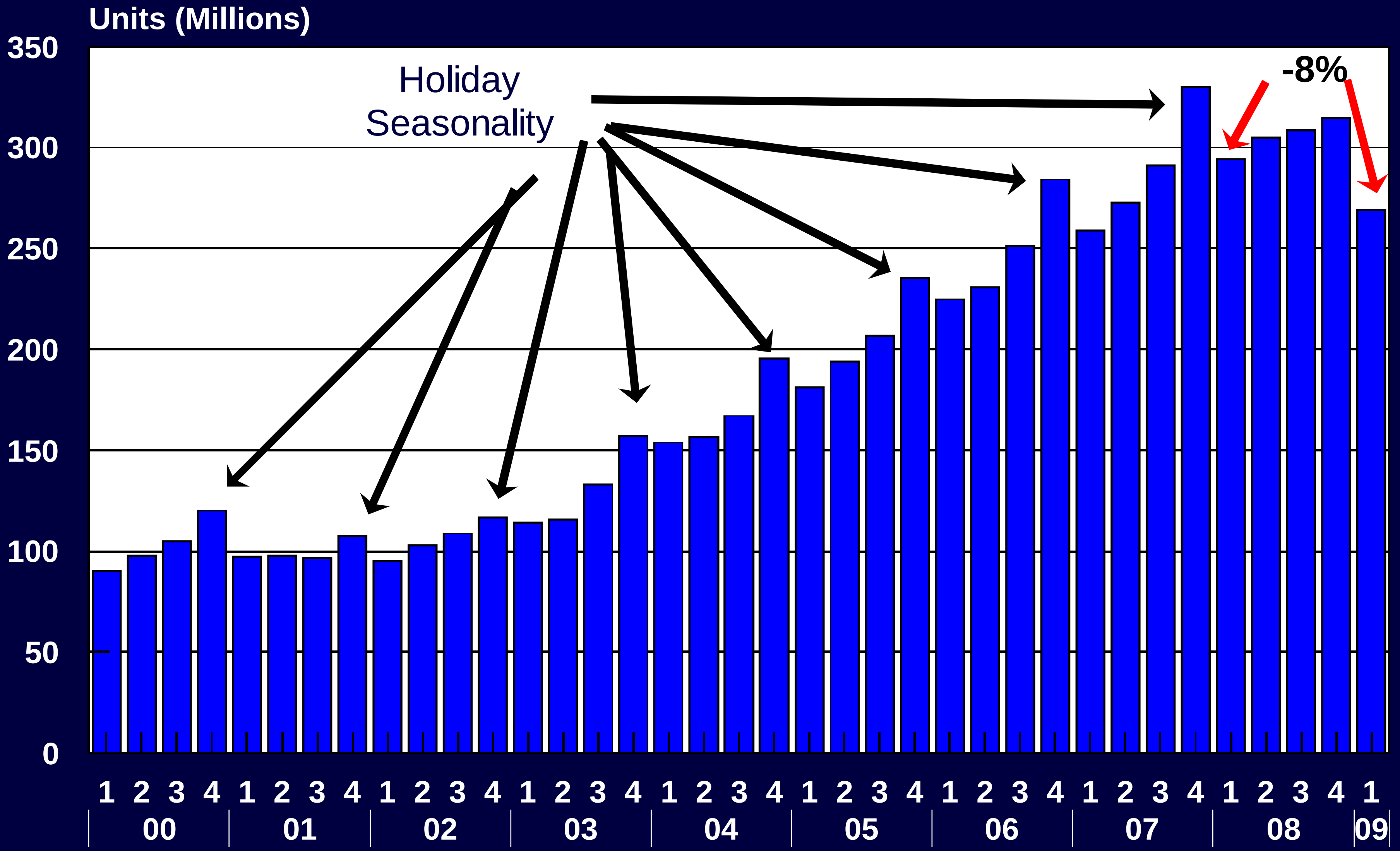


	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
		00				01				02				03				04	
Revenue	41	45	45	47	38	36	32	34	26	27	25	30	24	26	26	32	29	29	27
Income	2	1	1	-0	-6	-27	-14	-5	-2	-12	-6	-1	-0	-1	1	2	3	2	2
Inventory	24	26	28	29	30	23	19	15	14	13	12	10	10	10	9	9	10	11	10

	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
	04		05				06				07				08			09
Revenue	34	28	31	31	36	32	36	36	41	36	41	42	52	42	46	42	42	30
Income	3	3	3	4	2	2	4	3	3	2	4	2	-1	2	0	-2	-10	-1
Inventory	9	10	10	10	10	12	12	13	13	14	16	16	16	16	17	18	14	13

Alcatel+Lucent, Ericsson, Motorola, Nokia, Nortel
Euros & Krona converted at fluctuating exchange

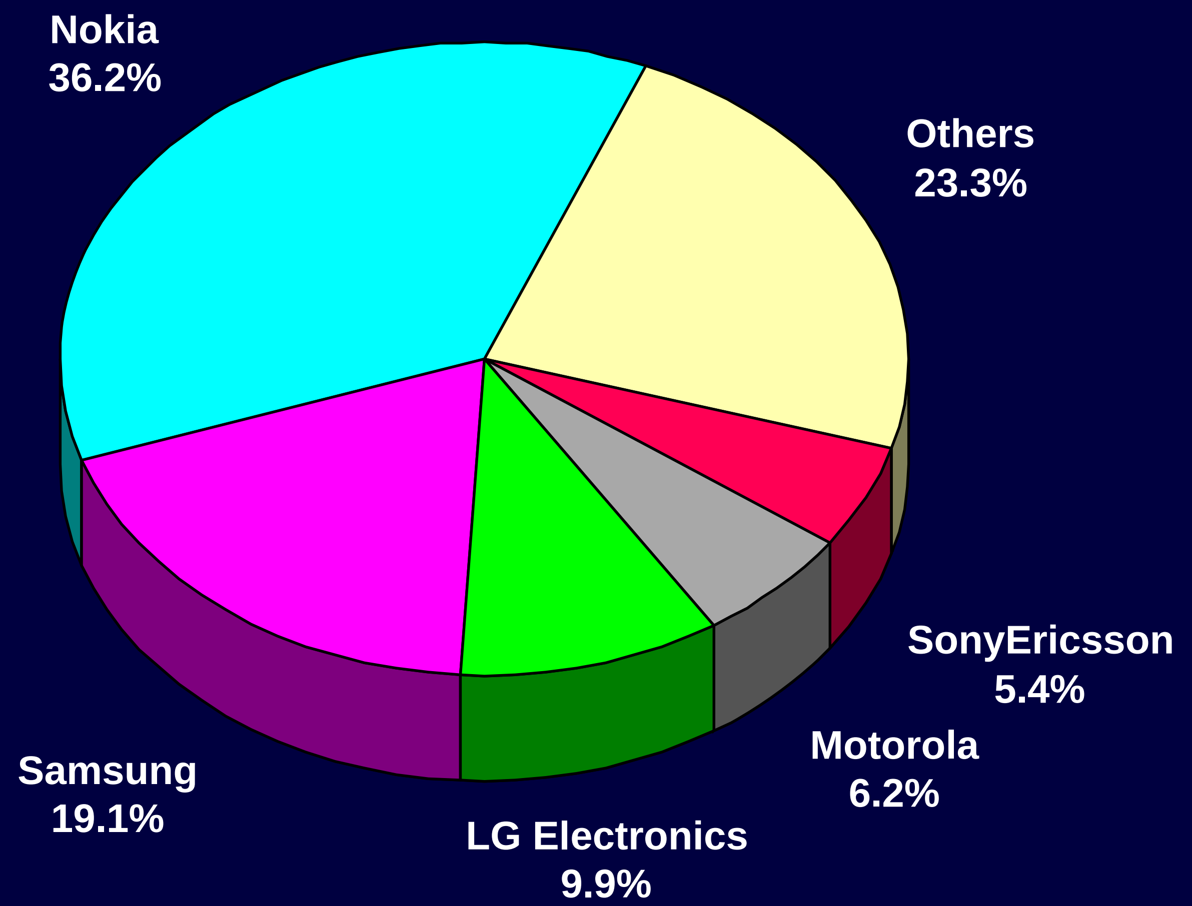
Mobile Phone Unit Shipments
World



Gartner DataQuest 5/09

World Cellular Phone Unit Sales by Vendor

1Q'09

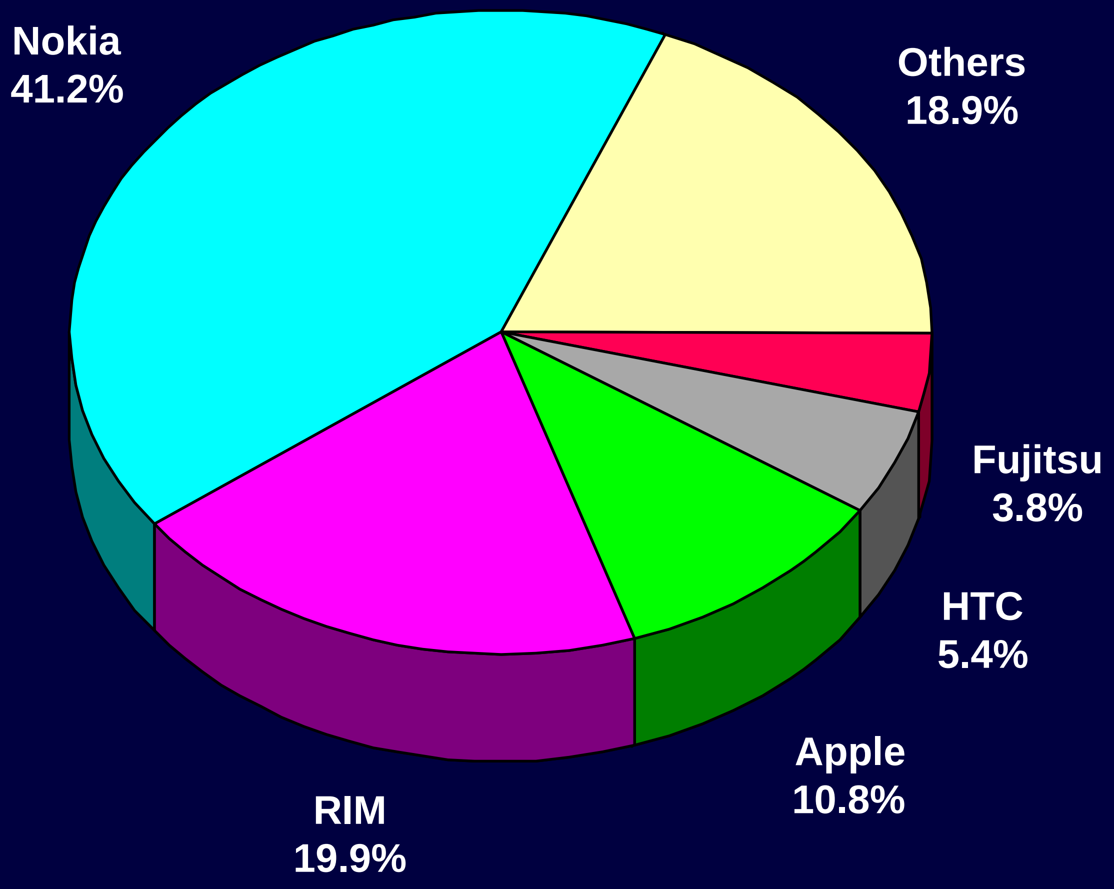


Total: 269 Million Units

Gartner 5/09

World Smartphone Sales to End Users

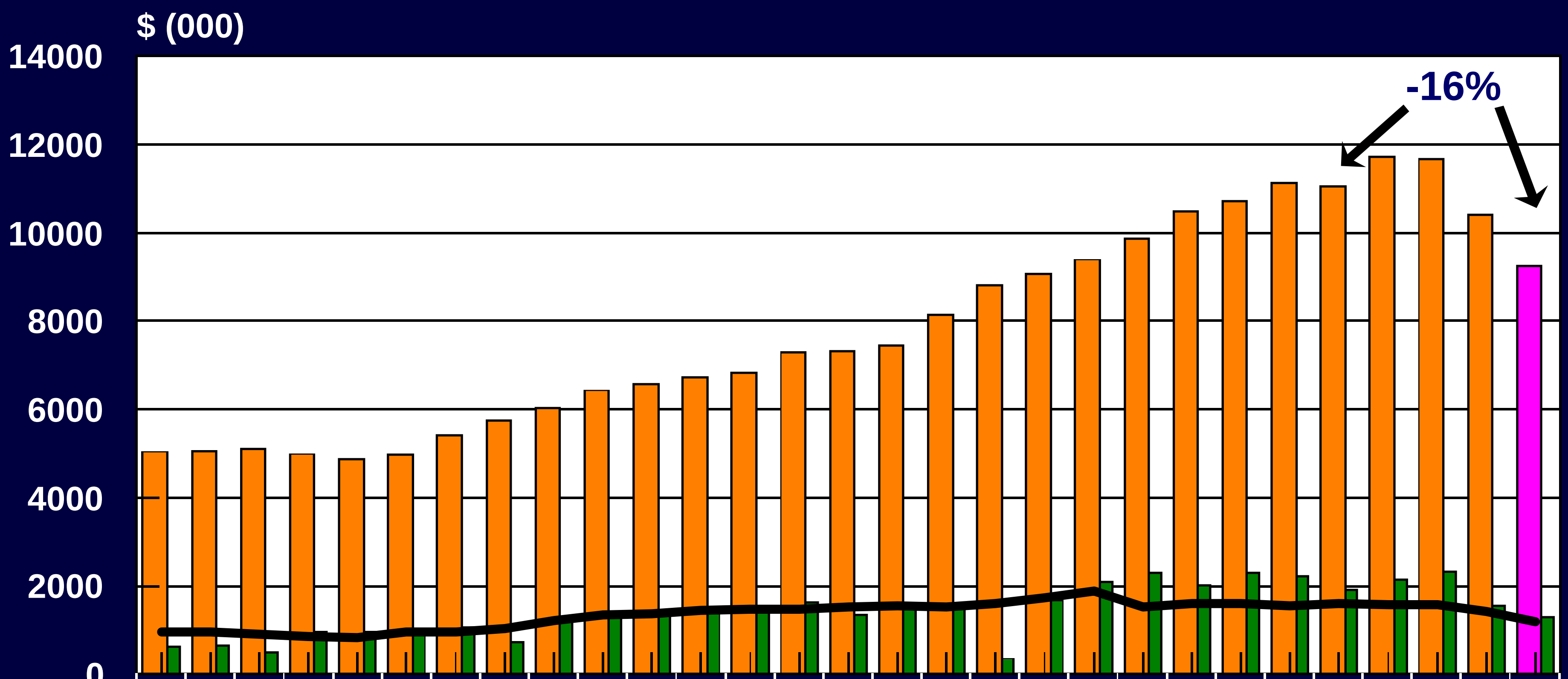
1Q'09



Total: 36.4 Million Units

Gartner 5/09

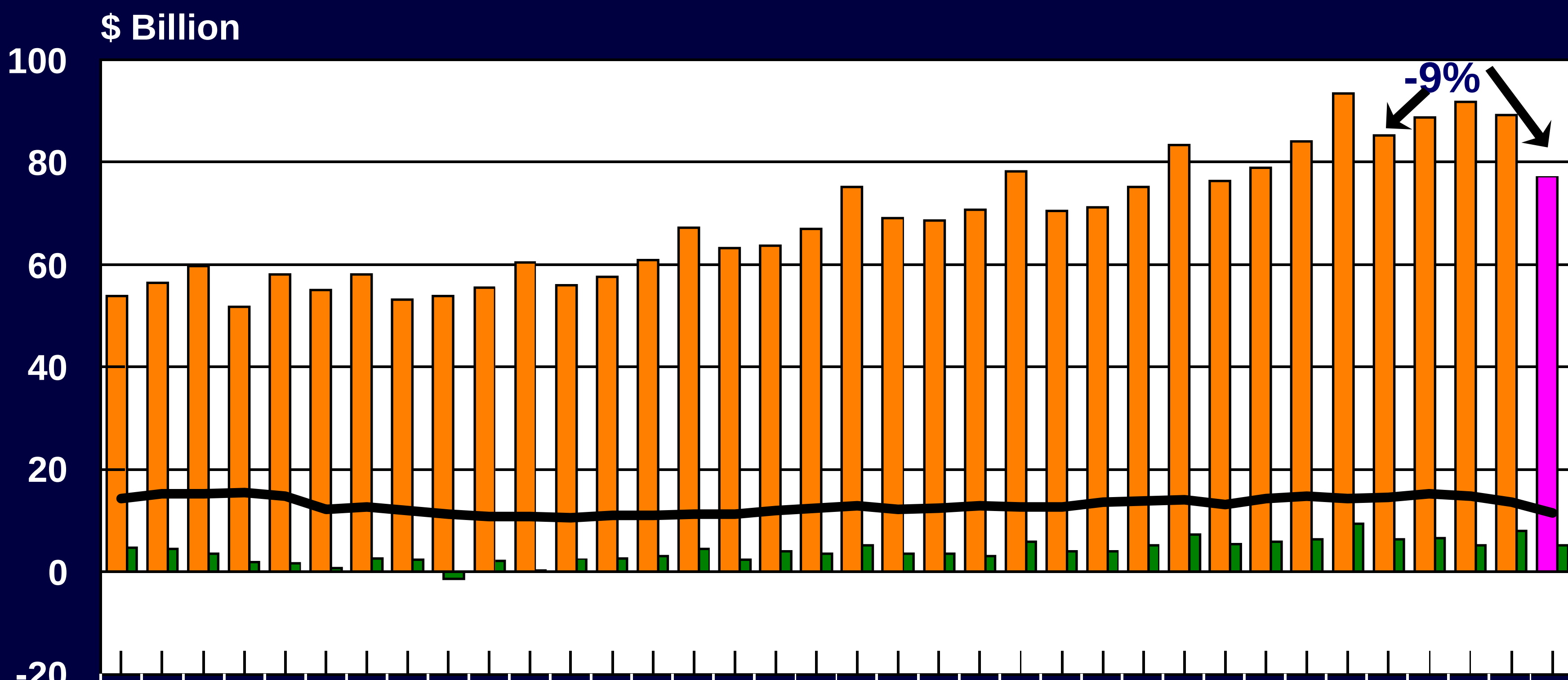
"Internet" Equipment Suppliers
Composite of 5 Public Companies
Revenue, Net Income & Inventory



	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
		02				03				04				05				06				07				08			09
Revenue	5040	5047	5095	4988	4883	4983	5406	5746	6025	6430	6567	6716	6817	7279	7308	7442	8144	8818	9073	9386	9867	10483	10706	11113	11049	11706	11672	10408	9241
Income	622	650	494	970	971	991	1071	722	1248	1374	1459	1483	1465	1622	1354	1499	1505	357	1673	2085	2301	2016	2293	2231	1902	2142	2335	1554	1289
Inventory	970	957	909	853	845	966	962	1036	1227	1343	1370	1445	1478	1488	1519	1563	1517	1602	1735	1898	1526	1598	1601	1556	1601	1569	1583	1436	1201

Cisco Systems, Juniper Networks, Netgear, Sonus Networks, Sycamore

"Computer" Equipment Suppliers
Composite of 11 Public Companies
Revenue, Net Income & Inventory



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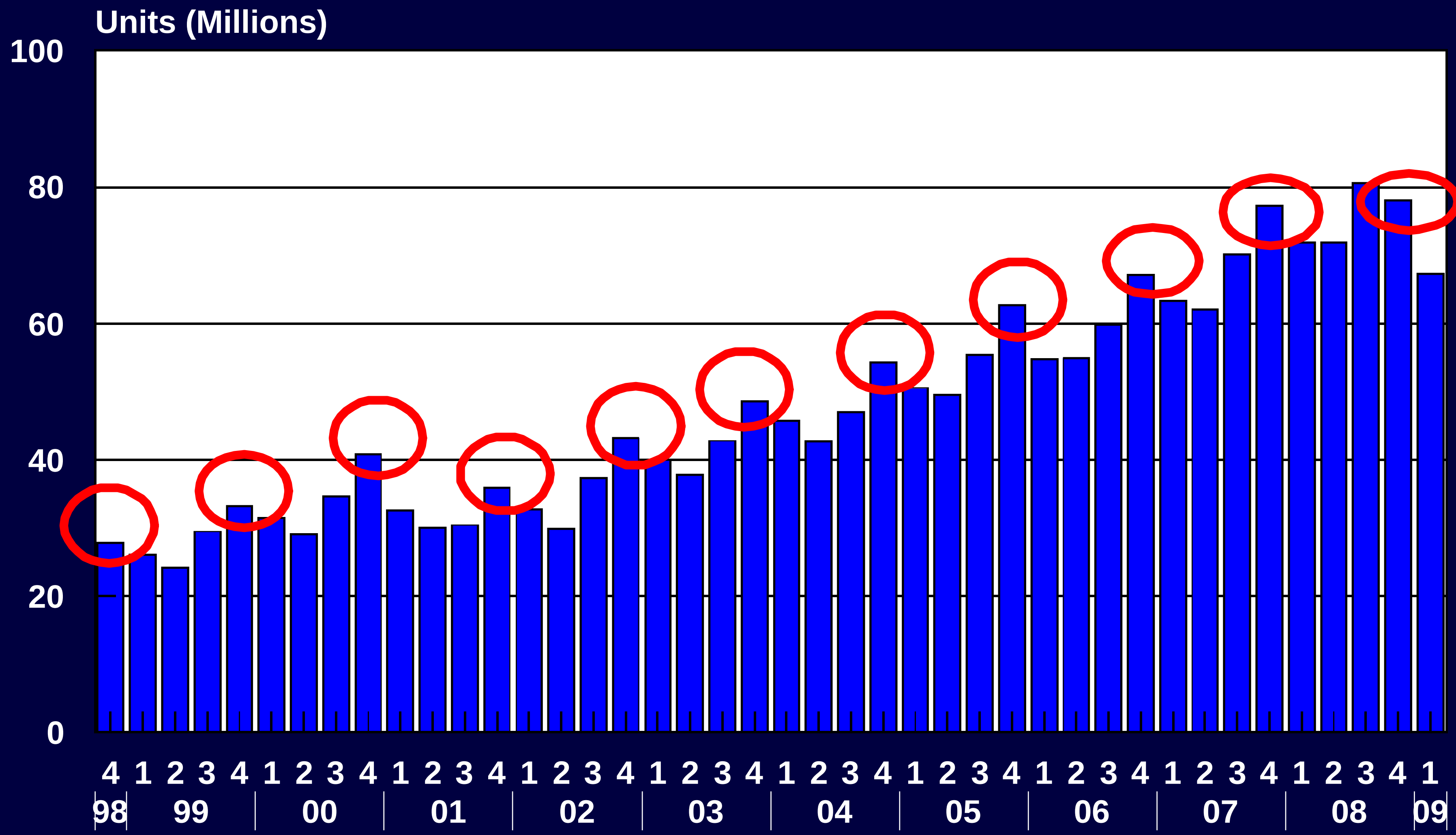
		00			01				02				03				04				05				06				07				08			09
Revenue	54	56	60	52	58	55	58	53	54	56	60	56	58	61	67	63	64	67	75	69	69	71	78	70	71	75	83	76	79	84	93	85	89	92	89	77
Income	5	4	3	2	2	1	3	2	-1	2	0	3	3	3	5	2	4	4	5	4	4	3	6	4	4	5	7	5	6	6	9	6	7	5	8	5
Inventory	14	15	15	16	15	12	13	12	11	11	11	11	11	11	11	11	12	13	13	12	13	13	13	13	14	14	14	13	14	15	14	15	15	15	14	12

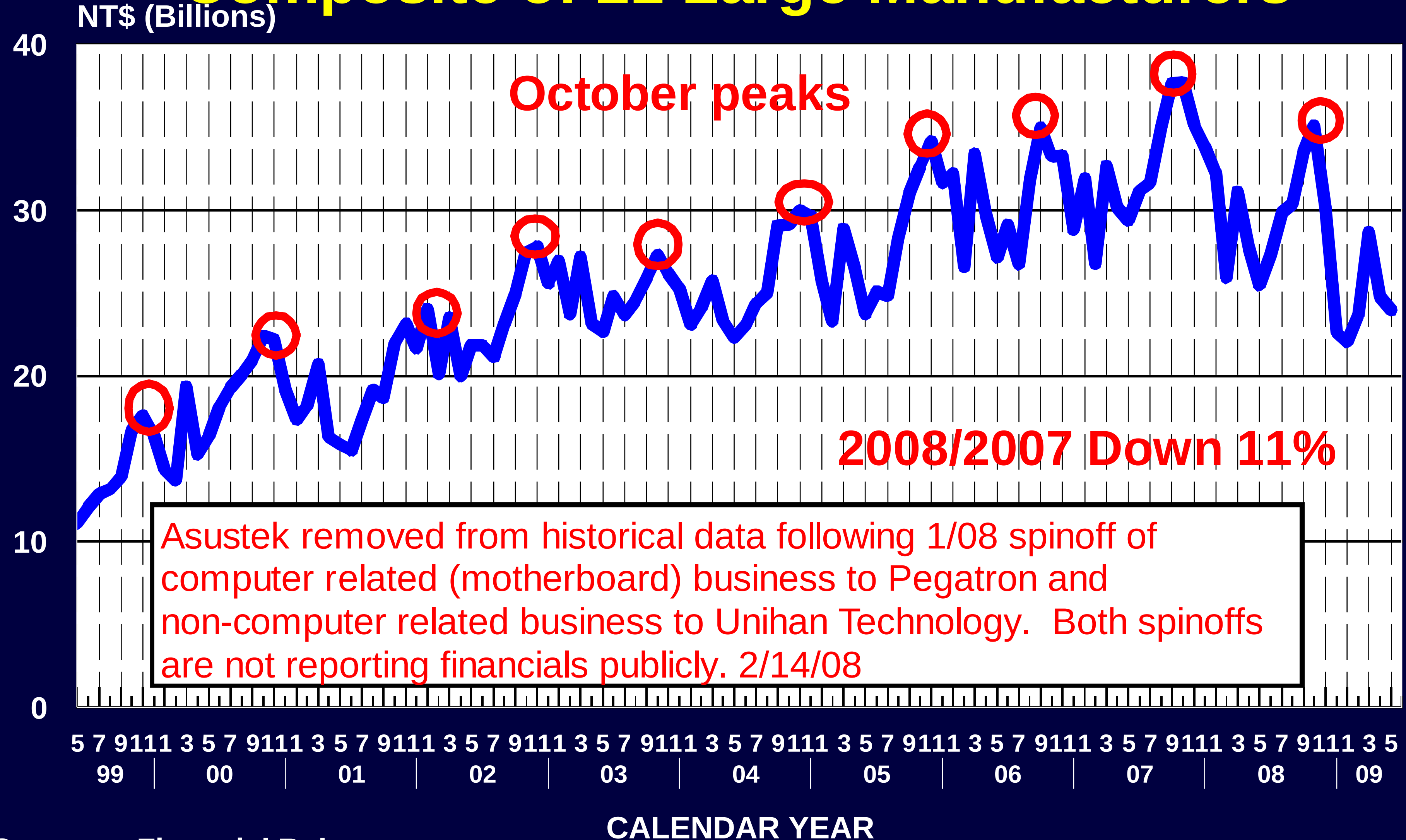
Acer+Gateway, Apple, Creative Tech, Cray, Dell, HP, IBM, Mercury, NCR, Sun Micro, Unisys

Personal Computer Unit Shipments
World



Gartner 4/09
Servers not included

Taiwan Motherboard Vendor Sales
Composite of 21 Large Manufacturers

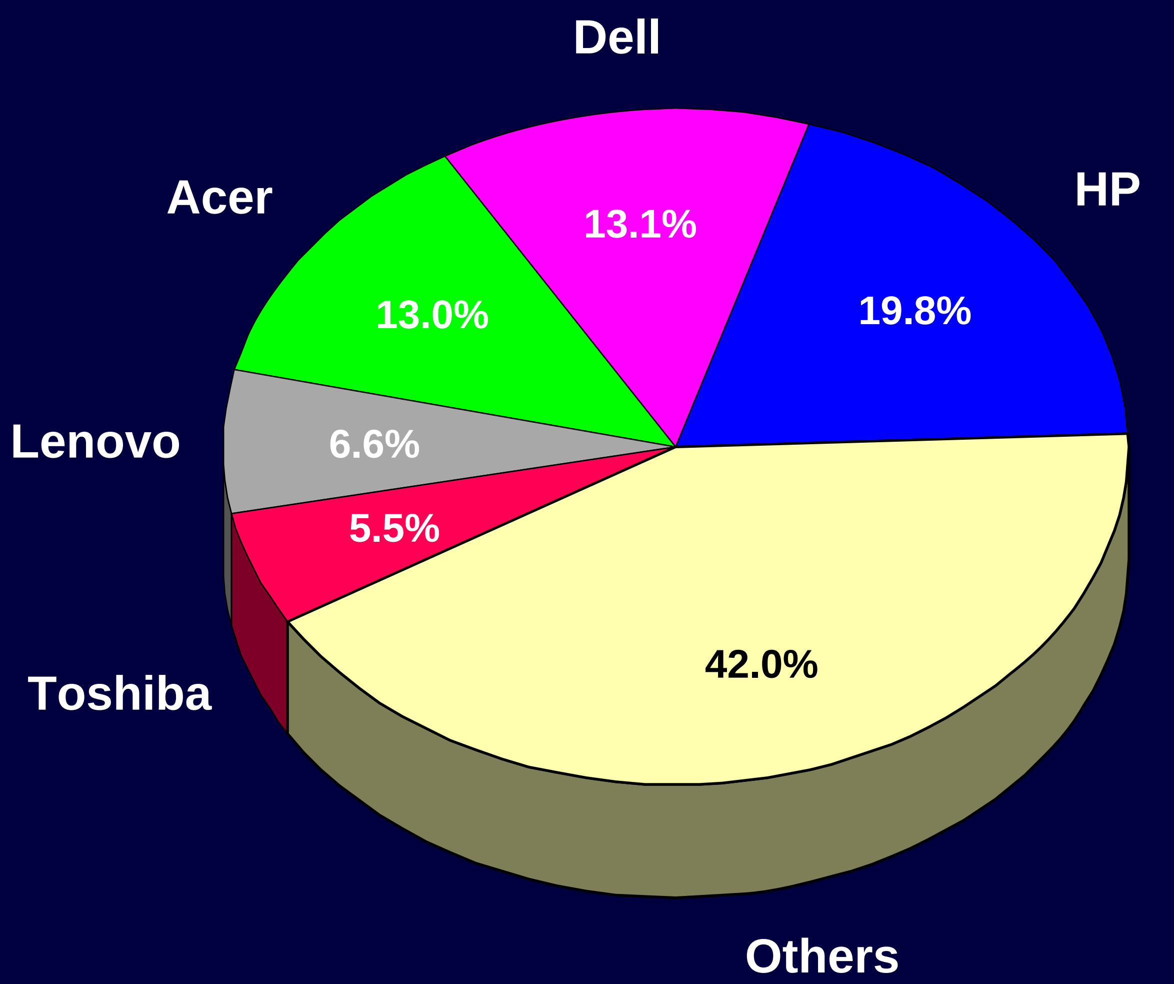


Company Financial Releases

Albatron, AOpen, Biostar, Chaintech, Diamond Flower, Elite Group, Epox, Flytech, Giga-Byte, ICP, Jetway, Keimei, Kinpo, Leadtek, Microstar Intl, Mitac, New Era, Shuttle, Soyo, Tul, Universal Scientific

WORLD PERSONAL COMPUTER MARKET

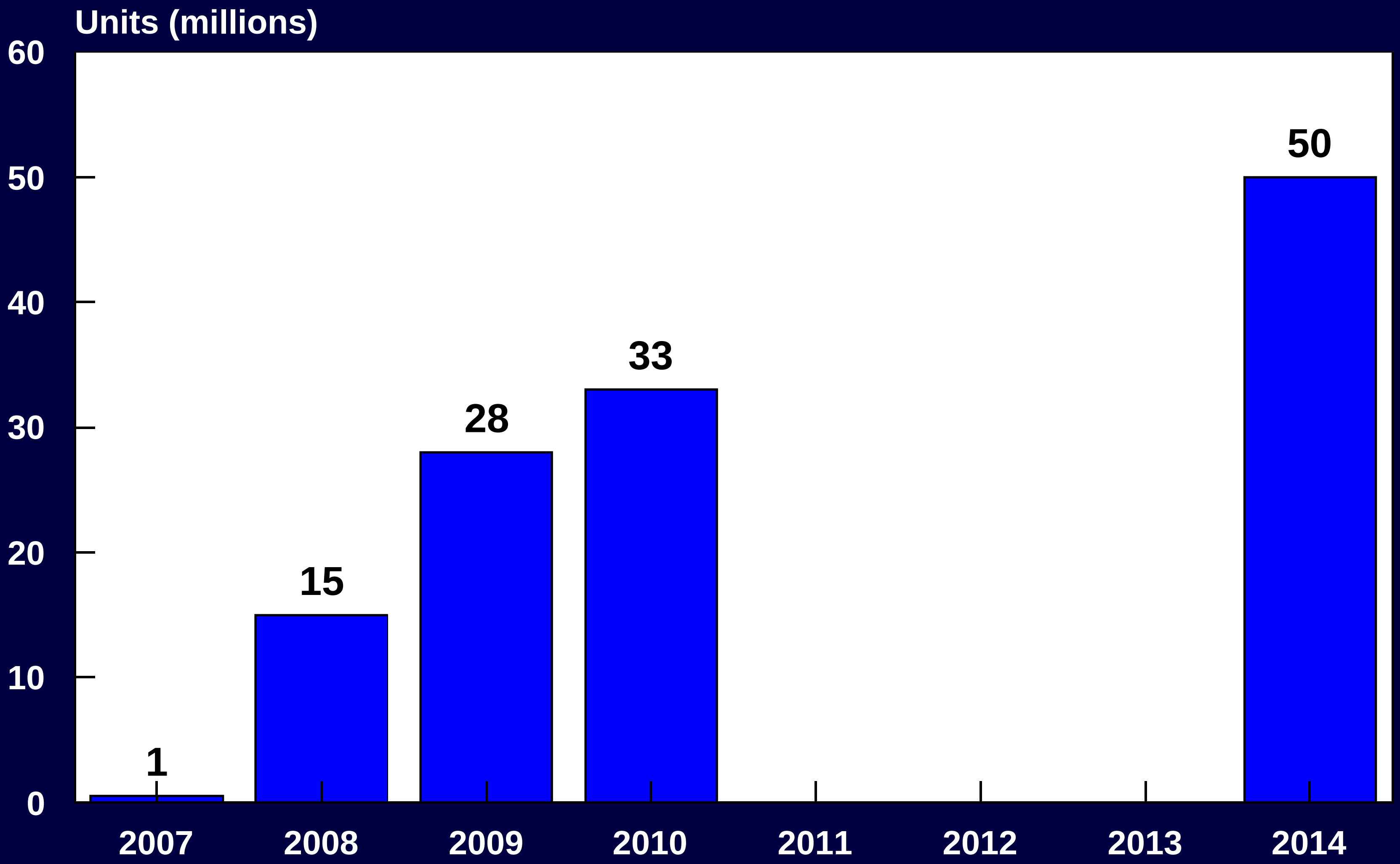
1Q'09



TOTAL: 67.2 M UNITS

Gartner 4/2009

Netbook Computers - Global Output

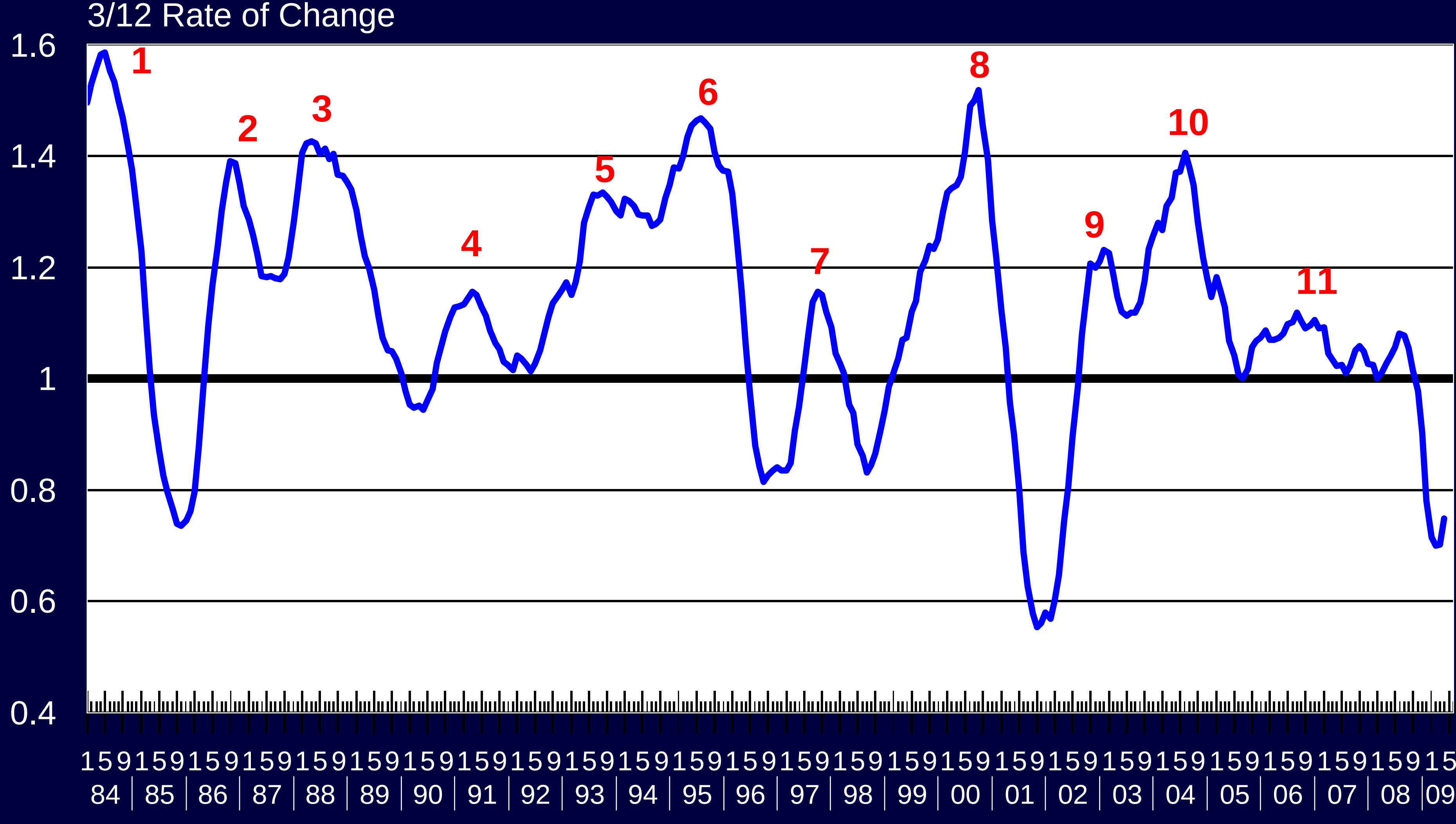


Fuji Chimera 4/09

Semiconductors

Global Semiconductor Shipments

3-Month Growth Rates on $ Basis

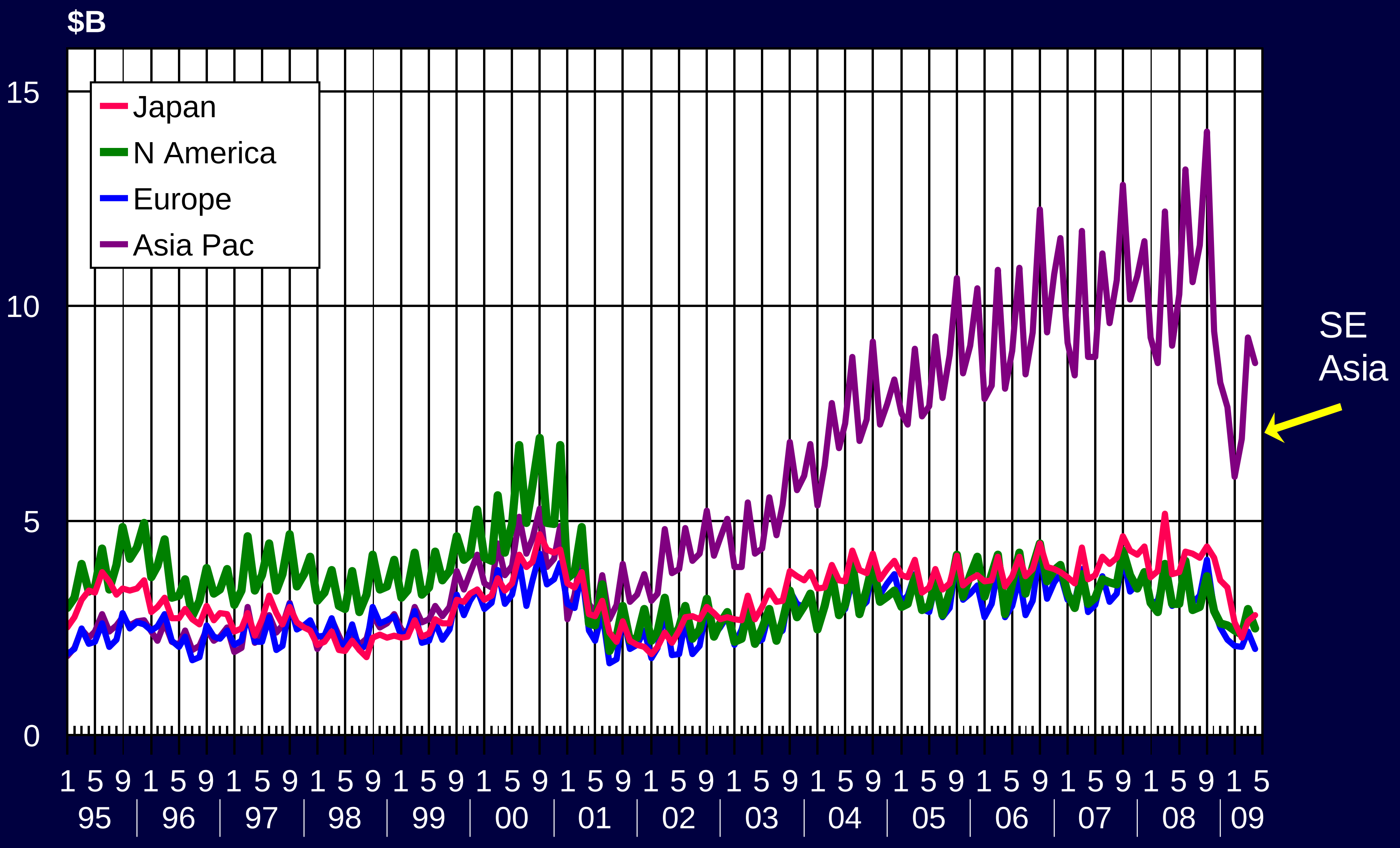


Total $ Shipments from All Countries to an Area

SIA website: www.sia-online.org/

Total Semiconductor Shipments to an Area

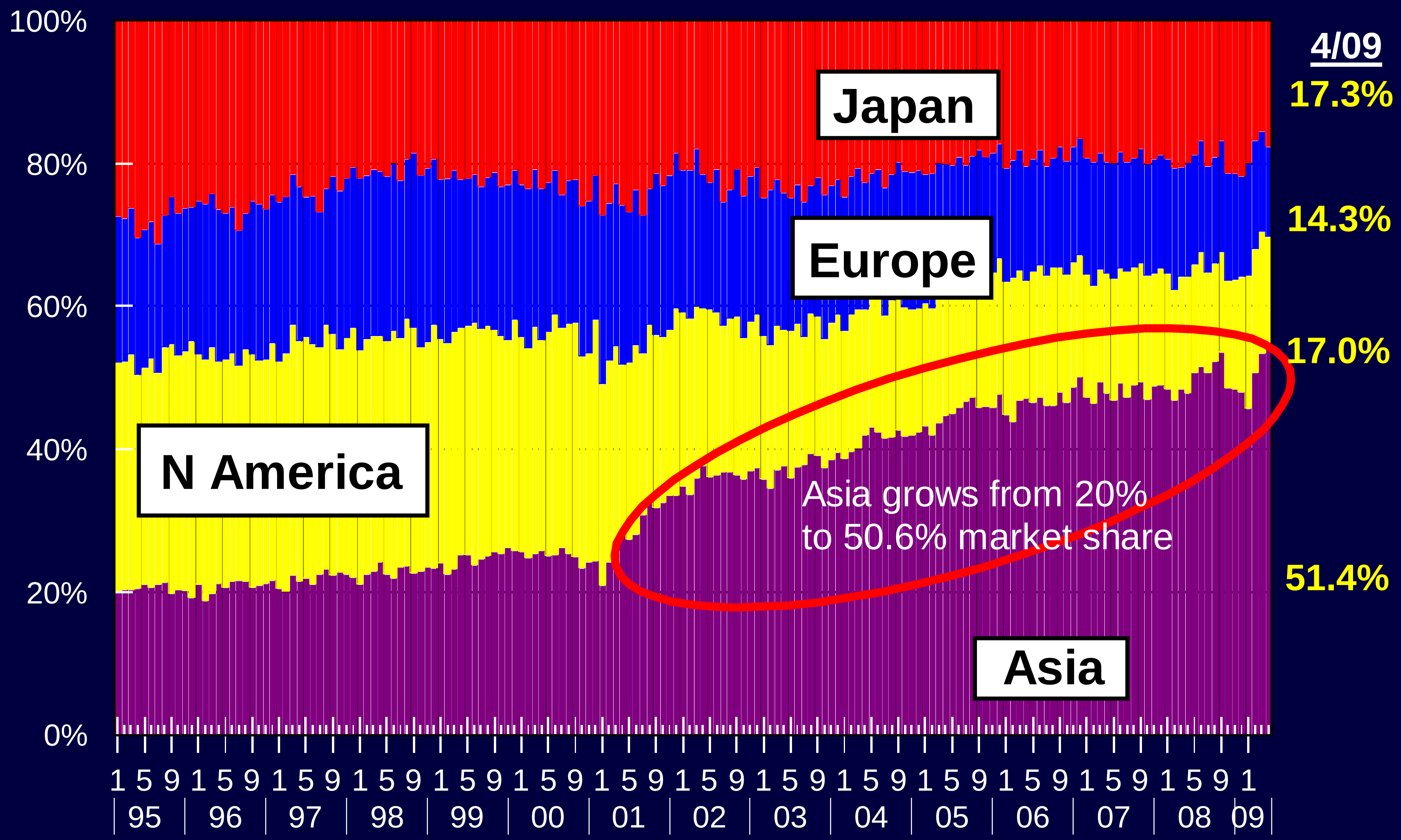
Monthly Shipments - Reporting Firms



SIA website: www.sia-online.org/

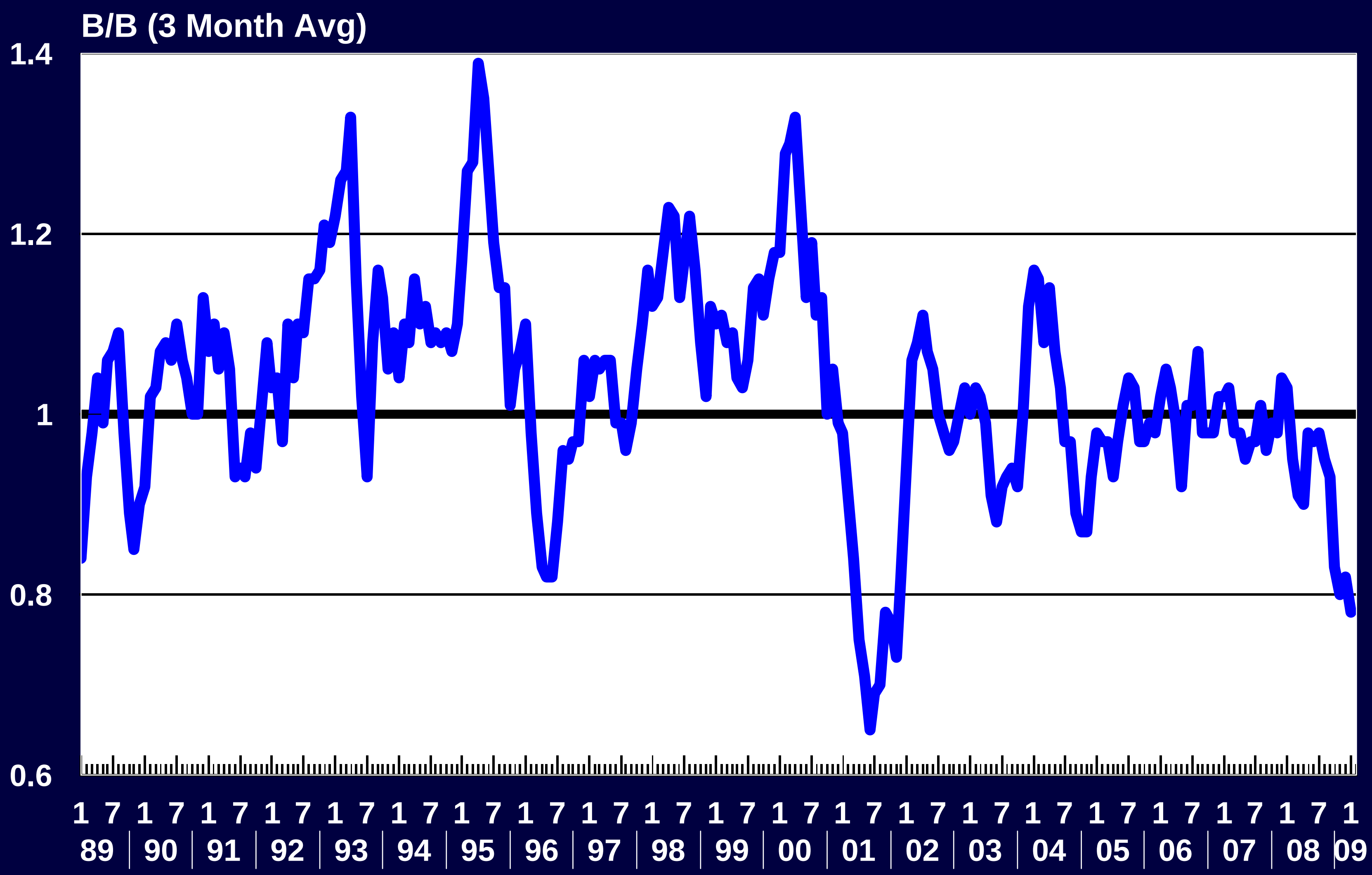
Total Semiconductor Shipments to an Area

Monthly Shipments - Reporting Firms



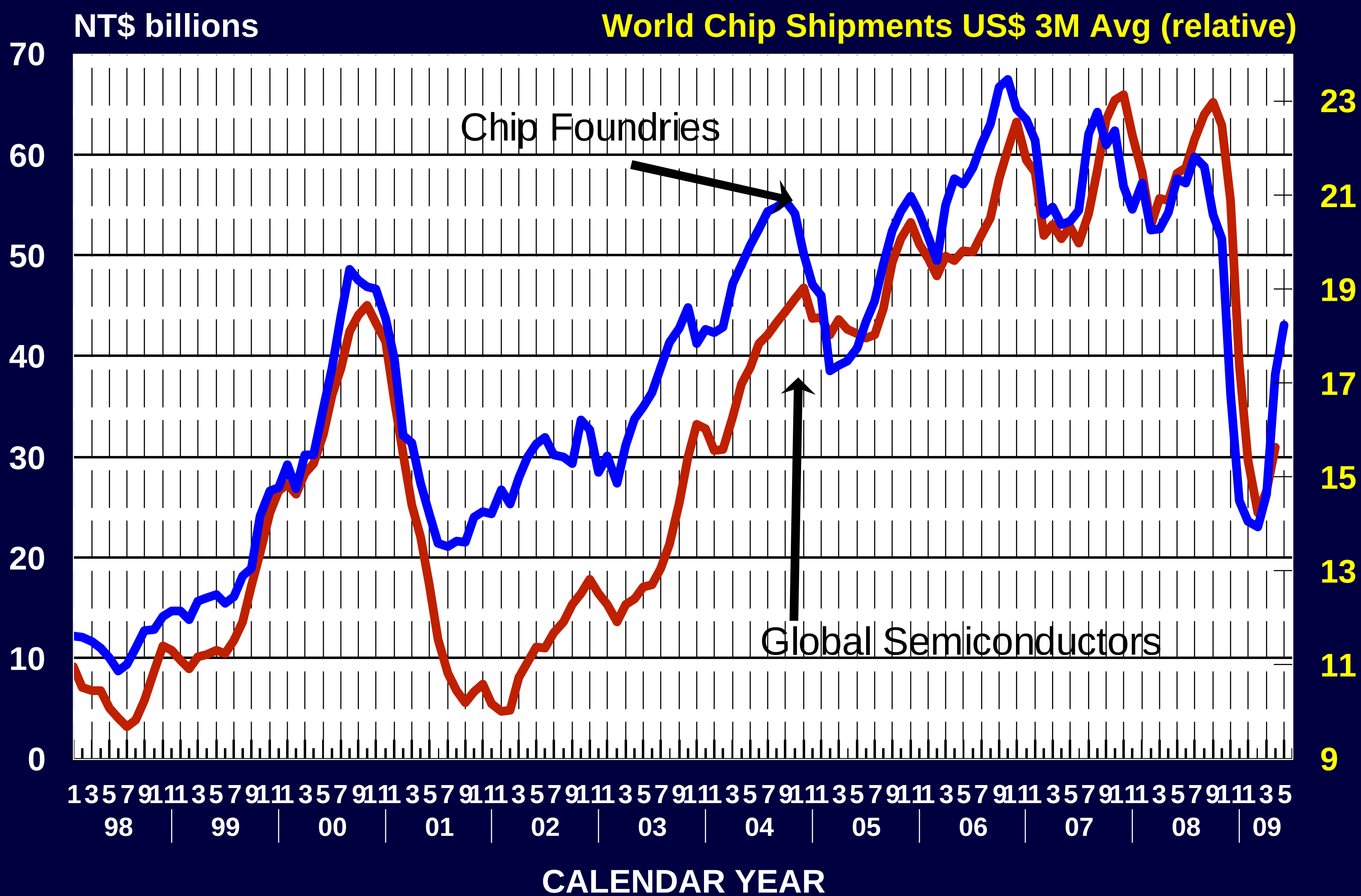
SIA website: www.sia-online.org/

German Semiconductor Book/Bill Ratio



www.zvei-be.org/brancheninfo/booktobill.html

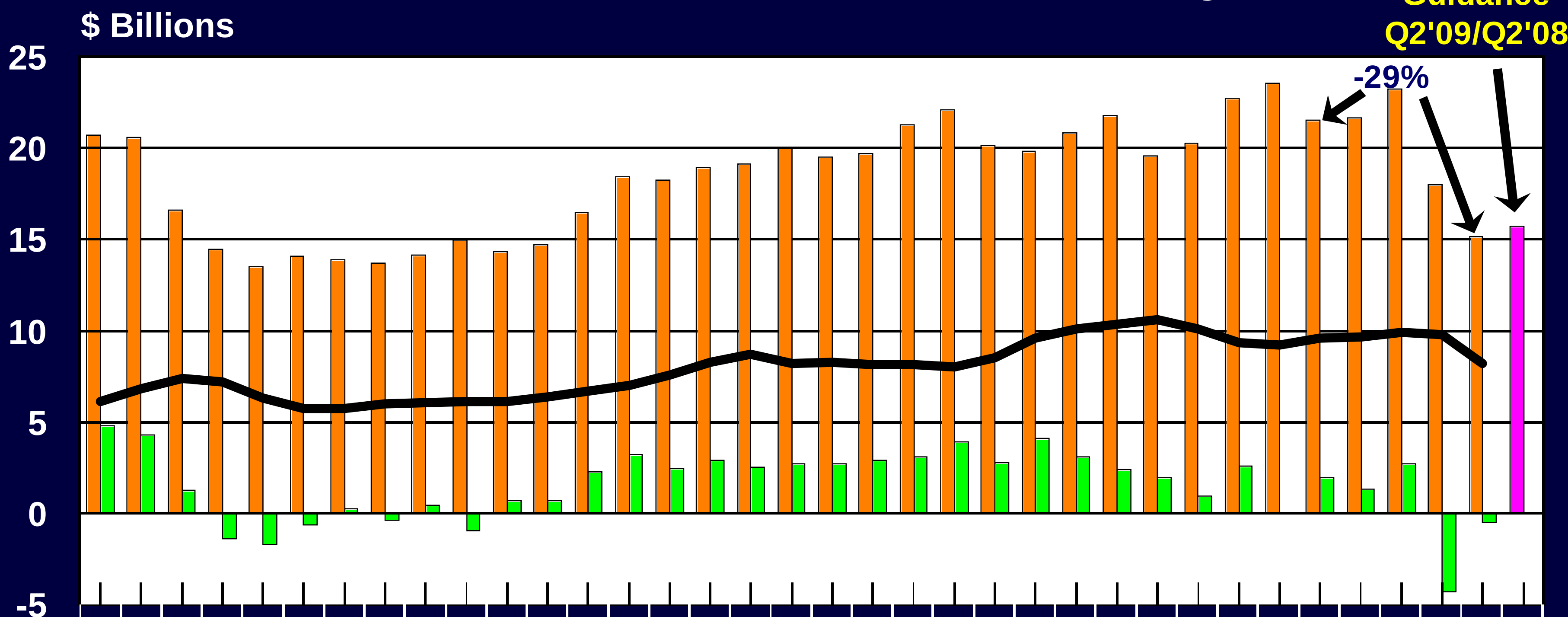
Taiwan Wafer Foundry Composite vs Global Semiconductor Revenues



14 Taiwan Company Financial Releases & SIA

Large Semiconductor Suppliers
Composite of 18 Public Companies

Revenue, Net Income & Inventory



	00		01				02				03	
	3	4	1	2	3	4	1	2	3	4	1	2
Revenue	21	21	17	14	14	14	14	14	14	15	14	15
Income	5	4	1	-1	-2	-1	0	-0	0	-1	1	1
Inventory	6	7	7	7	6	6	6	6	6	6	6	6

	03		04				05				06	
	3	4	1	2	3	4	1	2	3	4	1	2
Revenue	16	18	18	19	19	20	19	20	21	22	20	20
Income	2	3	2	3	3	3	3	3	3	4	3	4
Inventory	7	7	8	8	9	8	8	8	8	8	9	10

	06		07				08				09	
	3	4	1	2	3	4	1	2	3	4	1	2
Revenue	21	22	20	20	23	24	22	22	23	18	15	16
Income	3	2	2	1	3	0	2	1	3	-4	-0	
Inventory	10	10	11	10	9	9	10	10	10	10	8	

CY

Actel, AMD, Altera, Anadigics, Analog Devices, Atmel, Conexant, Cypress, Fairchild, Intel, Intersil, Linear Technologies, LSI Logic, Microsemi, National Semi, On Semi, STMicro, Texas Instruments

Semiconductor
Fab, Assembly,
Packaging,Test & Measurement
Equipment

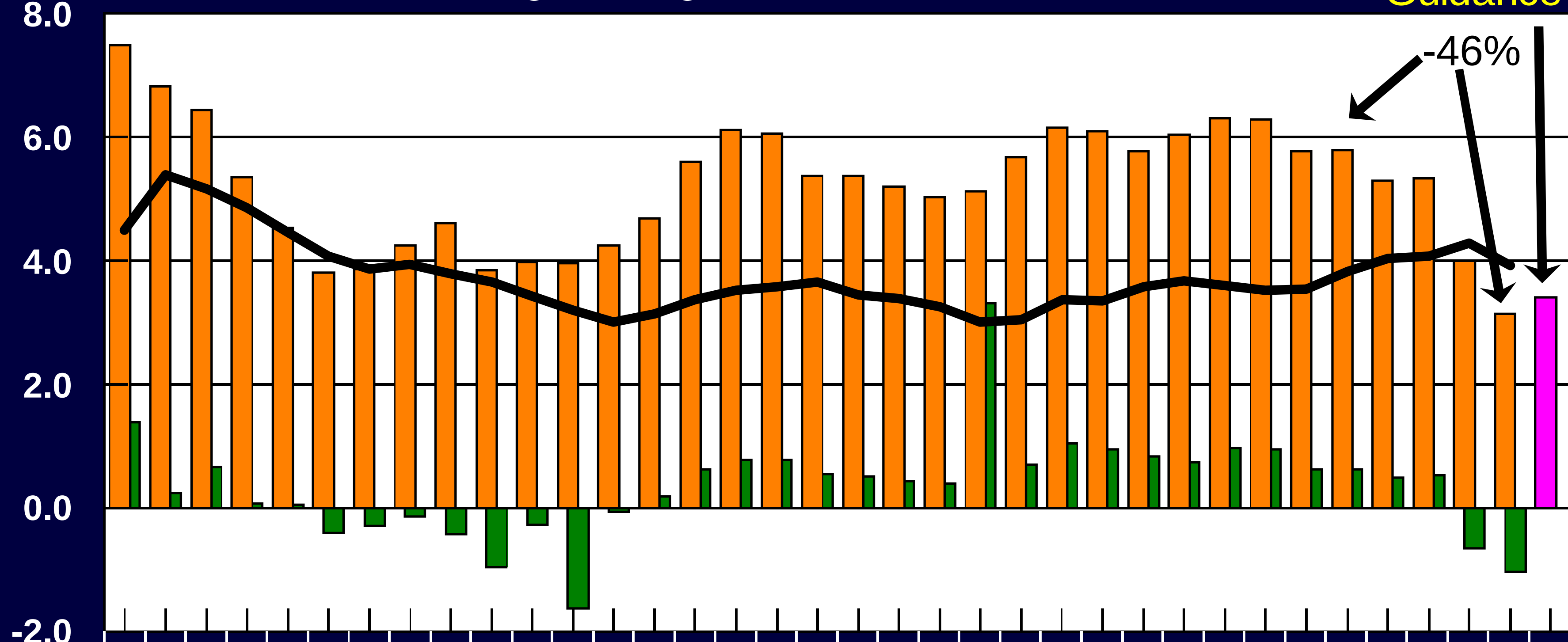
Top 15 SEMI Equipment Suppliers 2008 Sales ($M)

Applied Materials	5,878
ASML	4,367
Tokyo Electron	4,343
KLA-Tencor	2,112
Lam Research	1,904
Nikon	1,742
Canon	1,090
Hitachi High-Technologies	1,056
Dainippon Screen	1,041
Novellus Systems	970
ASM International	961
Teradyne	925
Advantest	884
Varian Semiconductor	687
Verigy	606
Total Top 15	$28,566 million
Total - all suppliers	$41,800 million

VLSI Research & company data 3/09

Semiconductor Fab, Test & Measurement Composite of 13 Public Companies

Revenue, Net Income & Inventory



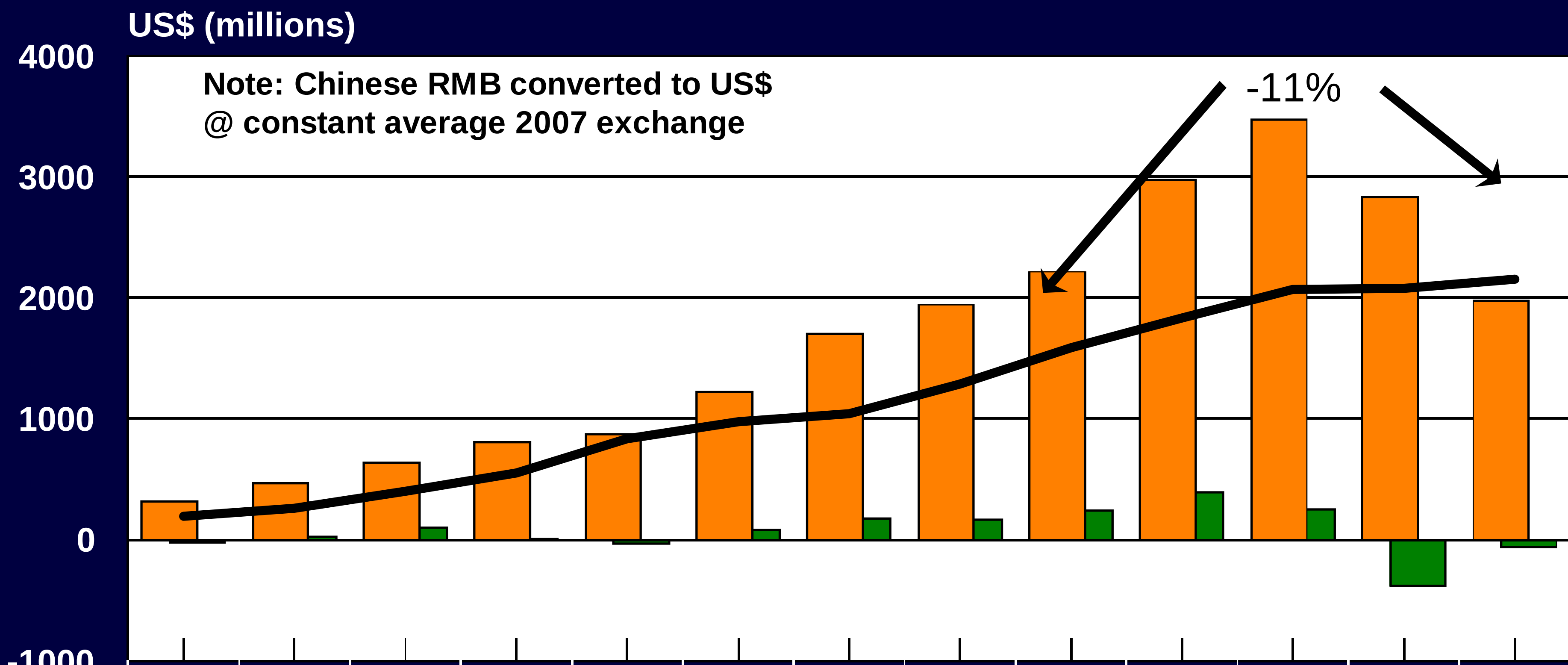
	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3
	00		01				02				03				04		
Revenue	7.5	6.8	6.4	5.4	4.5	3.8	3.9	4.2	4.6	3.8	4.0	4.0	4.2	4.7	5.6	6.1	6.1
Income	1.4	0.2	0.7	0.1	0.0	-0.4	-0.3	-0.1	-0.4	-1.0	-0.3	-1.6	-0.1	0.2	0.6	0.8	0.8
Inventory	4.5	5.4	5.2	4.9	4.5	4.1	3.9	3.9	3.8	3.7	3.4	3.2	3.0	3.1	3.4	3.5	3.6

	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
		05				06				07				08				09	
Revenue	5.4	5.4	5.2	5.0	5.1	5.7	6.1	6.1	5.8	6.0	6.3	6.3	5.8	5.8	5.3	5.3	4.0	3.1	3.4
Income	0.5	0.5	0.4	0.4	3.3	0.7	1.0	0.9	0.8	0.7	1.0	0.9	0.6	0.6	0.5	0.5	-0.6	-1.0	
Inventory	3.7	3.4	3.4	3.3	3.0	3.0	3.4	3.3	3.6	3.7	3.6	3.5	3.5	3.8	4.0	4.1	4.3	3.9	

Applied Materials, KLA-Tencor, Novellus Systems, Agilent Technologies, BTU International, FEI Co, IBIS Tech, Kulicke & Soffa, MKS Instruments, Teradyne, Ultratech Stepper, Varian Semiconductor Equip, Veeco Instruments

Solar/Photovoltaic

Solar/Photovoltaic Financials
Composite of 21 Public Companies
Revenue, Net Income & Inventory



	1	2	3	4	1	2	3	4	1	2	3	4	1
	06				07				08				09
Revenue	313	469	634	803	873	1219	1698	1940	2214	2970	3474	2829	1977
Income	-27	23	99	8	-28	84	173	163	239	389	251	-379	-60
Inventory	191	259	399	553	836	978	1044	1282	1592	1833	2070	2077	2148

Akeena Solar, Ascent Solar Technologies, Canadian Solar, China Sunenergy, DayStar Technologies, Emcore, Energy Conversion Devices, Evergreen Solar, First Solar, JA Solar, LDK Solar, Satcon Technology, Solar Enertech, Solarfun, Power, Spire, SunPower, Suntech Power, Trina Solar, Yingli Green

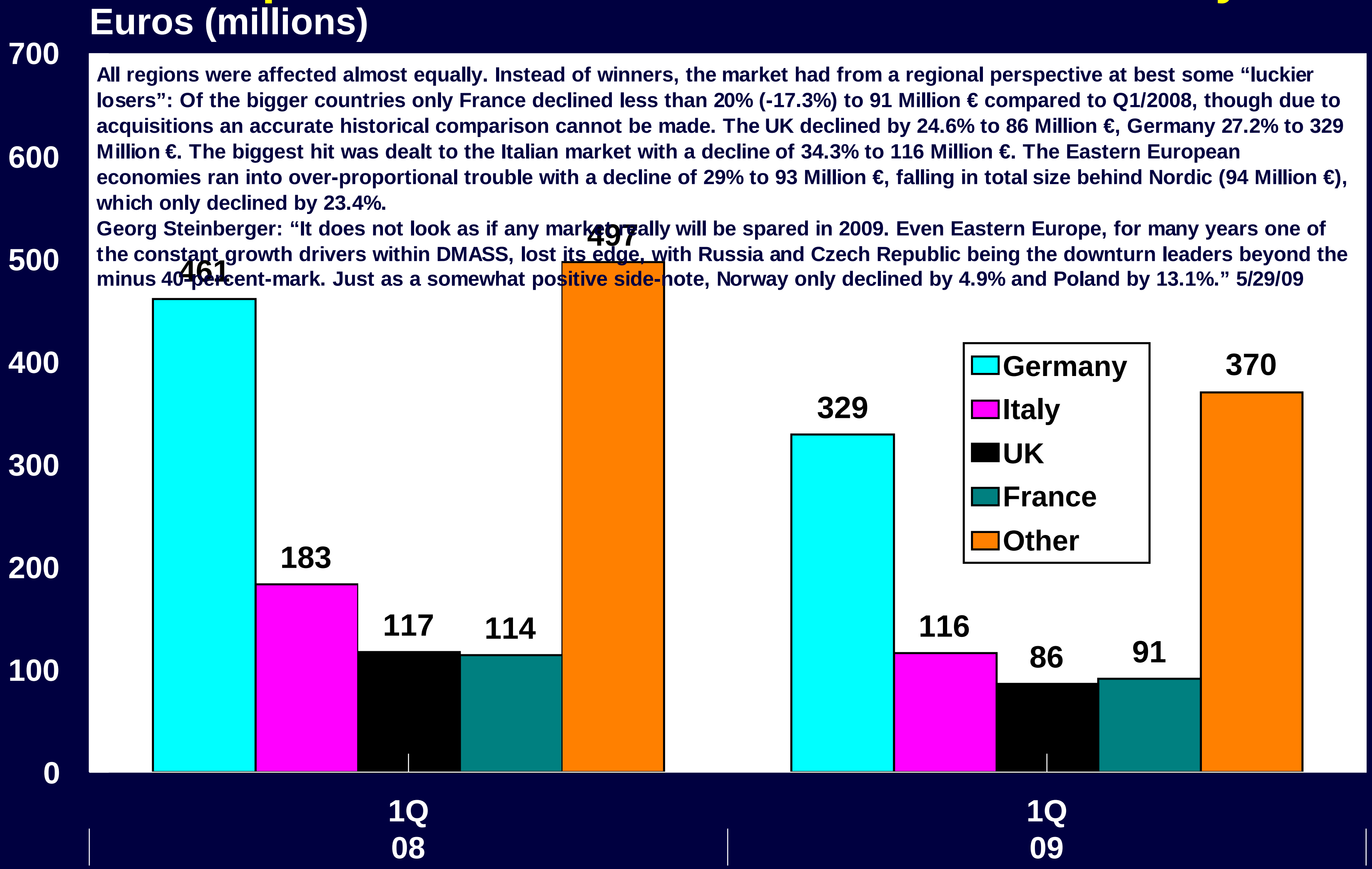
Component Distributors

DMASS

European Semiconductor Distribution Industry

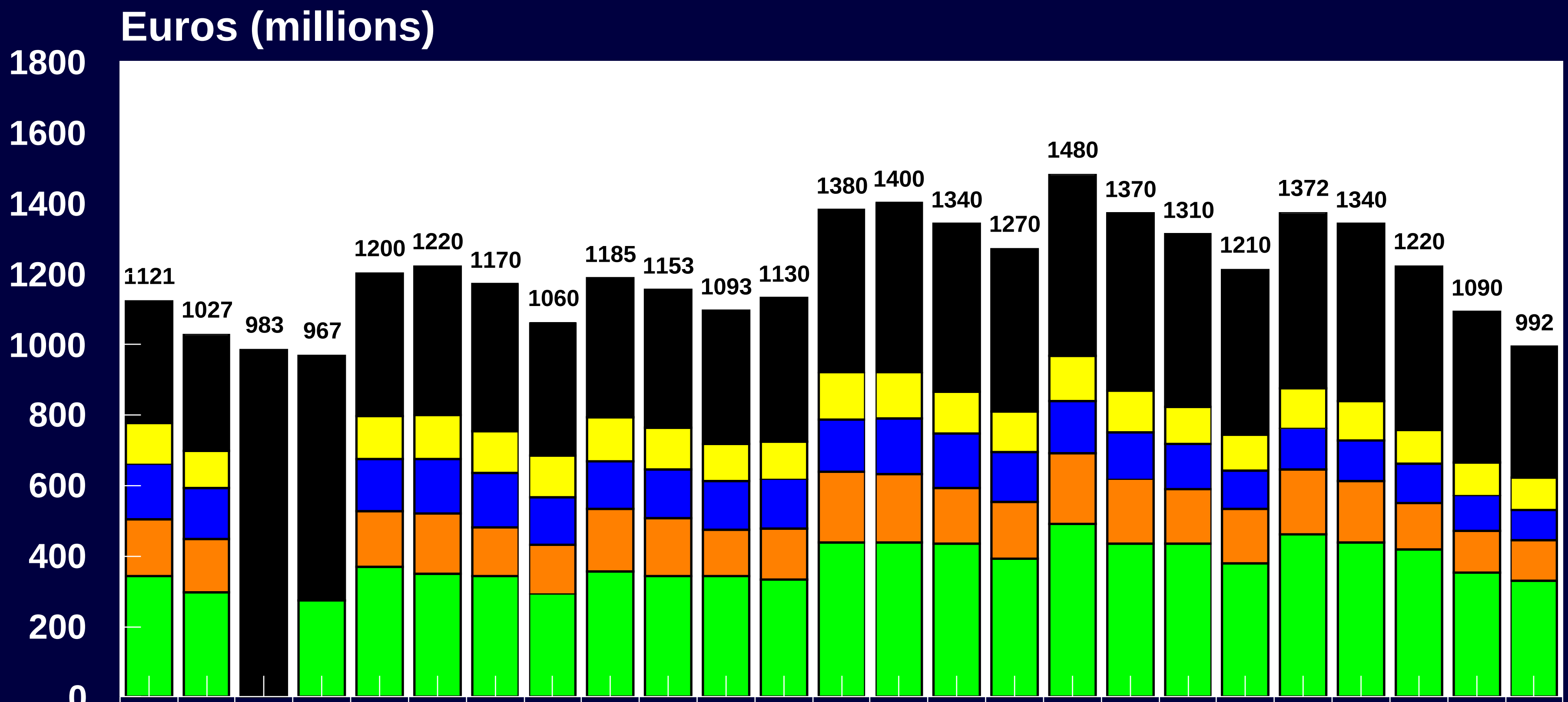
All regions were affected almost equally. Instead of winners, the market had from a regional perspective at best some "luckier losers": Of the bigger countries only France declined less than 20% (-17.3%) to 91 Million € compared to Q1/2008, though due to acquisitions an accurate historical comparison cannot be made. The UK declined by 24.6% to 86 Million €, Germany 27.2% to 329 Million €. The biggest hit was dealt to the Italian market with a decline of 34.3% to 116 Million €. The Eastern European economies ran into over-proportional trouble with a decline of 29% to 93 Million €, falling in total size behind Nordic (94 Million €), which only declined by 23.4%.

Georg Steinberger: "It does not look as if any market really will be spared in 2009. Even Eastern Europe, for many years one of the constant growth drivers within DMASS, lost its edge, with Russia and Czech Republic being the downturn leaders beyond the minus 40-percent-mark. Just as a somewhat positive side-note, Norway only declined by 4.9% and Poland by 13.1%." 5/29/09



DMASS

European Semiconductor Distribution Industry



	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
	03				04				05				06				07				08				09
Other	346	331	983	693	403	422	418	377	392	391	376	406	461	481	475	462	513	503	487	467	497	502	464	426	370
France	116	103			122	125	118	118	124	116	105	107	133	130	118	113	129	117	107	102	114	111	96	93	91
UK	157	144			149	154	154	133	137	138	138	140	149	158	154	142	146	133	127	109	117	116	110	100	86
Italy	161	152			158	171	138	140	175	166	131	144	198	193	159	160	201	182	155	152	183	174	132	119	116
Germany	342	297		274	368	348	342	292	357	342	343	333	439	438	434	393	491	435	434	380	461	437	419	352	329

http://dmass.com/

EMS & ODM Companies

Large Global EMS Providers

2007 vs. 2008 Sales ($M)

		2007	2008	2008/2007 Growth %
Hon Hai (Foxconn)	Taiwan	37,670	46,623	24%
Flextronics+Solectron	Singapore	33,552	33,141	-1%
Jabil Circuit	USA	12,435	12,794	3%
Celestica	Canada	8,070	7,678	- 5%
Sanmina-SCI	USA	8,560	6,844	- 20%
Elcoteq Network	Finland	5,551	5,060	-9%
Venture Mfg	Singapore	2,571	2,679	4%
Benchmark Elec+Pemstar	USA	2,916	2,590	-11%
Plexus	USA	1,624	1,839	13%
Universal Scientific	Taiwan	1,078	798	-26%
Sypris	USA	436	411	-6%
Total		114,463	120,458	5%

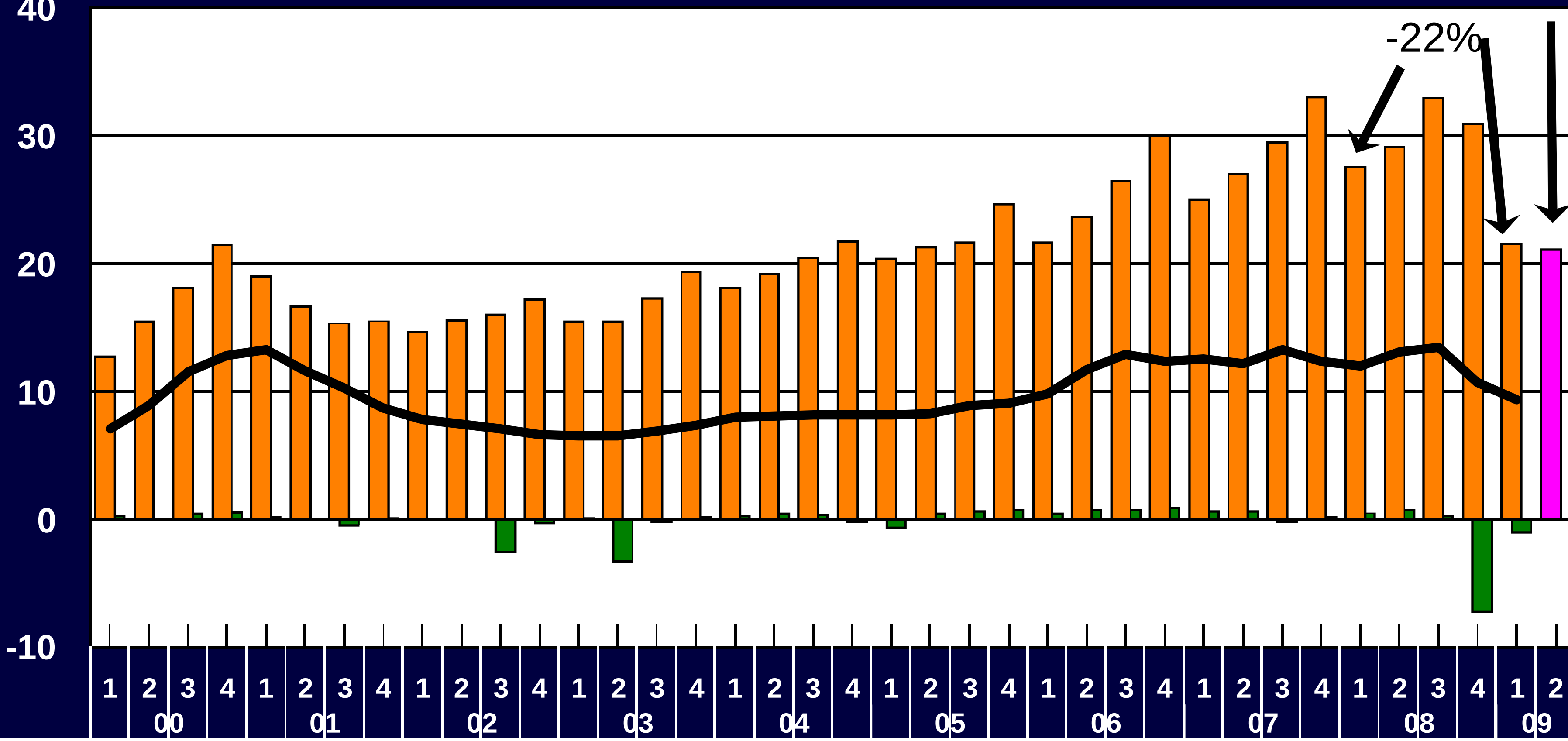
Sources: Company data
Local currency converted at fluctuating exchange

Large EMS Providers
Composite of 11 Public Companies

Revenue, Net Income & Inventory

-28% Guidance Q2'09/Q2'08

US$ Billions @ fluctuating exchange

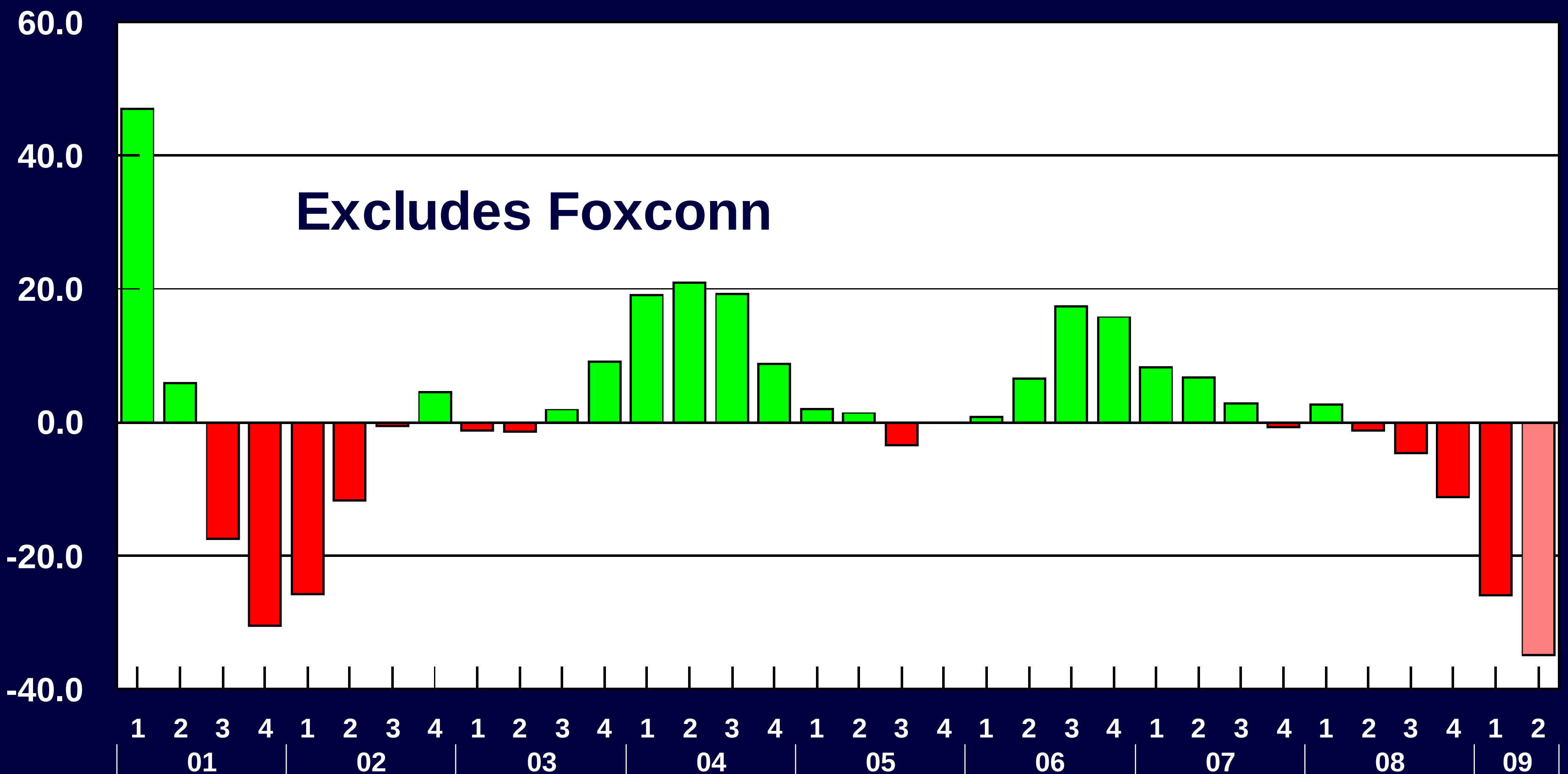


	00				01				02				03				04			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Revenue	13	15	18	21	19	17	15	16	15	16	16	17	15	15	17	19	18	19	20	22
Income	0	-0	0	1	0	0	-0	0	-0	-0	-3	-0	0	-3	-0	0	0	0	0	-0
Inventory	7	9	12	13	13	12	10	9	8	7	7	7	7	7	7	7	8	8	8	8

	05				06				07				08				09	
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2
Revenue	20	21	22	25	22	24	26	30	25	27	29	33	28	29	33	31	22	21
Income	-1	0	1	1	0	1	1	1	1	1	-0	0	0	1	0	-7	-1	
Inventory	8	8	9	9	10	12	13	12	13	12	13	12	12	13	13	11	9	

Benchmark+Pemstar, Celestica, Elcoteq, Flextronics+Solectron, Foxconn, Jabil, Plexus, Sanmina-SCI, Sypris, Universal Scientific, Venture Mfg

Large EMS Providers
Composite of 10 Public Companies
Quarterly Revenue Growth



Benchmark+Pemstar, Celestica, Elcoteq, Flextronics+Solectron, Jabil, Plexus, Sanmina-SCI, Sypris, Universal Scientific, Venture Mfg

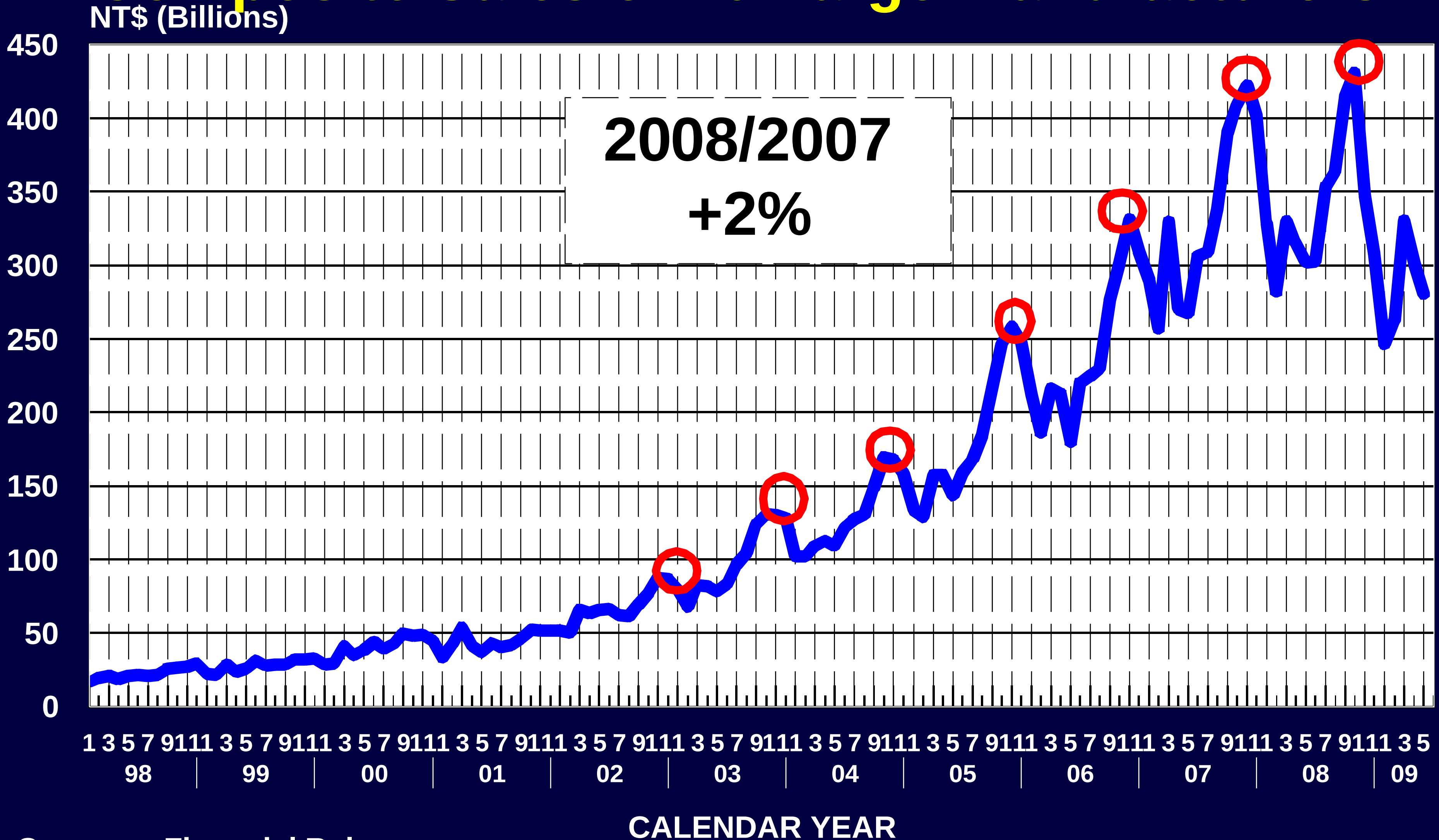
Large Taiwan ODM Providers and Motherboard & Electronic Equipment Assemblers

2007 vs. 2008 Sales ($M)

	2007	2008	2008/2007 Growth %
Foxconn (Hon Hai)	39,079	49,461	27%
Quanta Computer	23,150	25,423	10%
Wistron	8,741	14,306	64%
Acer	10,084	13,918	38%
Compal Electronics	13,506	13,665	1%
Inventec	7,557	11,866	57%
Asustek Computer	18,638	8,147	-56%
Innolux Display	4,927	5,310	8%
High Tech Computer	3,747	5,136	37%
Lite On Technology	5,355	4,270	-20%
Foxconn Technology	2,972	4,161	40%
Micro-Star International	2,907	3,352	15%
Qisda (was BenQ)	3,868	2,466	- 36%
Elitegroup	2,641	2,301	-13%
Inventec Appliance	2,509	2,047	-18%
Mitac International	2,593	2,043	- 21%
Compal Communications	1,540	1,194	-22%
Universal Scientific	1,119	830	-26%
Gigabyte Technology	756	860	14%
First International	1,118	698	-38%
Total	156,807	171,454	9%

Source: Company data, NT$ converted at constant avg 2008 exchange (31.65 NT$ = 1US$)

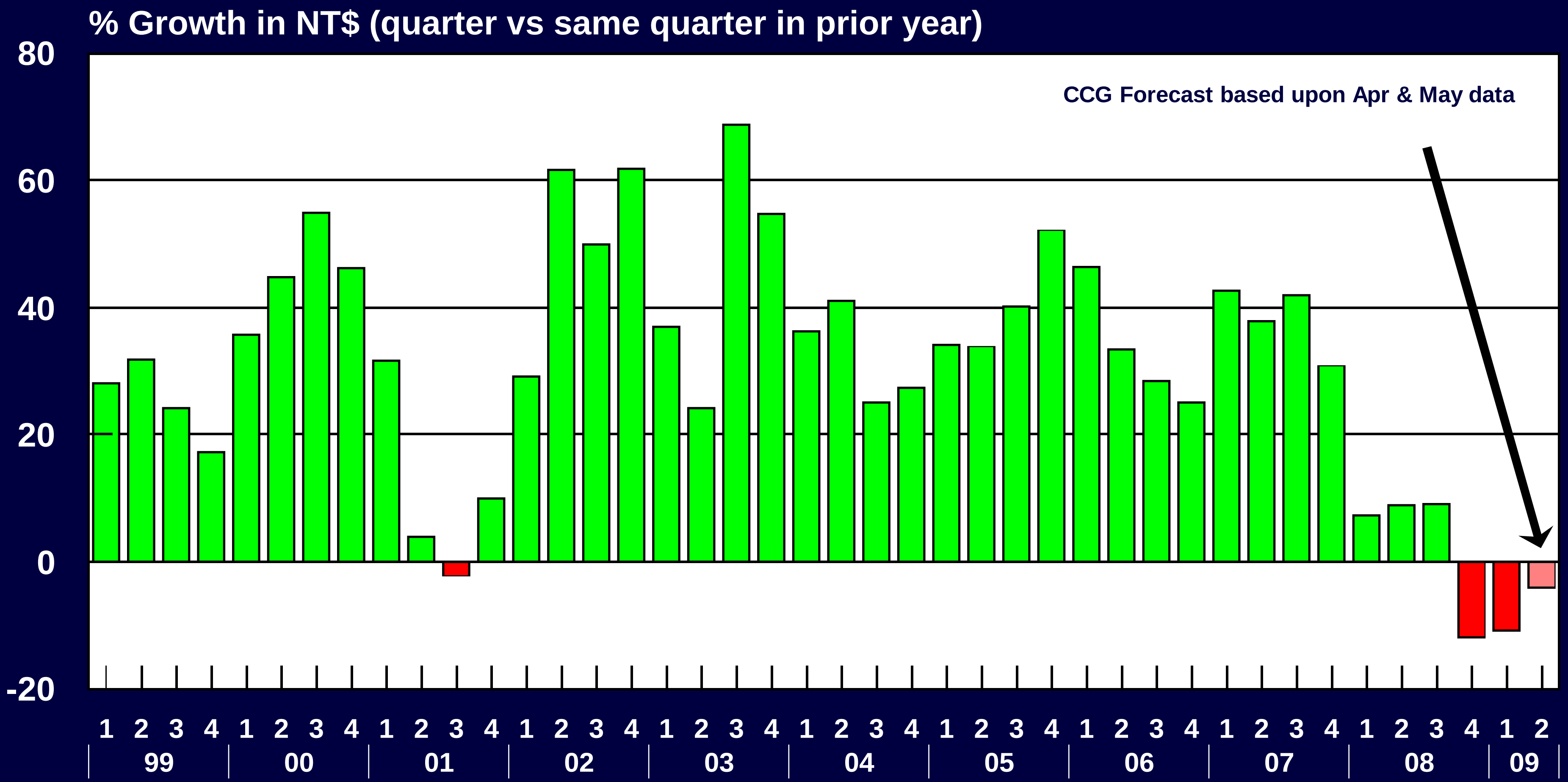
Taiwan ODM Companies
Composite Sales of 10 Large Manufacturers



Company Financial Releases

Asustek Computer, Compal Electronics, Foxconn, Innolux Display, Inventec, Inventec Appliance, Lit On Technology, Mitac International, Quanta Computer, Wistron

Large ODM Companies
Composite of 10 Public Manufacturers
Quarterly Revenue Growth

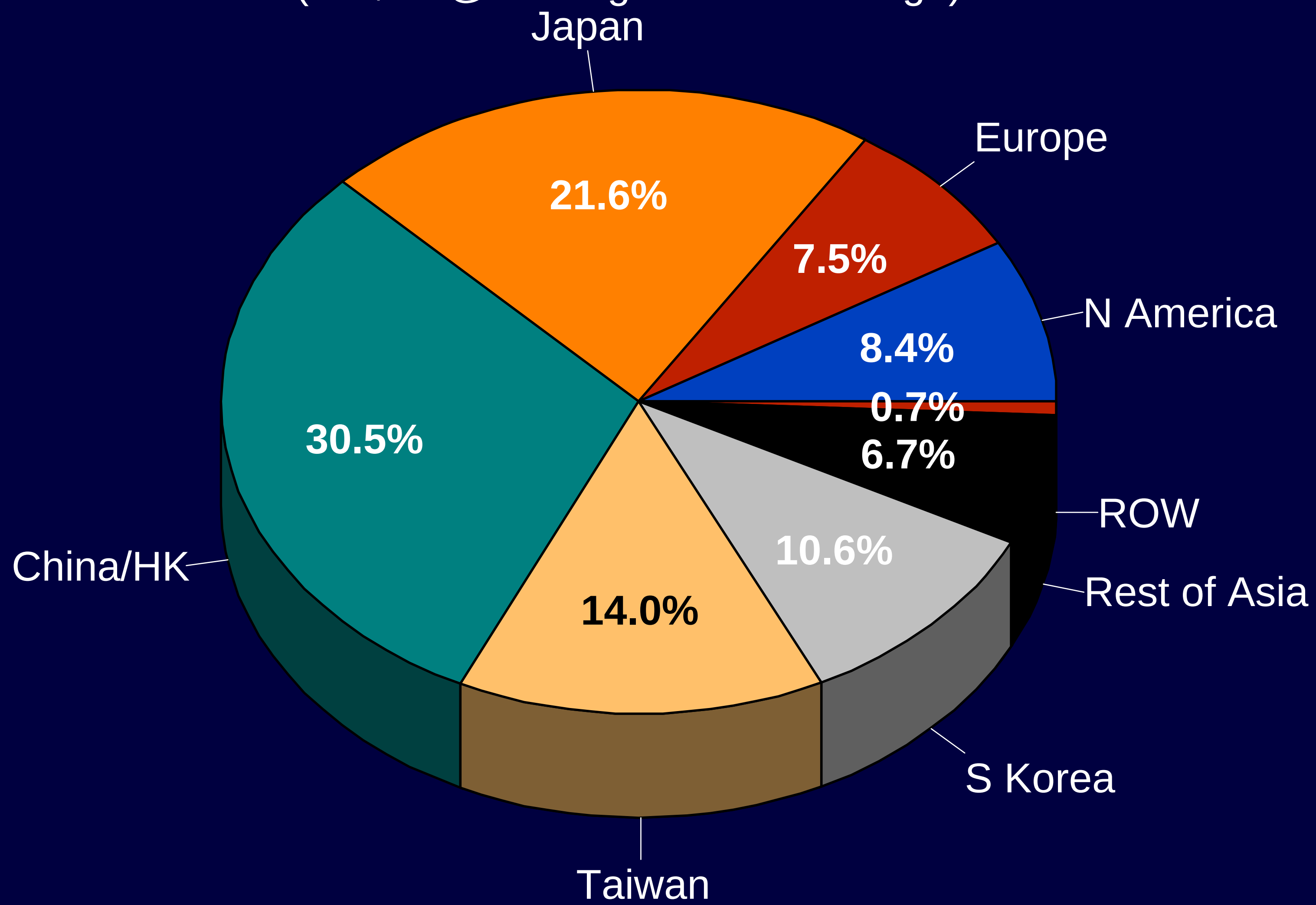


Asustek Computer, Compal Electronics, Foxconn, Innolux Display, Inventec, Inventec Appliance, Lite On Technology, Mitac International, Quanta Computer, Wistron

PCB
Fabrication

2008 World Rigid & Flex PCB Production by Geographical Area

(US$ M @ Average 2008 Exchange)



Total: $48.9 Billion

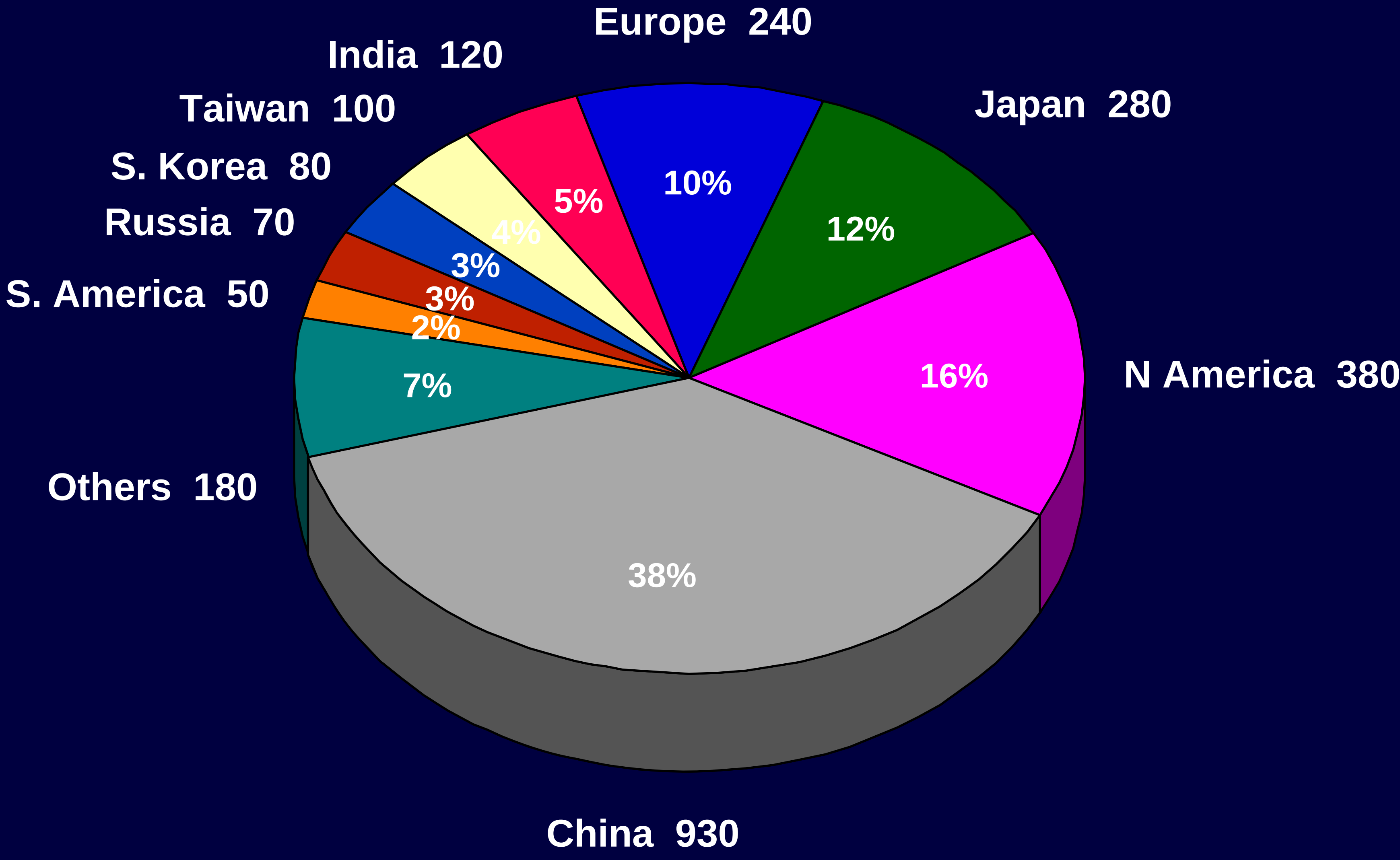
IPC 3/2009- very preliminary

2008 World PCB Production
Top 10 Companies

Rank	Maker	Country	US$M
1	Nippon Mektron*	Japan	1,716
2	Ibiden	Japan	1,629
3	Unimicron	Taiwan	1,489
4	Nanya PCB	Taiwan	1,179
5	Samsung EM	S. Korea	1,174
6	Kingboard PCB Group	HK-China	1,104
7	CMK	Japan	1,076
8	Tripod	Taiwan	933
9	Fujikura*	Japan	882
10	Multek	USA	815

Dr Hayao Nakahara, N.T. Information Ltd 6/2009, *= Flex Circuit Maker

Number of PCB Makers

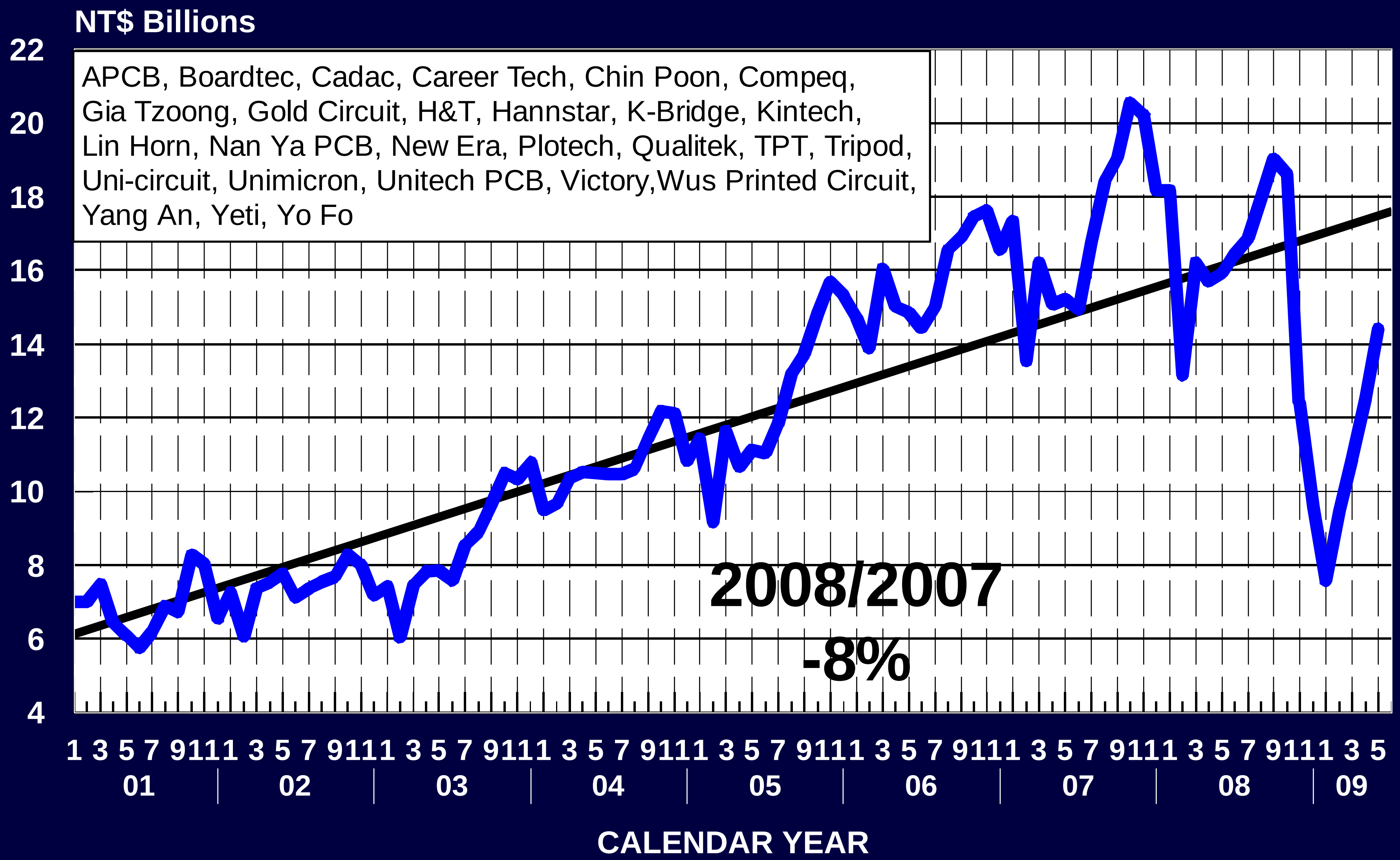


N.T. Information Ltd 3/09

Japan PCB Shipments

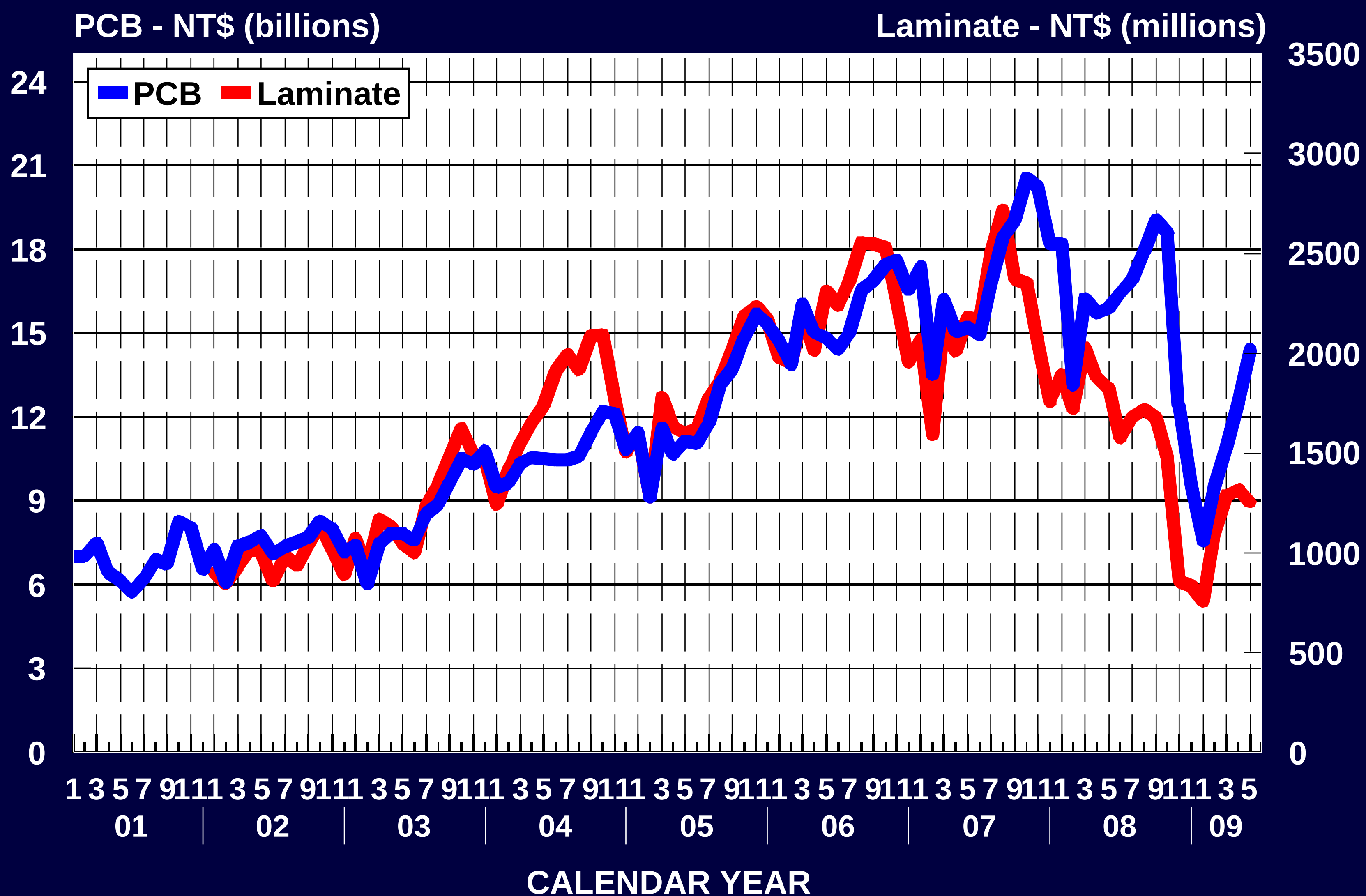
www.jpca.org/kikaitoukei/kikai2009.xls

Taiwan Rigid PCB Shipments
Composite of 27 Taiwan-listed Manufacturers



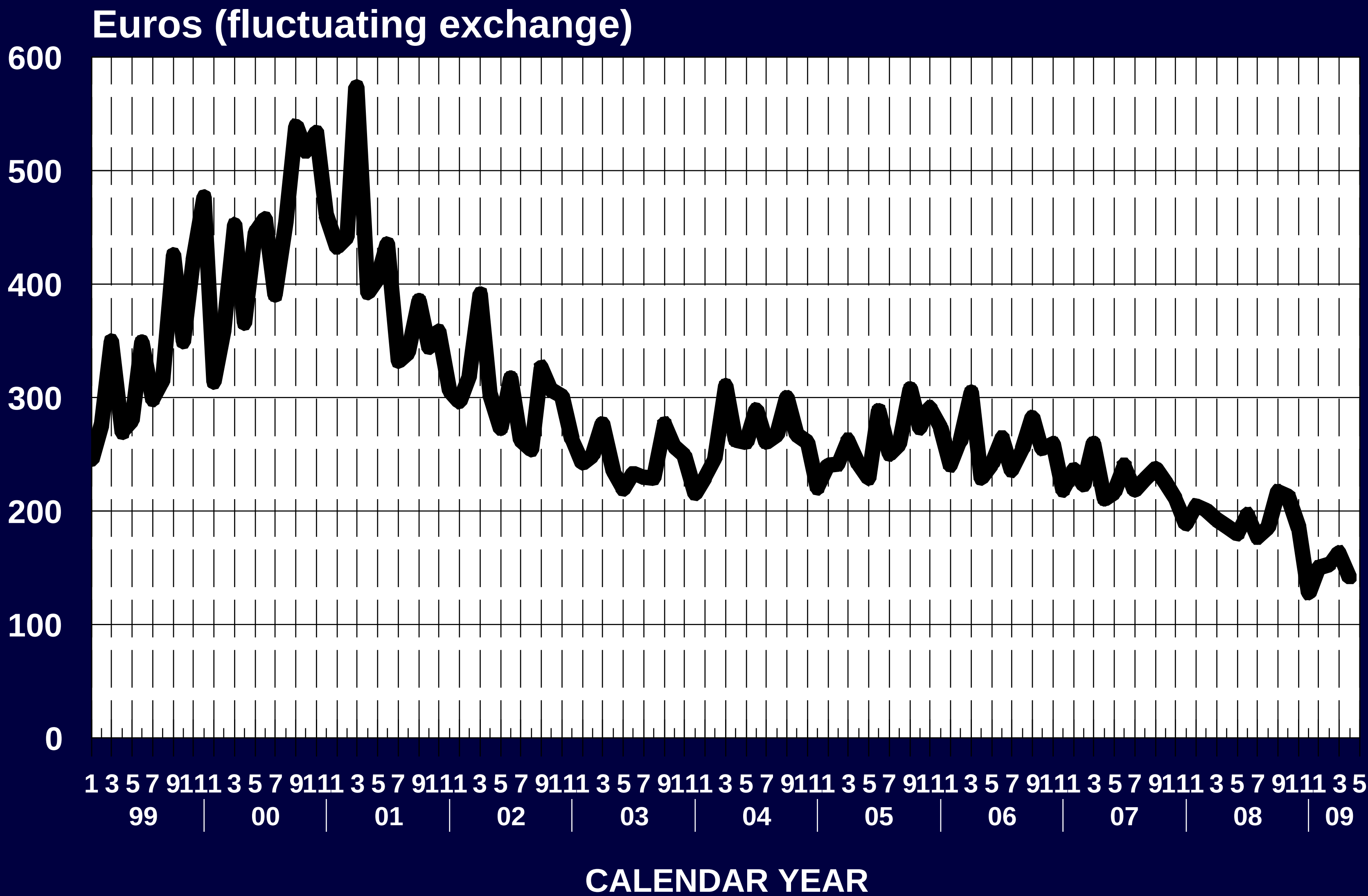
Company Financial Releases

Taiwan Shipments
27 Rigid PCB & 8 Laminate Manufacturers



Company Financial Releases

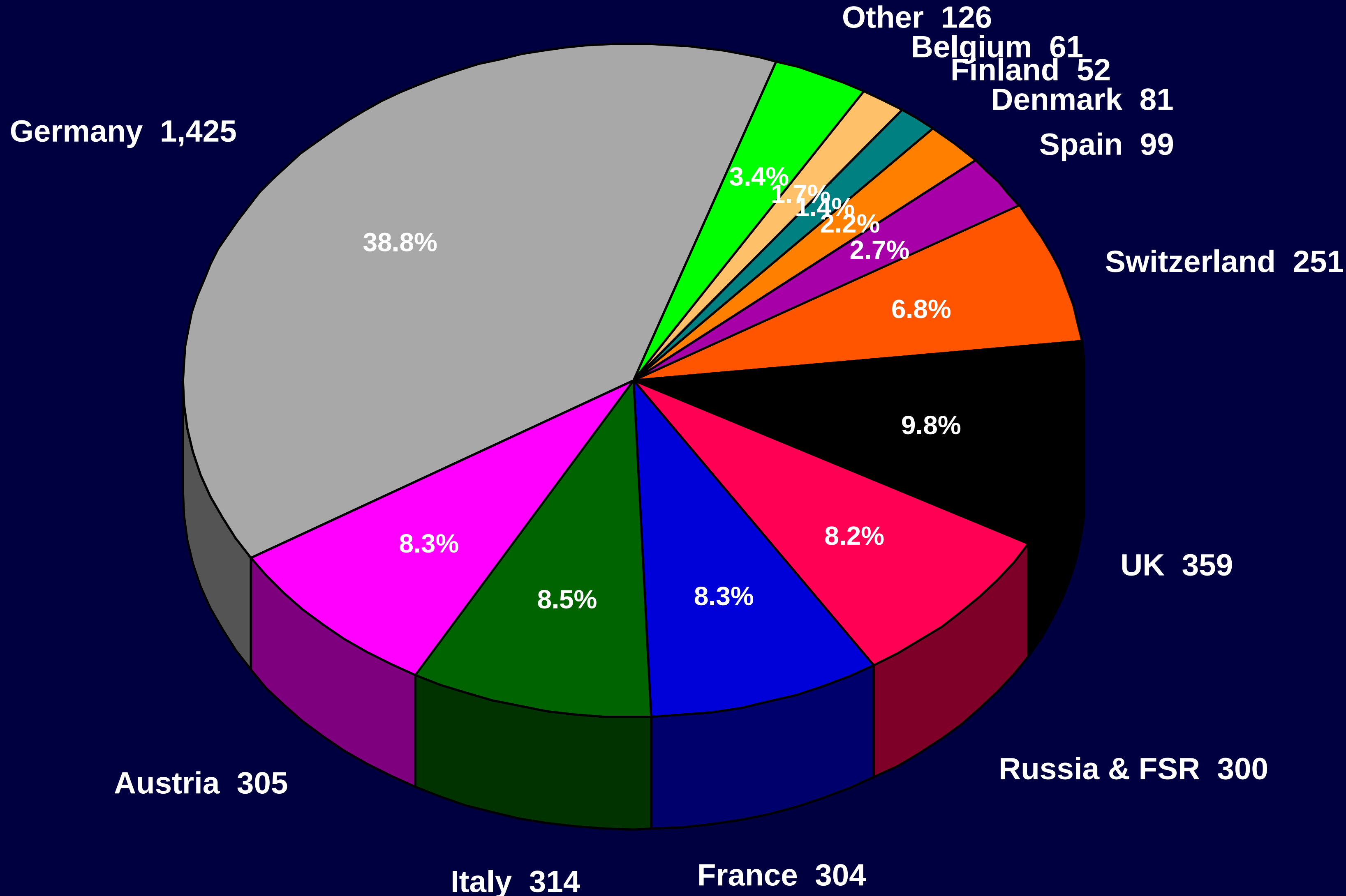
European PCB Monthly Shipments



Source: Custer Consulting Group

2008 European Rigid & Flex PCB Production

(US$ M @ 2007 Exchange)



Total: $3,677 Million

IPC 3/2009 - very preliminary

European PCB Production - Million Euro

Country	2005	2006	2007	2008
Austria	260	272	255	209
Belgium	38	41	48	41
Denmark	81	70	60	56
Finland	85	73	54	36
France	240	234	231	206
Germany	981	1,054	1039	970
Italy	281	284	248	212
Netherlands	41	29	23	20
Norway	13	10	8	3
Spain	193	167	100	68
Sweden	18	16	15	9
Switzerland	166	174	172	169
UK	278	252	197	177
Subtotal	2,675	2,676	2,450	2,175
Others (excluding FSU)	75	71	100	90
Total	2,750	2,747	2,550	2,266

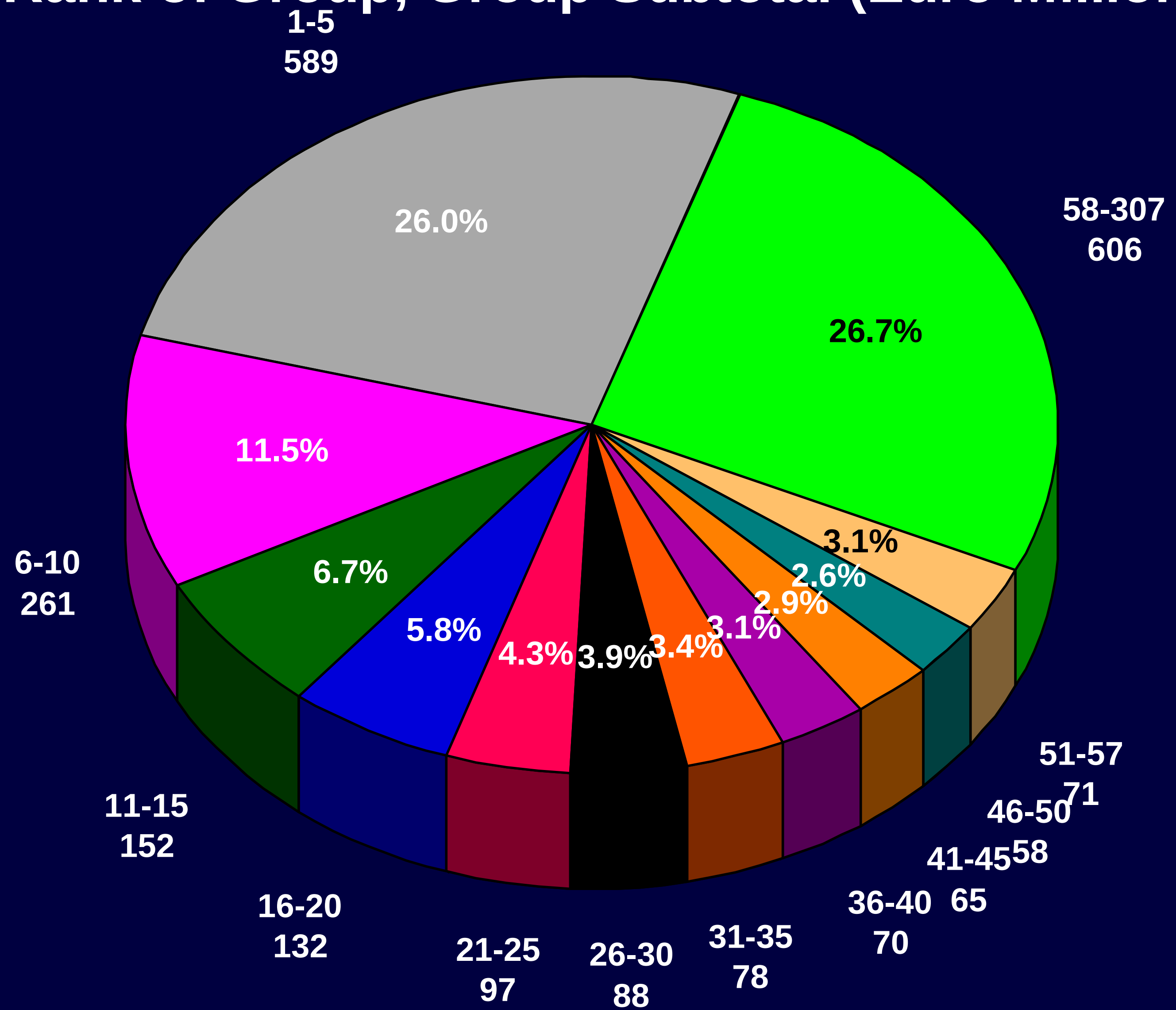
2008 European PCB Companies

Rank	Maker
1	AT&S
2	Wurth Group
3	Ruwel Group
4	Schweizer Electronic
5	Fuba
6	Multek
7	Cire Group
8	KSG
9	Elvia
10	Freudenberg Mektec
11	Invotec Group
12	Cicor Group
13	PPC Electronic
14	hmp Heideheim
15	Dyconex
16	SoMaCis Italia
17	CST Group
18	Elco
19	GPV Group
20	ACB Group
21	Hausermann
22	Aspocomp Oy
23	Greule
24	Cisel
25	Cistel-Laier
26	eXeption
27	GS Prazision
28	Optiprint
29	Varioprint
30	Ramaer
31	Polytron Print
32	Schoeller
33	Freudenberg Mechatronic
34	Storz
35	Lares
36	Microcirtec/Precoplat
37	Rohde & Schwarz
38	Technoflex
39	Ilfa
40	Techci (Confidur)
41	Pri Dana
42	Fela Group
43	Silga
44	Graphic
45	Cimulec Group
46	ggp-Peters
47	Eurocir
48	Elekonta Marek
49	Technoboards
50	TW Elektronik
51	Jenaer
52	LAB
53	Stevenage
54	Brockstedt
55	Cebisa
56	Cipsa
57	OMR

M Gasch 10/2007

2008 European PCB Production

Rank of Group, Group Subtotal (Euro Million)

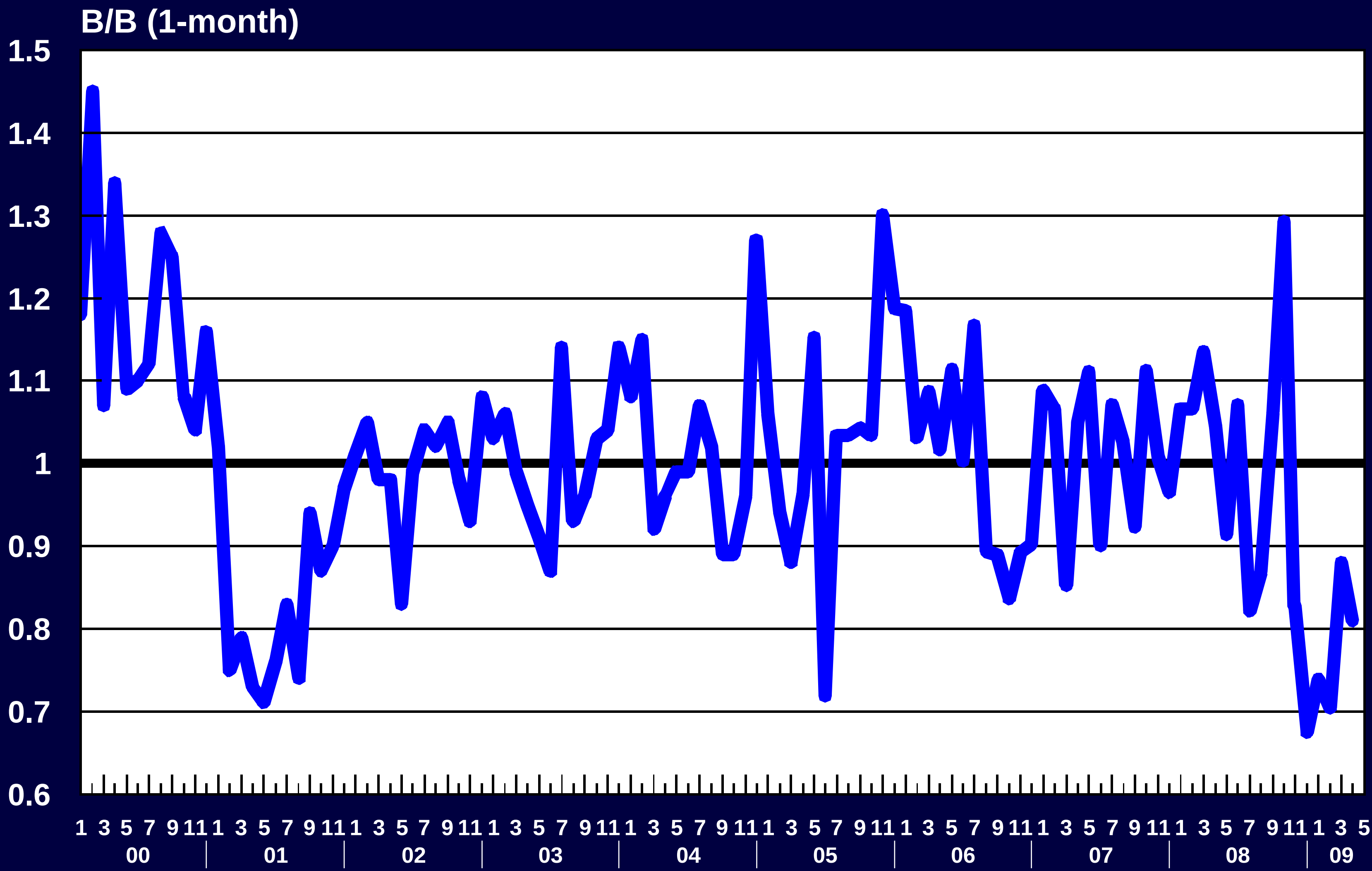


M Gasch 5/09

Total: 2,267 Million Euro

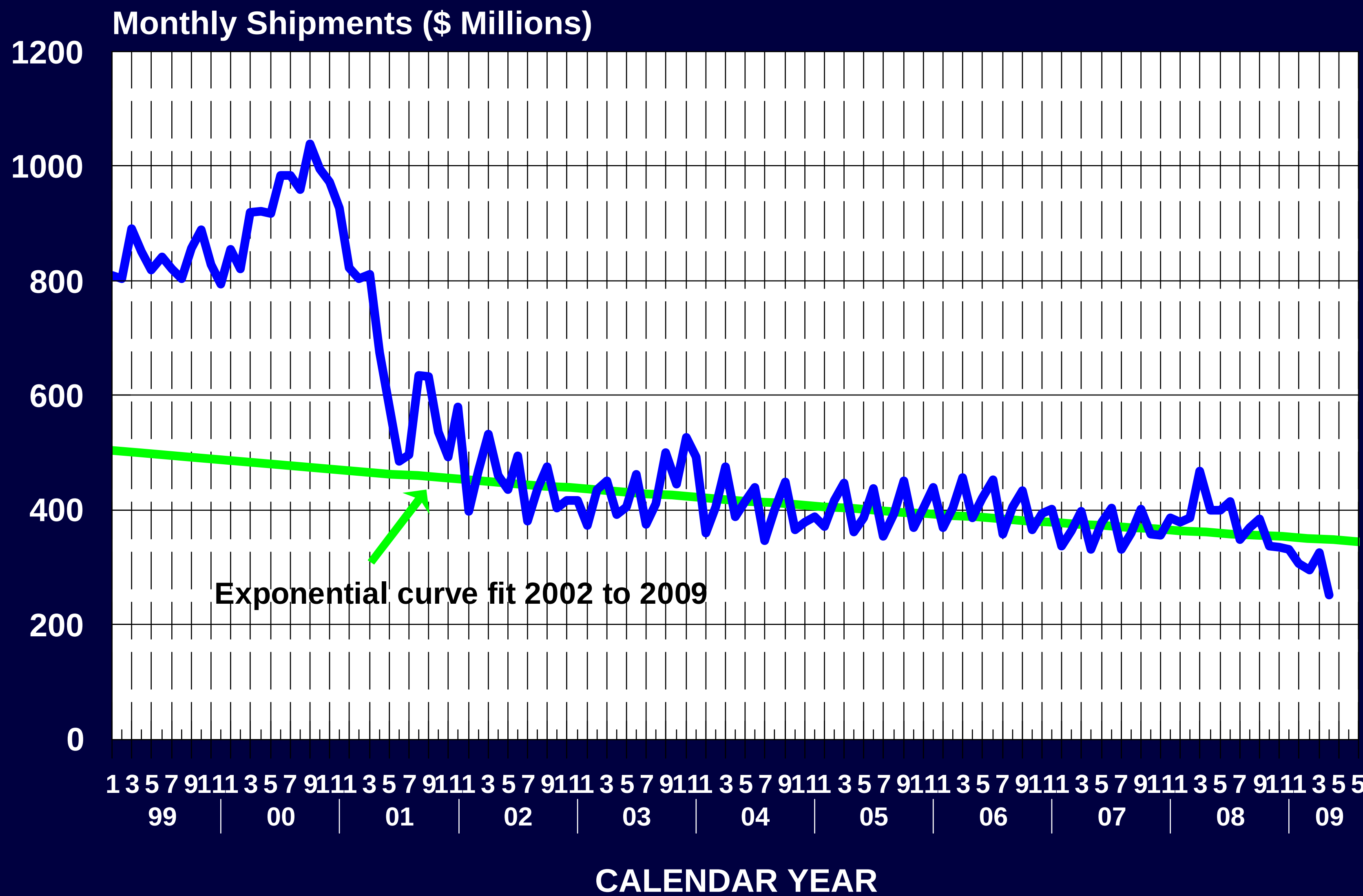
PCB Book/Bill - VdL/ZVEI

Primarily German PCB Makers



VdL/ZVEI
www.zvei.de/fileadmin/user_upload/Presse/

N American PCB Monthly Shipments



Source: Custer Consulting Group

N AMERICAN PCB GROWTH INDICATORS

% GROWTH - Apr 2009 vs Apr 2008

RIGID PCB $ SHIPMENTS

Down 37.1%

RIGID PCB $ BOOKINGS

Down 26.9%

RIGID PCB BOOK/BILL RATIO

3-MONTH AVG	0.98
1-MONTH	1.11

FLEX CIRCUIT $ SHIPMENTS

Down 2.1%

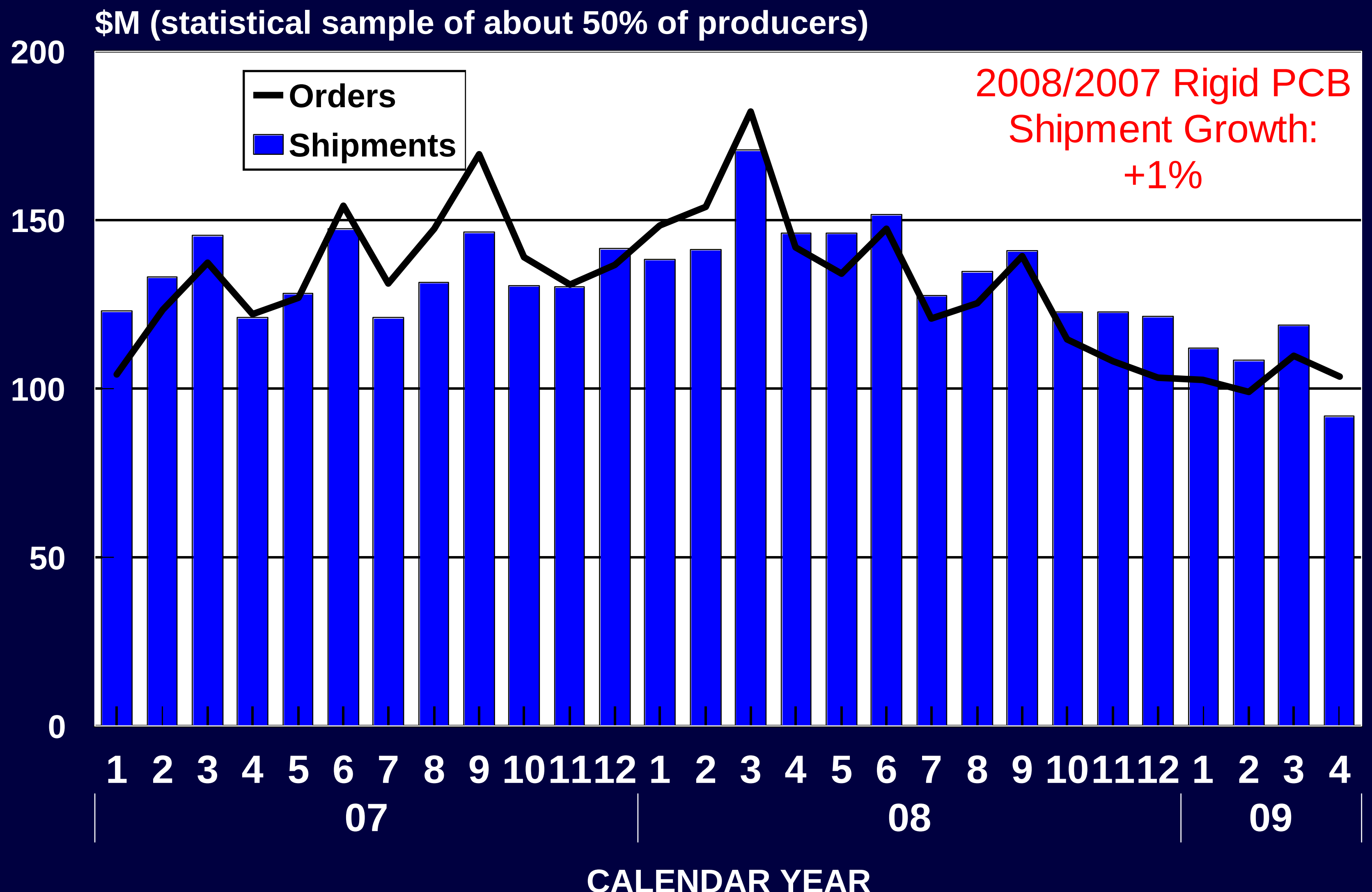
FLEX CIRCUIT $ BOOKINGS

Down 0.3%

FLEX CIRCUIT BOOK/BILL RATIO

3-MONTH AVG	0.94
1-MONTH	1.01

N American Rigid PCB Shipments & Orders



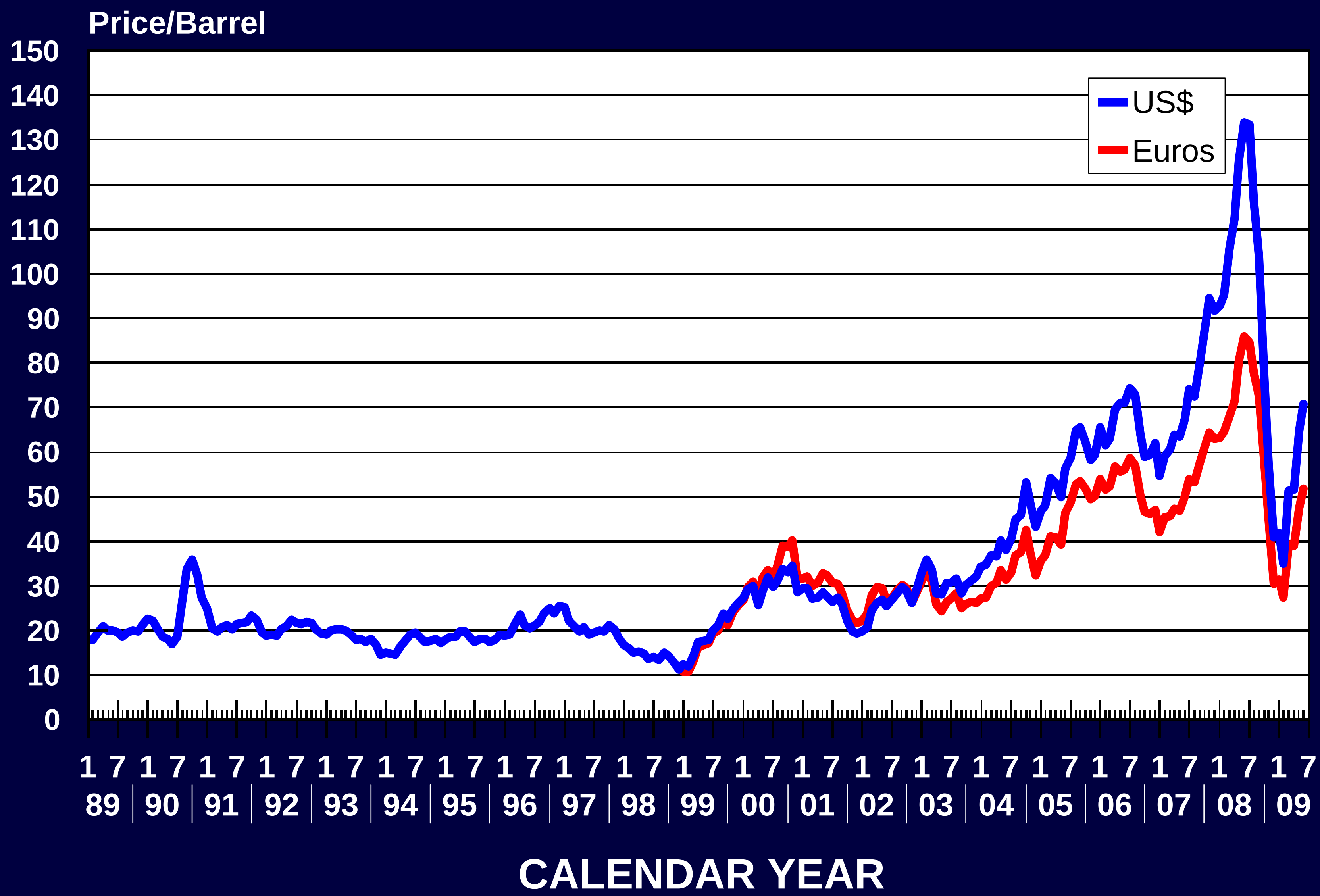
Note: IPC survey captures "market" not domestic production. About 15% of the above represents imported boards resold by N American PCB producers in survey.

IPC

PCB Materials
& Process Equipment

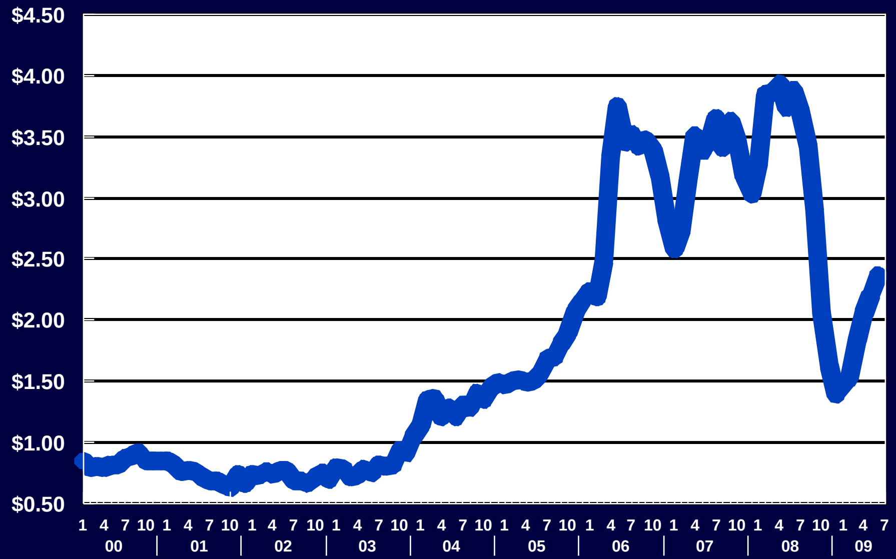
Spot Oil Prices - US$ & Euros

W Texas Intermediate Crude



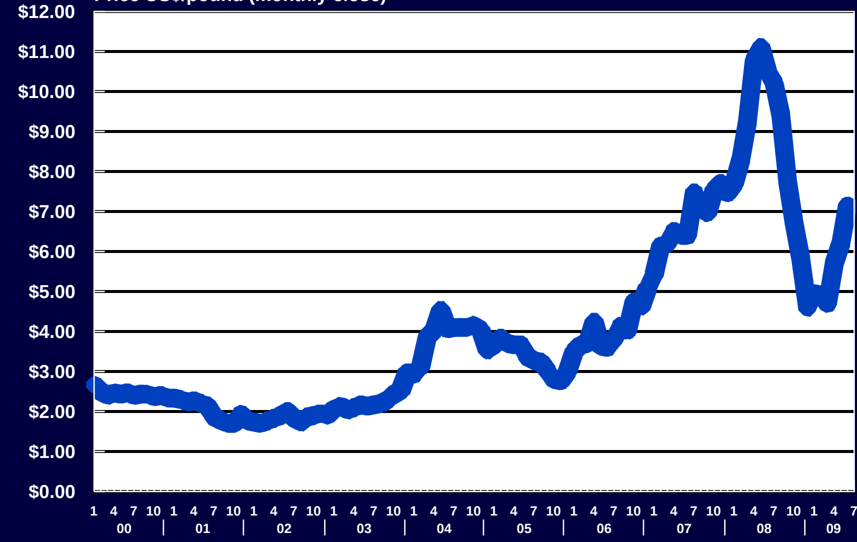
www.nymex.com/lsco_fut_cso.aspx

Copper



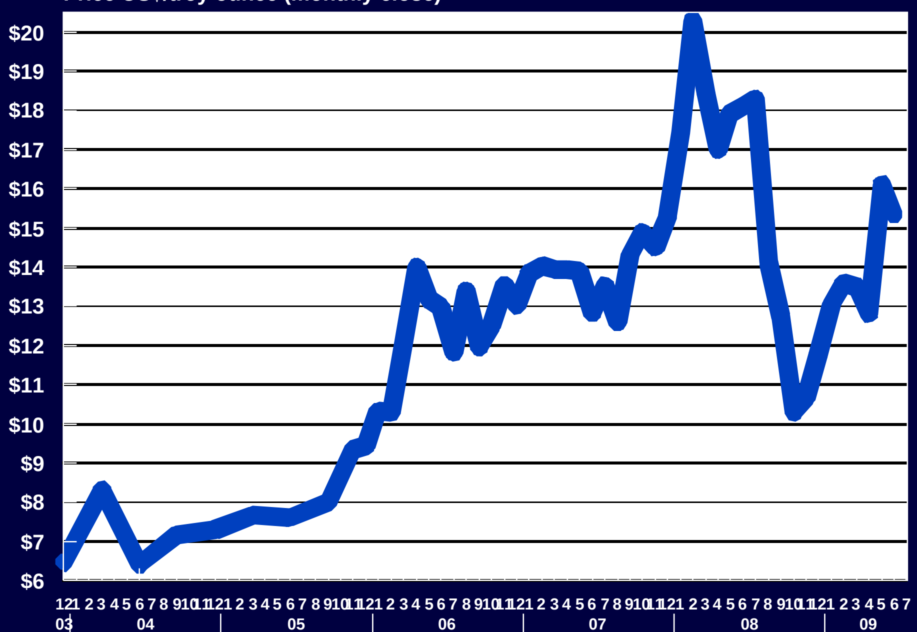
Tin

Price US$/pound (monthly close)



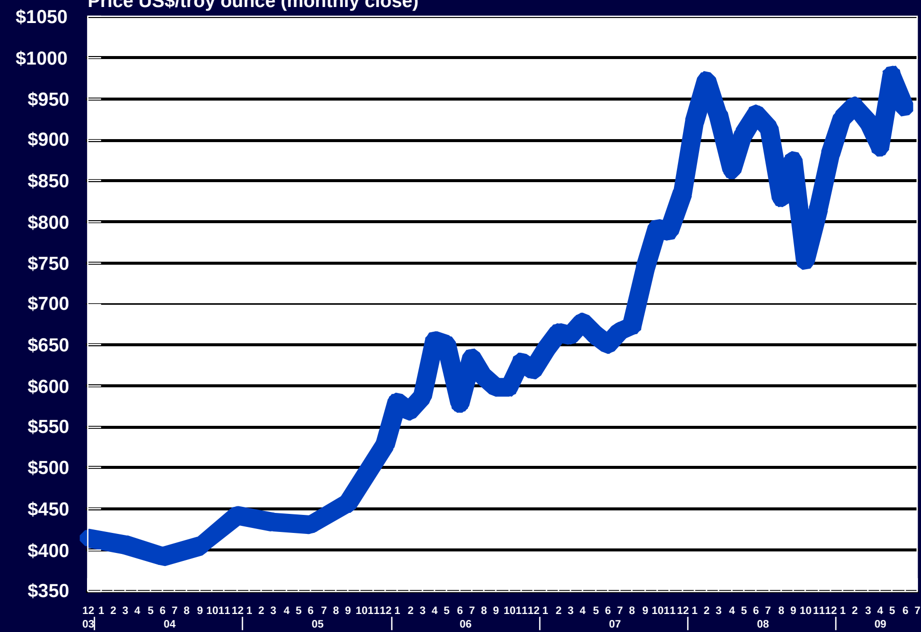
Silver

Price US$/troy ounce (monthly close)



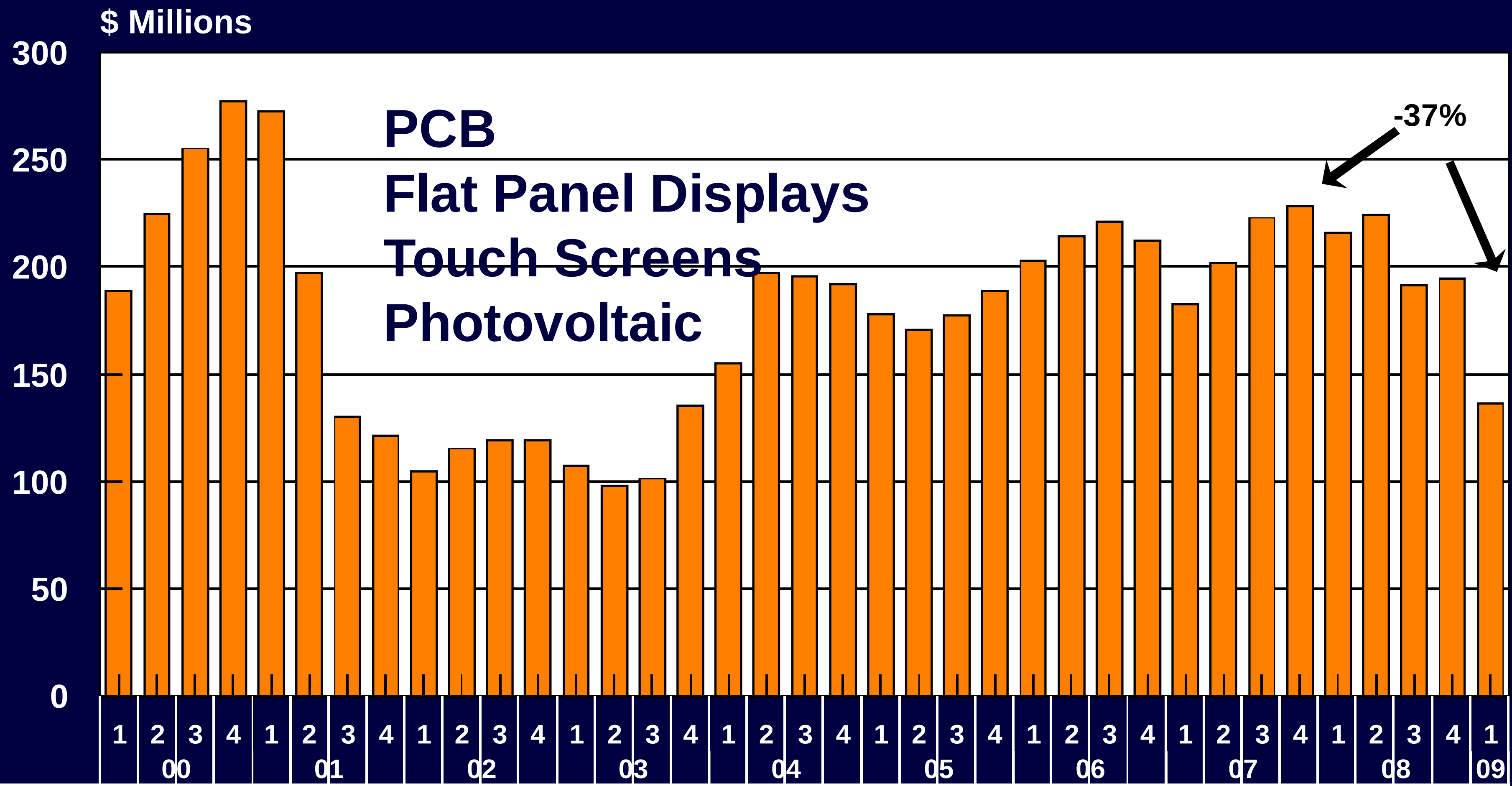
Gold

Price US$/troy ounce (monthly close)



Process Equipment Related Suppliers

Composite of 5 Companies



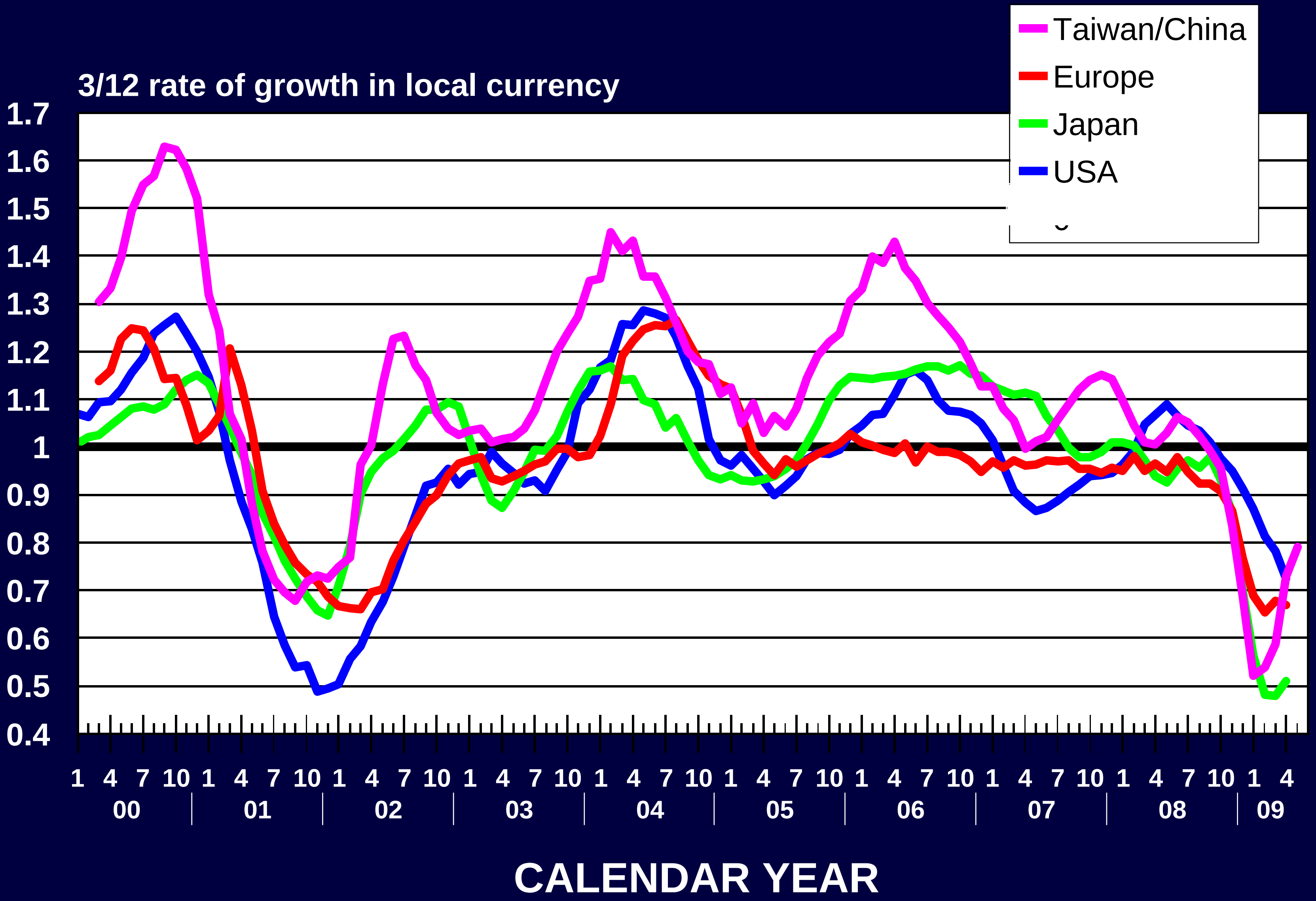
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
	00				01				02				03				04				05				06				07				08				09
Revenue	189	225	255	277	272	197	130	121	105	115	119	119	107	98	101	135	155	197	196	192	178	170	177	189	203	214	221	212	183	202	223	228	216	224	191	194	137

C-Sun, Camtek, GSI Group, Orbotech, Valor

NT$ converted at fluctuating exchange

World PCB Model

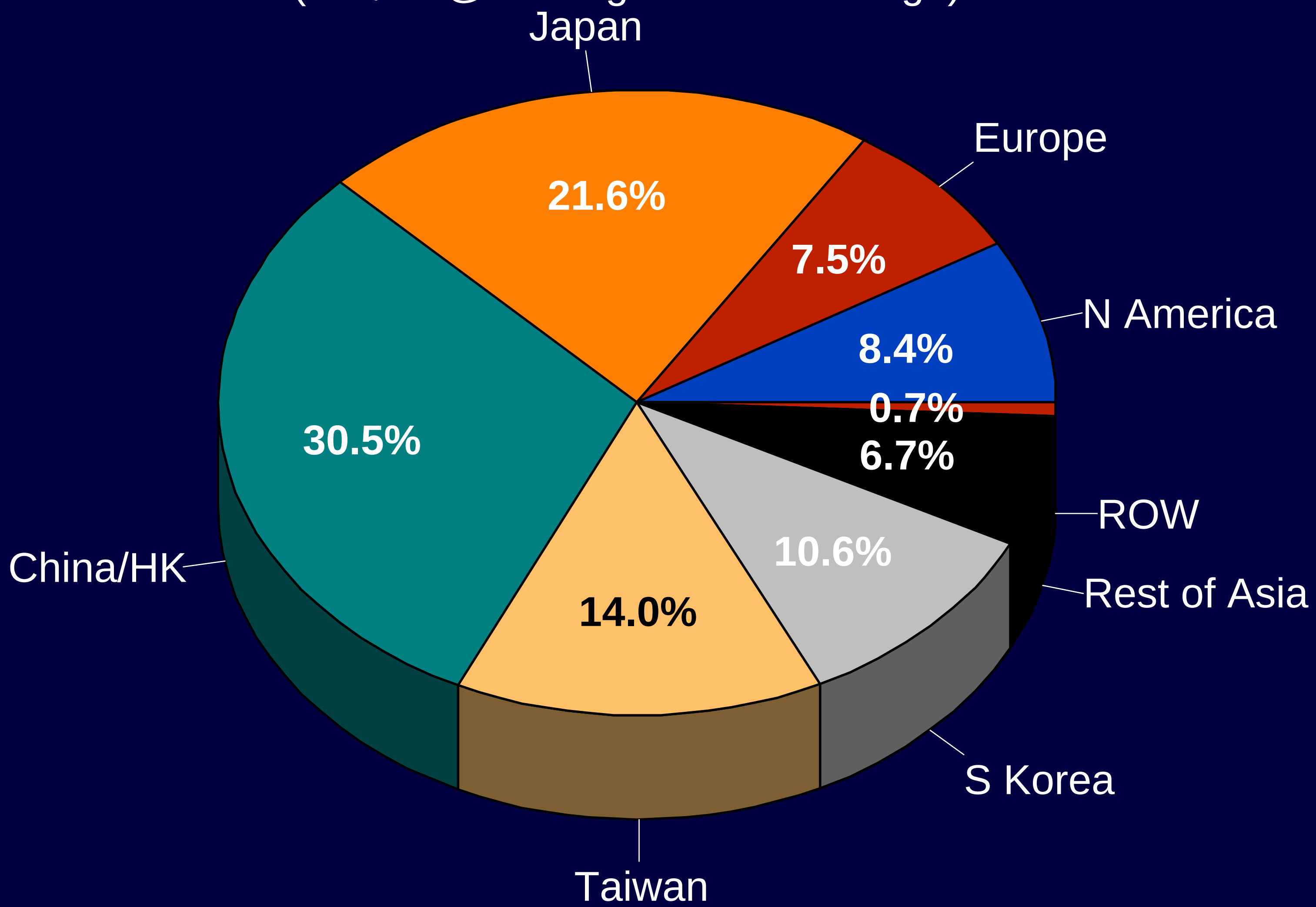
Regional PCB Shipment Growth



Sources: IPC, JPCA, Taiwan/China composite; modified SIA chip shipments to approximate Europe

2008 World Rigid & Flex PCB Production by Geographical Area

(US$ M @ Average 2008 Exchange)

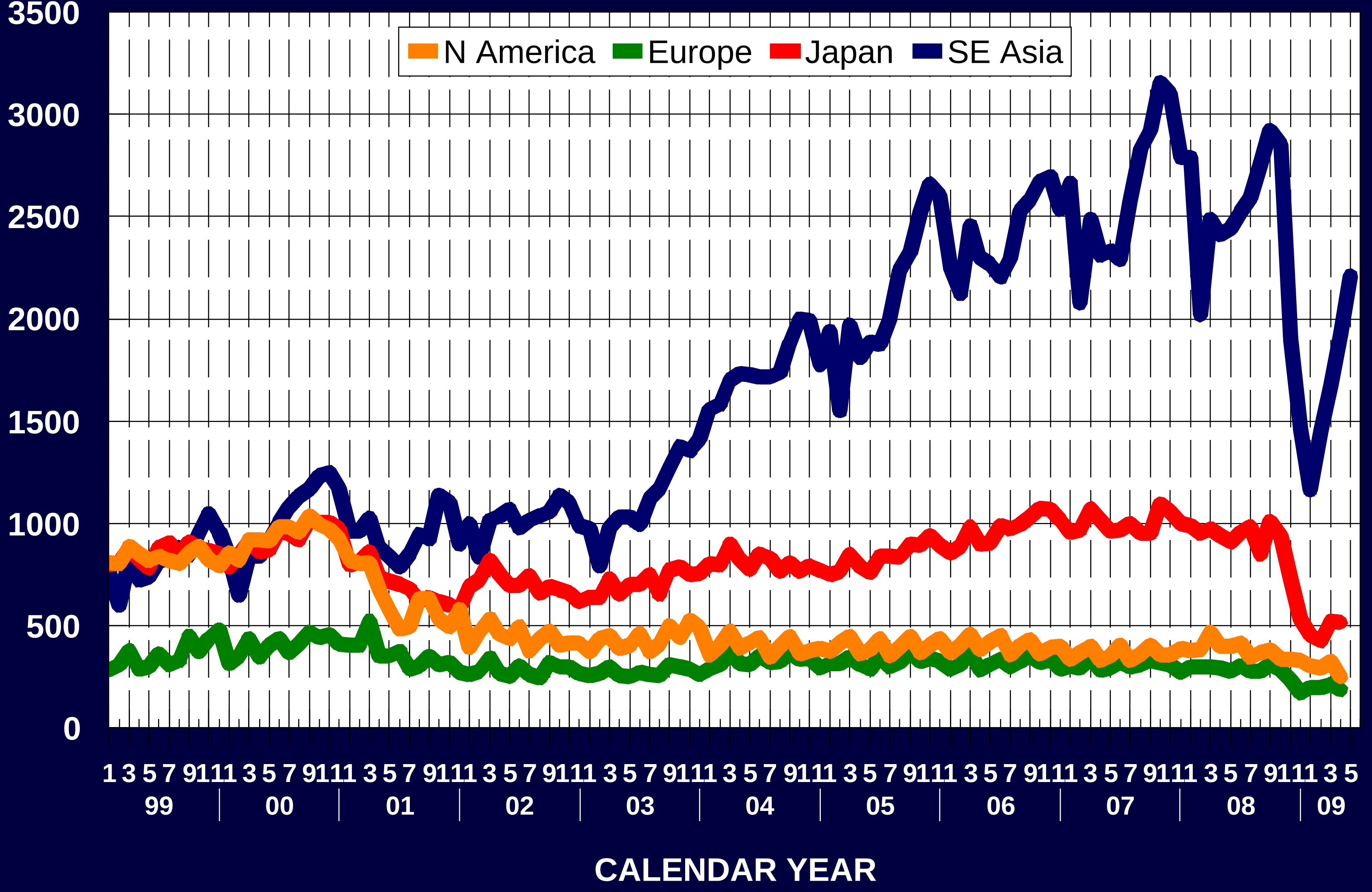


Total: $48.9 Billion

IPC 3/2009- very preliminary

World PCB Monthly Shipments

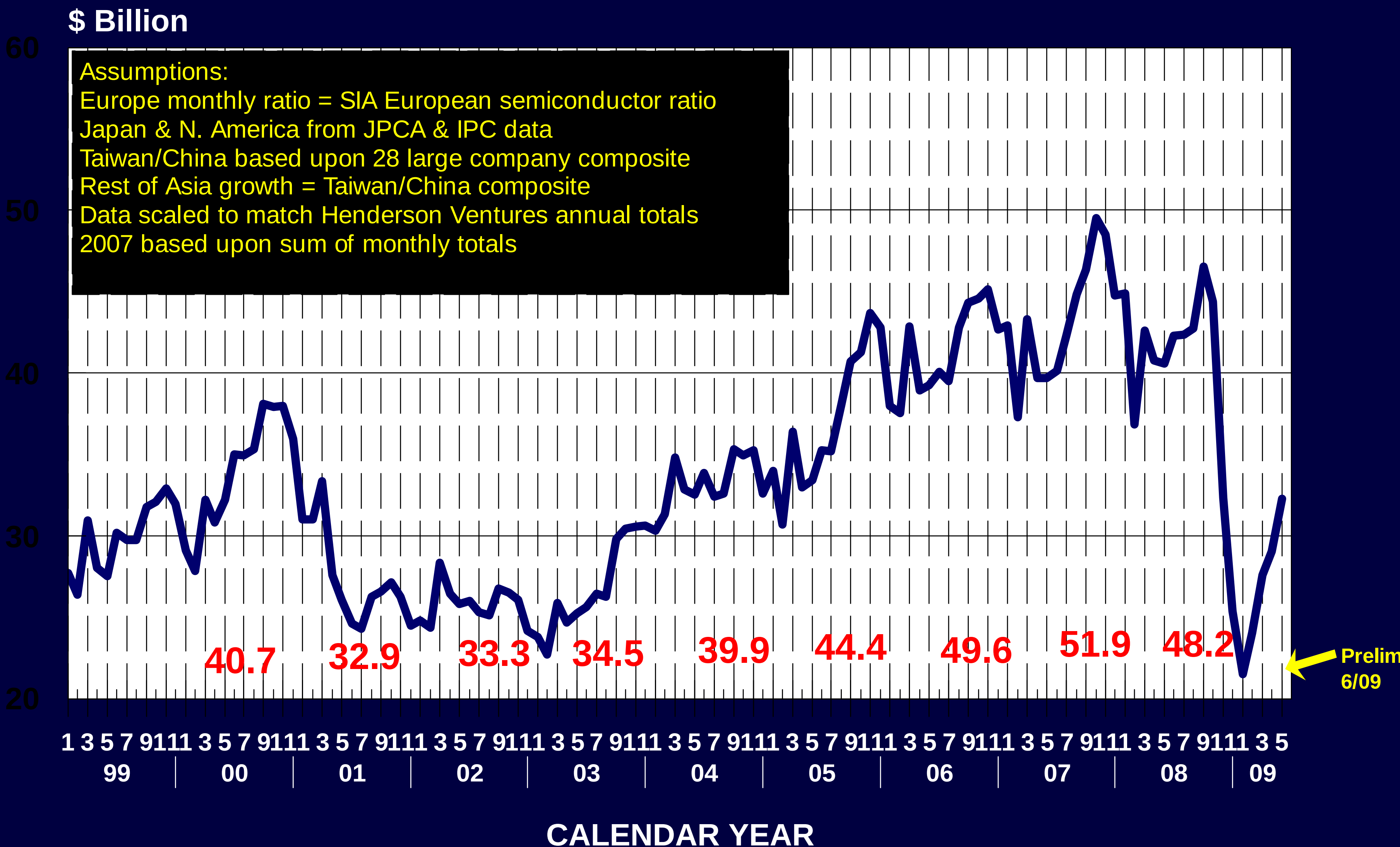
Converted @ Constant 2007 Exchange Rates



Source: Custer Consulting Group

World PCB Shipments

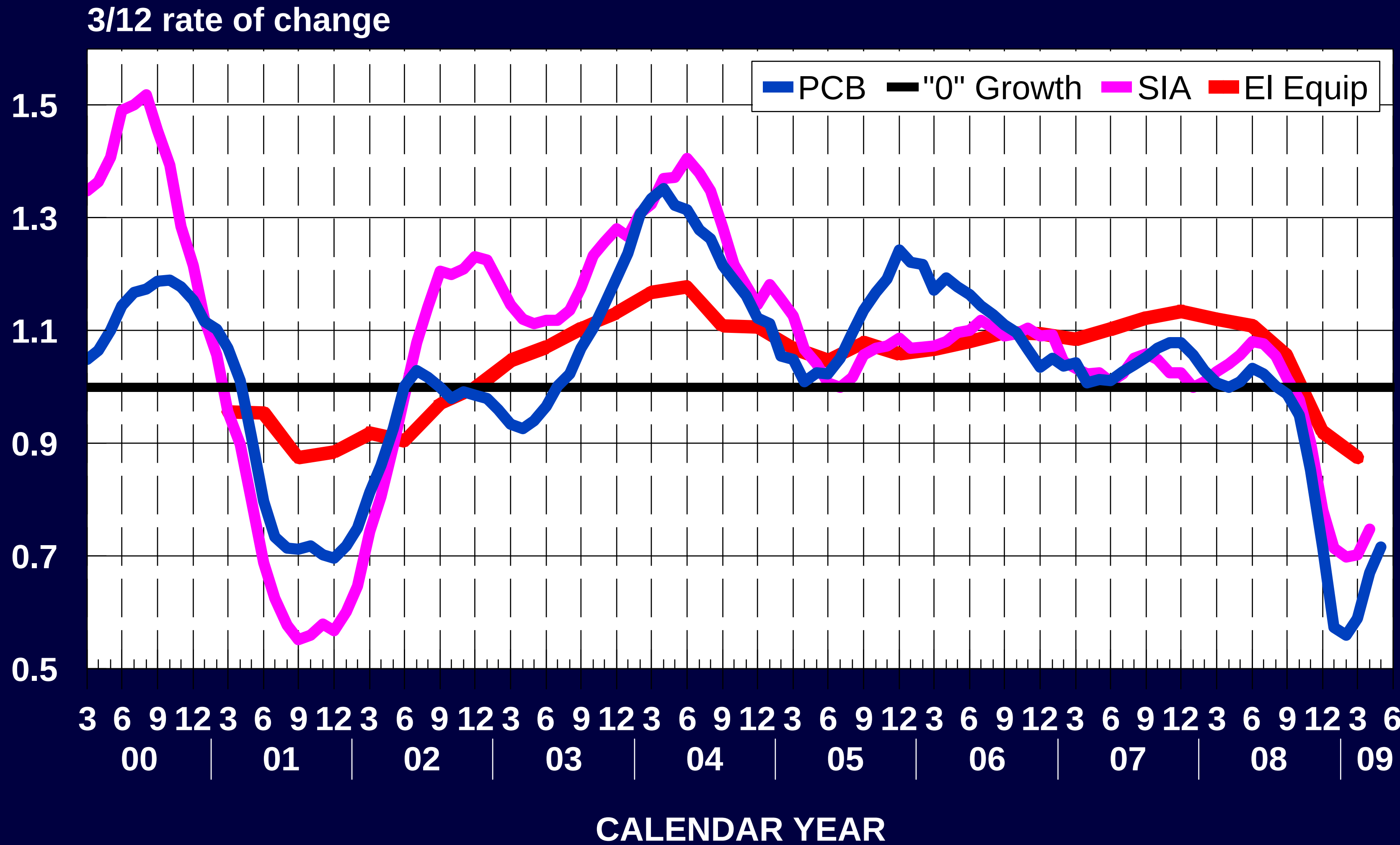
Converted @ Constant 2007 Exchange Rates



Source: Custer Consulting Group - synthesized from Henderson Ventures annual estimates and N. American, Japanese & Taiwan/China monthly PCB shipments and SIA European chip shipments

World Electronic Equipment, PCB & Semiconductor Shipments

Converted @ Constant 2006 Exchange Rates



Source: Custer Consulting Group

Forecasts

GDP Growth

Constant $ Growth Rates Converted @ Constant Exchange Rates

	2007	2008	2009	2010	2011
World	3.9	2.1	-2.3	1.9	3.7
USA	2.0	1.1	-3.0	1.6	3.7
EU	2.9	0.9	-3.8	0.0	1.7
Japan	2.4	-0.7	-6.5	0.6	2.5
Four Tigers	5.3	-0.5	-4.1	1.7	4.7
China	11.6	9.0	6.5	7.3	8.9

Henderson Ventures 6/2009
www.hendersonventures.com

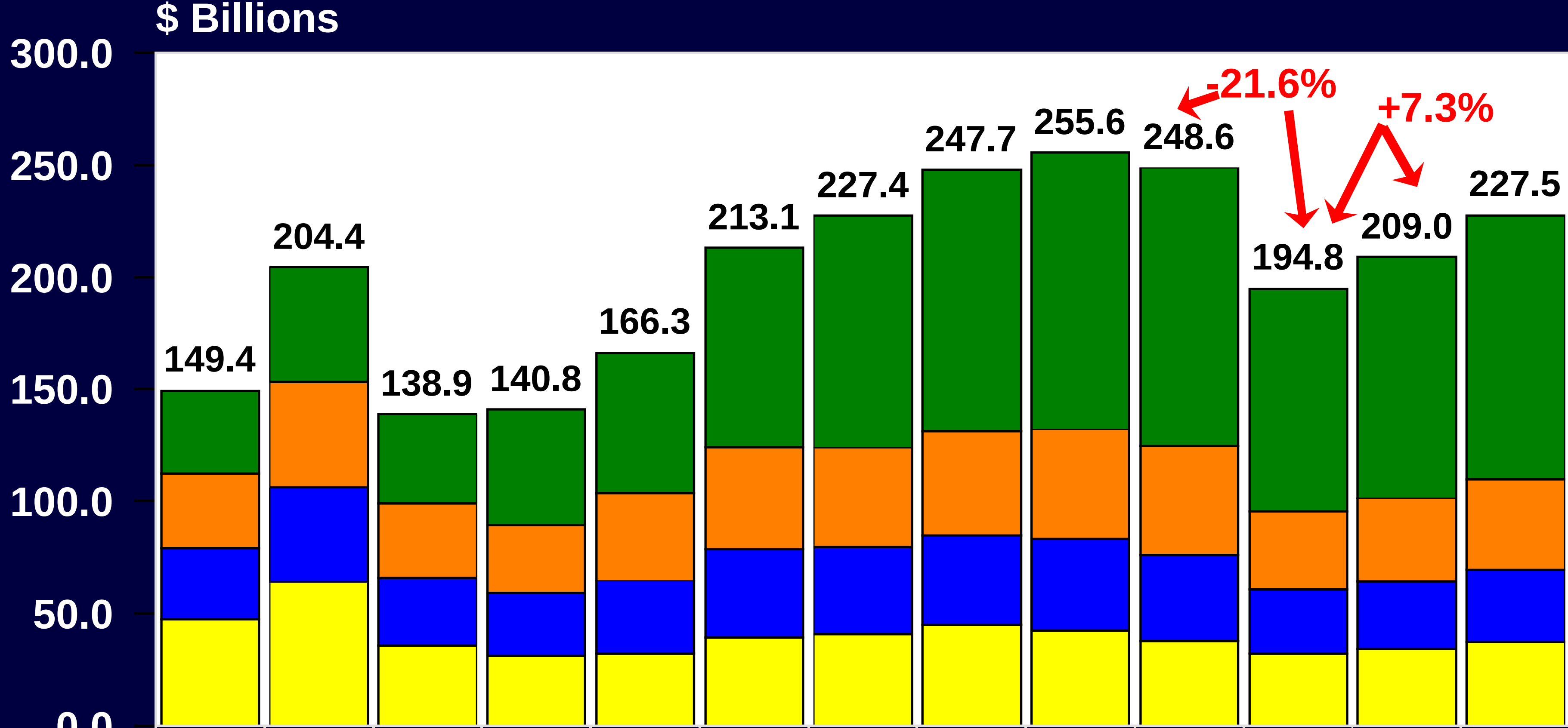
Electronic Equipment Production Growth

Current $ Growth Rates Converted @ Constant 2007 Exchange Rates

	2007	2008	2009	2010	2011
World	8.1	0.3	-12.3	5.4	8.4
USA	0.9	0.3	-10.1	3.3	4.5
W Europe	-0.1	-1.1	-19.7	2.2	4.5
Japan	0.2	-9.7	-21.3	4.3	6.0
Four Tigers	7.6	1.3	-10.3	5.0	9.3
China	21.2	3.1	-6.6	8.8	13.2

Henderson Ventures 6/2009
www.hendersonventures.com

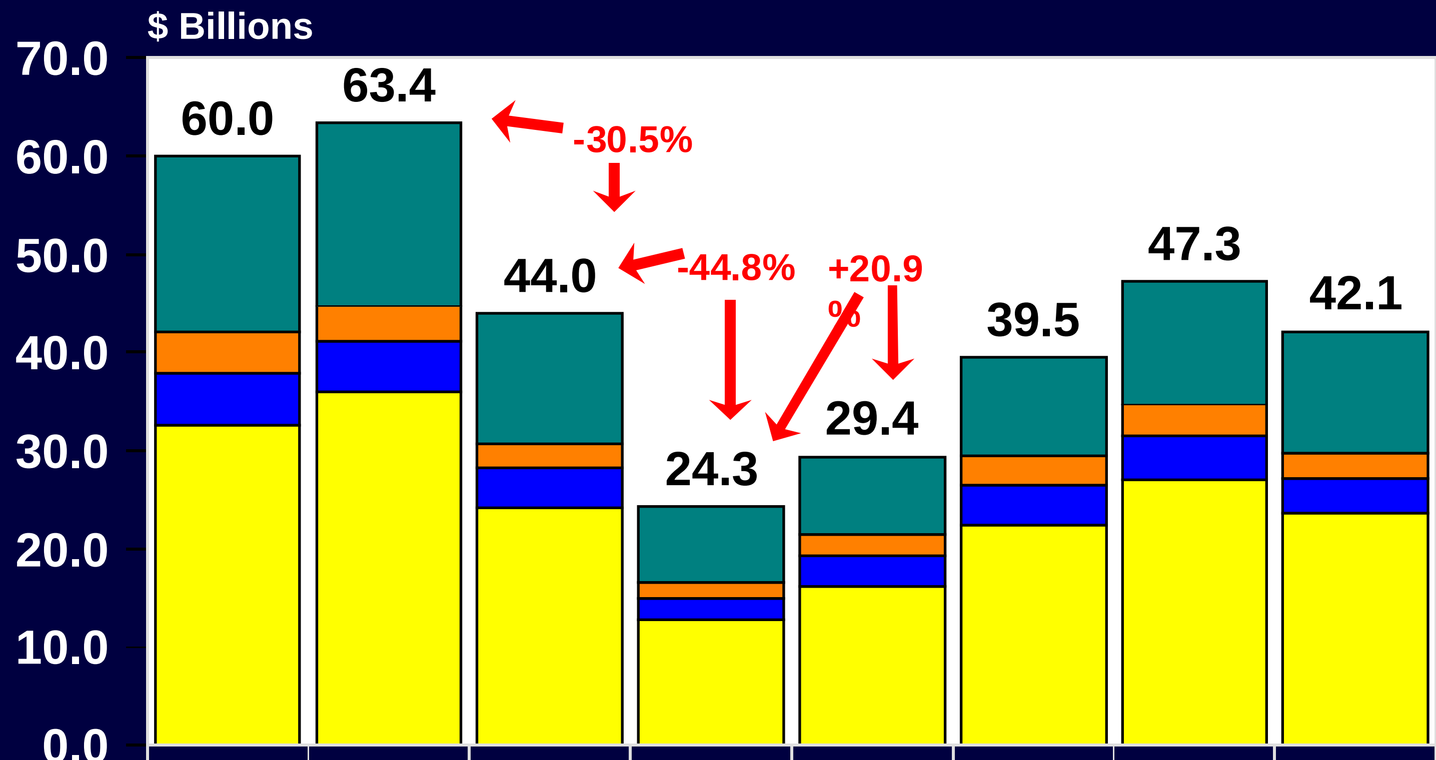
Worldwide Semiconductor Market by Geography
WSTS Forecast



	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Asia Pacific	37.2	51.3	39.8	51.2	62.8	88.8	103.5	116.5	123.5	124.0	99.5	107.6	117.8
Japan	32.8	46.7	33.1	30.5	38.9	45.8	44.1	46.4	48.8	48.5	34.7	37.0	40.0
Europe	31.9	42.3	30.2	27.8	32.3	39.4	39.1	39.9	41.0	38.2	28.3	30.1	32.6
N. America	47.5	64.1	35.8	31.3	32.3	39.1	40.7	44.9	42.3	37.9	32.3	34.2	37.1

WSTS 6/2009

Worldwide Semiconductor Capital Spending

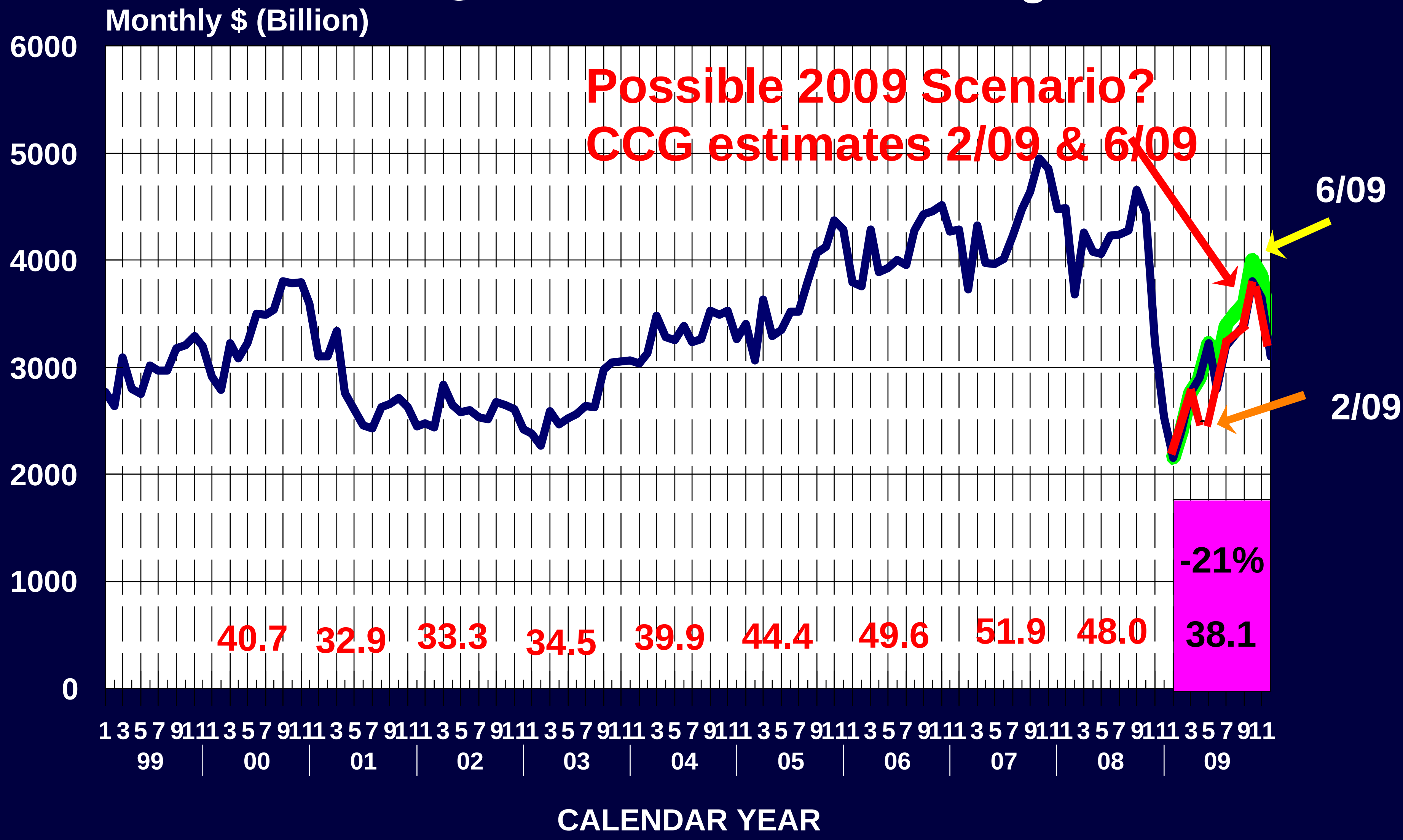


	2006	2007	2008	2009	2010	2011	2012	2013
Other Capital Spending	17.9	18.7	13.4	7.7	7.9	10.0	12.6	12.4
Automated Test Equip	4.1	3.6	2.4	1.7	2.2	3.0	3.2	2.6
Packaging & Assembly Equip	5.4	5.2	4.0	2.1	3.0	4.0	4.5	3.6
Wafer Fab Equip	32.5	36.0	24.2	12.8	16.2	22.4	27.0	23.6

Gartner 6/2009

World PCB Shipments

Converted @ Constant 2007 Exchange Rates



Source: Custer Consulting Group - synthesized from Henderson Ventures annual estimates and N. American, Japanese & Taiwan/China monthly PCB shipments and SIA European chip shipments