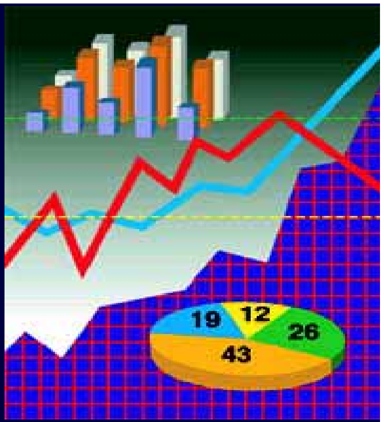


BUSINESS OUTLOOK

GLOBAL ELECTRONICS INDUSTRY

WALT CUSTER
CUSTER CONSULTING GROUP
www.custerconsulting.com
February 2005

Historical Review

2000 - "Bubble demand", double ordering & inventory building

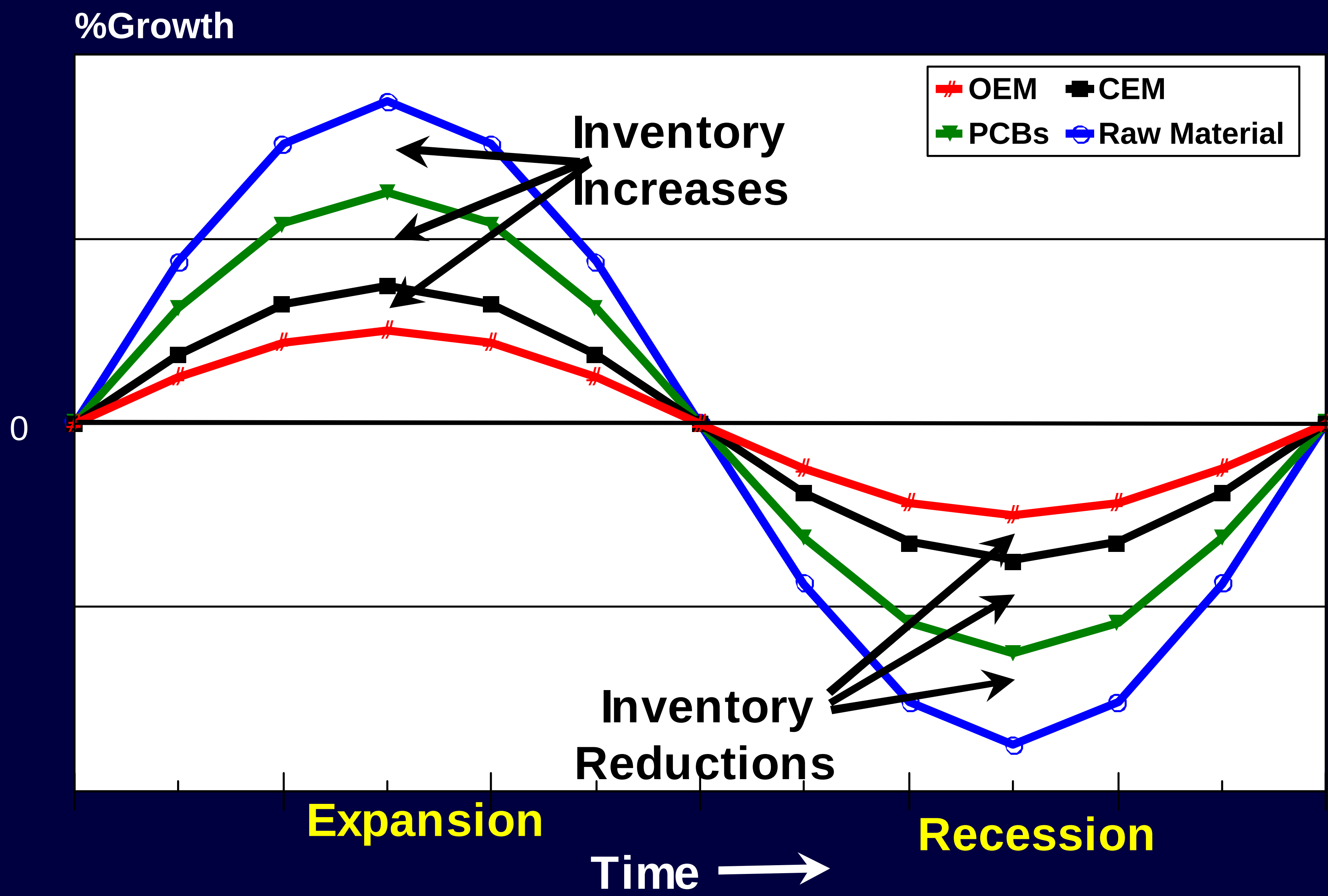
2001 - Dot.com & telecom crash, sharply lower demand, inventory reductions, Sept 11

2002 - declining demand, shift to Asia, N. American & European PCB shutdowns & massive China buildup, overcapacity & price degradation throughout supply chain; strong US$ vs euro & GBP

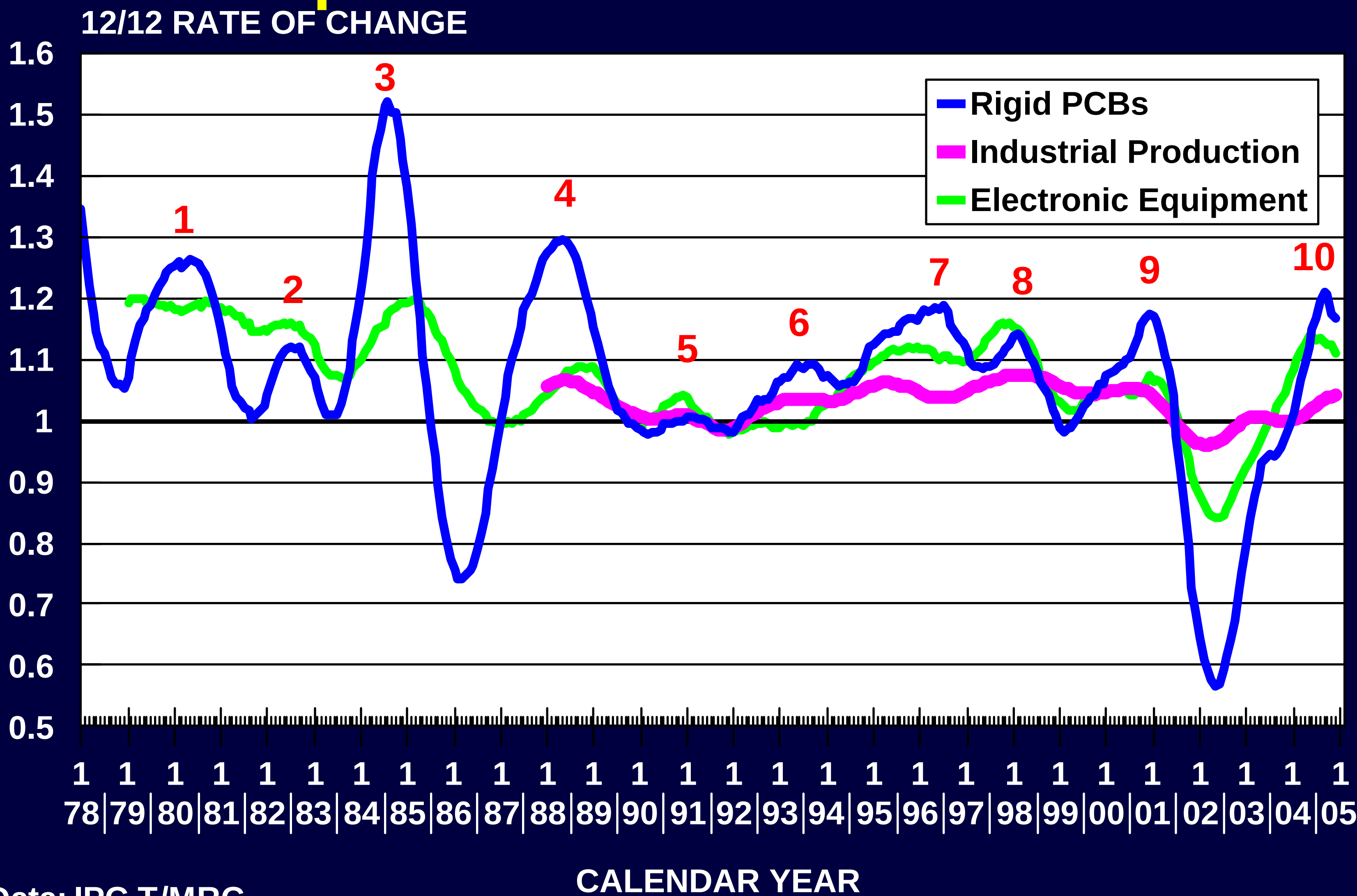
2003 - Initial modest improvements slowed by war worries & SARS; recovery accelerated in late 2003; weak US$; Communications orders drop in Nov/Dec

2004 - Strong 1Q'04 - with over-ordering & inventory building; Downward N American "correction" in rest of 2004; SE Asia continues to grow; Japan slows

BUSINESS CYCLE
Supply Chain Effect

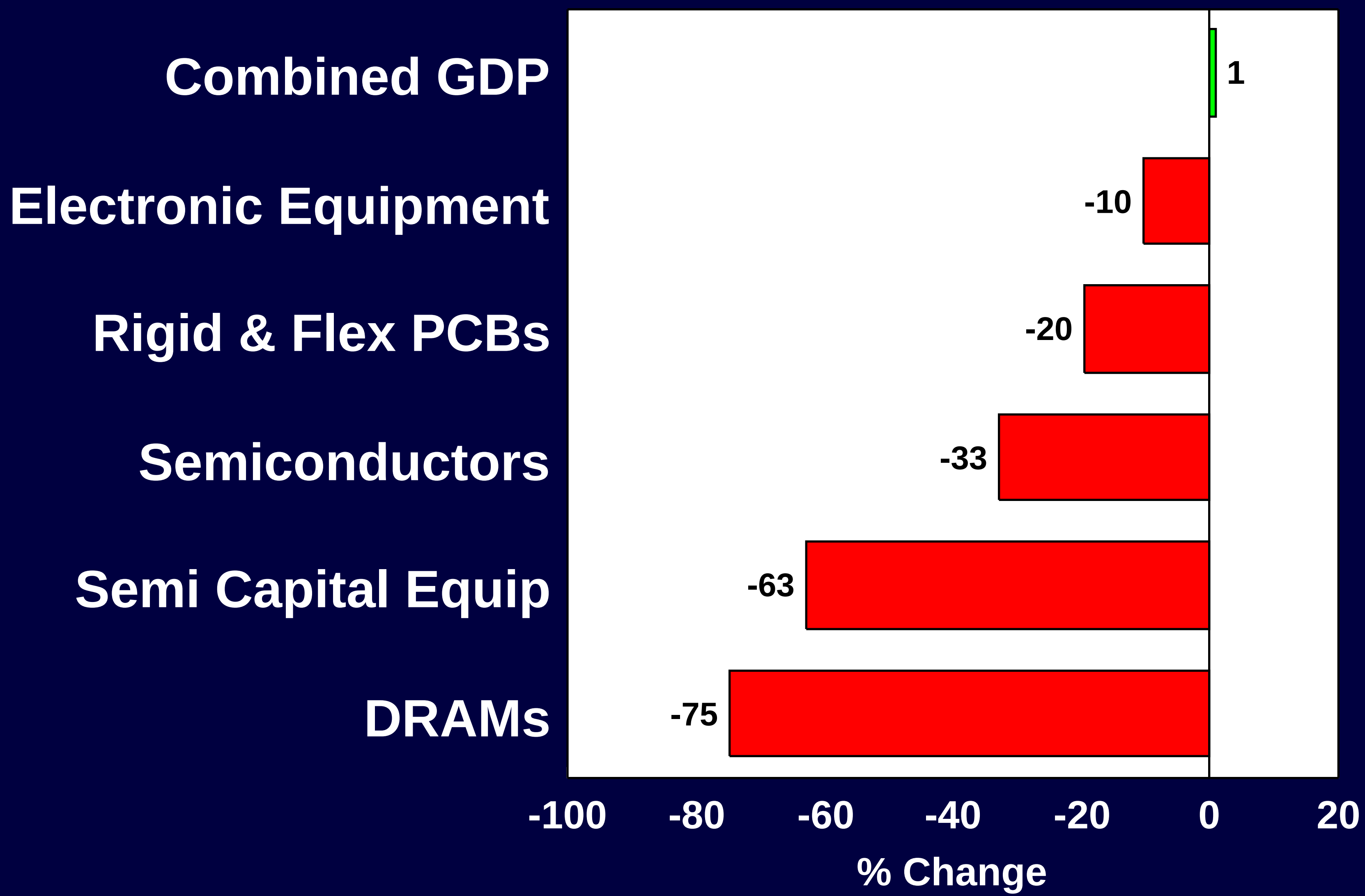


N American PCB vs US Electronic Equipment Shipments & Industrial Production

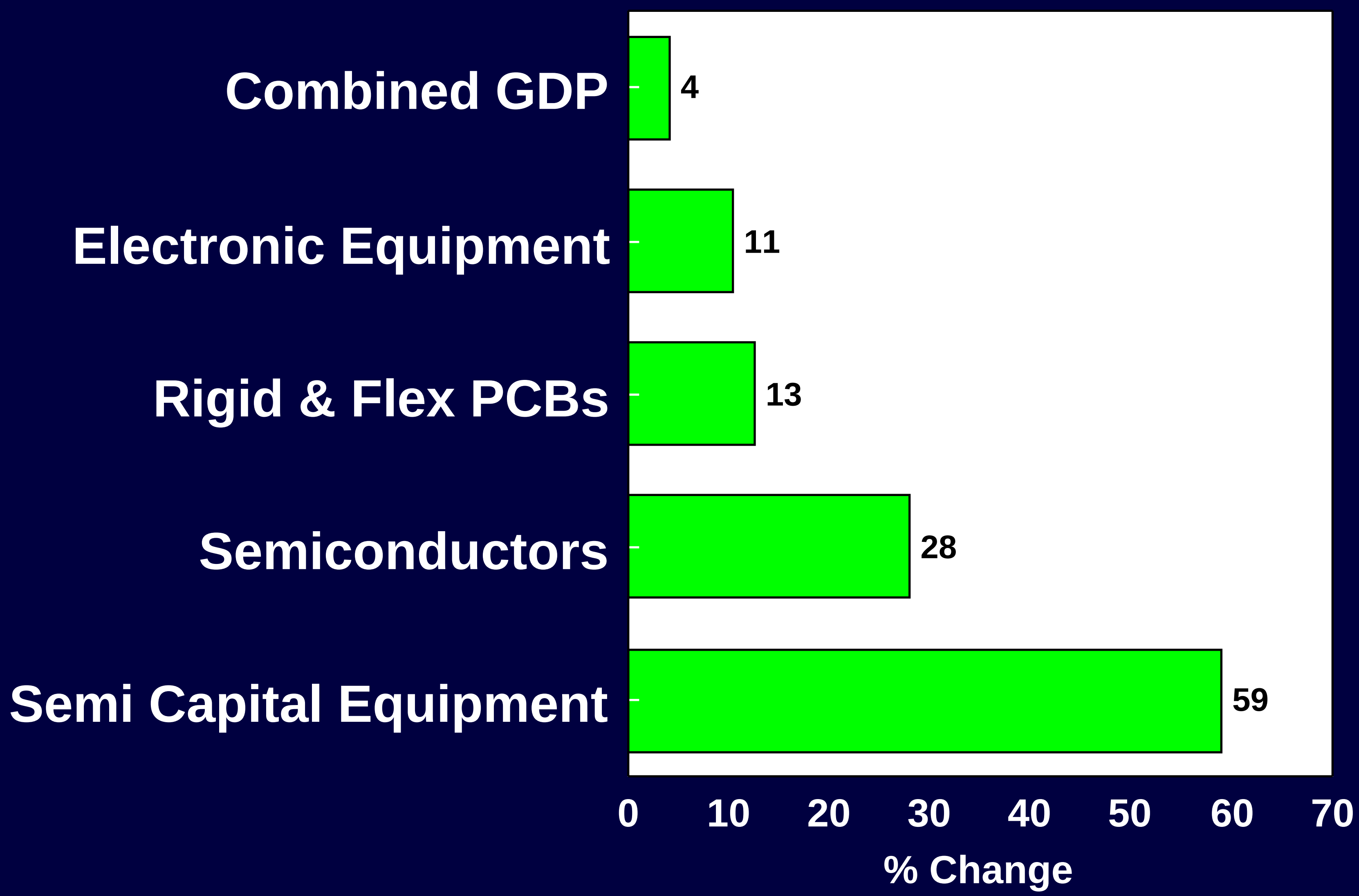


Data: IPC T/MRC
www.federalreserve.gov/releases/g17/table1_2.htm

Global Impact - 2001 vs 2000

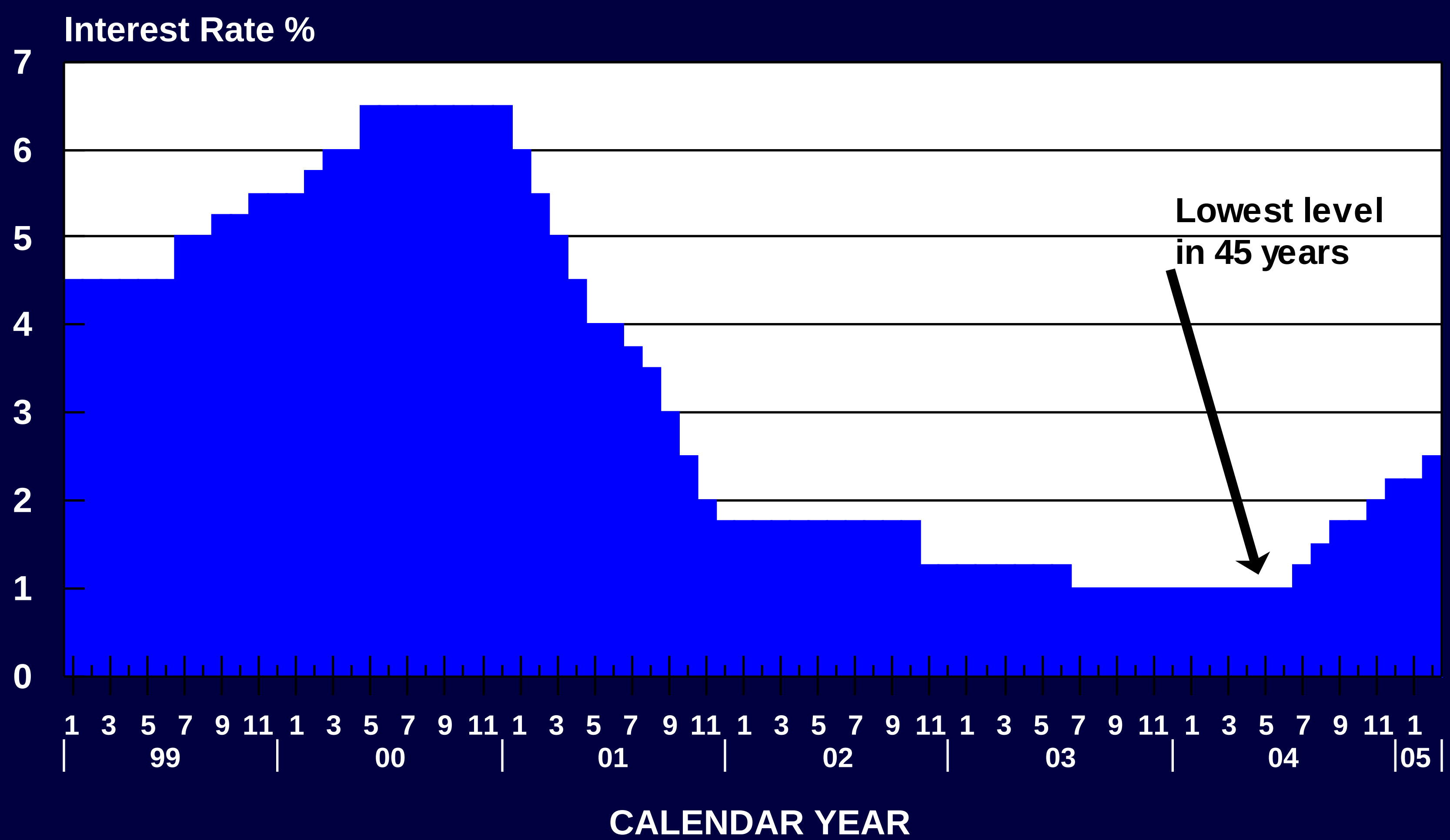


Global Impact - 2004 vs 2003



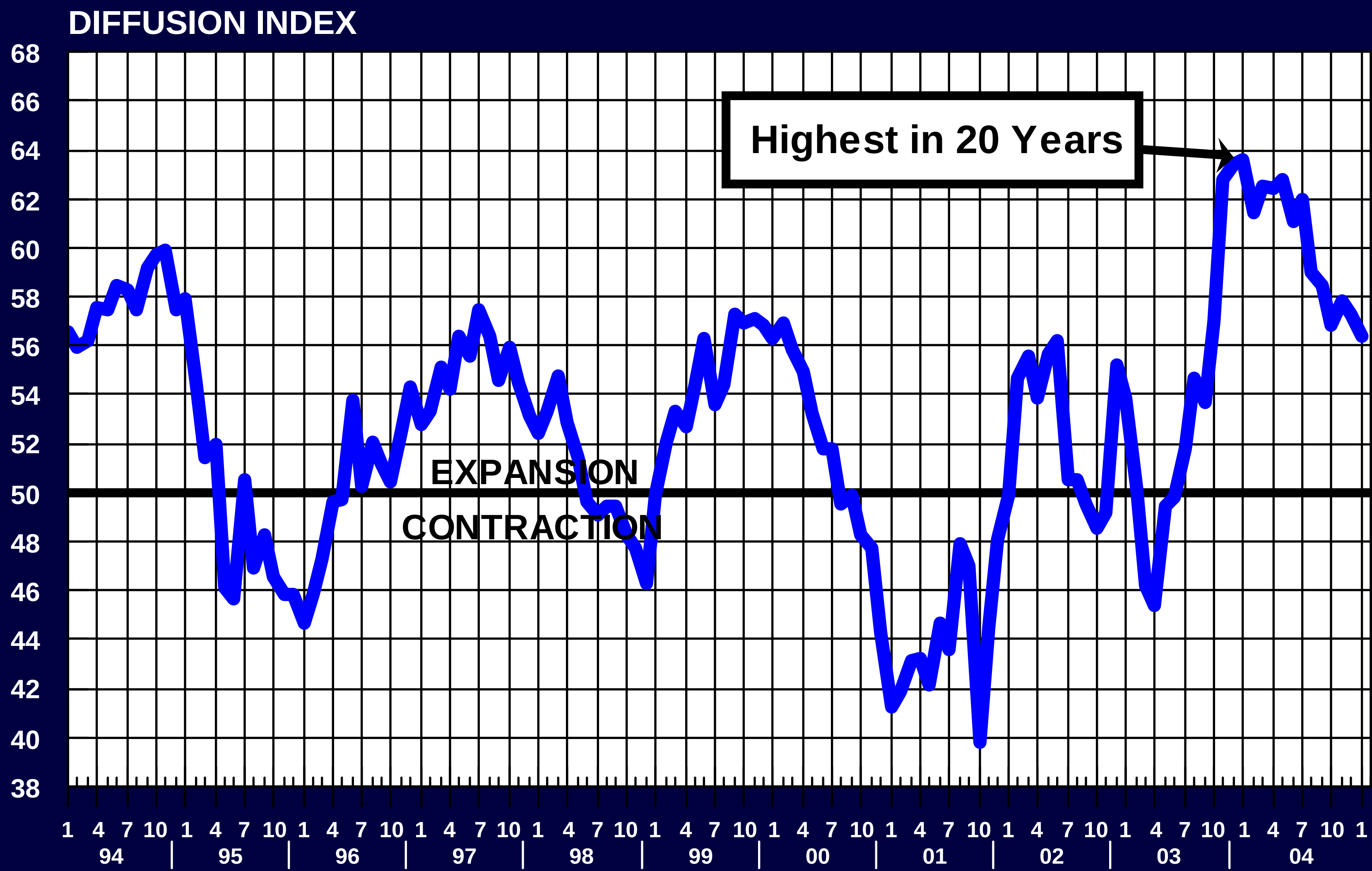
Interest Rates
&
Foreign Exchange Rates

U.S. FEDERAL FUNDS RATE



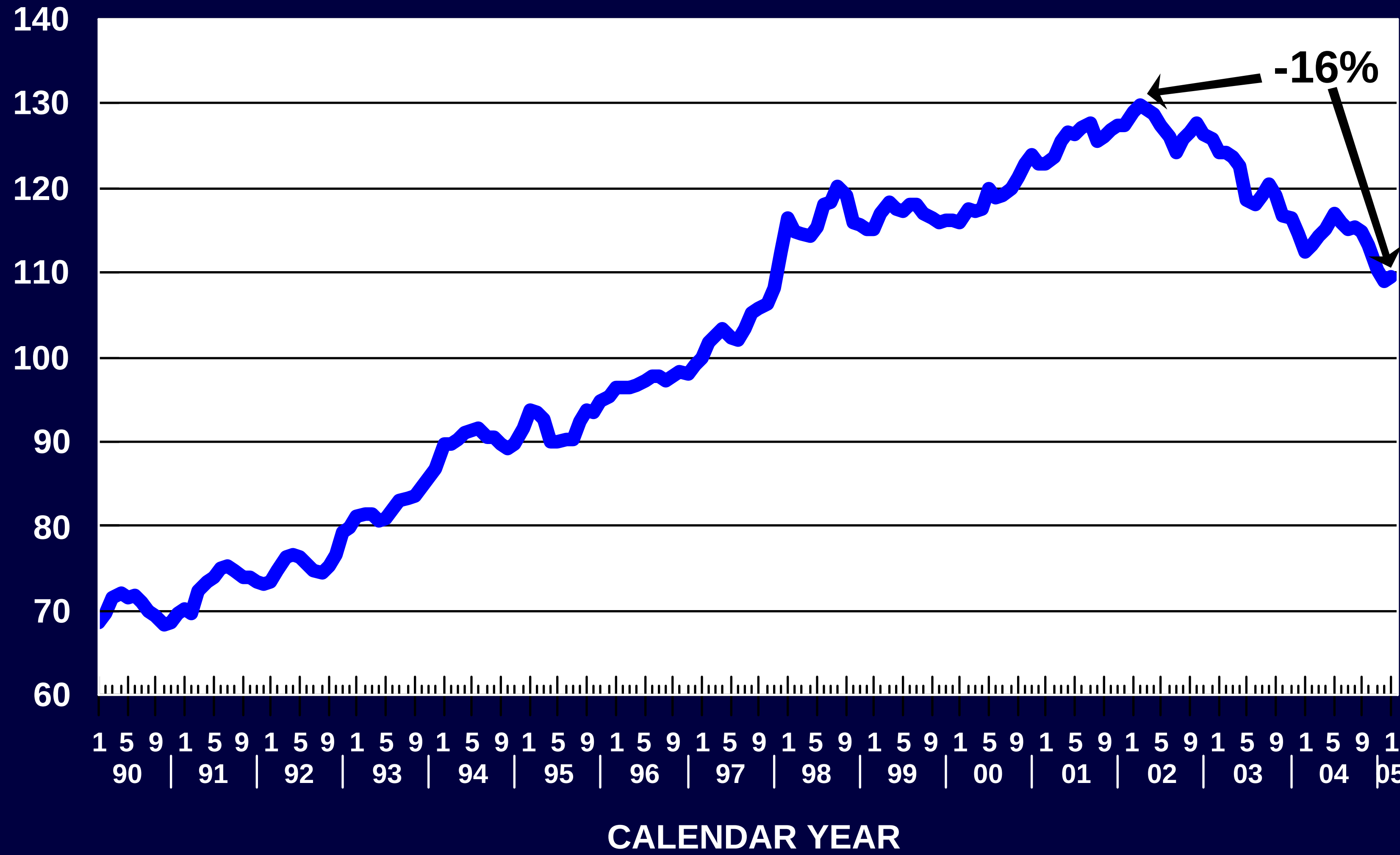
http://www.federalreserve.gov/releases/h15/data.htm

U.S. "Purchasing Managers" Index



Institute for Supply Management

Trade-Weighted Exchange Value of U.S. Dollar vs of a broad group of major U.S. trading partners



http://research.stlouisfed.org/fred2/series/TWEXBMTH/15

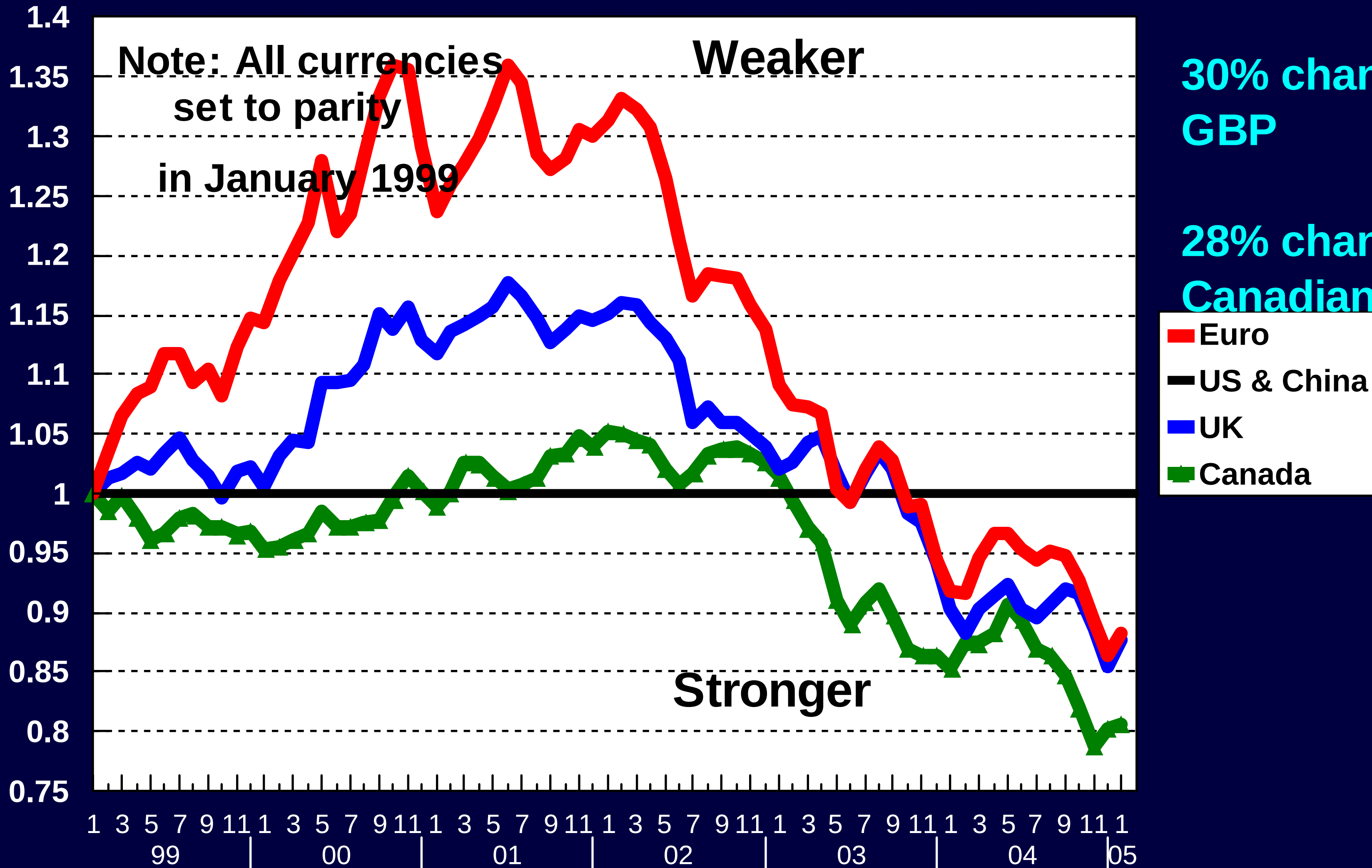
Key European Exchange Rates vs US$ & China Yuan

1/99 = 1.00

48% change in euro

30% change in GBP

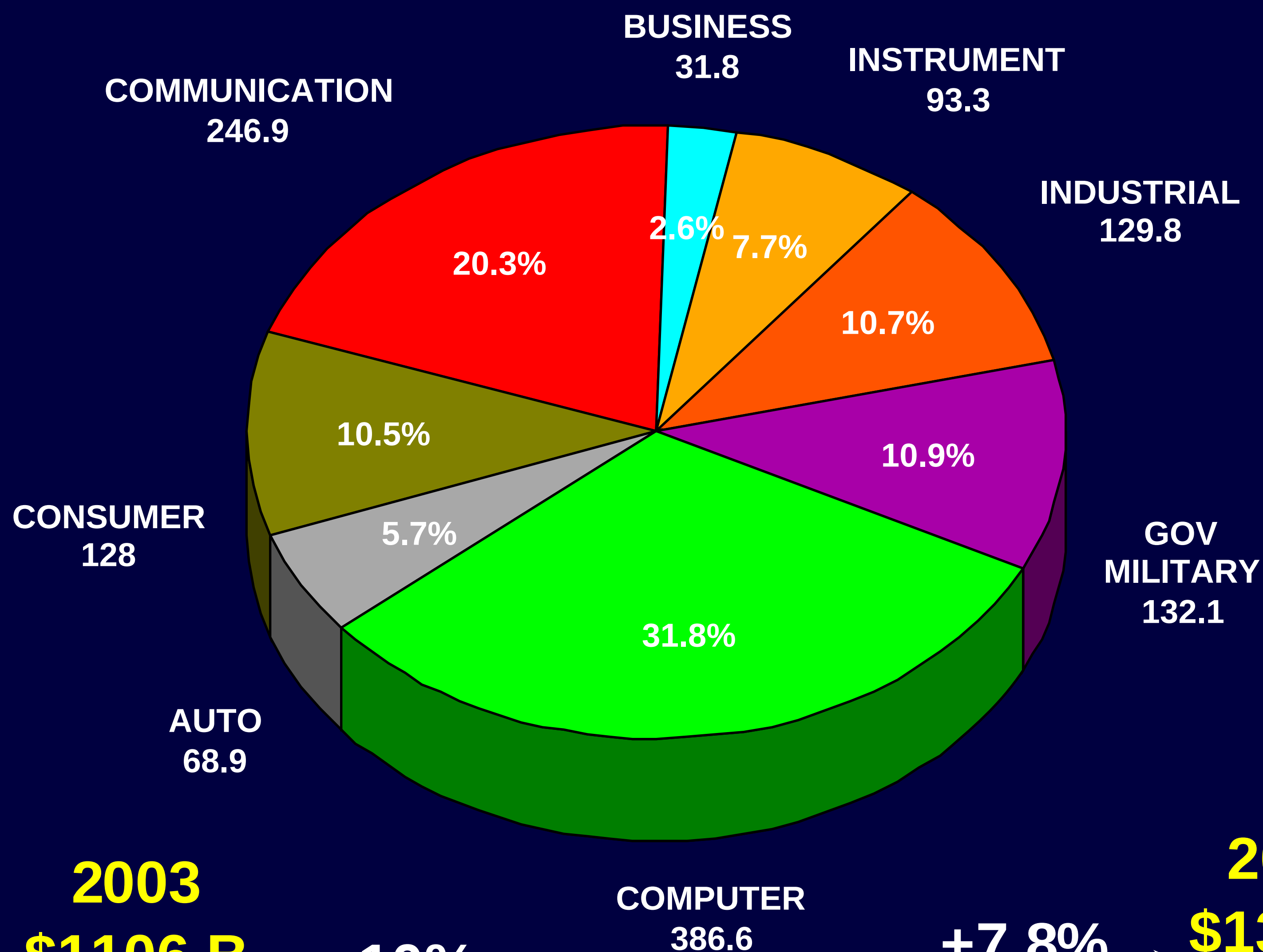
28% change in Canadian $



http://research.stlouisfed.org/fred2/categories/15

Electronic Equipment

World Electronic Equipment by Type 2004



2003
$1106 B

10%

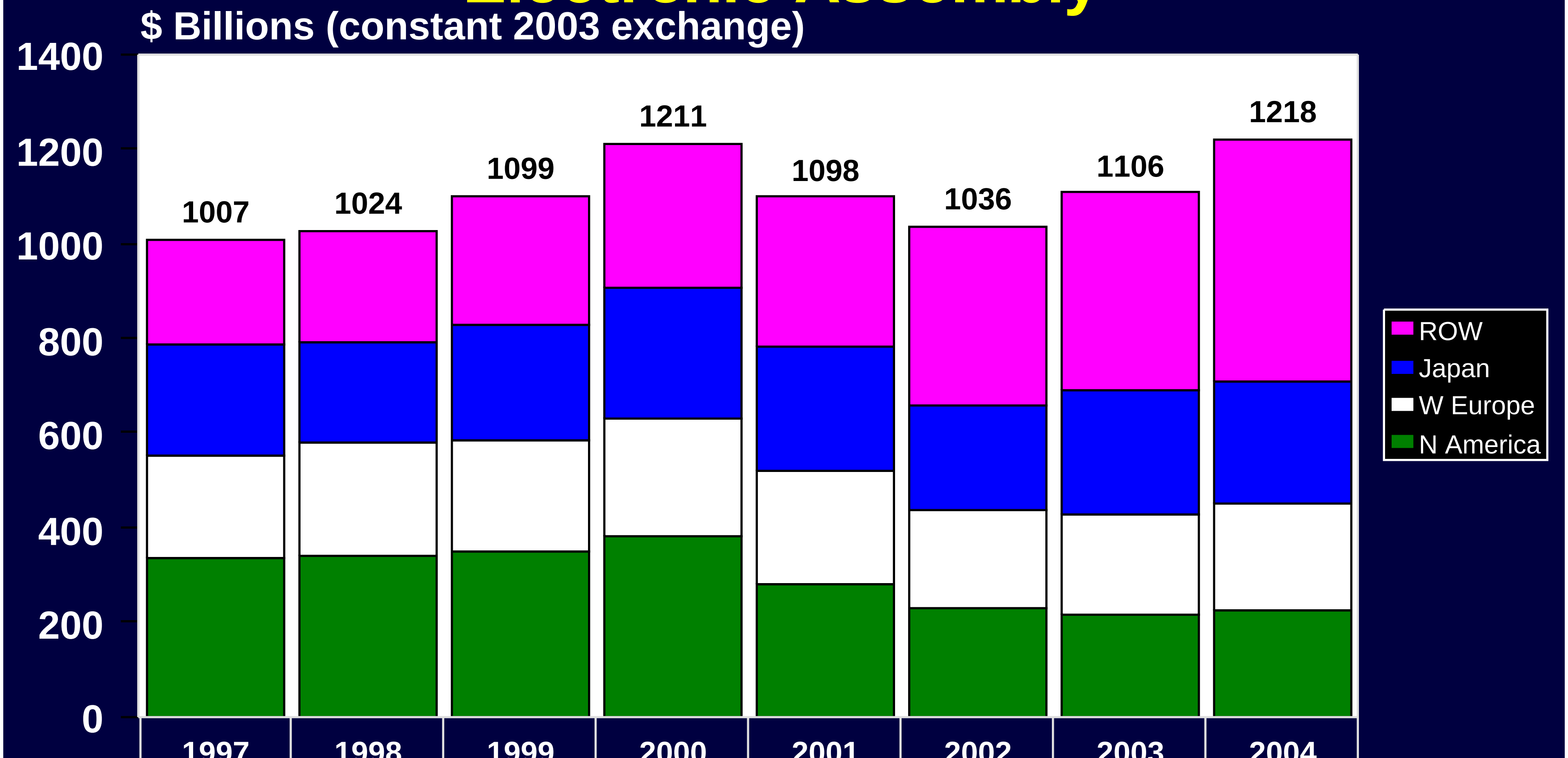
+7.8%

2005
$1312B

Electronic Outlook 9/04

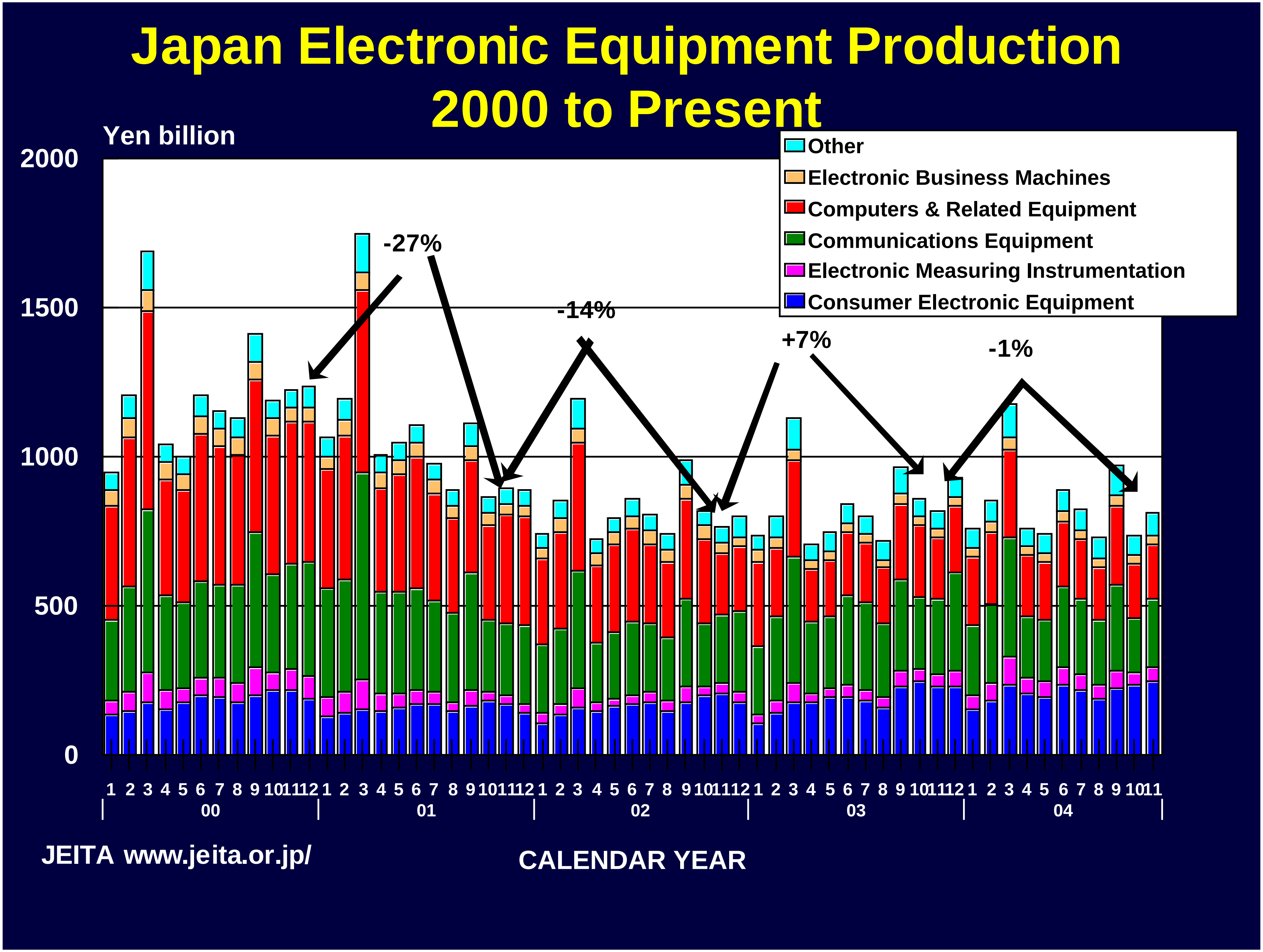
Total Production: $1218 Billion

World Electronic Equipment Production by Area
Electronic Assembly



	1997	1998	1999	2000	2001	2002	2003	2004
ROW	222	235	274	304	315	377	418	507
Japan	235	211	242	277	262	225	259	262
W Europe	214	240	235	251	239	205	215	225
N America	337	338	349	379	283	230	215	223

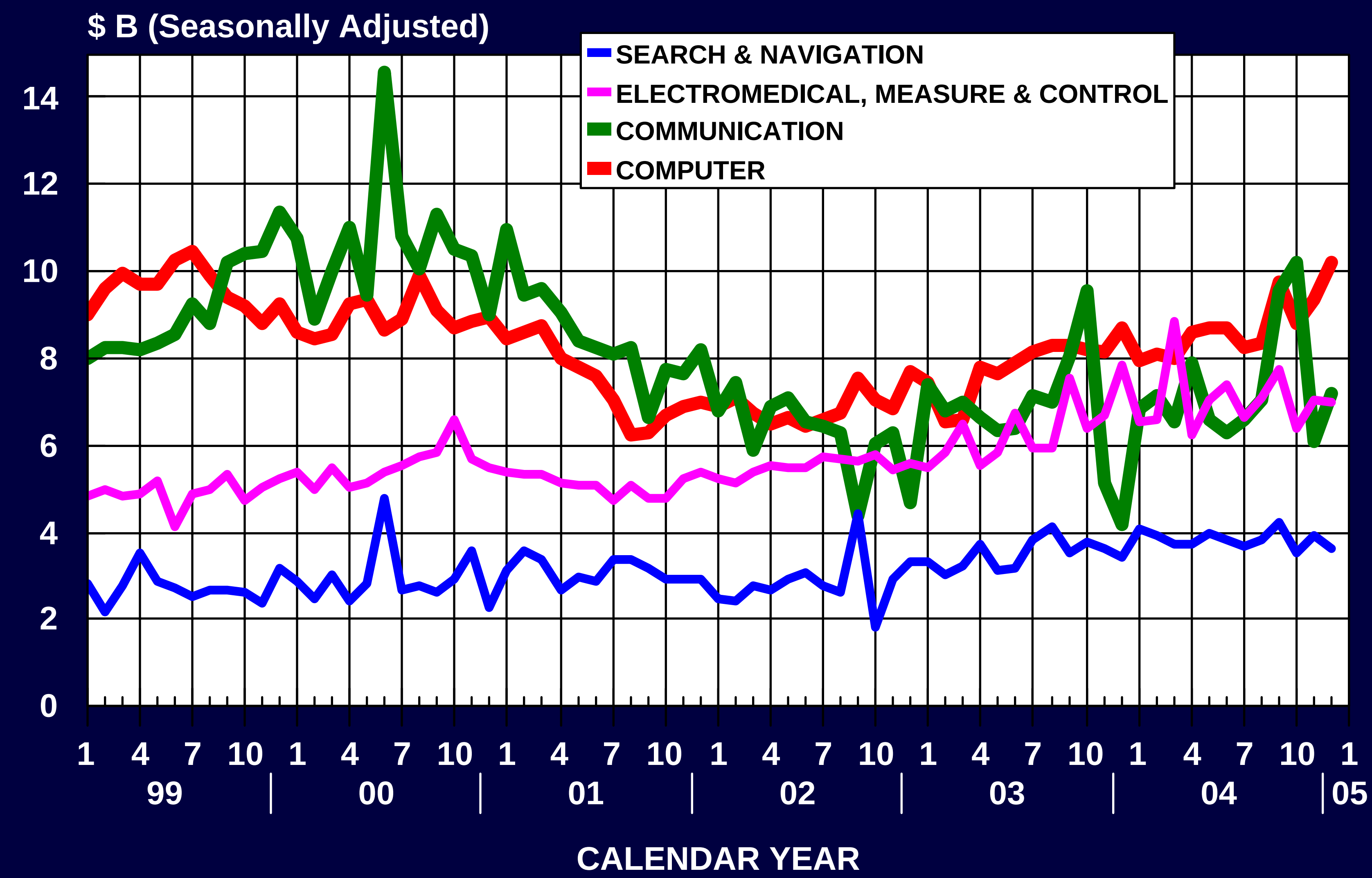
Electronic Outlook Corp total with area shares based upon SIA chip shipments



Japan Electronic Equipment Production
2000 to Present
Yen billion
2000
1500
1000
500
0
Other
Electronic Business Machines
Computers & Related Equipment
Communications Equipment
Electronic Measuring Instrumentation
Consumer Electronic Equipment
-27%
-14%
+7%
-1%
1 2 3 4 5 6 7 8 9 10 11 12
00
01
02
03
04
JEITA www.jeita.or.jp/
CALENDAR YEAR

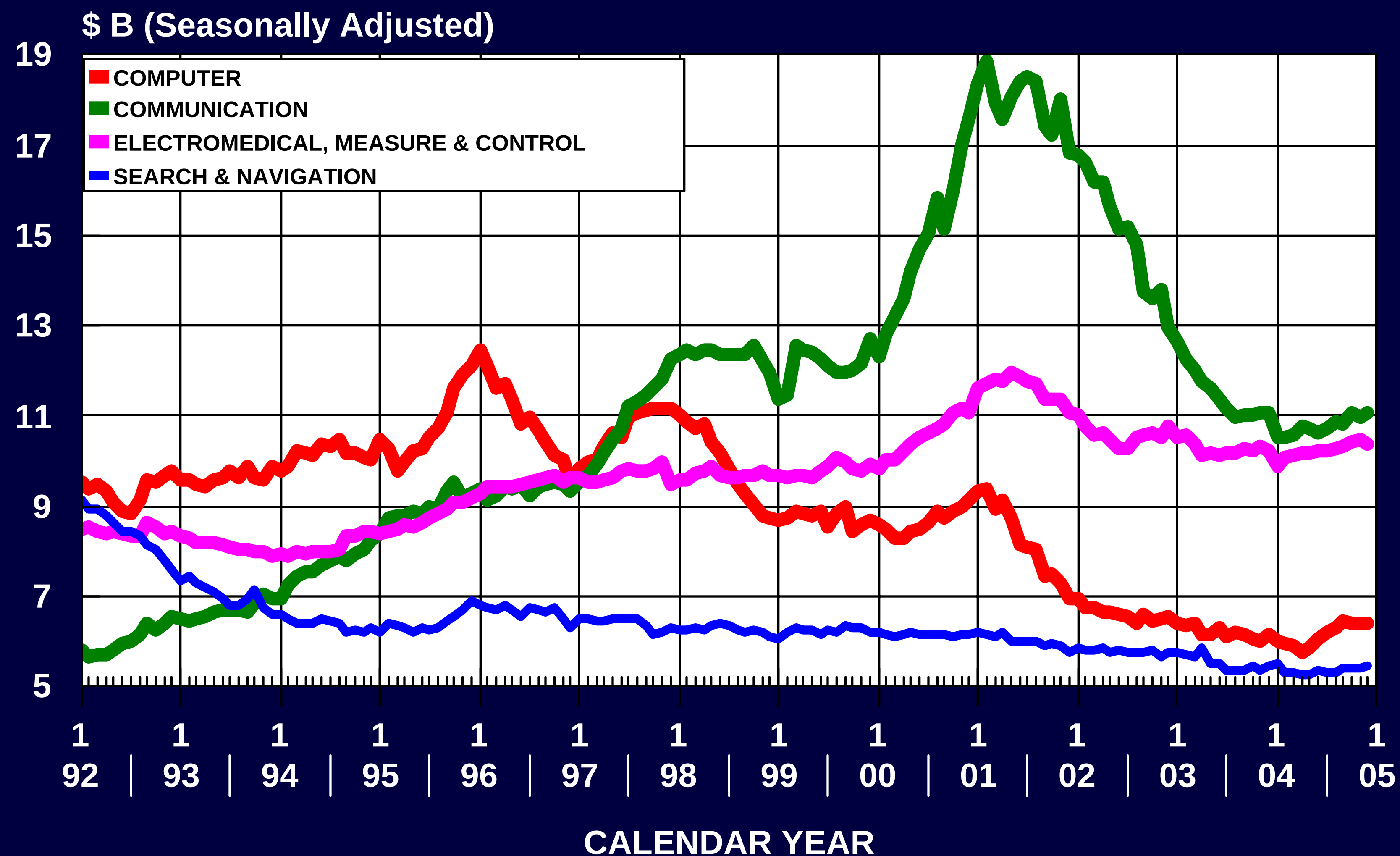
US Electronic Equipment Orders

Monthly Data



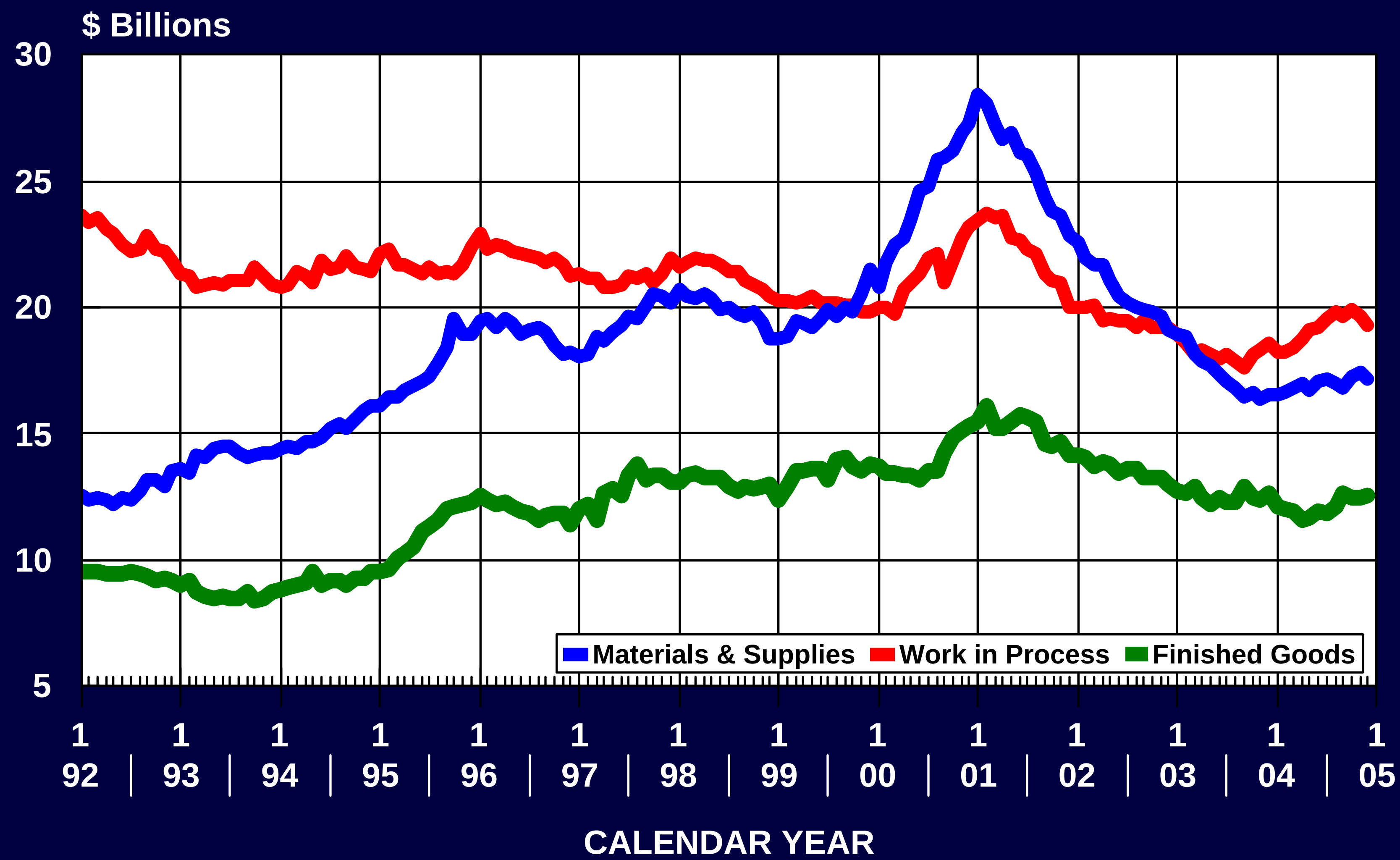
http://www.census.gov/indicator/www/m3/

US Electronic Equipment Inventories
Monthly Data



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

Value of U.S. "Computers & Electronic Products" Inventories by Stage of Fabrication

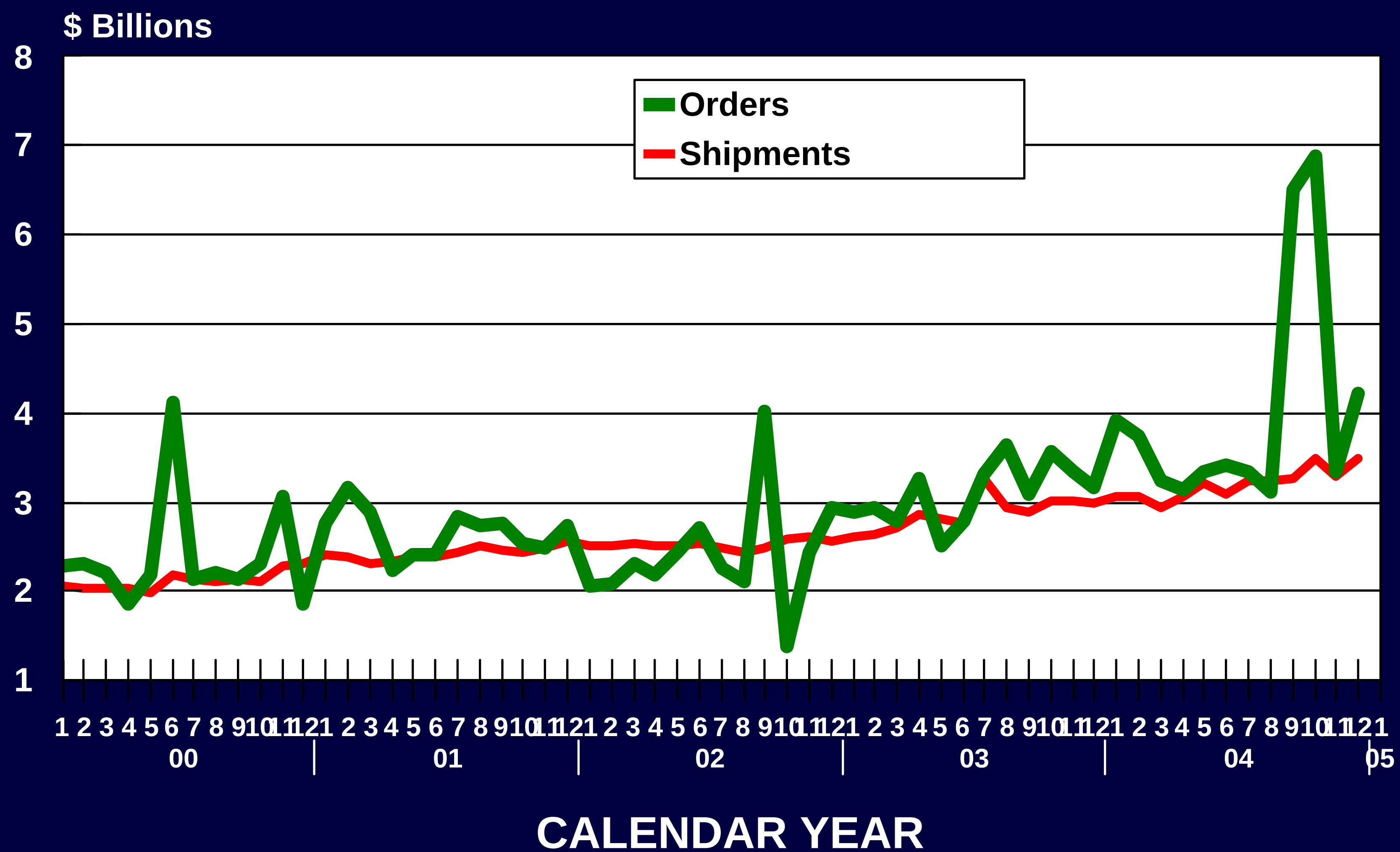


http://www.census.gov/indicator/www/m3/hist/naicsinvp.xls

Government & Military Electronics

U.S. Military Electronics Orders & Shipments

Defense Search & Navigation and Communications Equipment

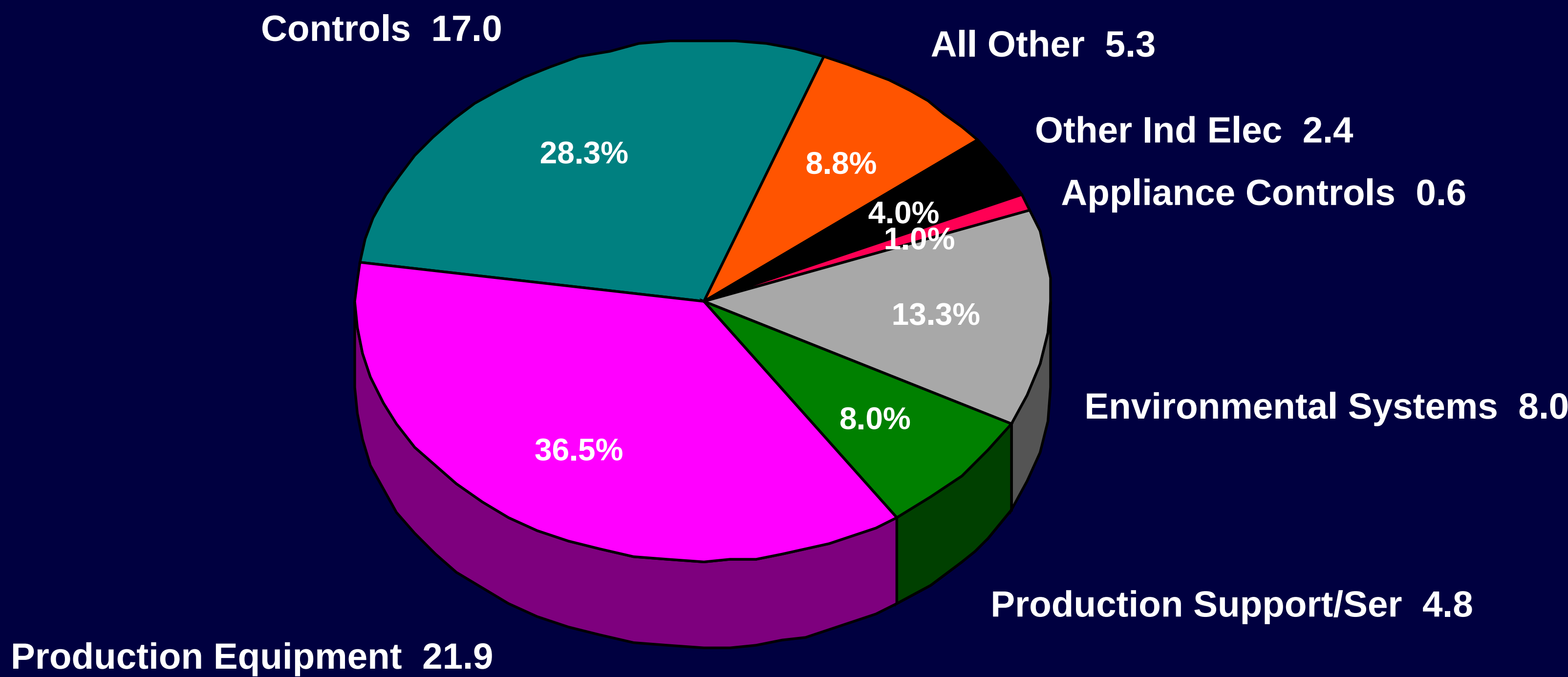


http://www.census.gov/indicator/www/m3/

Instruments & Control Equipment

INDUSTRIAL ELECTRONICS PRODUCTION

U.S. - 2004



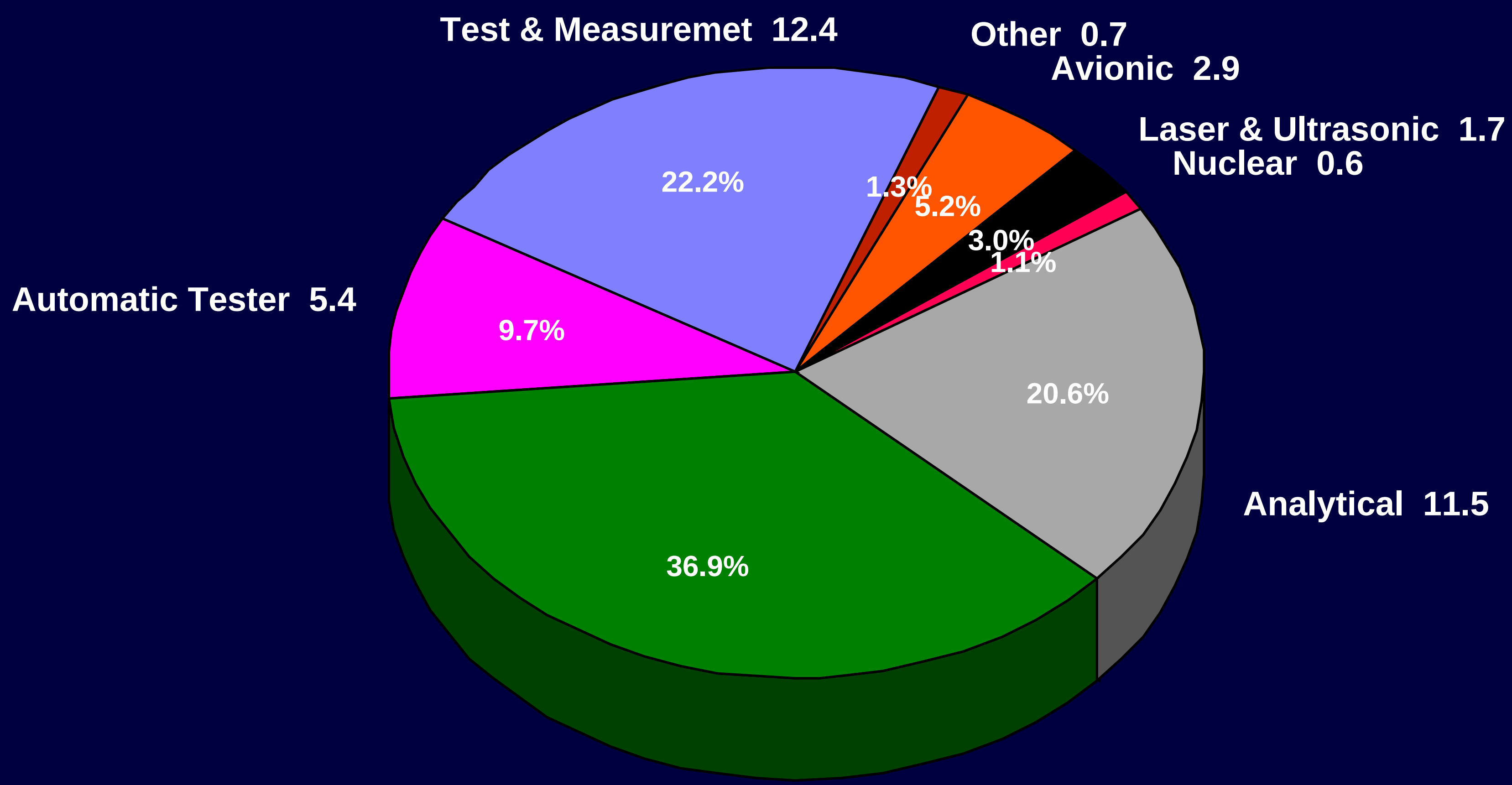
TOTAL: $60.0 Billion

Electronic Outlook 9/2004

Note: Similar data available for other electronic equipment sectors

INSTRUMENTATION EQUIPMENT PRODUCTION

U.S. - 2004



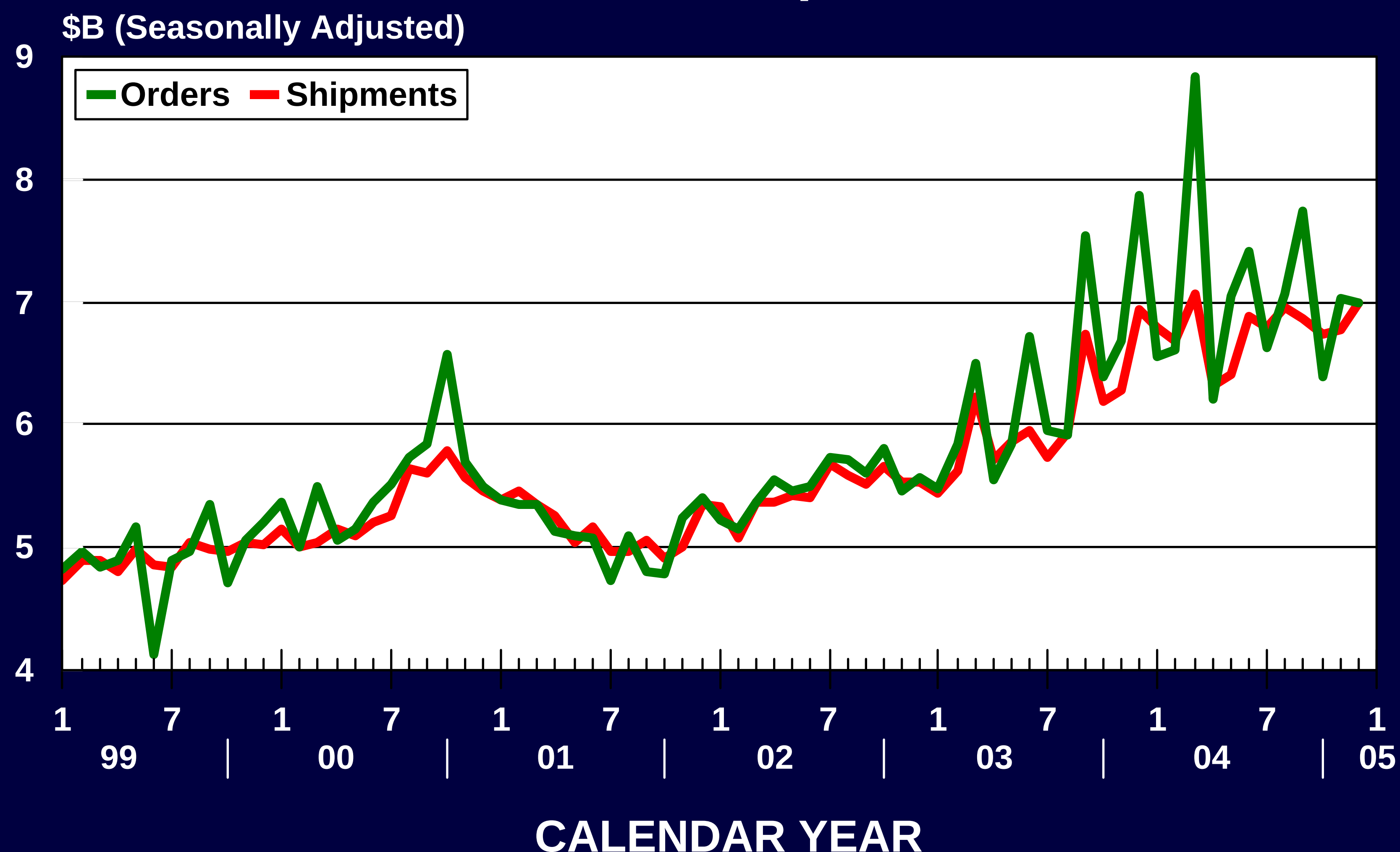
TOTAL: $56.2 Billion

Electronic Outlook 9/2004

Note: Similar data available for other electronic equipment sectors

ELECTROMEDICAL, MEASUREMENT & CONTROL EQUIPMENT

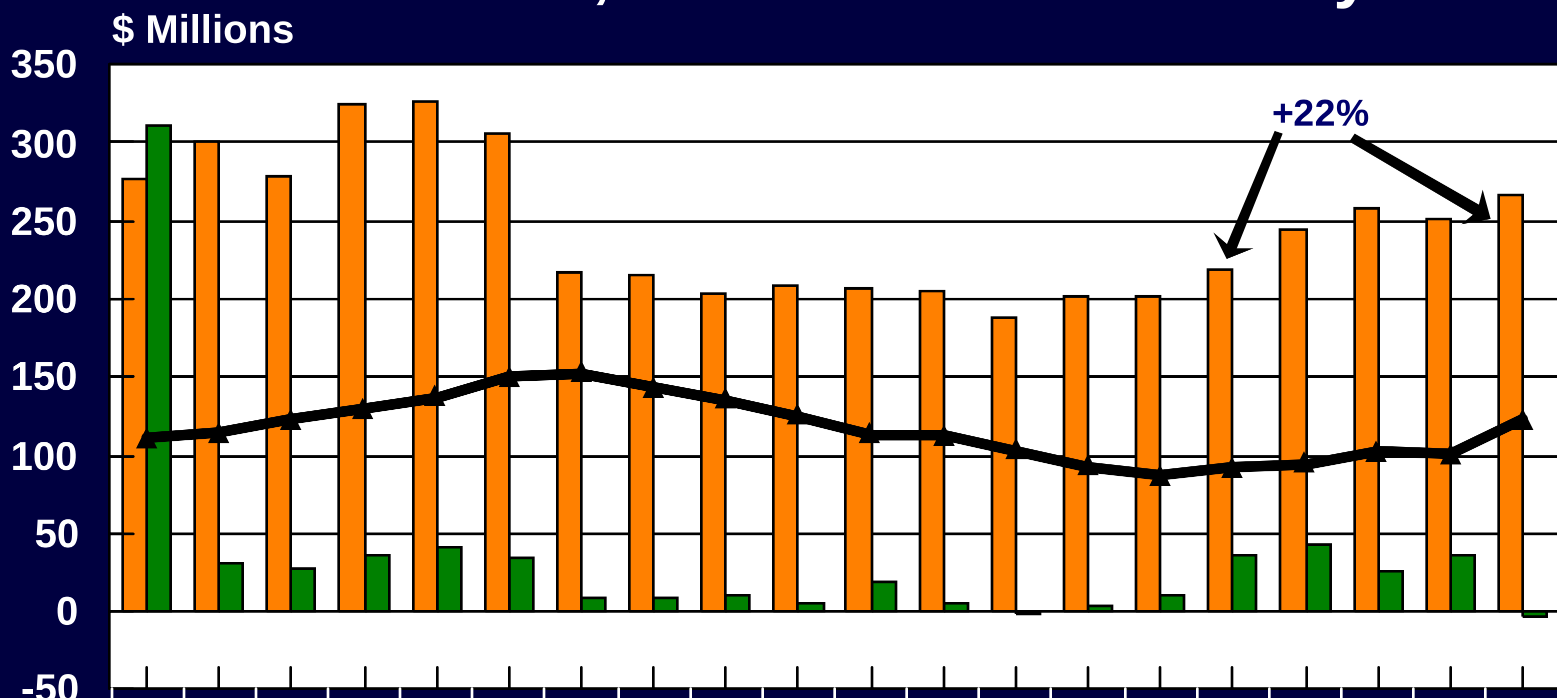
Orders & Shipments



www.census.gov/indicator/www/m3/

Tektronix

Revenue, Net Income & Inventory



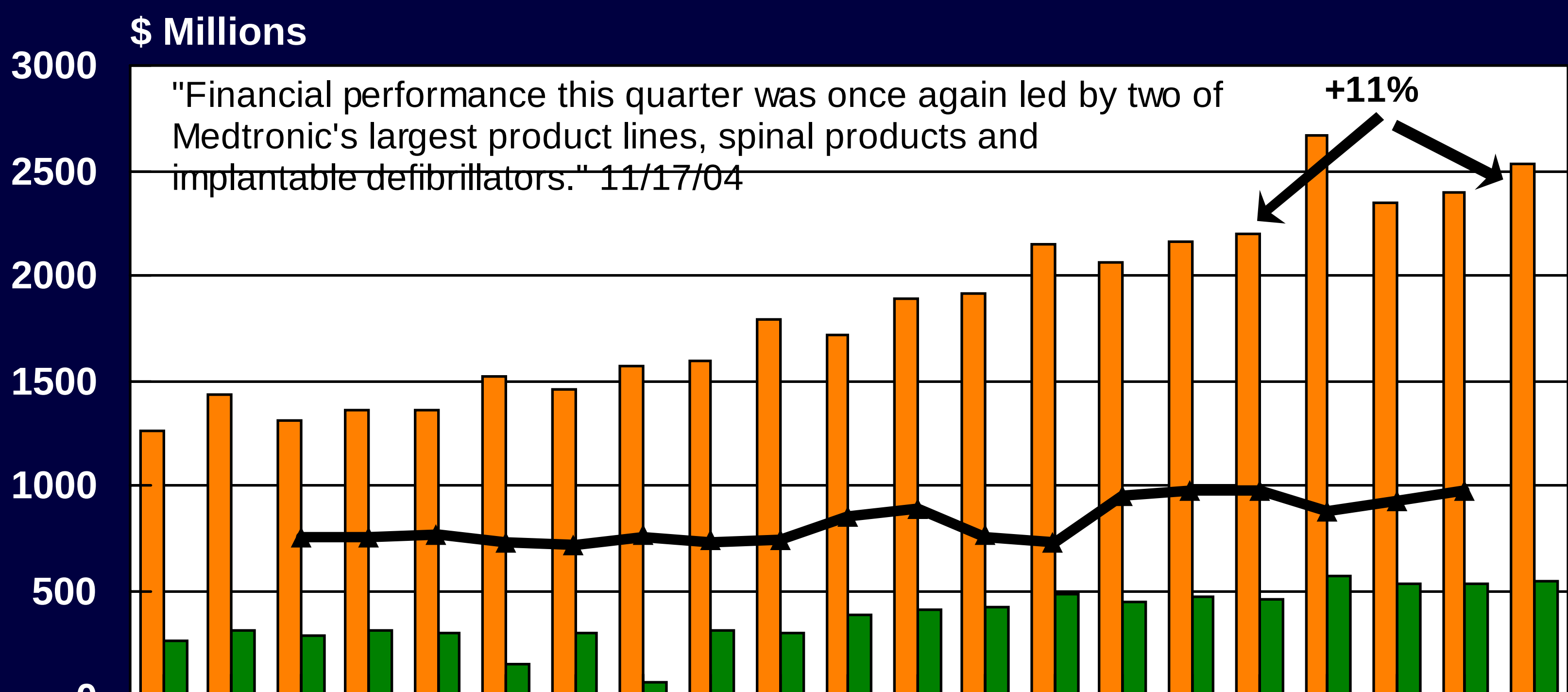
	00				01				02				03				04			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Revenue	277	301	278	325	327	305	217	215	204	209	206	205	188	202	201	218	244	258	250	267
Income	311	32	27	37	41	35	8	8	10	6	20	5	-2	3	10	36	44	26	36	-3
Inventory	111	114	123	129	137	150	153	144	135	125	113	113	103	93	87	92	95	102	101	123

FY ends May 31

CY

Medtronic Inc

Revenue, Net Income & Inventory



	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	99		00				01				02				03				04		
Revenue	1259	1433	1310	1362	1362	1518	1456	1571	1592	1792	1714	1891	1913	2148	2064	2164	2195	2665	2346	2400	2531
Income	260	318	284	309	303	150	302	67	315	301	383	416	428	487	450	476	464	569	530	536	544
Inventory			751	755	764	730	718	763	738	748	851	894	763	728	950	978	976	878	932	978	

CY

MDT

Communications Equipment

Worldwide Telecommunications Equipment Manufacturers ($B)

	2000	2001	2002	2003	2004	'04/'03 % Change
Nokia	27.9	28.0	28.9	34.0	36.6	+7.6
Cisco	23.9	18.3	19.2	19.9	23.6	+18.6
Motorola	37.6	30.0	26.7	27.1	34.7	+28.0
Alcatel	28.8	22.6	15.9	14.9	15.8	+6.0
Ericsson	29.7	20.7	15.3	14.9	18.1	+21.5
Lucent	26.2	20.5	10.8	8.7	9.1	+4.6
Top 6 Total	174.1	140.1	116.8	119.5	137.9	+15.4

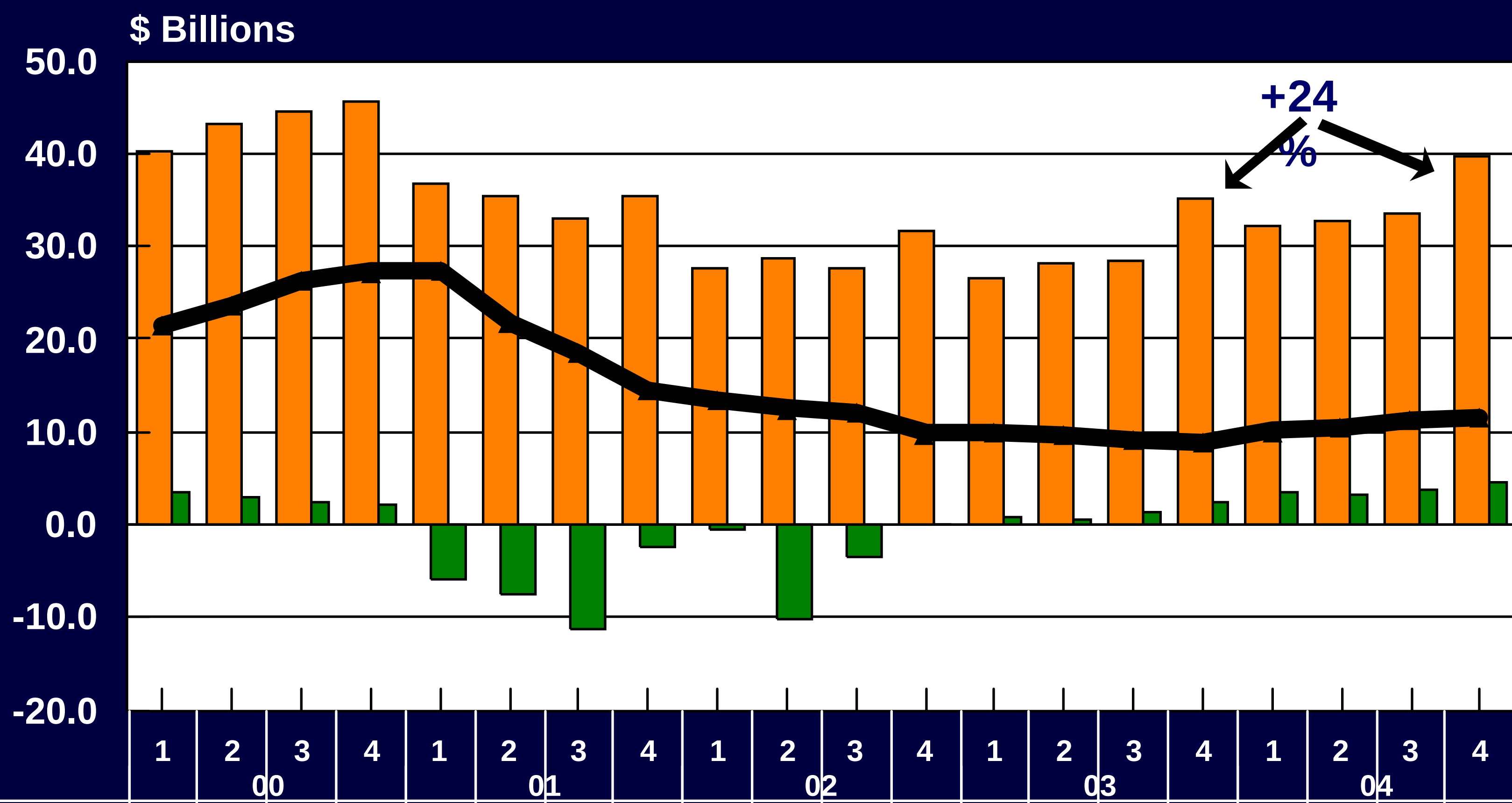
- Siemens not included due to multiple product lines
- Nortel not included due to incomplete 2004 reporting

Growth Resumes

Source: Company financial statements
Alcatel & Ericsson calculated @ fluctuating exchange

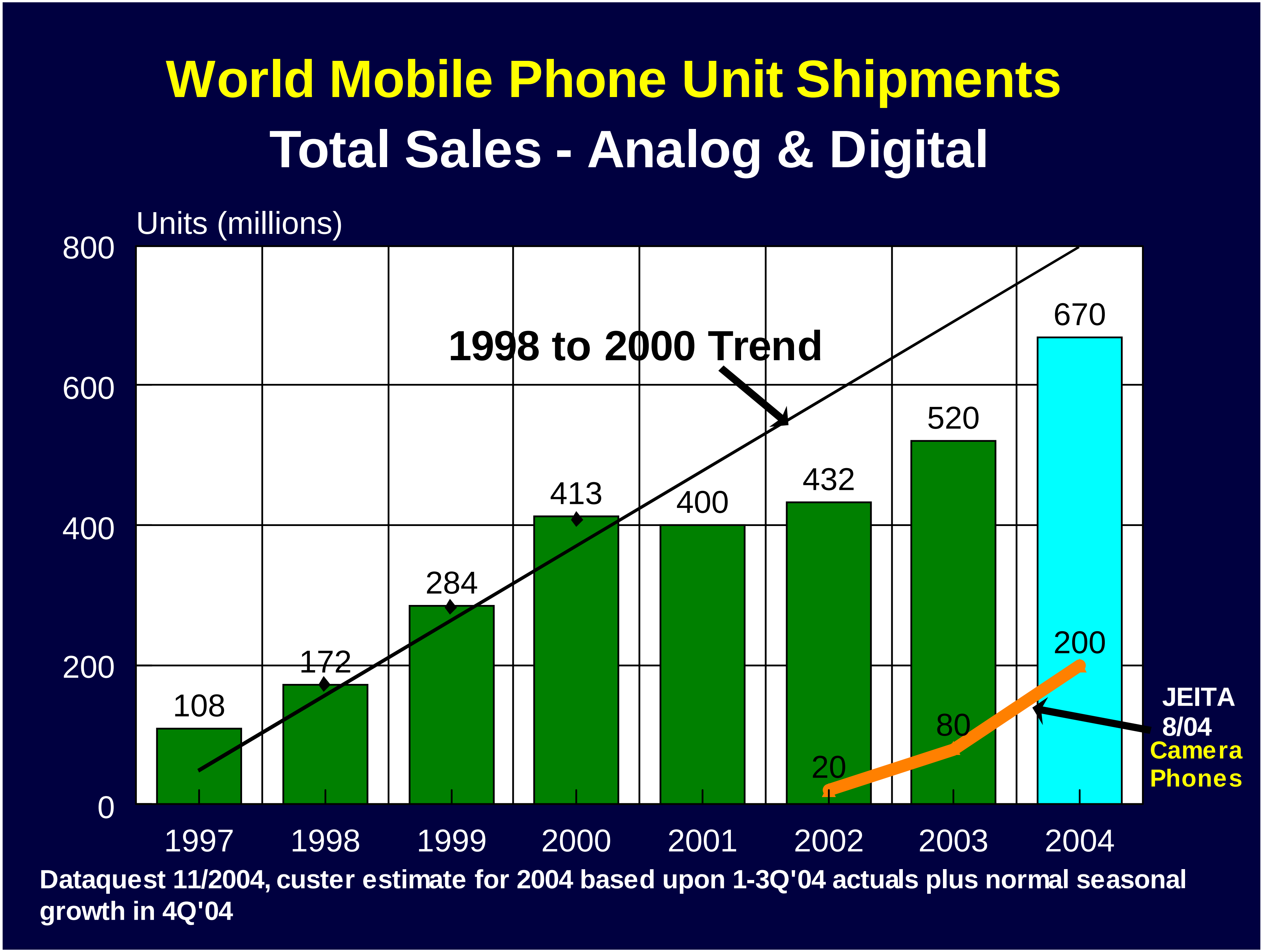
Large "Communications" Equipment Suppliers
Composite of 6 Public Companies

Revenue, Net Income & Inventory

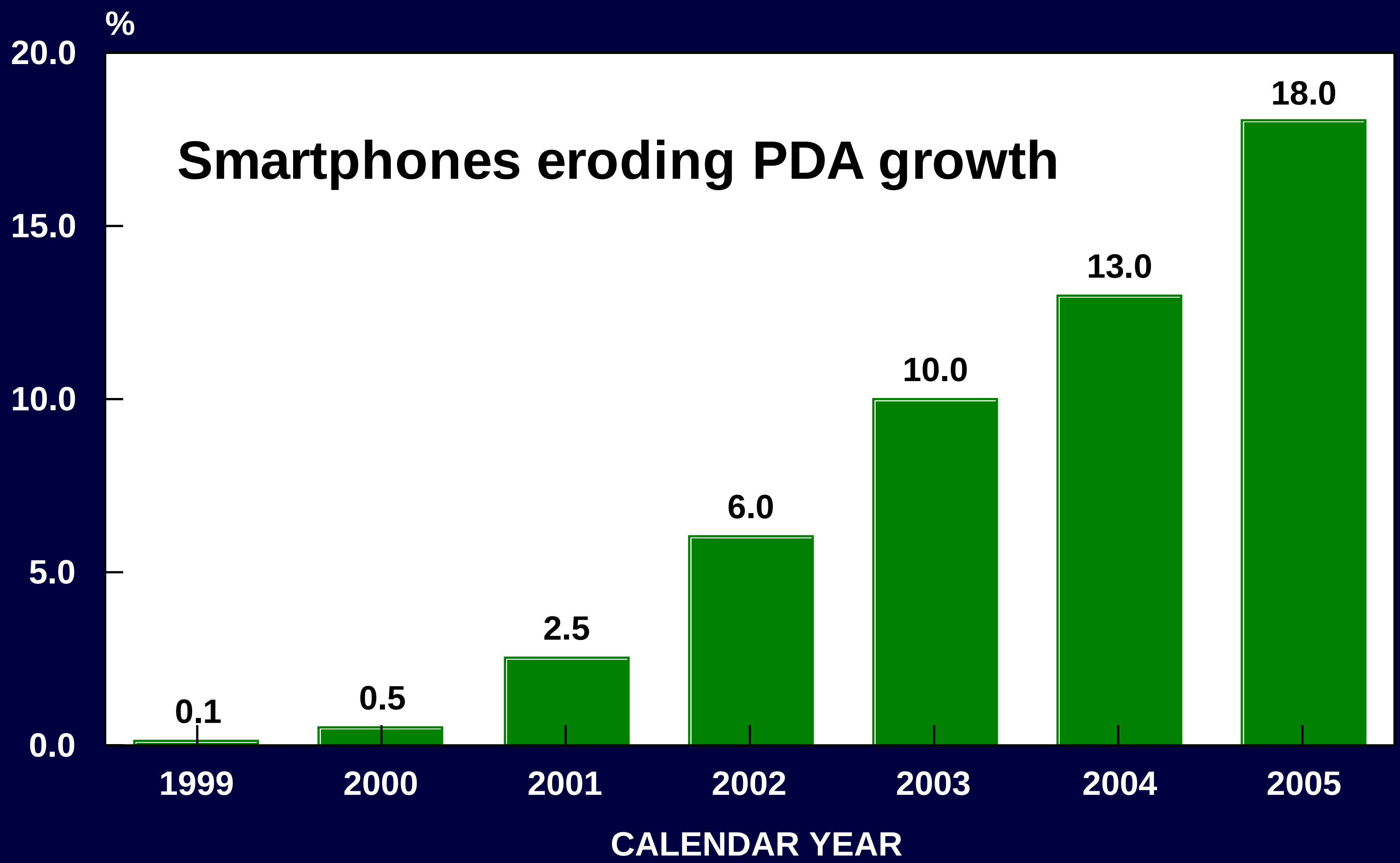


	00 Q1	00 Q2	00 Q3	00 Q4	01 Q1	01 Q2	01 Q3	01 Q4	02 Q1	02 Q2	02 Q3	02 Q4	03 Q1	03 Q2	03 Q3	03 Q4	04 Q1	04 Q2	04 Q3	04 Q4
Revenue	40.1	43.1	44.4	45.5	36.8	35.3	33.0	35.5	27.7	28.6	27.6	31.8	26.6	28.1	28.4	35.1	32.1	32.8	33.5	39.6
Income	3.5	3.0	2.4	2.2	-5.8	-7.6	-11.2	-2.3	-0.5	-10.3	-3.4	-0.1	0.9	0.4	1.4	2.3	3.5	3.1	3.8	4.5
Inventory	21.5	23.7	26.4	27.3	27.5	21.8	18.5	14.6	13.5	12.5	12.1	9.8	10.0	9.7	9.1	8.9	10.1	10.5	11.3	11.5

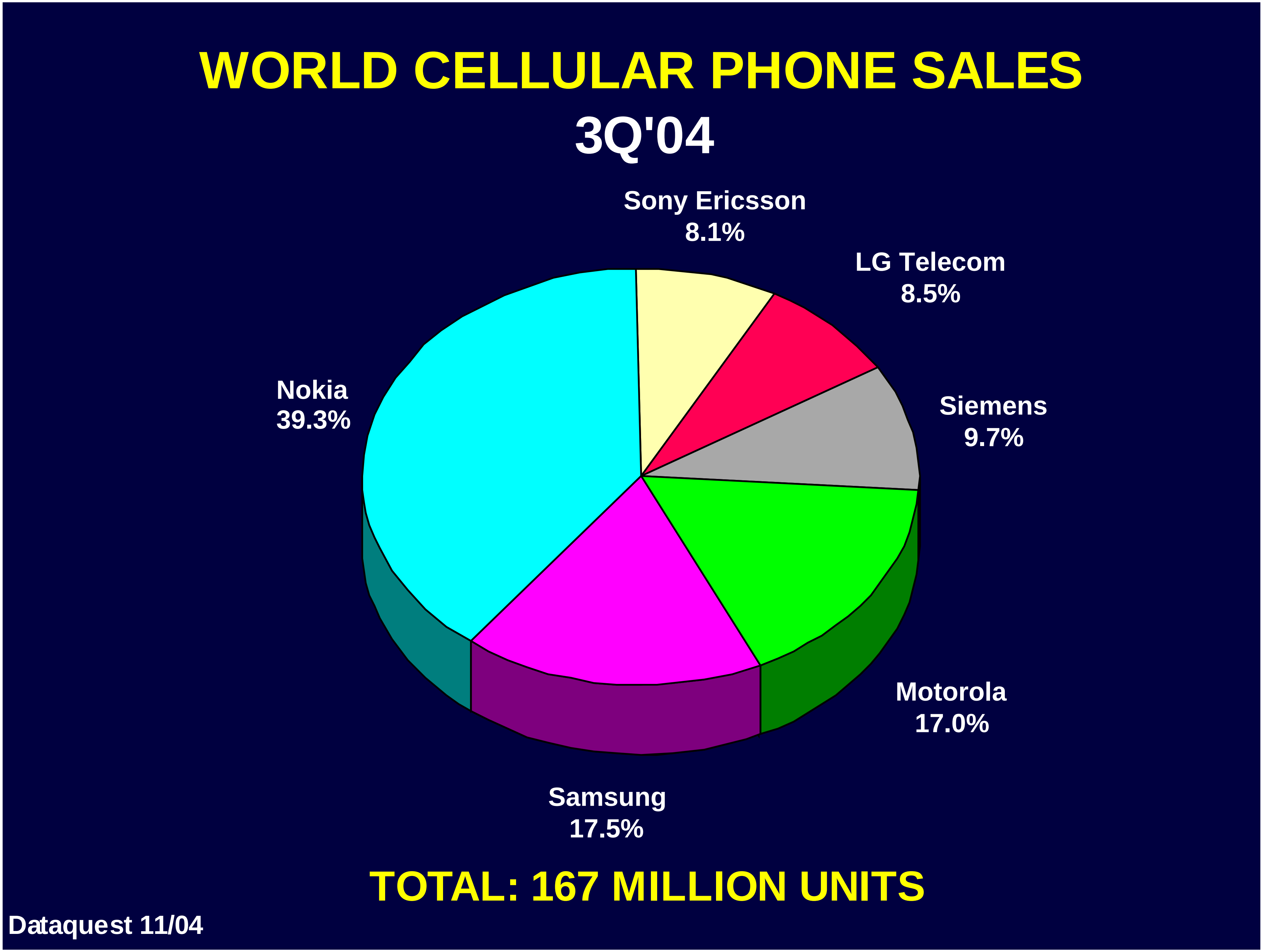
Alcatel, Cisco, Ericsson, Lucent, Motorola, Nokia
Euros & Krona converted at fluctuating exchange


World Mobile Phone Unit Shipments
Total Sales - Analog & Digital
Units (millions)
800
600
400
200
0
1998 to 2000 Trend
108
172
284
413
400
432
520
670
20
80
200
JEITA
8/04
Camera
Phones
1997
1998
1999
2000
2001
2002
2003
2004
Dataquest 11/2004, custer estimate for 2004 based upon 1-3Q'04 actuals plus normal seasonal growth in 4Q'04

Smartphone Market Share of Mobile Phone Market



Financial Times 2/04 (Gartner Dataquest & Lehman brothers)

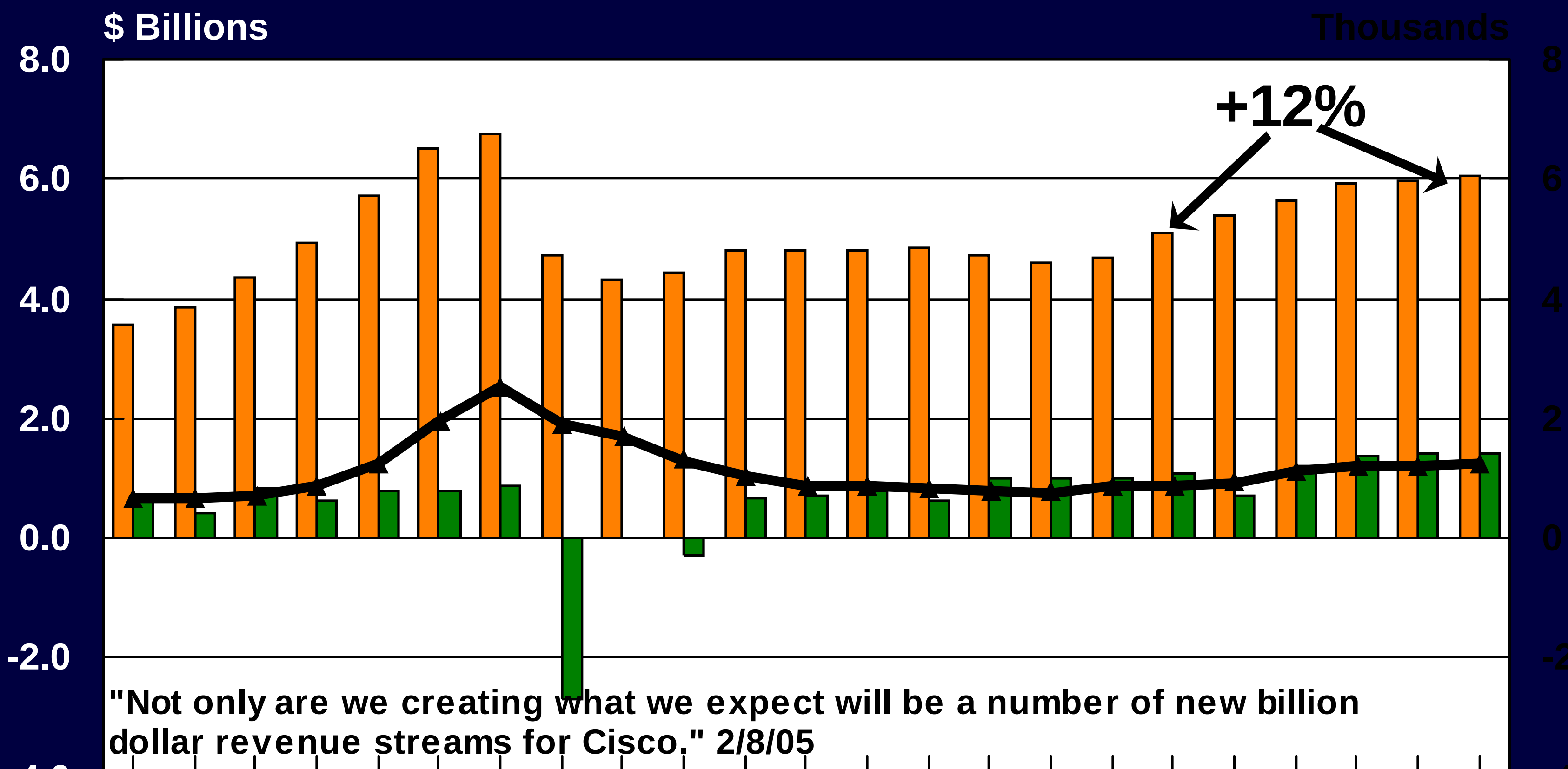

WORLD CELLULAR PHONE SALES
3Q'04
Sony Ericsson
8.1%
LG Telecom
8.5%
Siemens
9.7%
Nokia
39.3%
Motorola
17.0%
Samsung
17.5%
TOTAL: 167 MILLION UNITS
Dataquest 11/04

The mobile phone supply chain is undergoing changes since cellular phone telephone makers no longer have the leverage they once did.

Service providers are determining what hardware suppliers provide and are taking more control of the value chain - thus dictating which models and features are offered.

Internet Infrastructure

Cisco Systems
Revenue, Net Income & Inventory



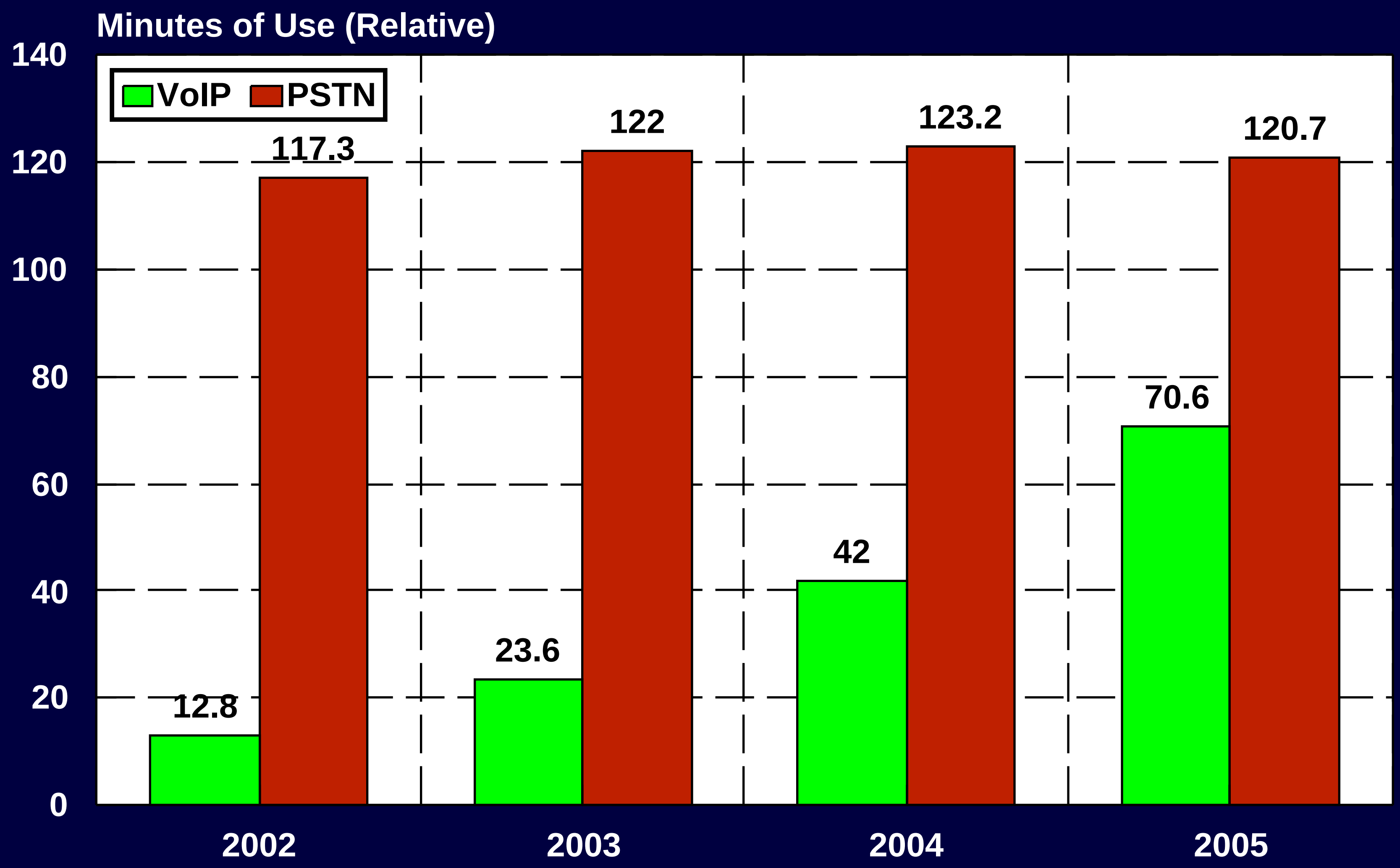
	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
		99				00				01				02				03				04	
Revenue	3.6	3.9	4.4	4.9	5.7	6.5	6.7	4.7	4.3	4.4	4.8	4.8	4.8	4.8	4.7	4.6	4.7	5.1	5.4	5.6	5.9	6.0	6.1
Income	0.7	0.4	0.8	0.6	0.8	0.8	0.9	-2.7	0.0	-0.3	0.7	0.7	0.8	0.6	1.0	1.0	1.0	1.1	0.7	1.2	1.4	1.4	1.4
Inventory	0.7	0.7	0.7	0.9	1.2	2.0	2.5	1.9	1.7	1.3	1.0	0.9	0.9	0.8	0.8	0.8	0.9	0.9	0.9	1.1	1.2	1.2	1.3

CY

CSCO


U.S. Online Retail Sales
$ Billions (not seasonally adjusted)
18
16
14
12
10
8
6
4
4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3 4 1 2 3
99
00
01
02
03
04
CALENDAR YEAR
Census Bureau of the U.S. Department of Commerce 2/04

Voice over IP vs. Public Switched Telephone Network



Network World: IDC 10/03

Wireless Group Standards

Technology	Speed (bit/sec)	Status
UMTS	up to 384 K (burst)	Available
OFDM	up to 1.5 M	Available
EV-DO	up to 2.4 M (burst)	Available
HSDPA	up to 14.4 M	In trials
4G	up to 300 M	In trials

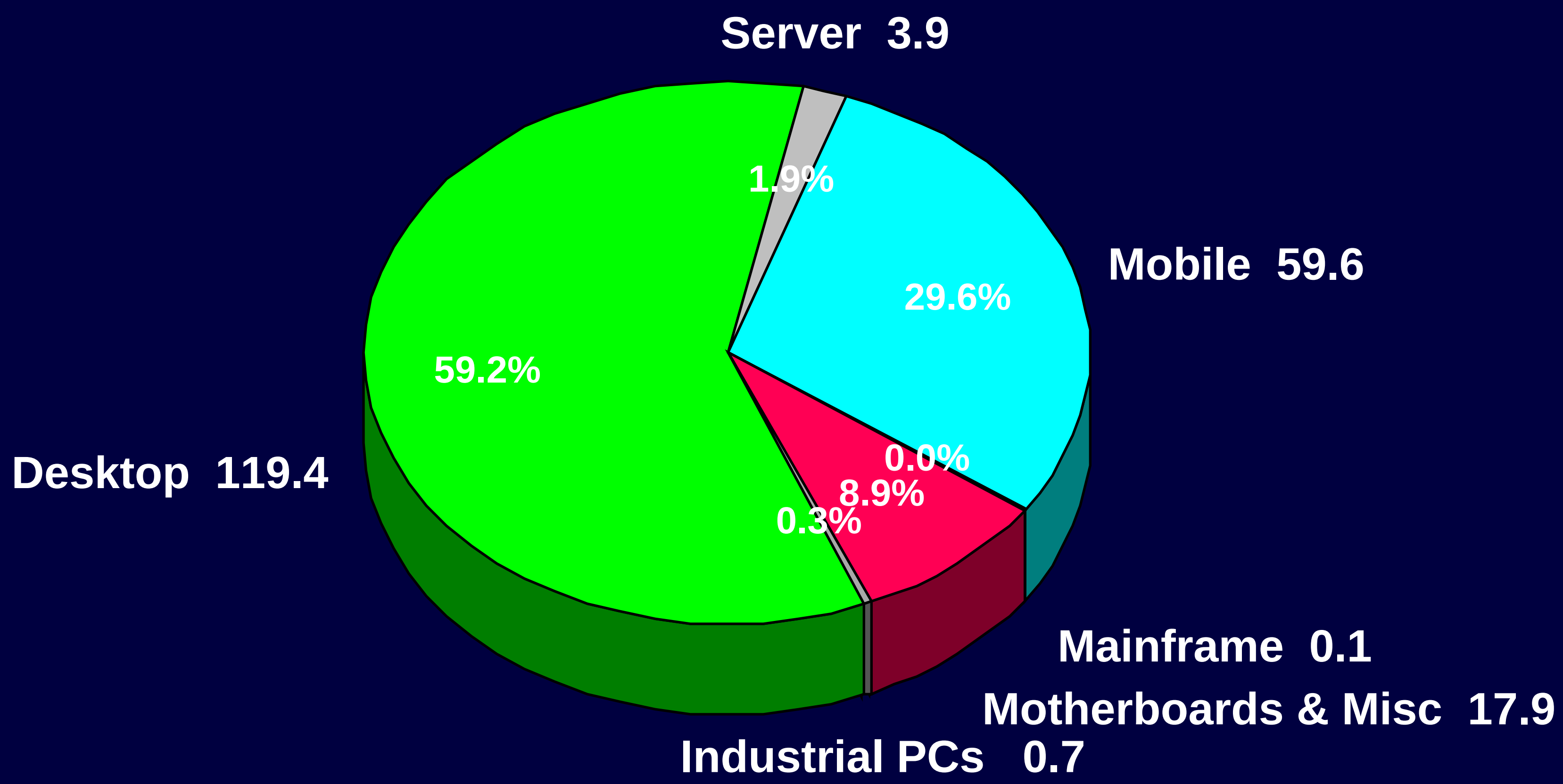
UMTS= Universal Mobile Telecomunications System
OFDM=Orthogonal Frequency Division Multiplexing
EV-DO=Evolution-Data Only
HSDPA= High-speed Download Packet Access

www.nwfusion.com 1/05

Computers & Related Products

World Computer Equipment Market

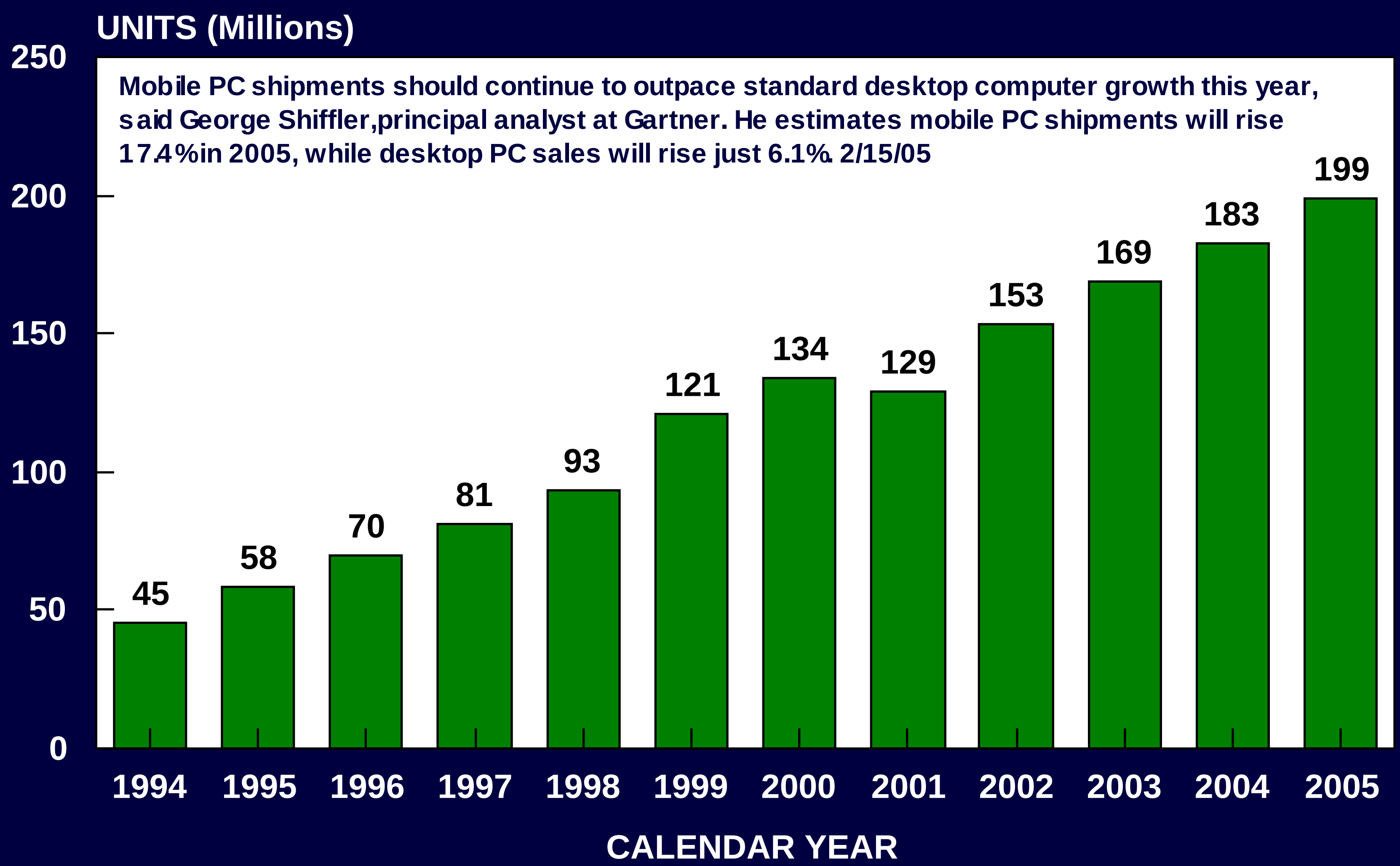
2004



Total: 201 Million Units

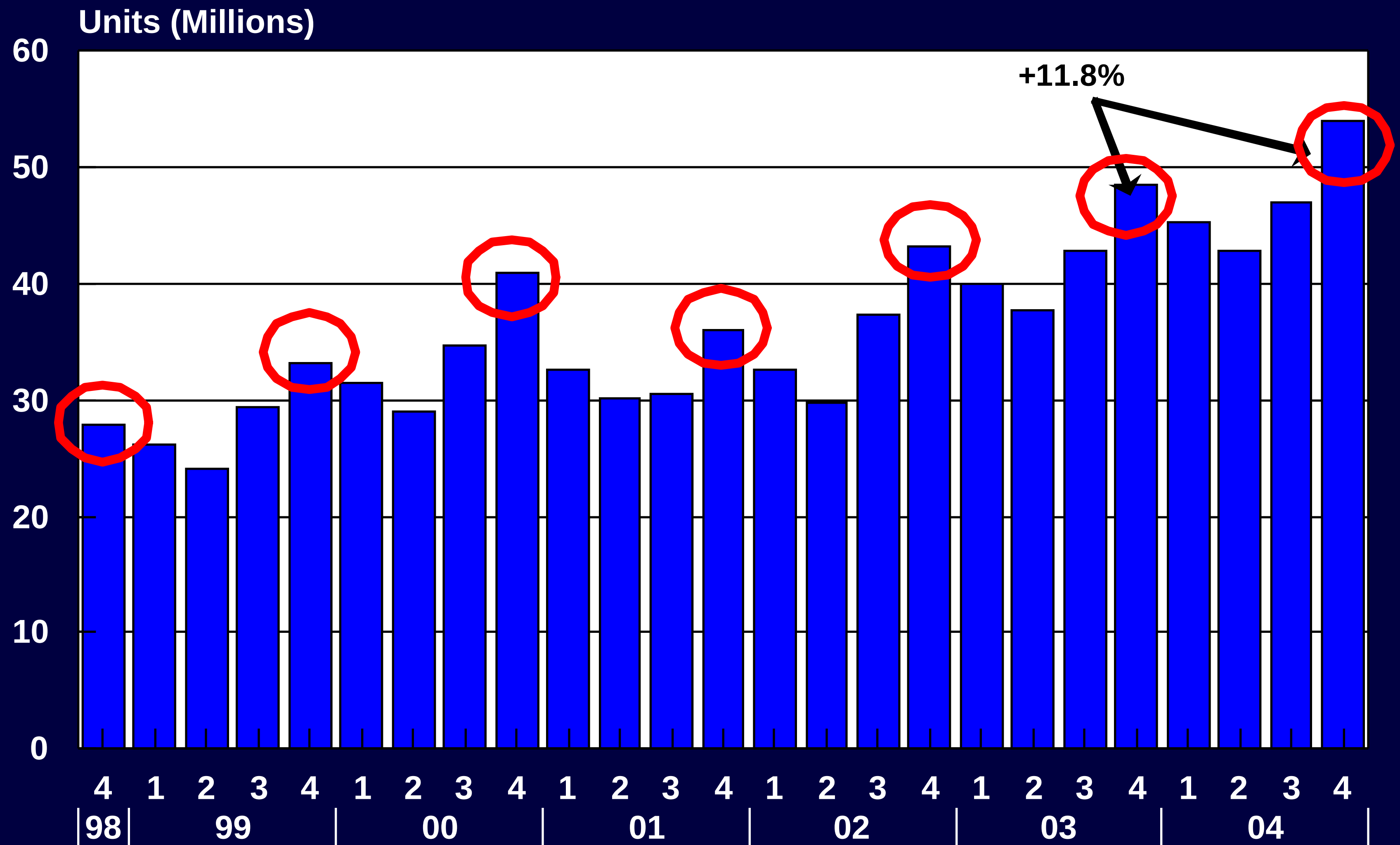
Bishop & Associates 2003

PERSONAL COMPUTER GROWTH
GLOBAL SALES



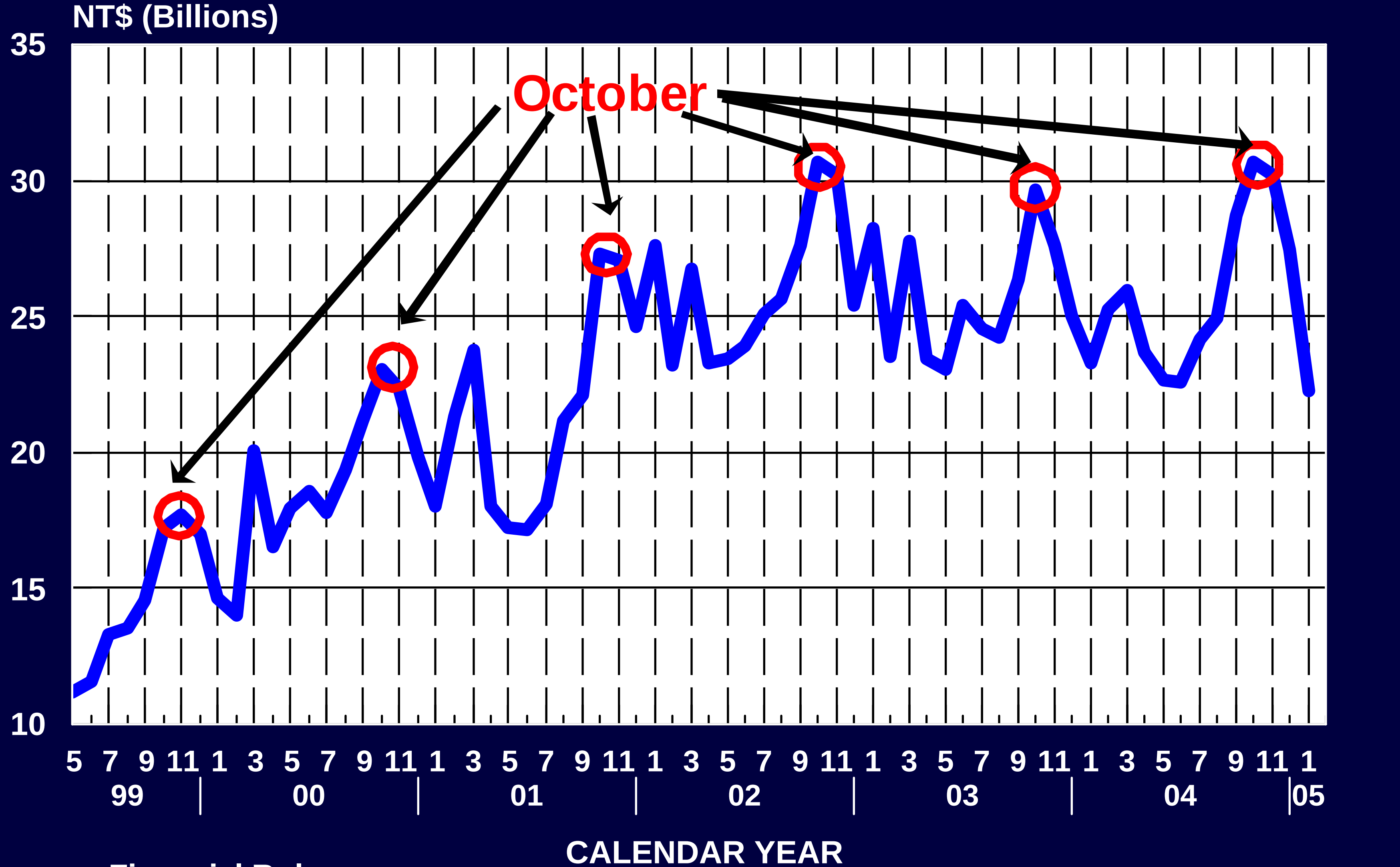
Gartner Dataquest 2/2005
Desktops, Notebooks, Ultraportables, IA-32 Servers

Personal Computer Unit Shipments
World



Gartner 1/05
Servers not included

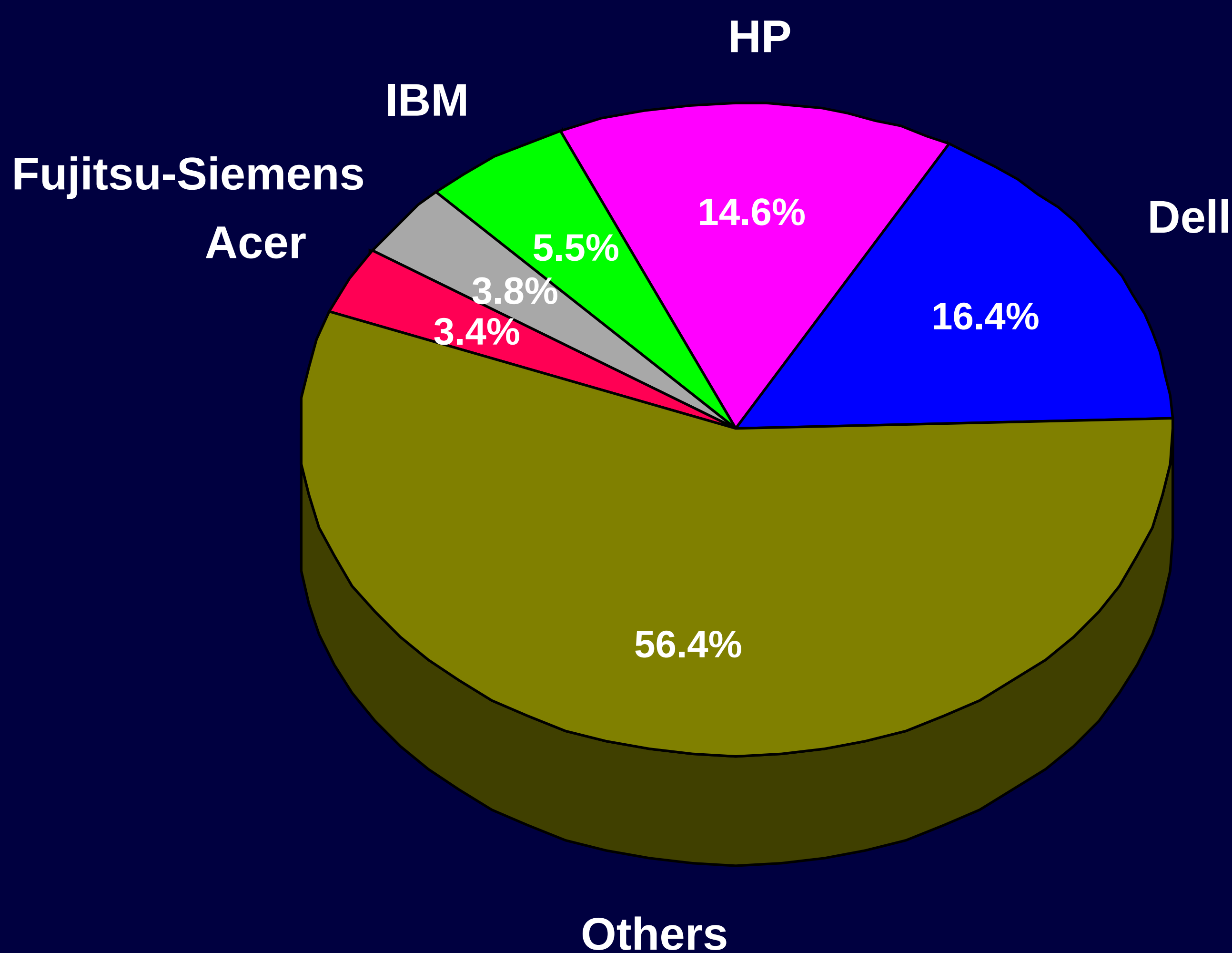
Taiwan Motherboard Vendor Sales
Composite of 13 Large Manufacturers



Company Financial Releases

ABIT, AOpen, Asustek, Biostar, Chaintech, Elite Group, Epox, Giga-Byte, Leadtek, Microstar Intl, Shuttle, Soyo, Universal Scientific

WORLD PERSONAL COMPUTER MARKET
2004

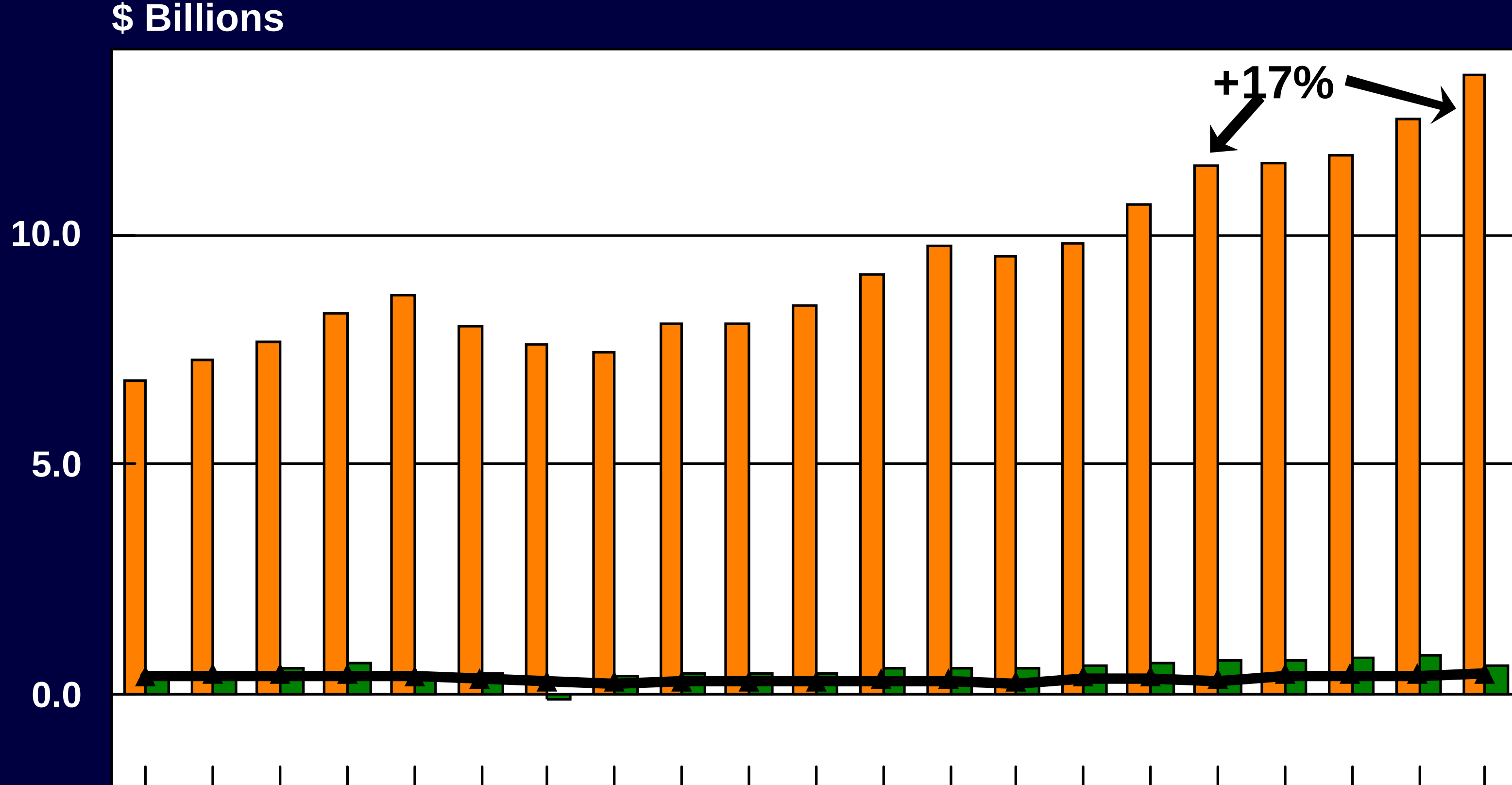


TOTAL: 189 M UNITS

DATAQUEST 1/2005
Preliminary, includes desk-based PCs, mobile PCs and IA-32 servers

Dell Computer

Revenue, Net Income & Inventory



	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	99		00				01				02				03				04		
SALES	6.8	7.3	7.7	8.3	8.7	8.0	7.6	7.5	8.1	8.1	8.5	9.1	9.7	9.5	9.8	10.6	11.5	11.5	11.7	12.5	13.5
PROFITS	0.4	0.5	0.6	0.7	0.4	0.5	-0.1	0.4	0.5	0.5	0.5	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.8	0.8	0.7
Inventory	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.3	0.4	0.4	0.4	0.5

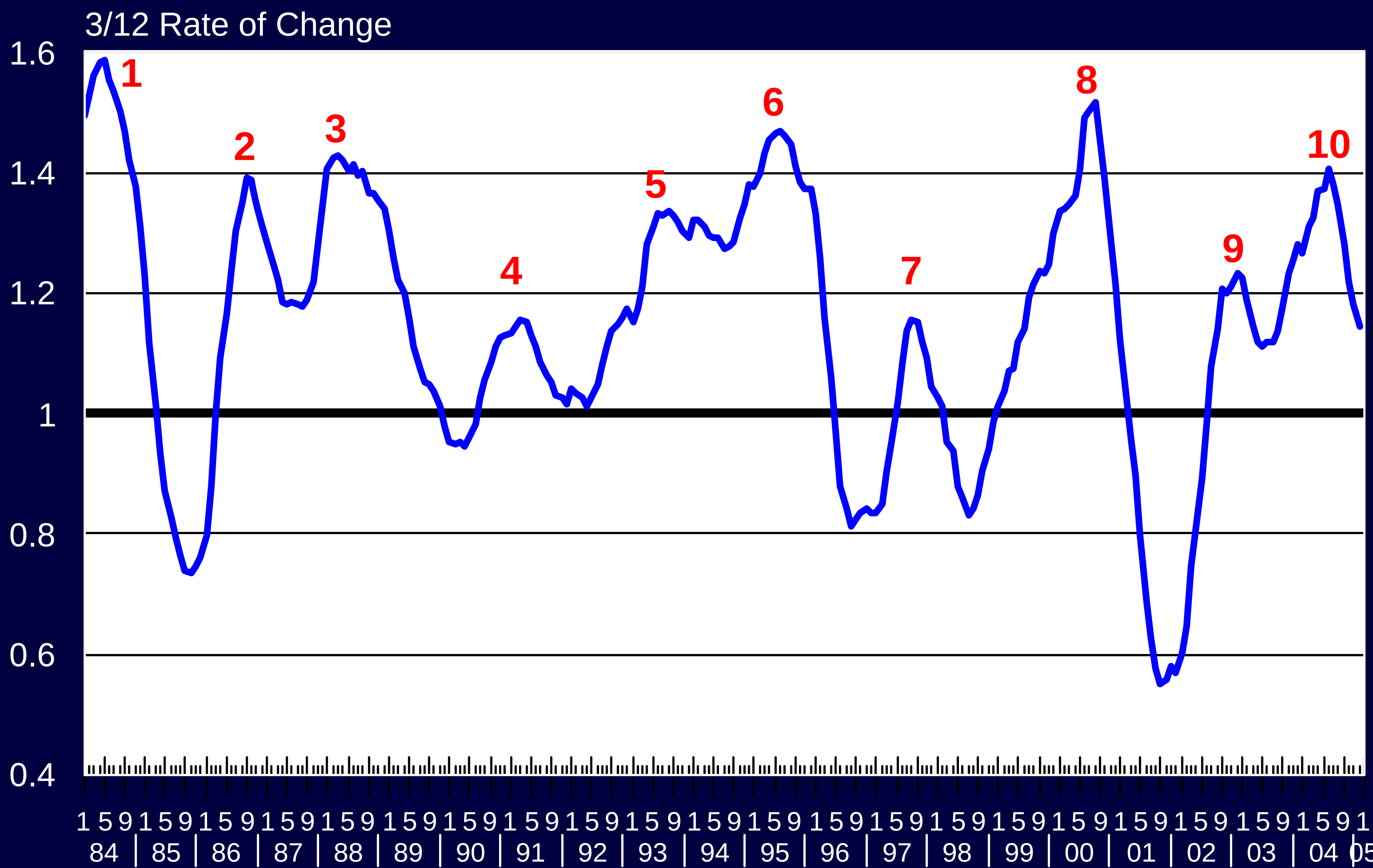
CY

FY ends October

Semiconductors

Global Semiconductor Shipments

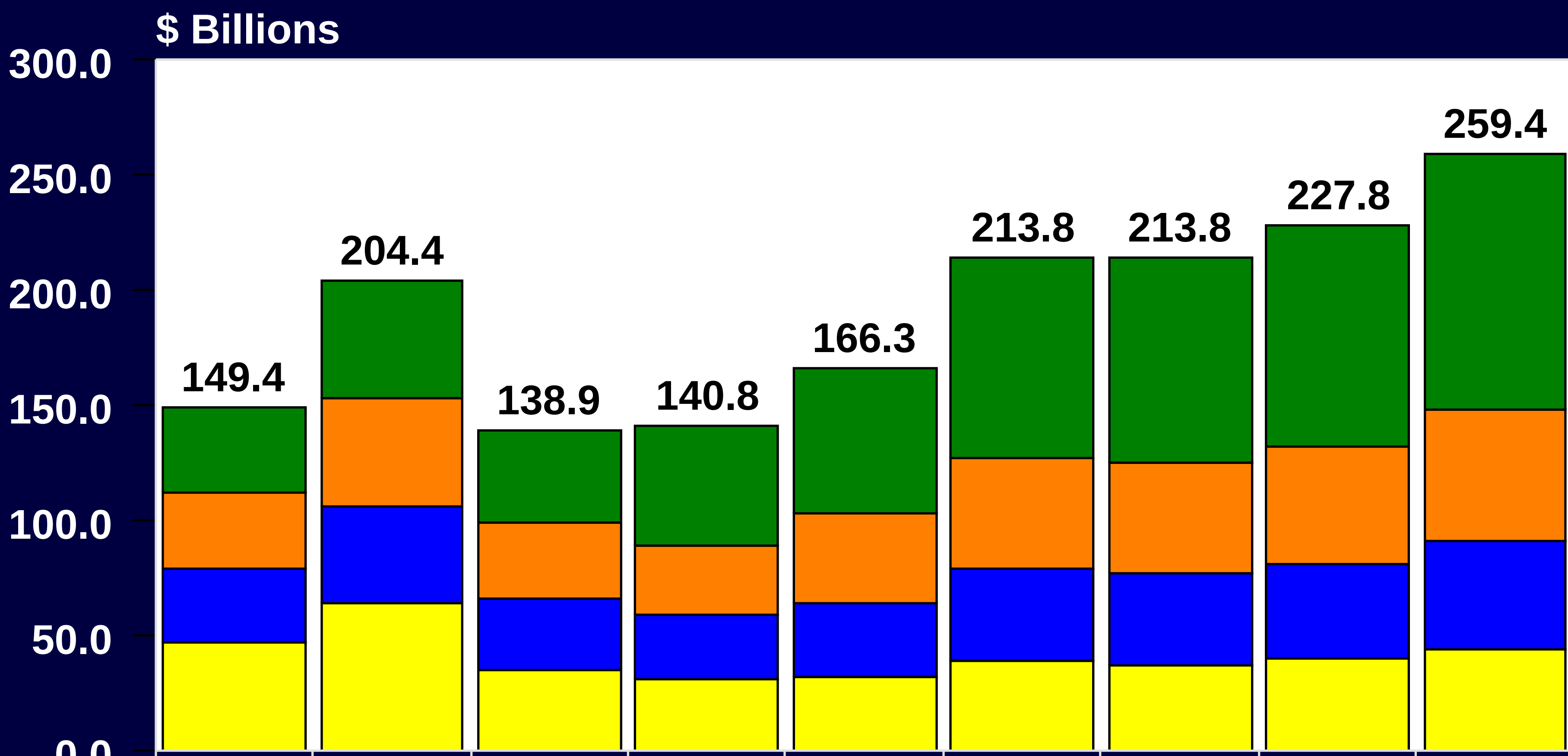
3-Month Growth Rates on $ Basis



Total $ Shipments from All Countries to an Area

SIA website: www.sia-online.org/

Worldwide Semiconductor Market by Geography
SIA Forecast

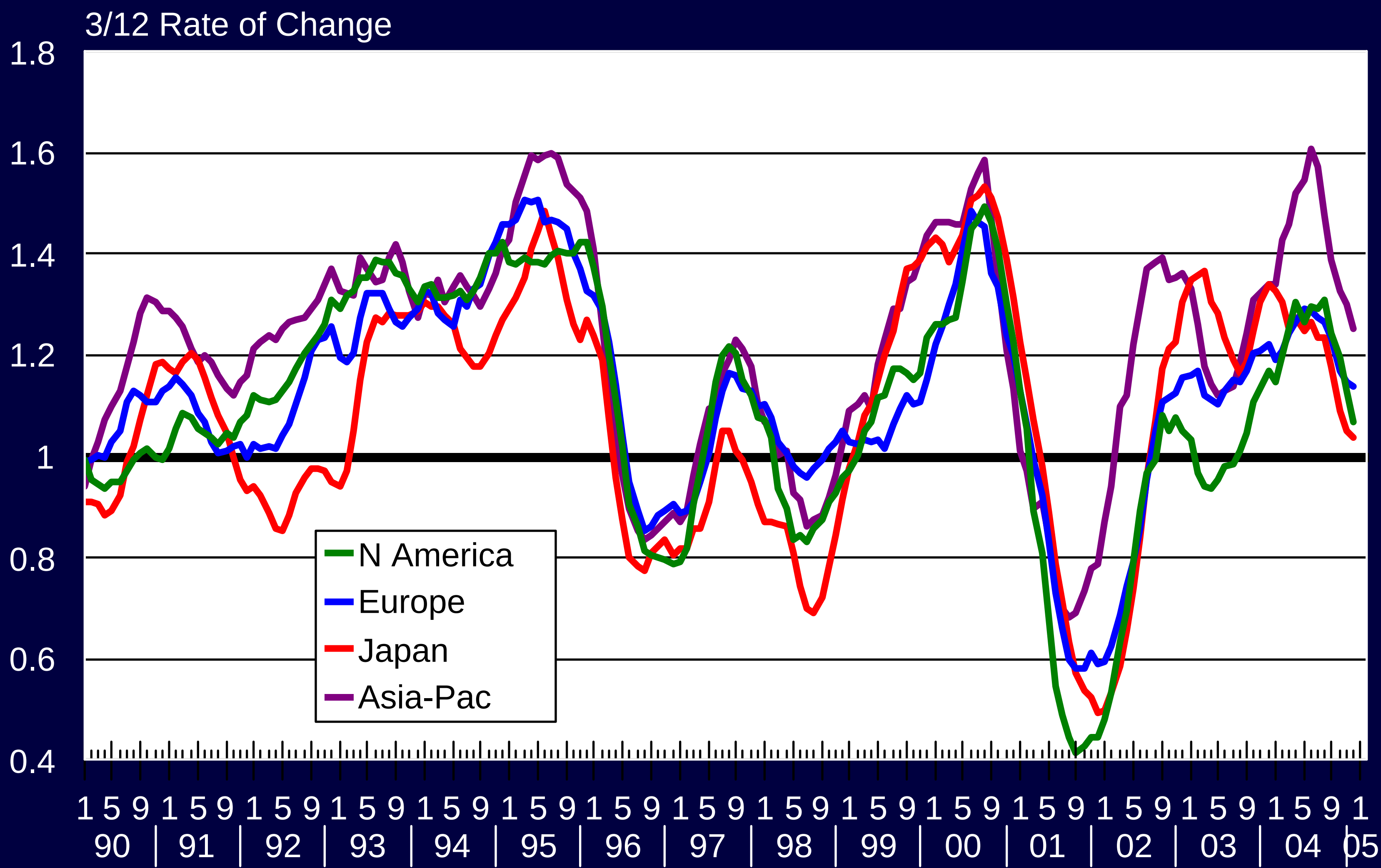


	1999	2000	2001	2002	2003	2004	2005	2006	2007
Asia Pacific	37.2	51.3	39.8	51.2	62.8	86.9	88.6	95.4	110.8
Japan	32.8	46.7	33.1	30.5	38.9	47.8	47.9	50.8	57.1
Europe	31.9	42.3	30.2	27.8	32.3	39.6	39.6	41.7	47.2
N. America	47.5	64.1	35.8	31.3	32.3	39.5	37.7	39.9	44.3

SIA 11/2004

Semiconductor Growth Rates

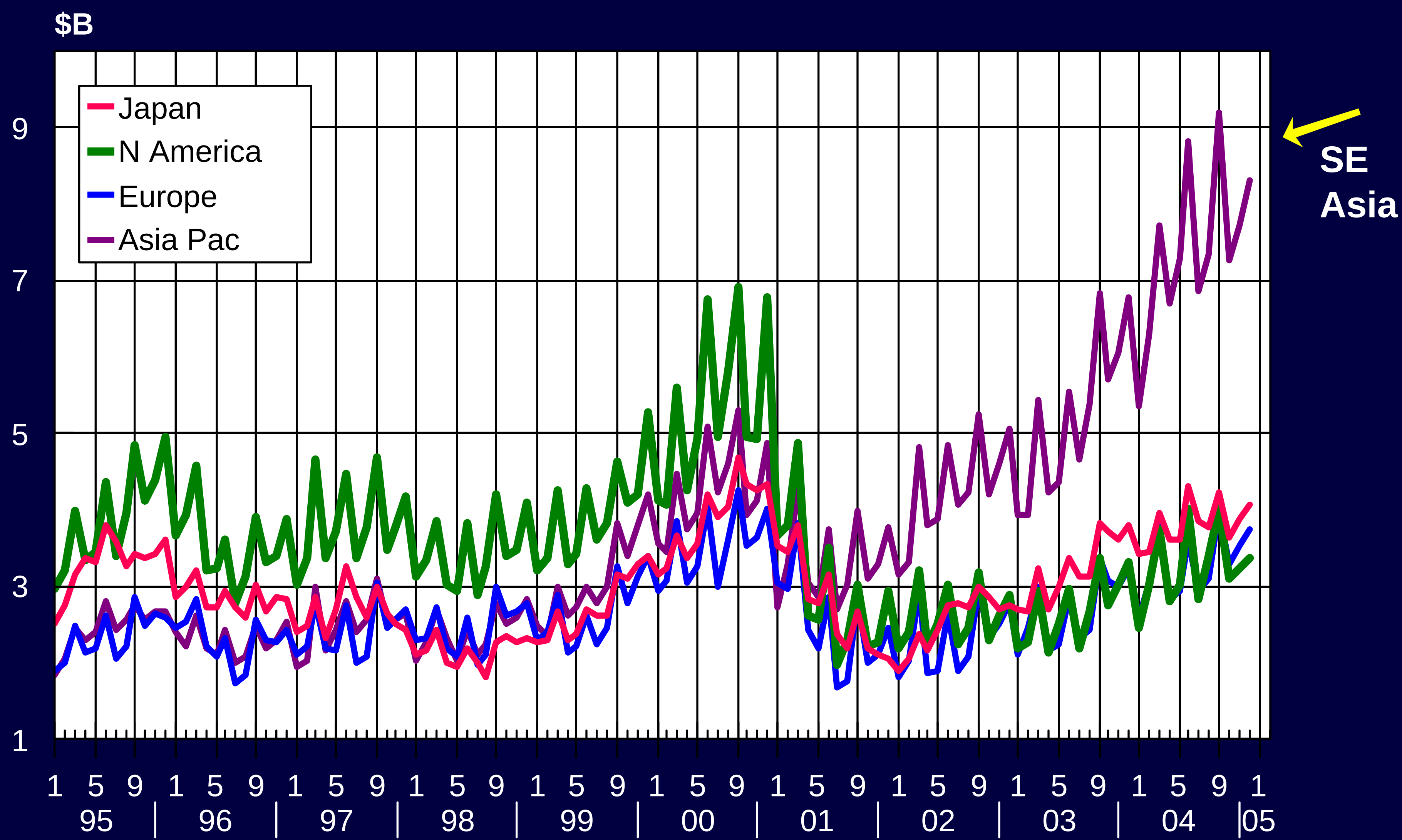
Total $ Shipments to an Area



Total $ Shipments from All Countries to an Area
SIA website: www.sia-online.org/

Total Semiconductor Shipments to an Area

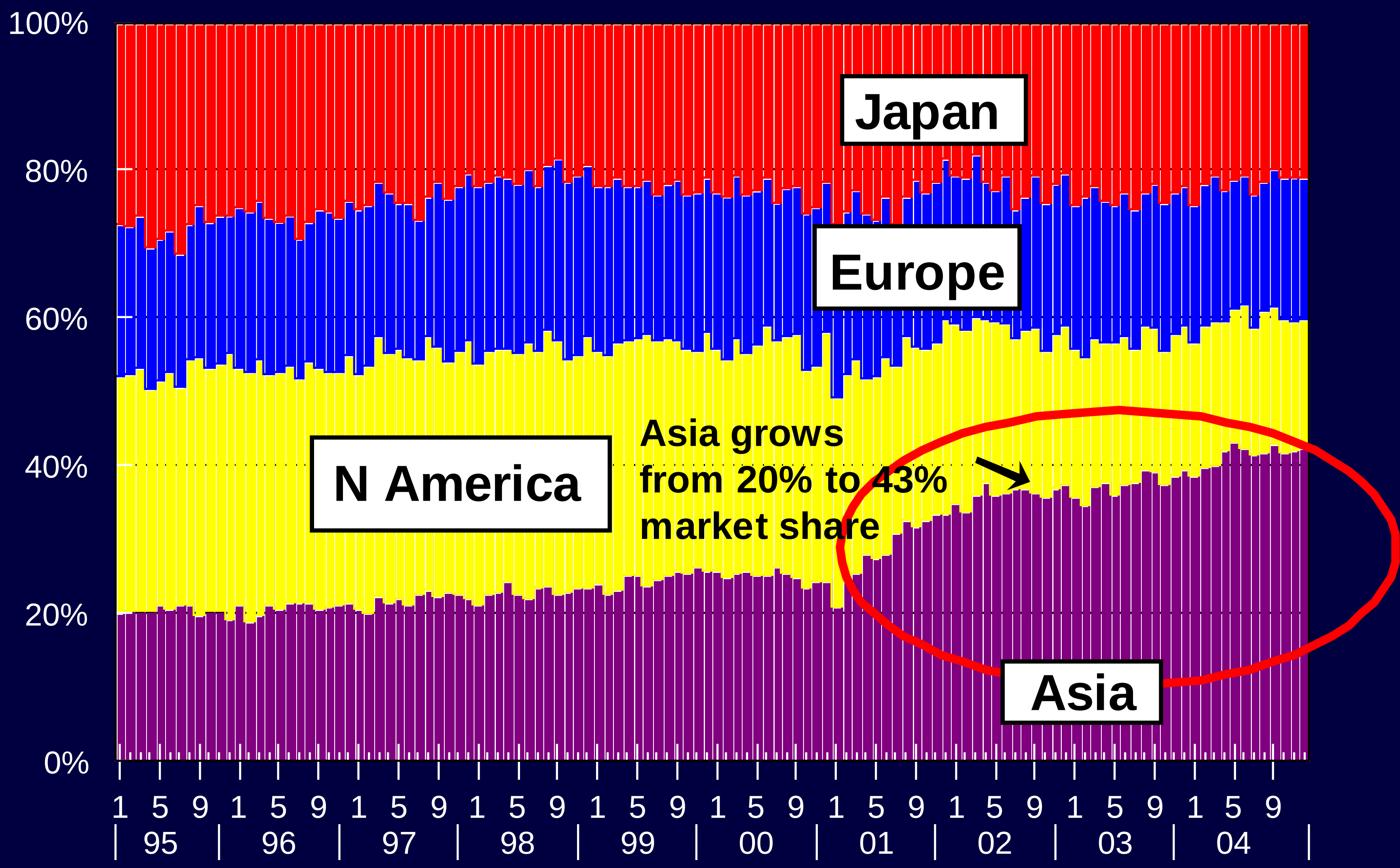
Monthly Shipments - Reporting Firms



SIA website: www.sia-online.org/

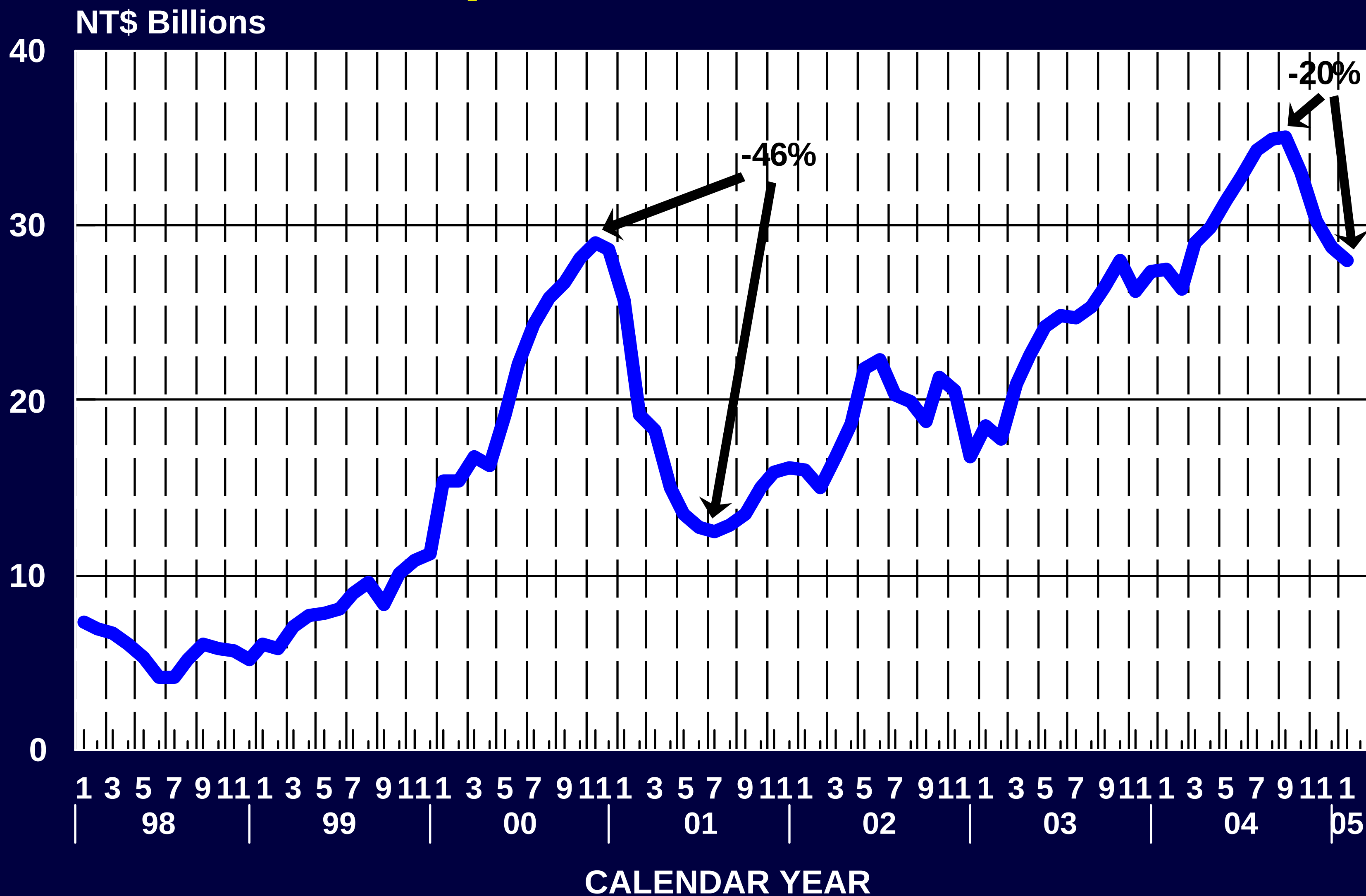
Total Semiconductor Shipments to an Area

Monthly Shipments - Reporting Firms



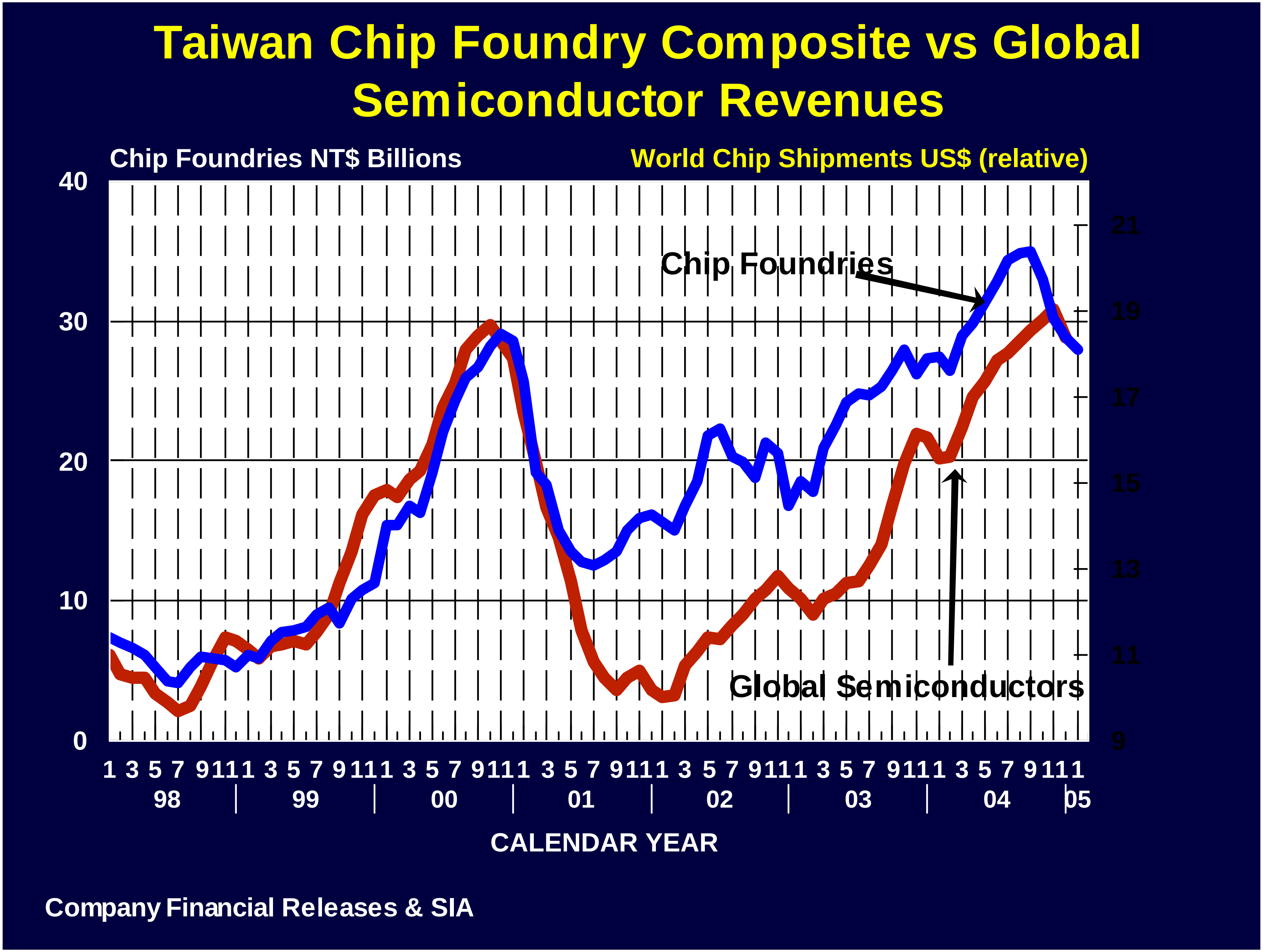
SIA website: www.sia-online.org/

Taiwan Chip Foundry Revenues
Composite of TSMC & UMC



Company Financial Releases

Taiwan Semiconductor Manufacturing Company & United Microelectronics

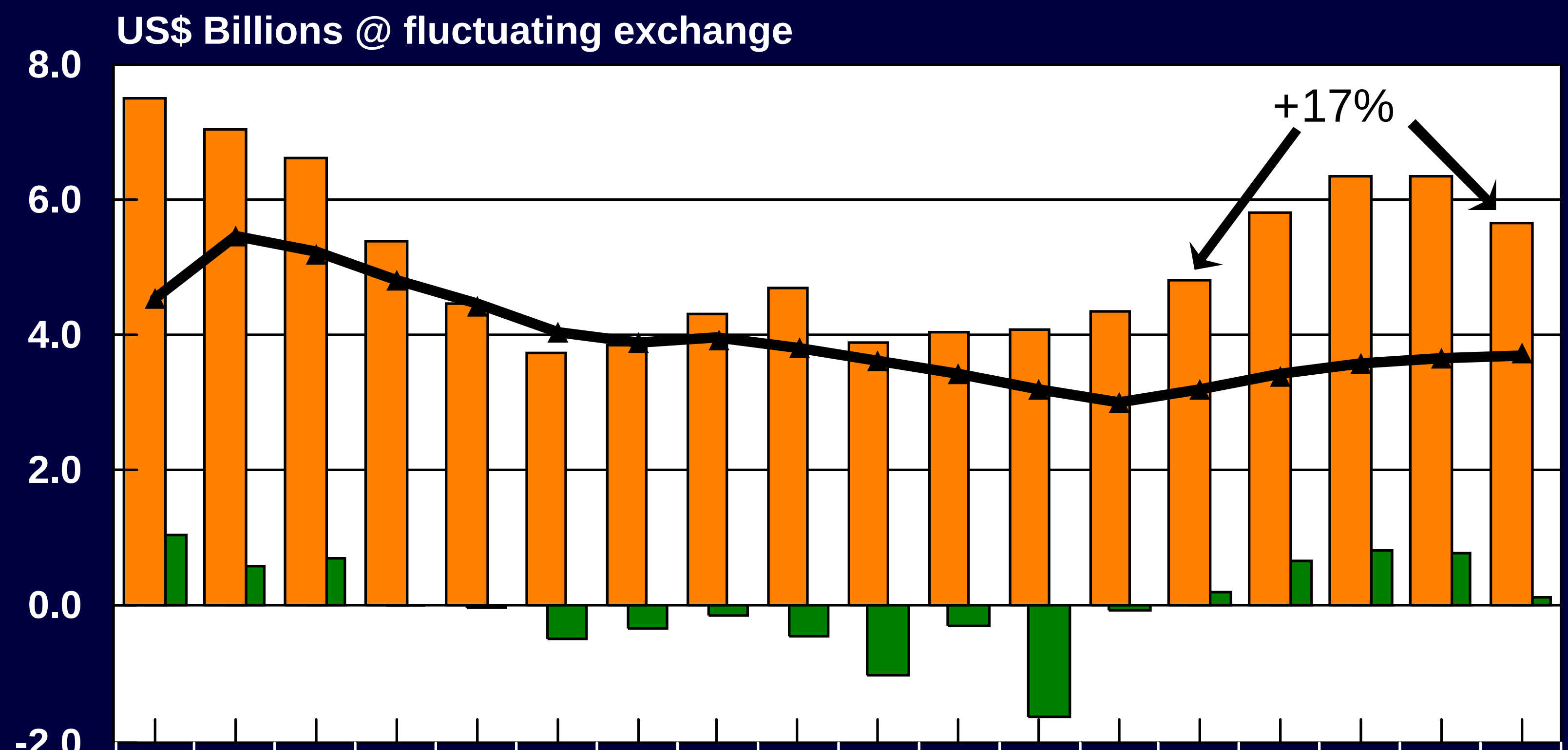


Taiwan Chip Foundry Composite vs Global Semiconductor Revenues
Chip Foundries NT$ Billions
World Chip Shipments US$ (relative)
40
30
20
10
0
21
19
17
15
13
11
9
Chip Foundries
Global Semiconductors
1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11 1 3 5 7 9 11 1
98
99
00
01
02
03
04
05
CALENDAR YEAR
Company Financial Releases & SIA

Semiconductor
Fab, Assembly,
Packaging,Test & Measurement
Equipment

Semiconductor Fab, Test & Measurement Composite of 14 Public Companies

Revenue, Net Income & Inventory

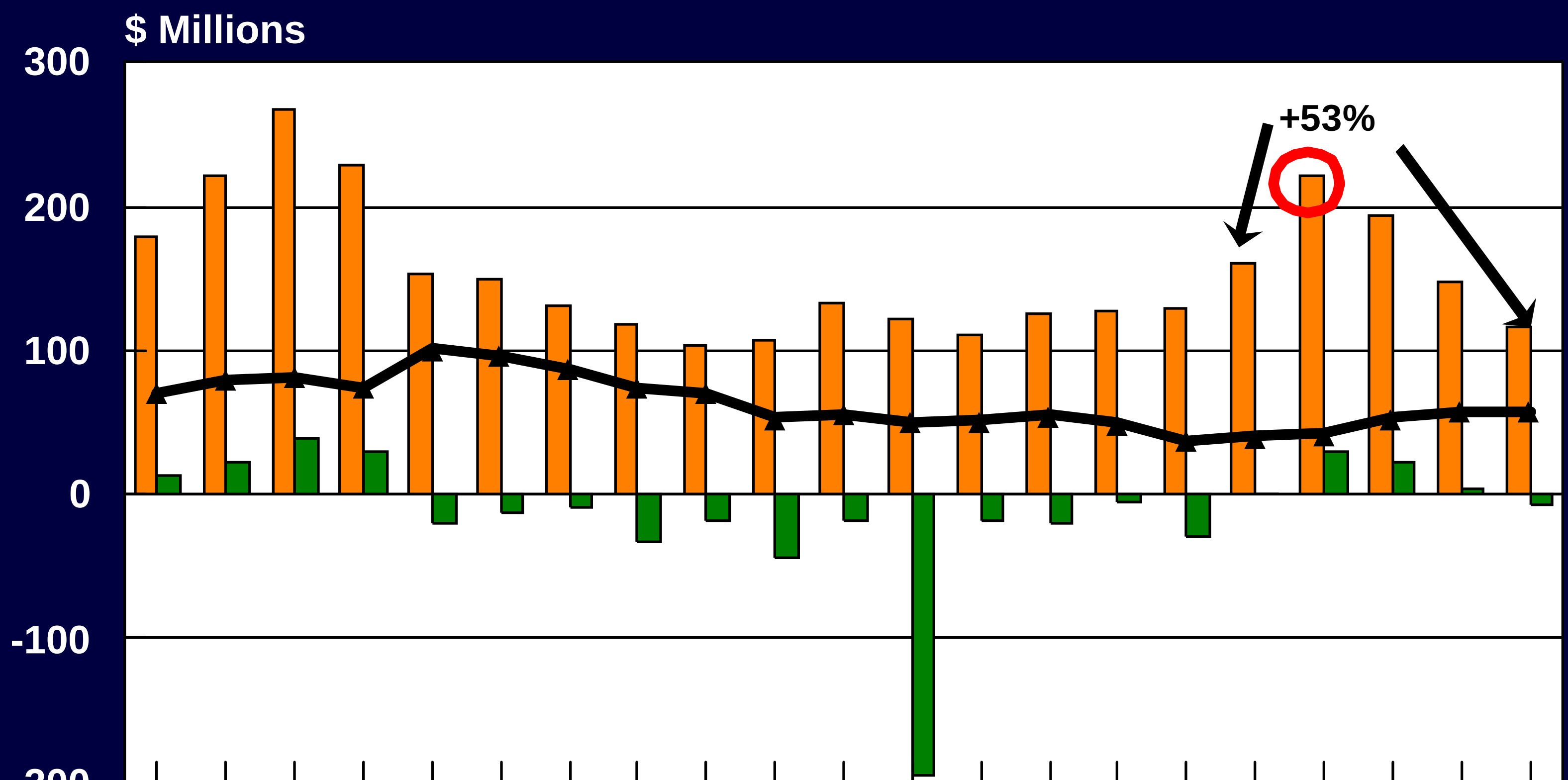


	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	00		01				02				03				04			
Revenue	7.5	7.0	6.6	5.4	4.4	3.7	3.9	4.3	4.7	3.9	4.0	4.1	4.3	4.8	5.8	6.3	6.3	5.6
Income	1.0	0.6	0.7	0.0	-0.0	-0.5	-0.3	-0.2	-0.4	-1.0	-0.3	-1.6	-0.1	0.2	0.7	0.8	0.8	0.1
Inventory	4.5	5.5	5.2	4.8	4.4	4.0	3.9	3.9	3.8	3.6	3.4	3.2	3.0	3.2	3.4	3.6	3.7	3.7

Applied Materials, KLA-Tencor, Novellus Systems, Agilent Technologies, BTU International, FEI Co, IBIS Tech, Kulicke & Soffa, MKS Instruments, ST Assembly Test Services, Teradyne, Ultratech Stepper,

Kulicke & Soffa
Revenue, Net Income & Inventory

"We are pleased with the progress made in our technology projects and our cost reductionefforts and look forward to the improved financial performance they will drive when the cycle turns" 1/27/05



	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	99		00				01				02				03				04		
Revenue	180	222	268	229	153	149	131	118	103	107	132	122	111	126	128	129	160	222	195	148	116
Income	13	22	38	30	-20	-12	-9	-33	-17	-44	-18	-195	-18	-19	-6	-28	1	29	23	3	-7
Inventory	70	80	82	74	101	97	87	74	71	53	56	51	51	55	49	38	40	42	54	58	58

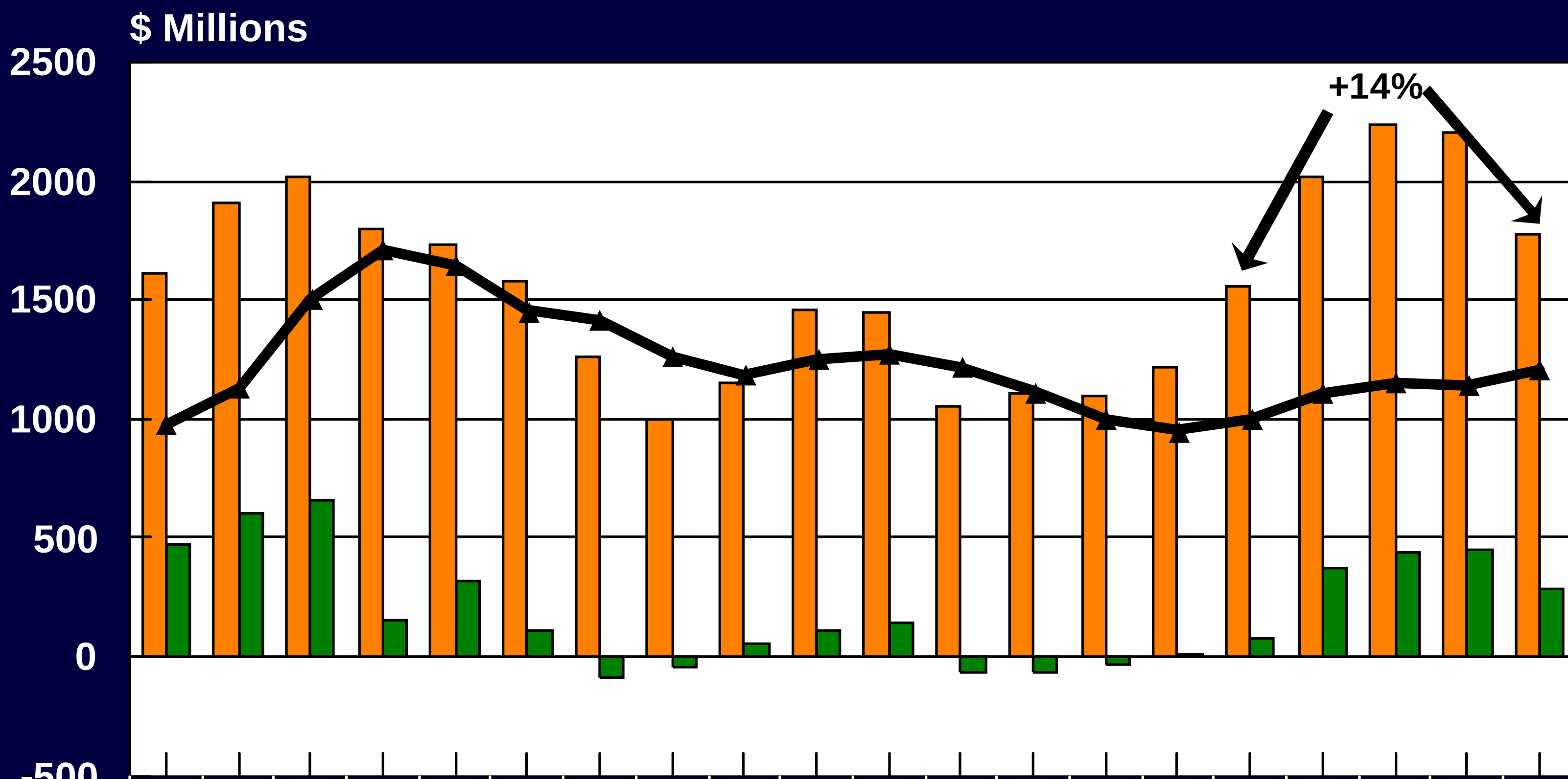
FY ends September

CY

KLIC

Applied Materials

Revenue, Net Income & Inventory



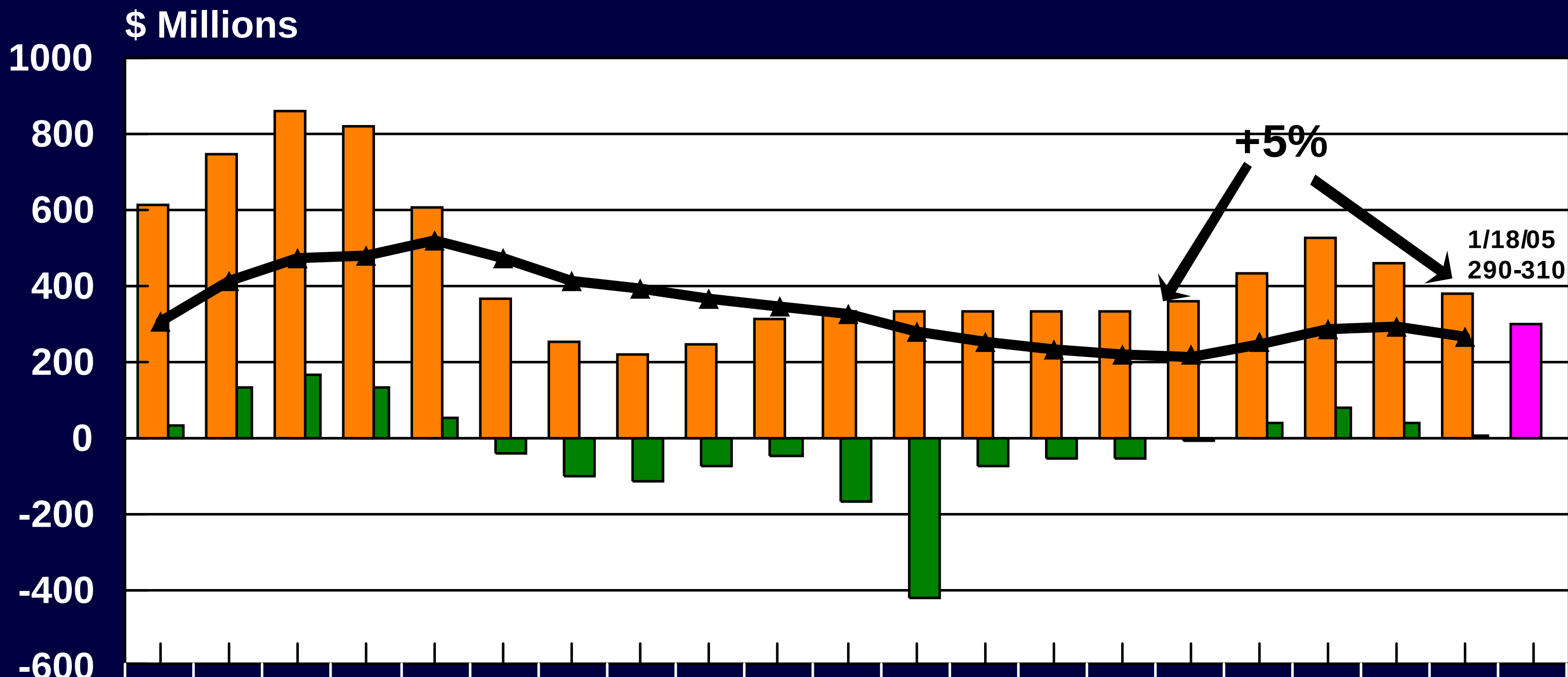
	00				01				02				03				04			
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Revenue	1616	1906	2015	1803	1735	1576	1265	1000	1156	1460	1446	1054	1107	1095	1221	1555	2018	2236	2203	1781
Income	469	604	664	157	318	115	-82	-45	52	115	147	-66	-62	-37	15	82	373	441	455	289
Inventory	980	1133	1504	1709	1649	1454	1413	1260	1186	1251	1274	1217	1115	997	951	1000	1111	1153	1139	1204

CY

AMAT

Teradyne
Revenue, Net Income & Inventory

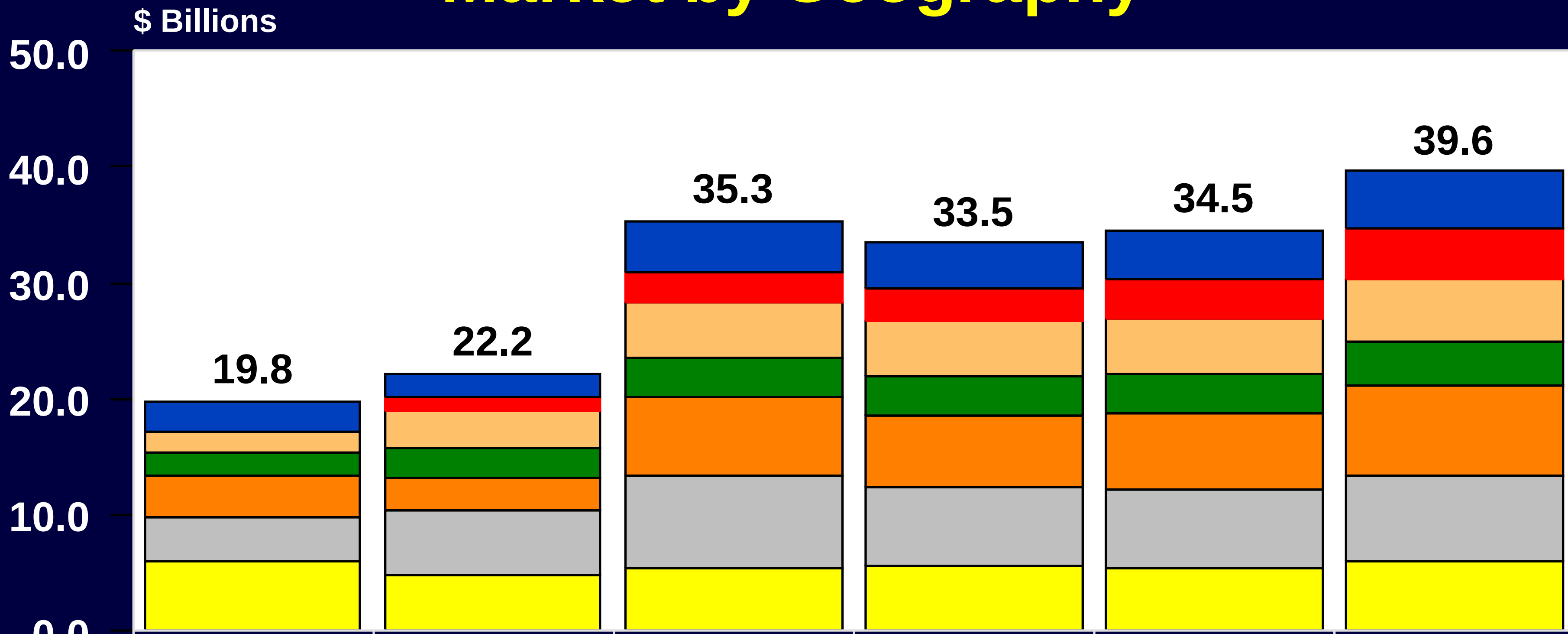
"Despite a slight increase in orders in the fourth quarter, customer demand remains tentative. Our competitive position in the System On a Chip test market was strengthened in 2004, and we're continuing to aggressively fund our FLEX R&D program. At the same time, we're reducing costs across a number of areas in the company." 1/18/05



	00				01				02				03				04				05
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
Revenue	615	747	859	822	605	366	249	220	248	310	331	334	335	332	329	358	431	526	458	377	300
Income	29	129	163	132	54	-40	-103	-113	-77	-51	-167	-424	-76	-52	-54	-11	40	80	41	3	
Inventory	308	412	473	478	520	475	413	395	364	342	327	280	252	234	221	215	248	284	292	263	

CY

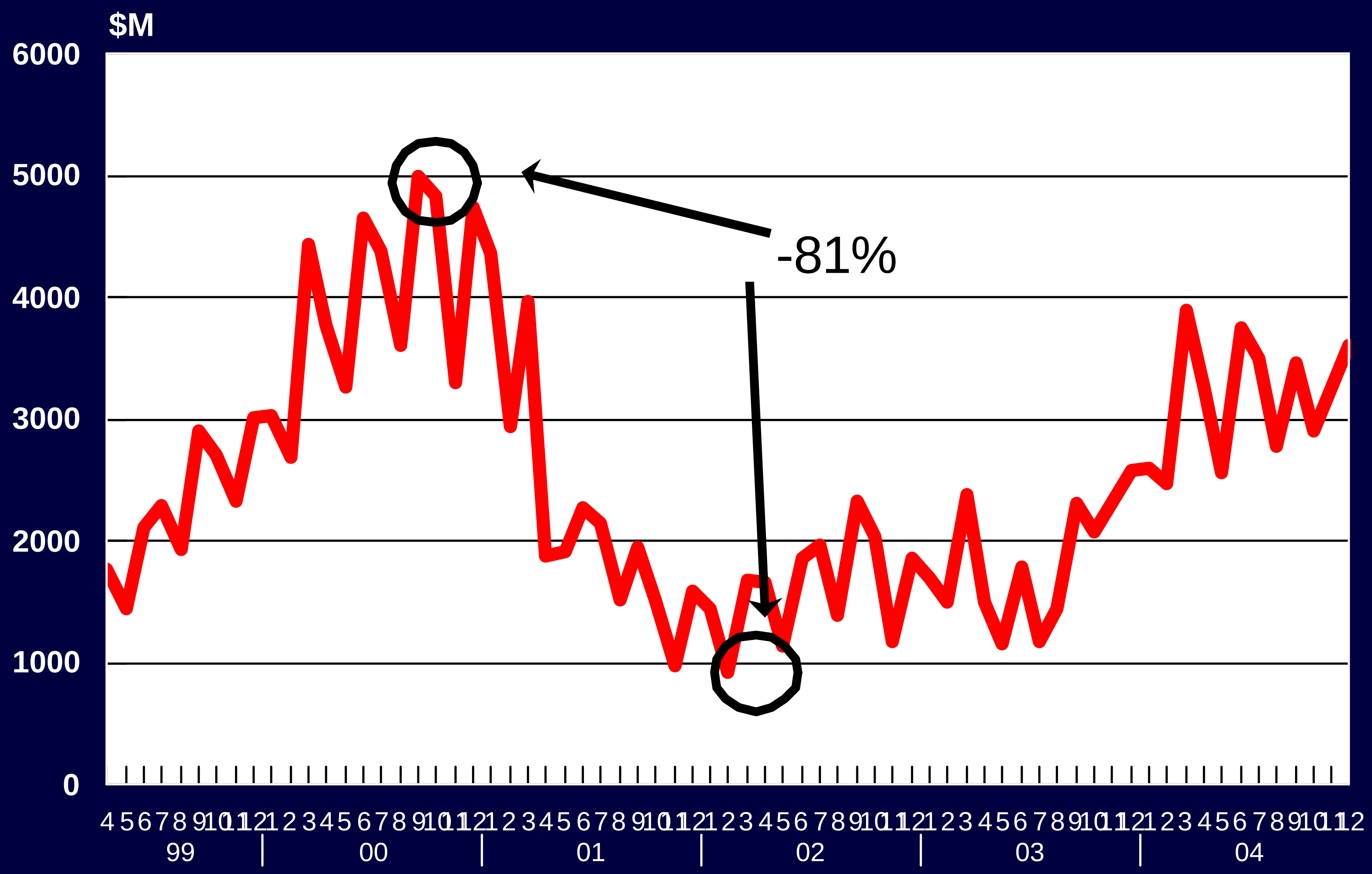
Worldwide Semiconductor Capital Equipment Market by Geography



	2002	2003	2004	2005	2006	2007
ROW	2.7	2.1	4.3	4.1	4.3	5.0
China		1.2	2.6	2.7	3.3	4.2
S Korea	1.7	3.2	4.8	4.8	4.8	5.5
Europe	2.1	2.6	3.4	3.4	3.4	3.7
Taiwan	3.5	2.9	6.8	6.2	6.6	7.8
Japan	3.9	5.6	7.9	6.8	6.7	7.4
N America	5.9	4.7	5.5	5.5	5.5	6.1

SEMI 11/2004

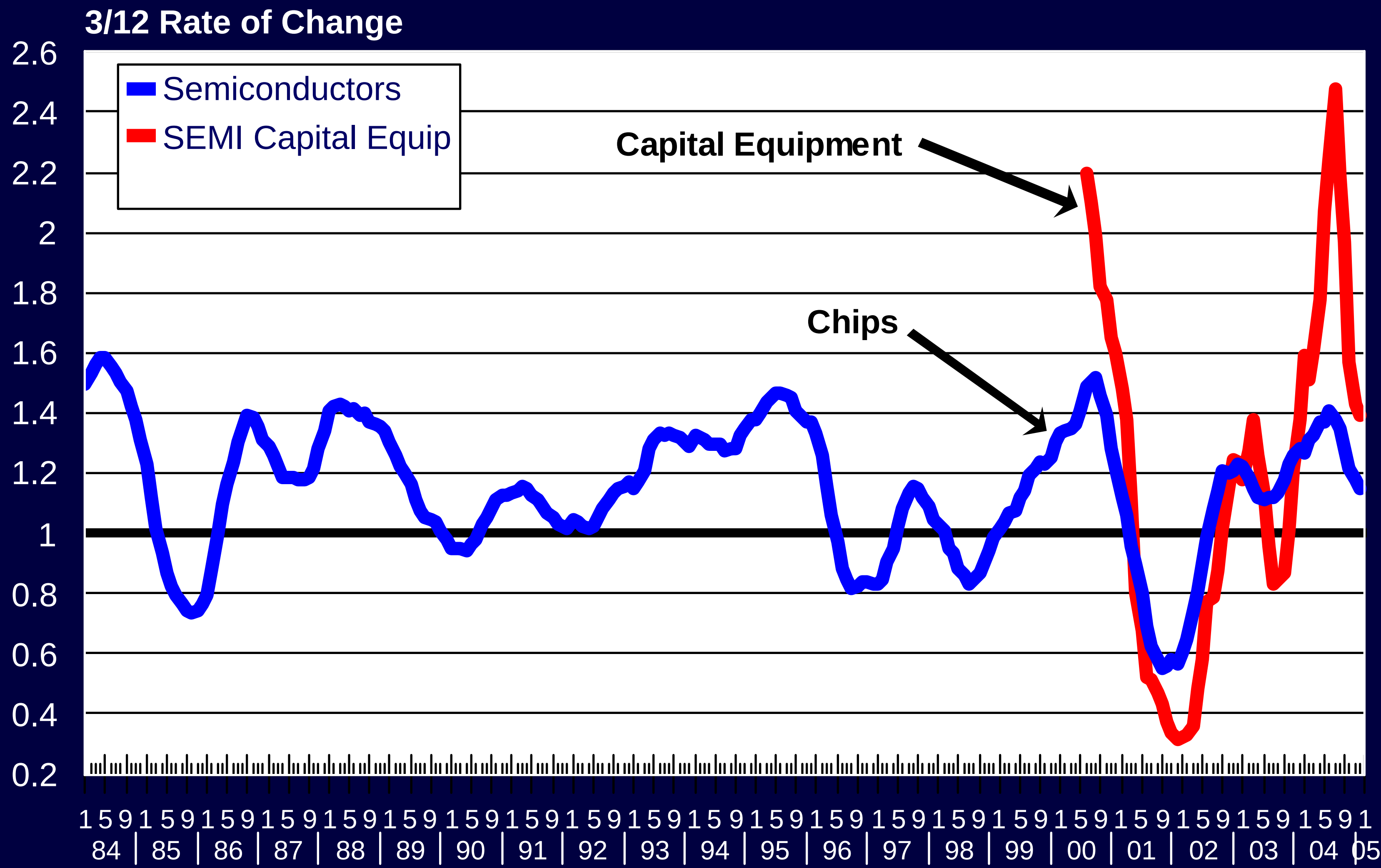
World Semiconductor Equipment Industry Shipments



SOURCE Semiconductor Equipment Association of Japan
www.seaj.or.jp/english/

Global Semiconductor & Semiconductor Capital Equipment

3-Month Shipment Growth Rates on $ Basis

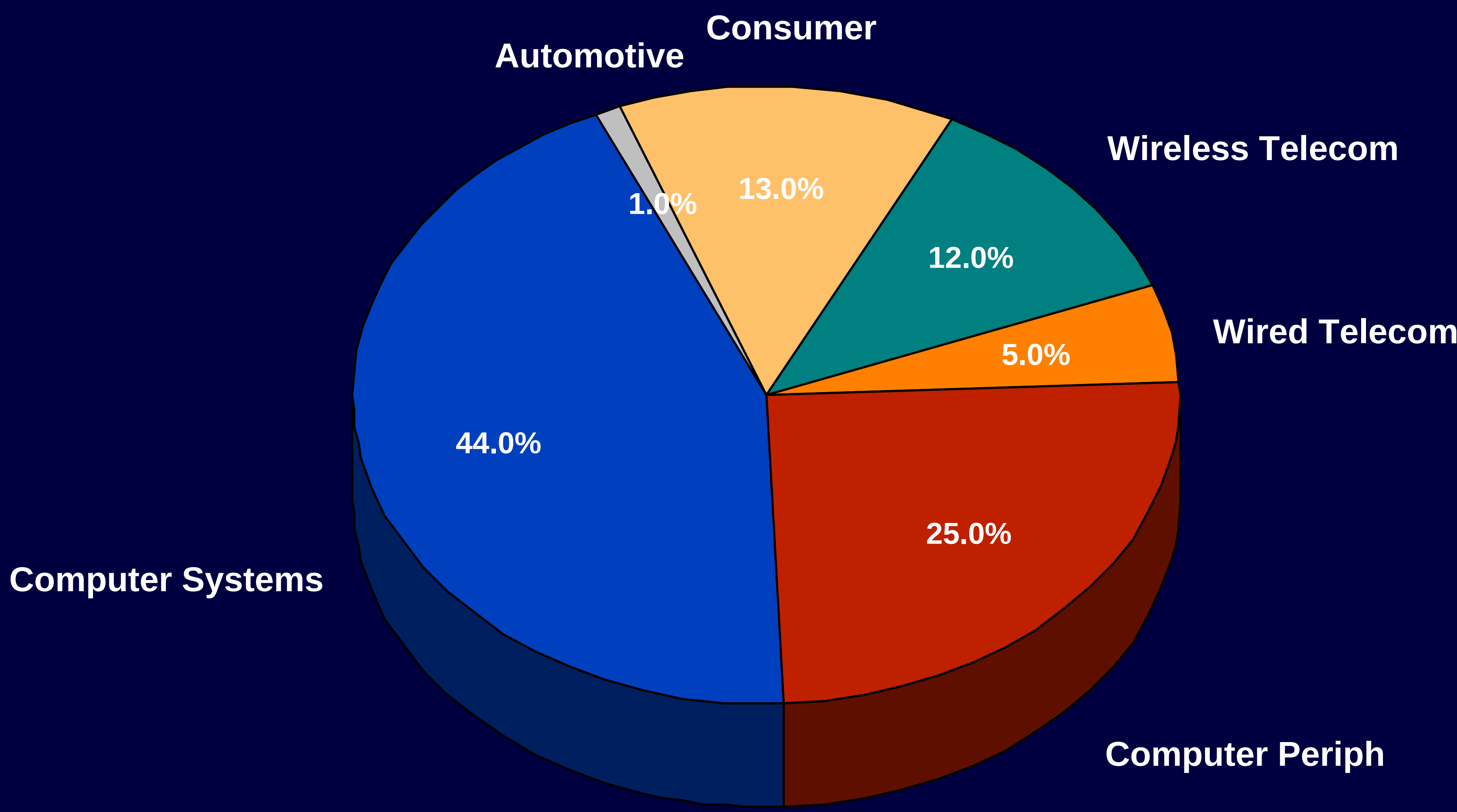


Sources: SIA; Semiconductor Equipment Association of Japan

EMS & ODM Companies

ODM Segment by Revenue

2003

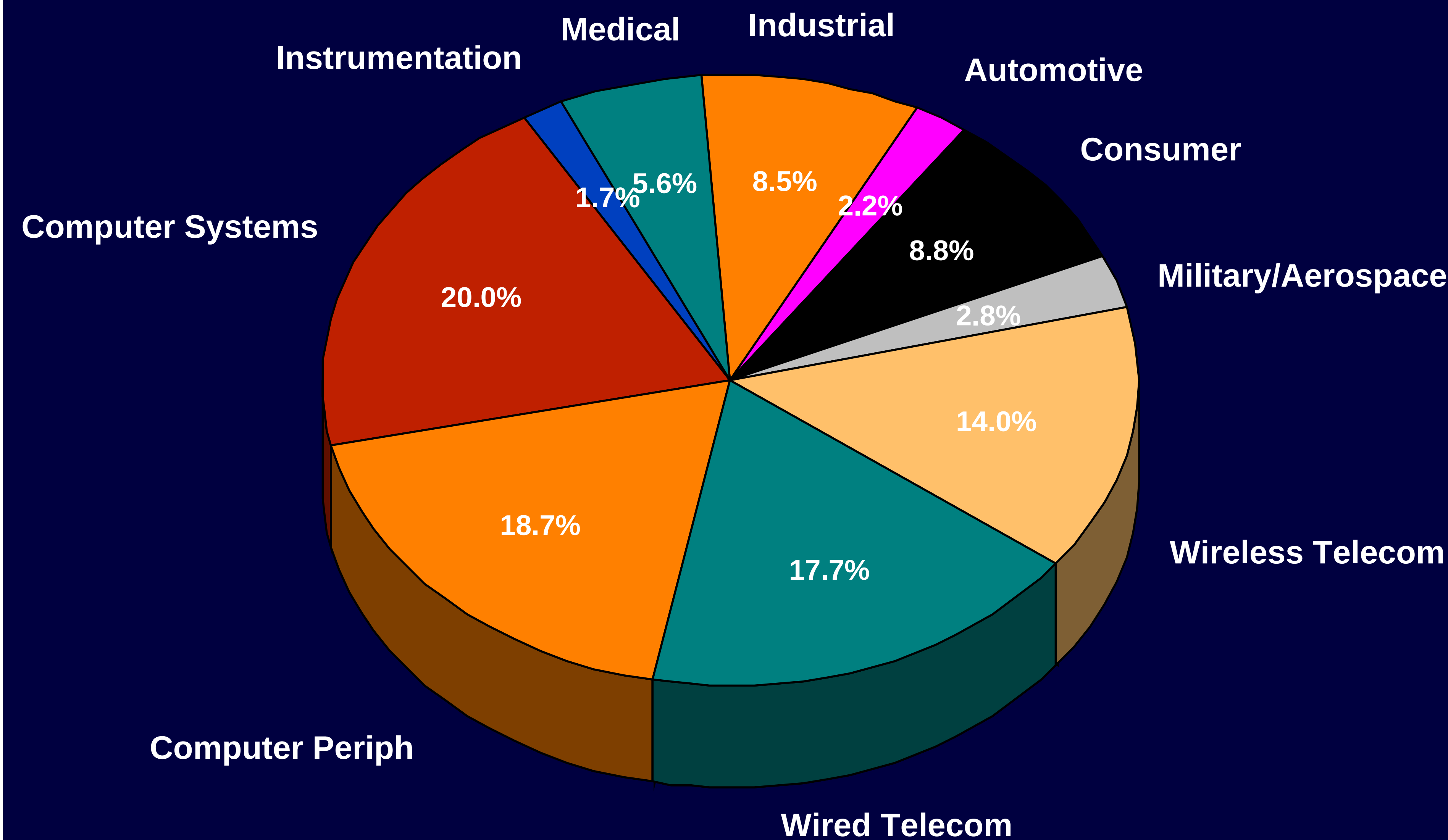


Technology Forecasters 1/2005

Total: $47 Billion

EMS Segment by Revenue

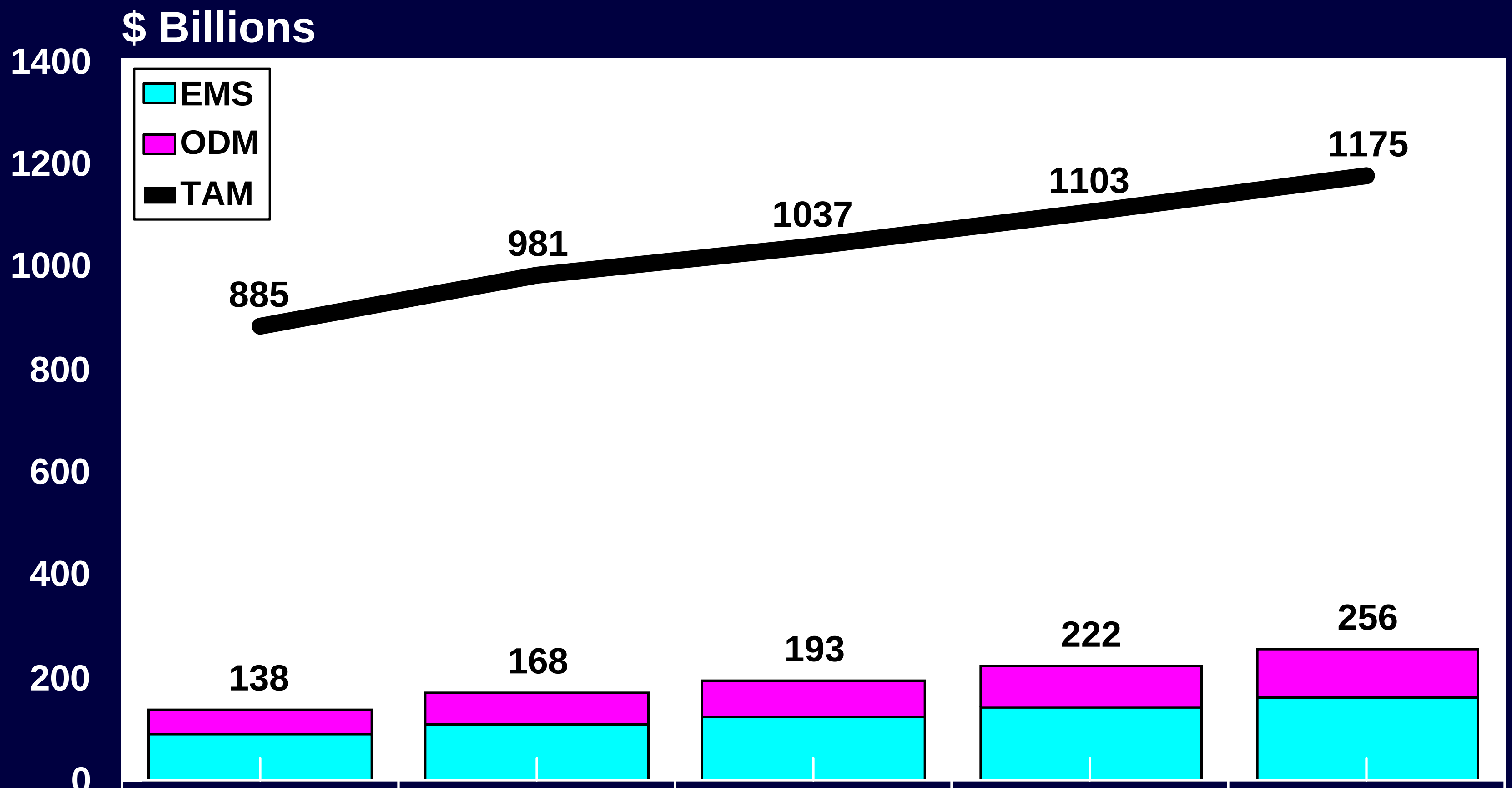
2003



Technology Forecasters 1/2005

Total: $91 Billion

EMS & ODM Estimated Global Revenue vs. Total Available Market



	2003	2004	2005	2006	2007
ODM	47	59	70	82	97
EMS	91	109	123	140	159

Technology Forecasters 1/05

Large World EMS Providers
2002 vs 2003

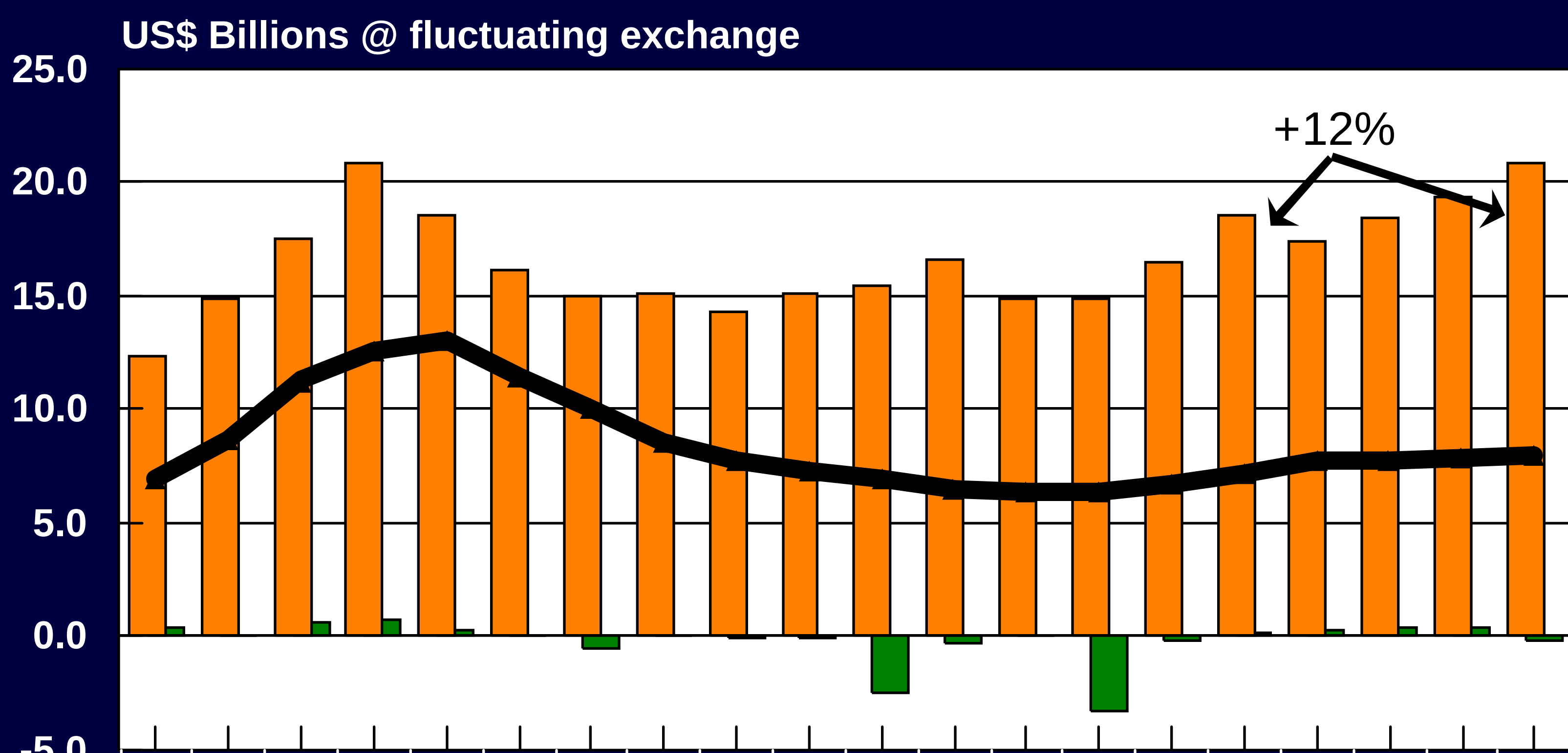
		2002	2003	2004	2004/2003 Growth %
Flextronics	Singapore	13,615	13,822	16,050	16%
Sanmina-SCI	USA	10,168	10,795	12,650	17%
Solectron	USA	12,261	11,144	11,950	7%
Hon Hai (Foxconn)	Taiwan	7,251	9,705	11,700	21%
Celestica	Canada	8,272	6,736	8,760	30%
Jabil Circuit	USA	3,729	5,170	6,400	24%
Elcoteq Network	Finland	1,749	2,564	3,100	21%
Benchmark Electronics	USA	1,630	1,840	2,000	9%
Venture	Singapore	1,333	1,829	1,750	-3%
Universal Scientific	Taiwan	820	1,011	1,400	39%
Plexus	USA	889	841	1,100	31%
Total		61,717	65,457	75,860	+17%

2004: Estimated based on 1-3Q actual plus company 4Q guidance or Custer estimate based upon historic 4Q seasonality

Sources: Company Data

$US Millions converted at fluctuating exchange

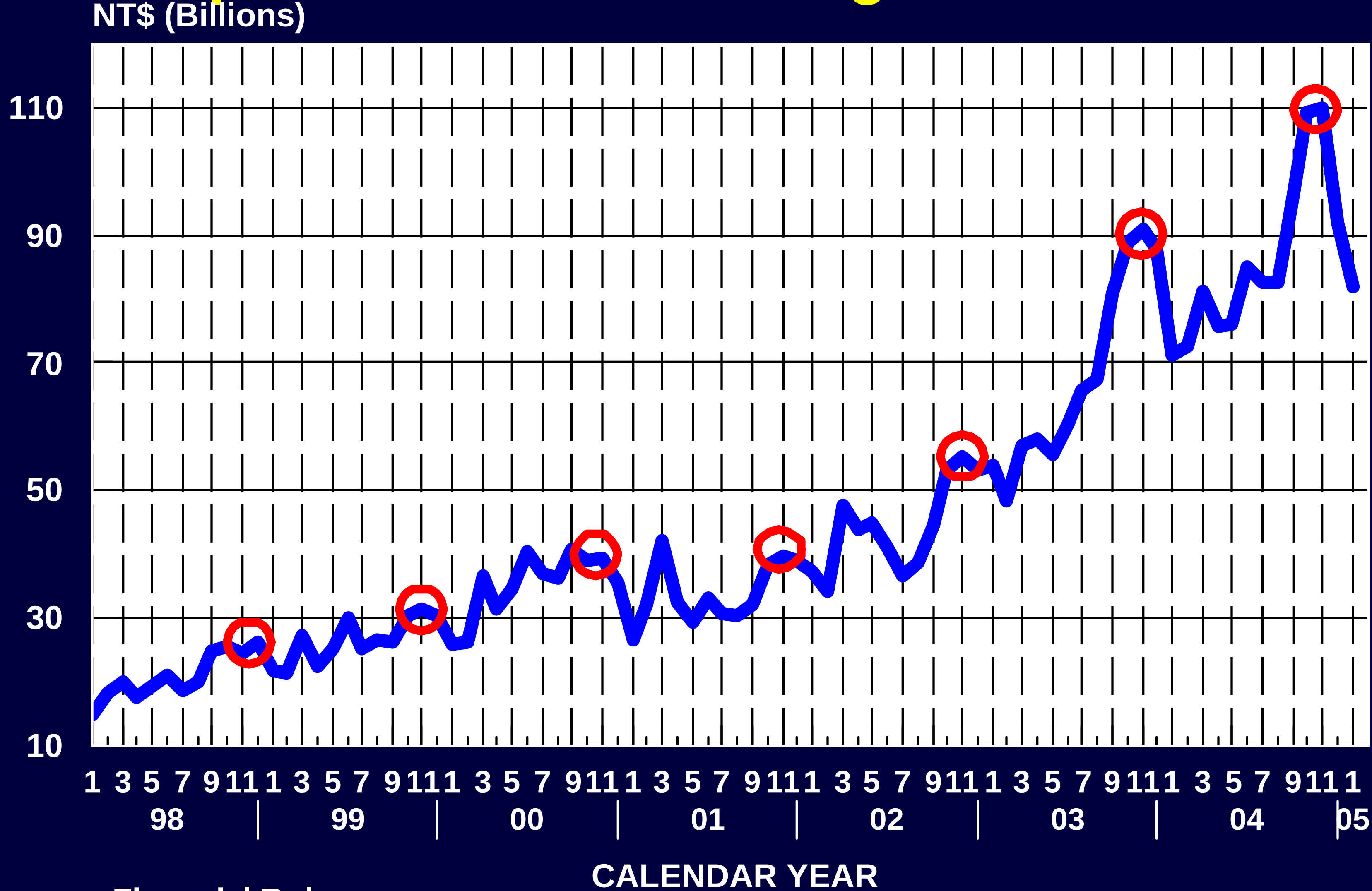
Large EMS Providers
Composite of 12 Public Companies
Revenue, Net Income & Inventory



	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	00				01				02				03				04			
Revenue	12.3	14.9	17.5	20.8	18.5	16.1	14.9	15.1	14.2	15.0	15.4	16.5	14.9	14.8	16.5	18.5	17.4	18.4	19.4	20.8
Income	0.4	-0.0	0.6	0.7	0.3	0.0	-0.6	0.0	-0.1	-0.1	-2.6	-0.3	0.1	-3.3	-0.2	0.1	0.3	0.4	0.3	-0.3
Inventory	6.9	8.6	11.2	12.5	13.0	11.4	10.0	8.5	7.7	7.2	6.9	6.4	6.4	6.4	6.7	7.1	7.7	7.8	7.9	8.0

Benchmark, Celestica, Elcoteq, Flextronics, Foxconn, Jabil, MSL, Pemstar, Plexus, Sanmina-SCI, Solectron, Sypris

Taiwan Electronic Equipment/ODM Manufacturers
Composite Sales of 7 Large Manufacturers

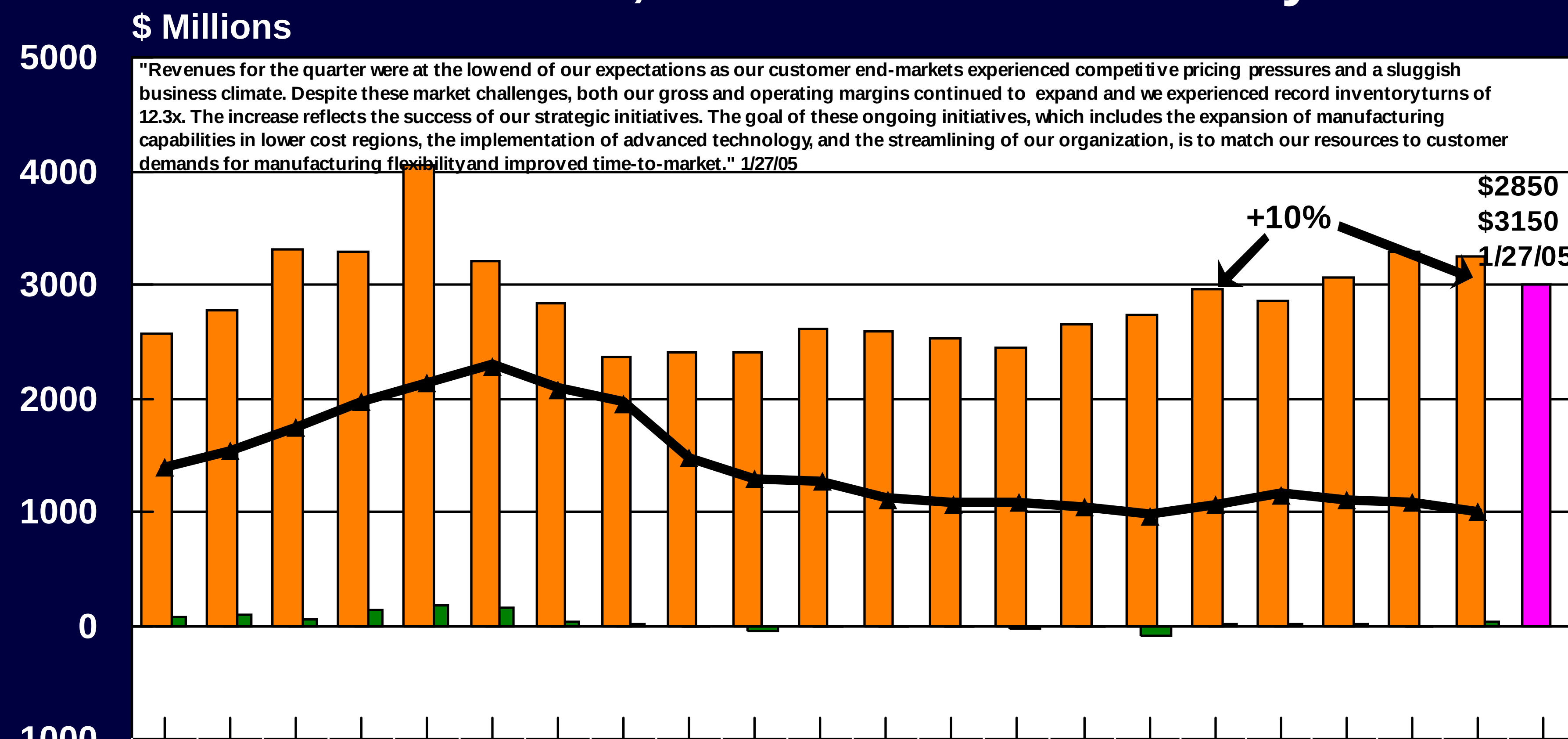


Company Financial Releases

Acer, BenQ, Compal, First Intl Computer, Inventec, Mitac, Quanta

Sanmina-SCI Corp

Revenue, Net Income & Inventory



	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1
	99		00				01				02				03				04			05
Revenue	2575	2772	3307	3300	4068	3208	2842	2366	2406	2411	2618	2602	2537	2444	2649	2732	2970	2862	3070	3302	3253	3000
Income	85	94	59	147	177	157	30	22	7	-39	-5	3	1	-32	-12	-86	16	27	11	5	46	
Inventory	1406	1552	1759	1980	2151	2297	2096	1971	1480	1303	1273	1123	1084	1092	1059	978	1070	1165	1120	1088	1003	

CY

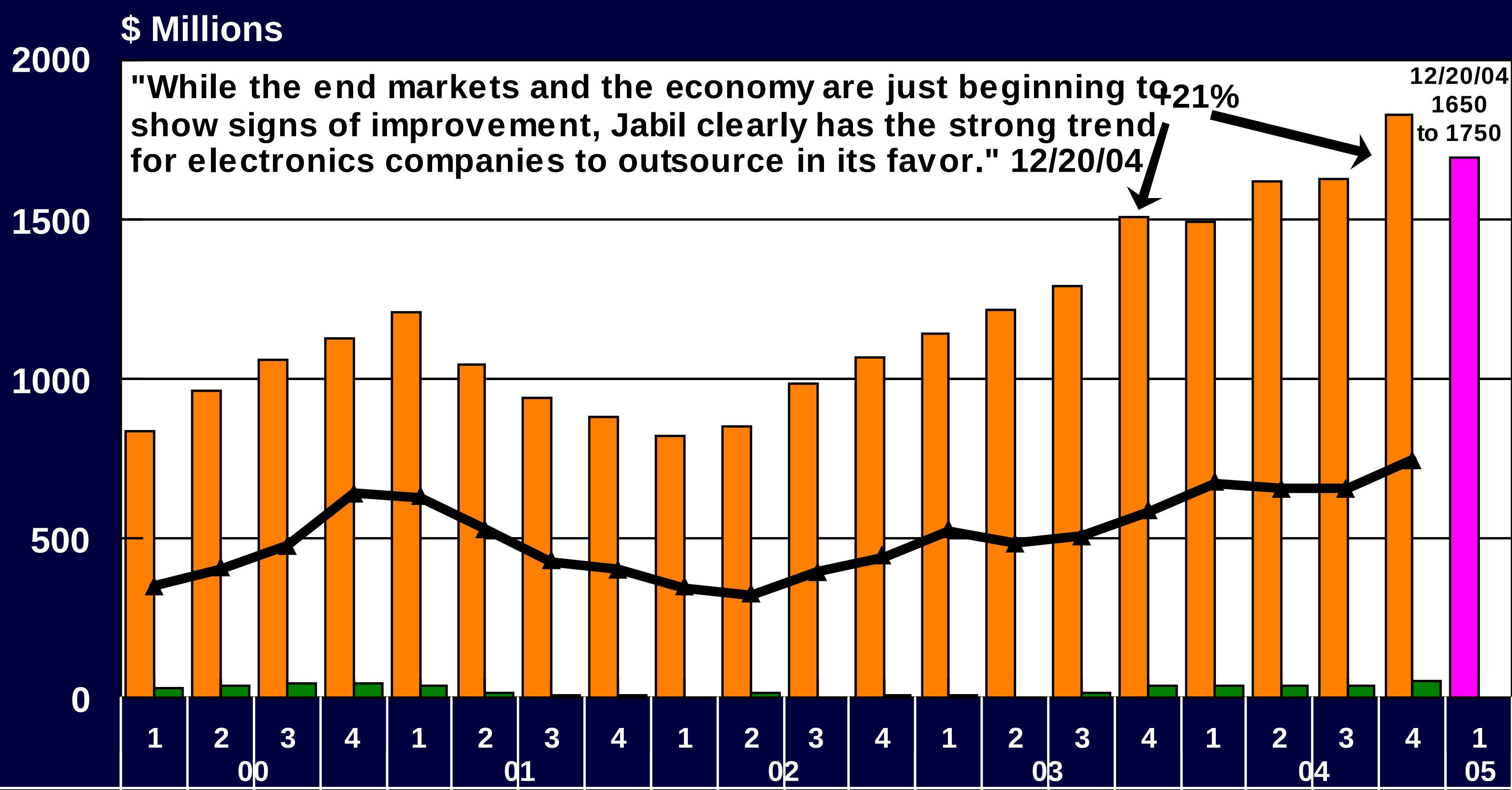
SANM

FY ends 9/30

(historical data = combined Sanmina & SCI)

Jabil Circuit Inc

Revenue & Net Income



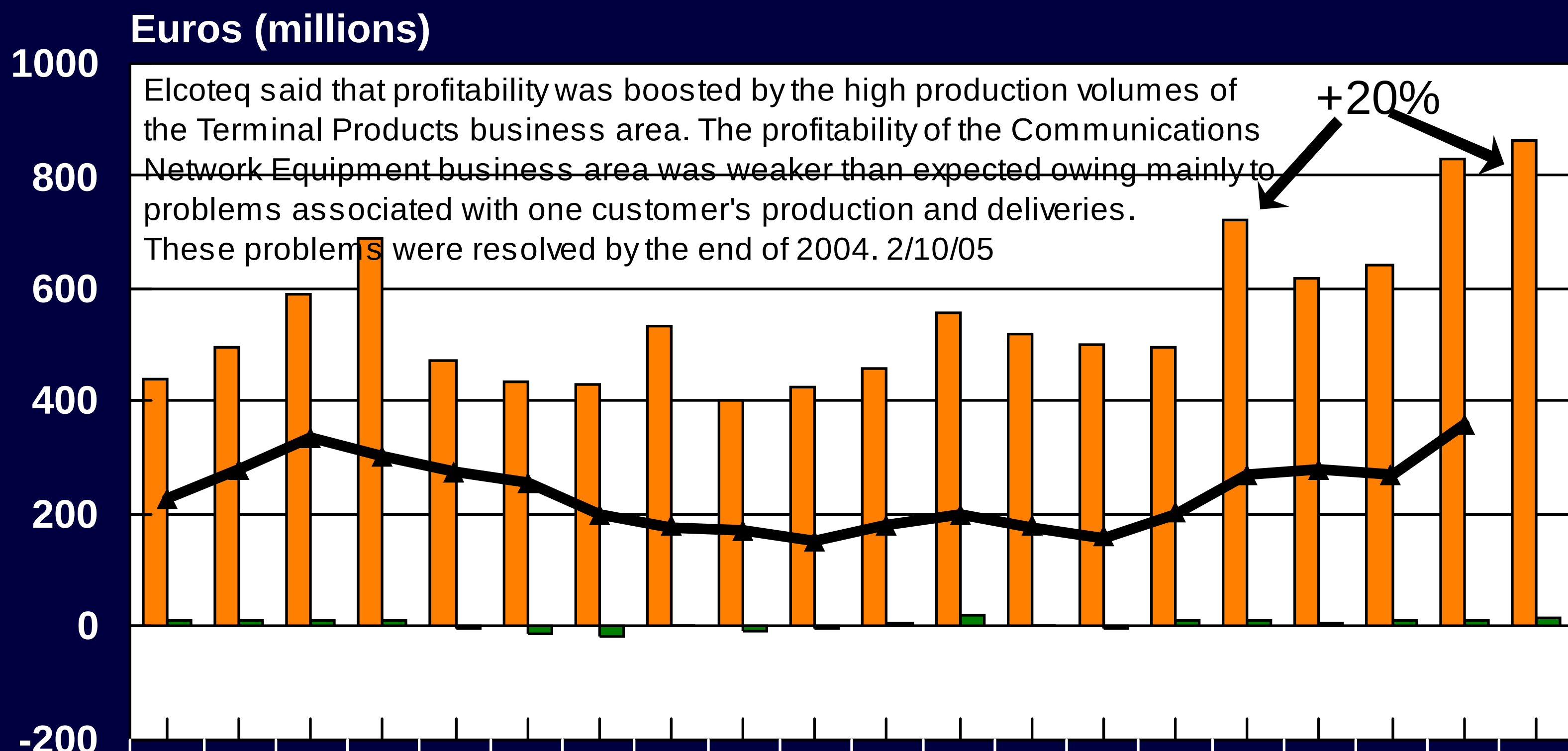
CY	00 Q1	00 Q2	00 Q3	00 Q4	01 Q1	01 Q2	01 Q3	01 Q4	02 Q1	02 Q2	02 Q3	02 Q4	03 Q1	03 Q2	03 Q3	03 Q4	04 Q1	04 Q2	04 Q3	04 Q4	05 Q1
Revenue	838	966	1065	1129	1211	1046	944	885	822	851	988	1068	1146	1219	1296	1509	1492	1626	1626	1833	1700
Income	34	38	47	48	41	19	11	8	4	21	2	8	10	4	20	42	40	40	44	56	
Inventory	353	410	478	642	632	530	431	406	348	325	396	444	527	487	510	589	676	657	657	751	

CY

FY ends August

Elcoteq Network, Finland

Revenue, Net Income & Inventory



	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	438	494	591	690	470	433	428	532	402	425	456	556	517	500	496	722	619	642	829	865
Income	9	9	9	10	-2	-13	-17	0	-8	-2	6	18	2	-2	9	12	6	11	10	13
Inventory	228	278	336	301	275	253	199	178	169	152	180	197	177	159	200	270	279	269	357	

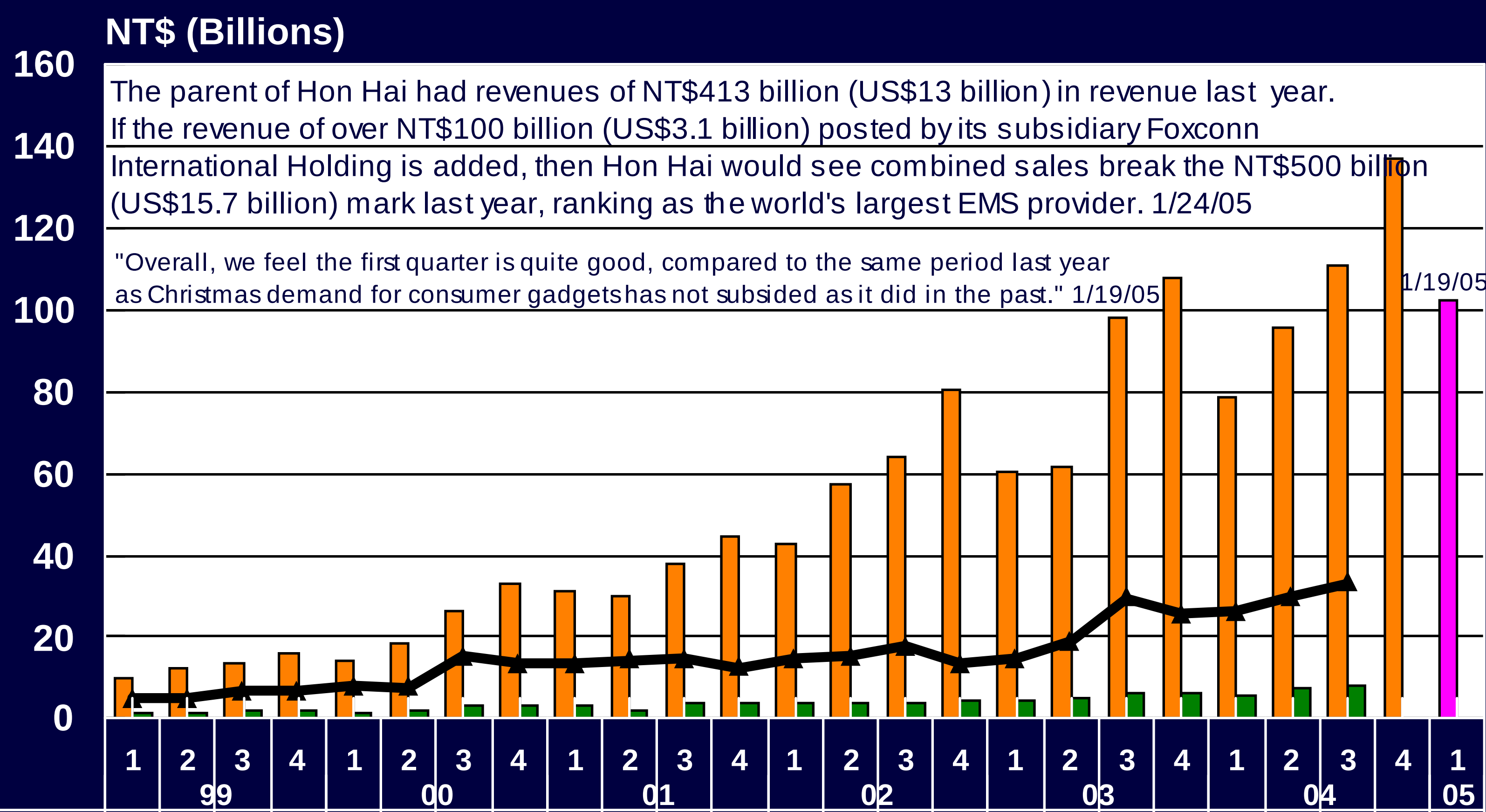
CY

www.elcoteq.com

Y.ELQ

Foxconn Electronics (Hon Hai), Taiwan

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
	99				00				01				02				03				04				05
Revenue	10	13	14	16	14	18	26	33	31	30	38	44	43	58	64	80	60	61	98	108	79	96	111	137	102
Income	1	2	2	2	2	2	3	3	3	2	4	4	4	4	4	5	5	5	6	7	6	8	8		
Inventory	5	5	7	7	8	8	15	14	14	14	15	13	15	16	18	14	15	19	30	26	26	30	33		

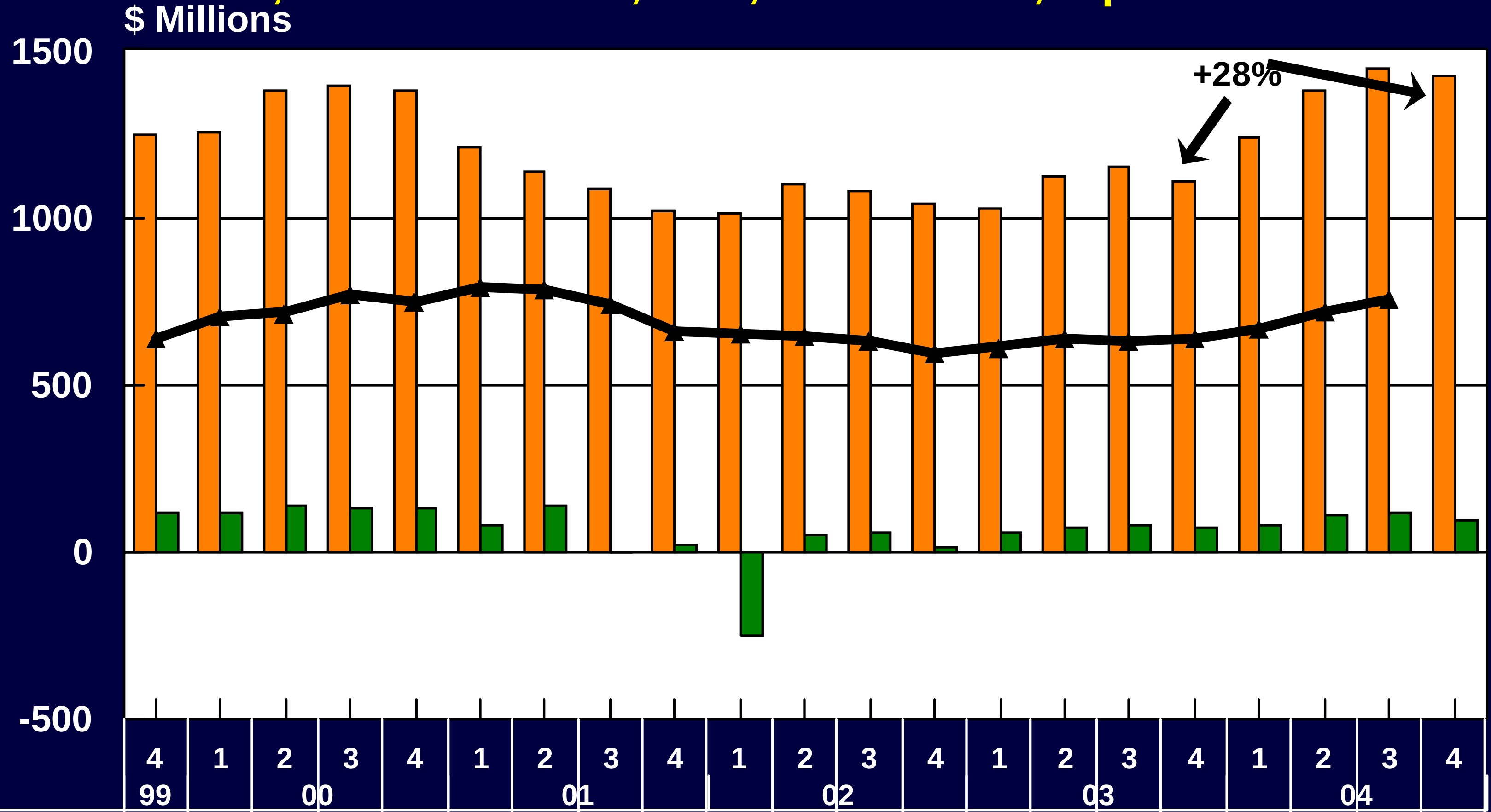
CY

PCB Assembly Equipment

Dover Corp

Revenue, Net Income & Inventory

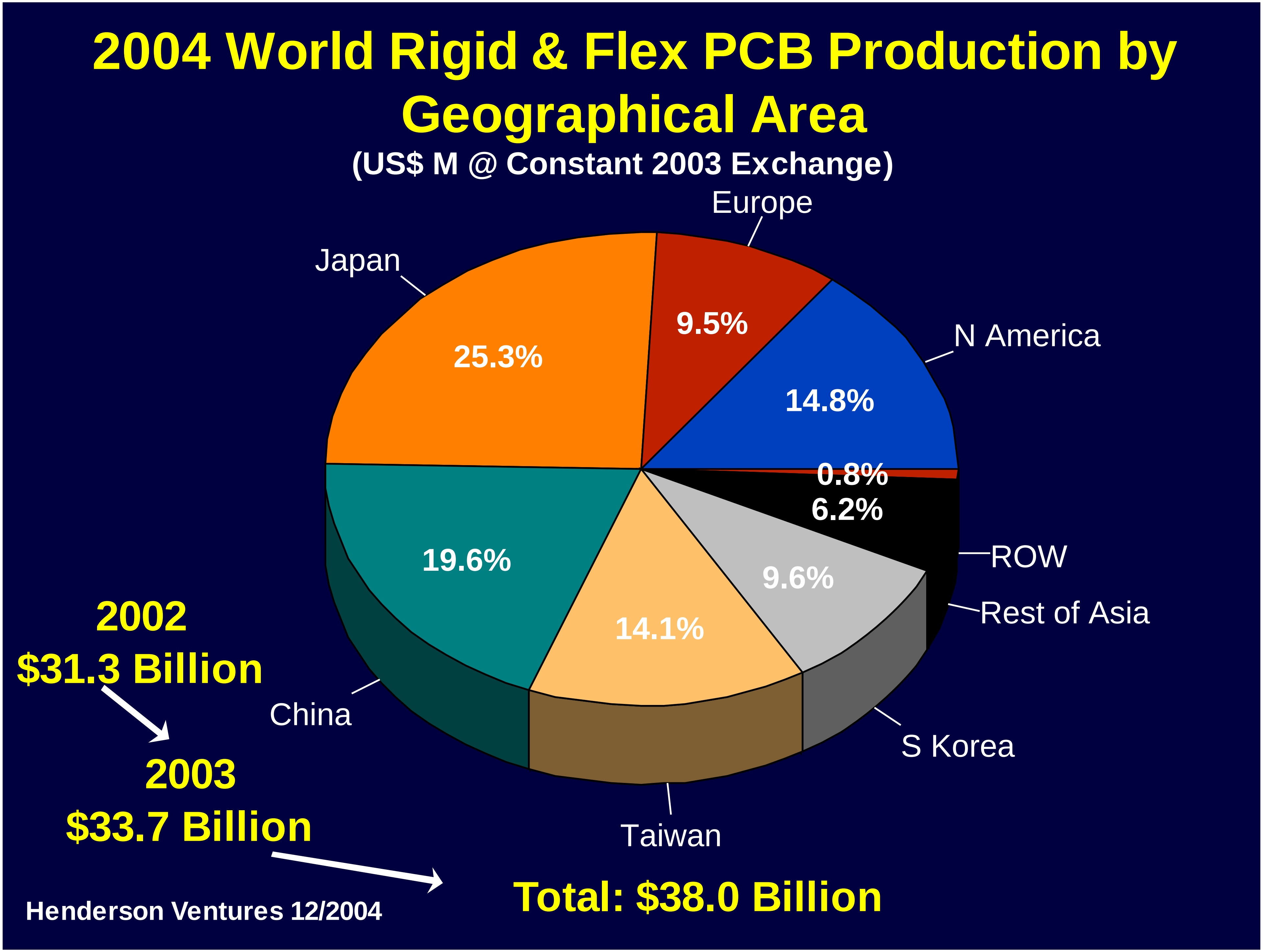
includes: Universal Instruments, Vitronics Soltec, Vectron, Dielectric, Dow Key, OK International, Everett Charles, DEK, Hover Davis, Alphasem



	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	99	00				01				02				03				04			
Revenue	1248	1251	1379	1390	1380	1210	1139	1089	1022	1010	1097	1076	1045	1028	1124	1154	1108	1240	1380	1444	1421
Income	121	117	137	131	135	79	143	3	24	-248	55	56	15	59	73	84	76	84	112	120	97
Inventory	639	705	716	769	751	794	784	744	661	651	646	629	595	613	642	630	639	667	720	757	

CY

PCB Fabrication


2004 World Rigid & Flex PCB Production by Geographical Area
(US$ M @ Constant 2003 Exchange)
Europe
Japan
9.5%
25.3%
N America
14.8%
0.8%
6.2%
ROW
19.6%
9.6%
Rest of Asia
14.1%
China
S Korea
Taiwan
2002
$31.3 Billion
2003
$33.7 Billion
Total: $38.0 Billion
Henderson Ventures 12/2004

Top 25 World PCB Manufacturers ($M)

	Company	2003	2002	Growth (%)
1.	Nippon Mektron	1175	968	21.4
2.	CMK	1049	1015	3.3
3.	Ibiden	1027	1017	1.0
4.	Hitachi Chemical	685	613	11.7
5.	Shinko Electric	636	458	38.9
6.	Unimicron	609	465	31.0
7.	Samsung Electro	545	469	16.2
8.	Compeq	462	515	-10.3
9.	Nanya PCB	453	354	28.0
10.	Daeduck Group	422	428	-1.4
11.	Viasystems Group	420	410	2.4
12.	Fujikura	400	340	17.6
13.	Sanmina-SCI	360	395	-8.9
14.	Multek	350	380	-7.9
15.	AT&S	345	312	10.6
16.	Tyco PCB	330	335	-1.5
17.	MACO (Matsushita)	318	304	4.6
18.	Kyoden Group	315	257	22.6
19.	Korea Circuit Group	310	280	10.7
20.	LG Electronics	305	265	15.1
21.	Toppan-NEC	300	298	0.7
22.	Nitto Denko	300	254	18.1
23.	Elec & Eltek	282	238	18.5
24.	3M	270	240	12.5

NT Information Systems 9/04 (Printed Circuit Design & Manufacture)

Top 10 PCB Companies
2000 vs 2003

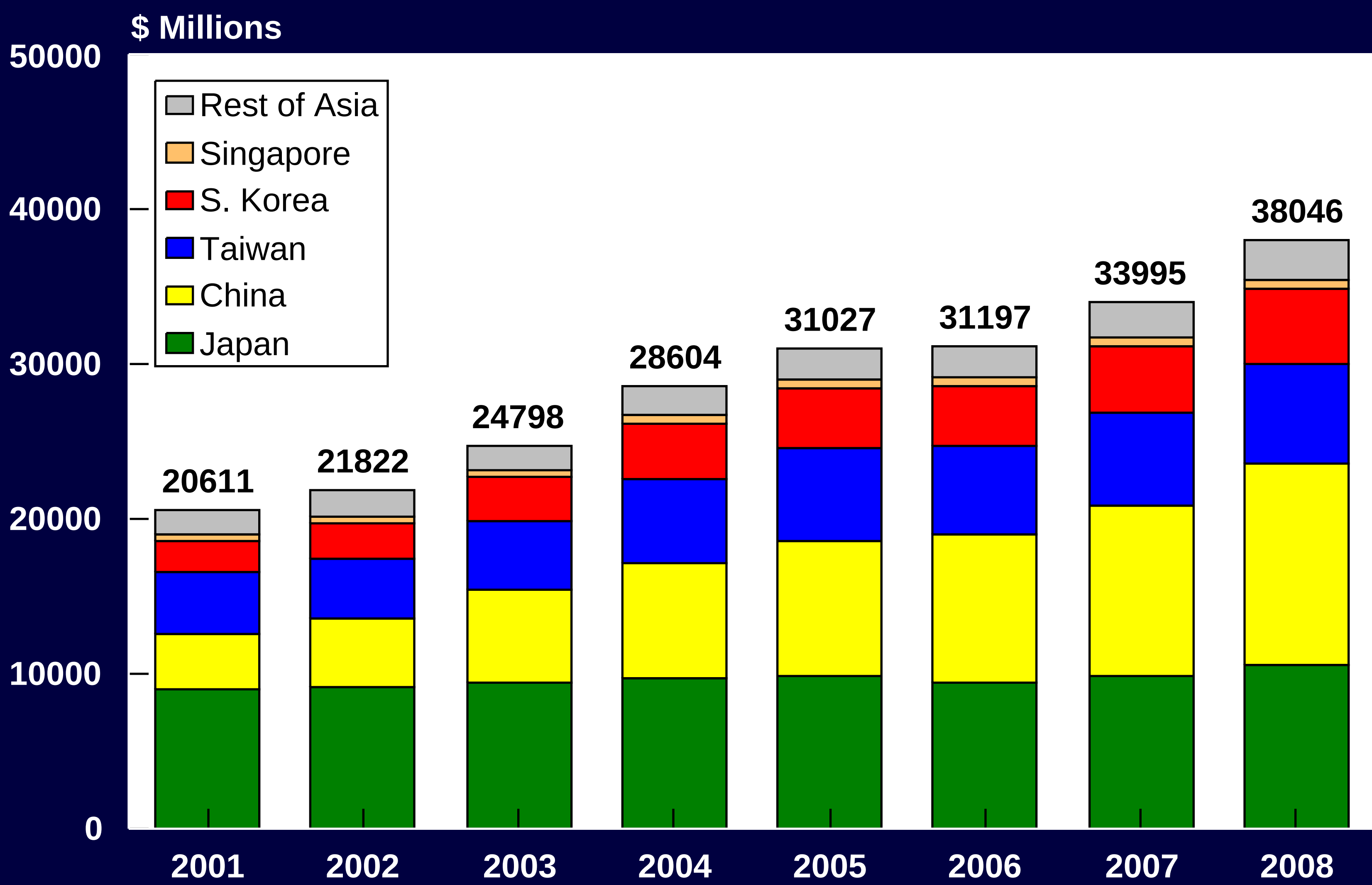
	2000		US$M
1	Sanmina-SCI	US	1,500
2	Viasystems	US	1,250
3	CMK	JP	1,112
4	Ibiden	JP	1,083
5	Hitachi Group	JP	973
6	Nippon Mektron	JP	905
7	Compeq	TW	802
8	Tyco	US	780
9	Fujitsu	JP	624
10	Multek	US	600
	Top 10 Total		9,629

	2003		US$M
1	Nippon Mektron	JP	1,117
2	CMK	JP	1,049
3	Ibiden	JP	1,027
4	Hitachi Group	JP	685
5	Shinko Denki	JP	636
6	Unimicron	TW	609
7	Samsung E-M	KR	545
8	Compeq	TW	462
9	Nanya PCB	TW	453
10	Daeduck Group	KR	422
			7,005

Dr Hayao Nakahara, N.T. Information Ltd, 12/04

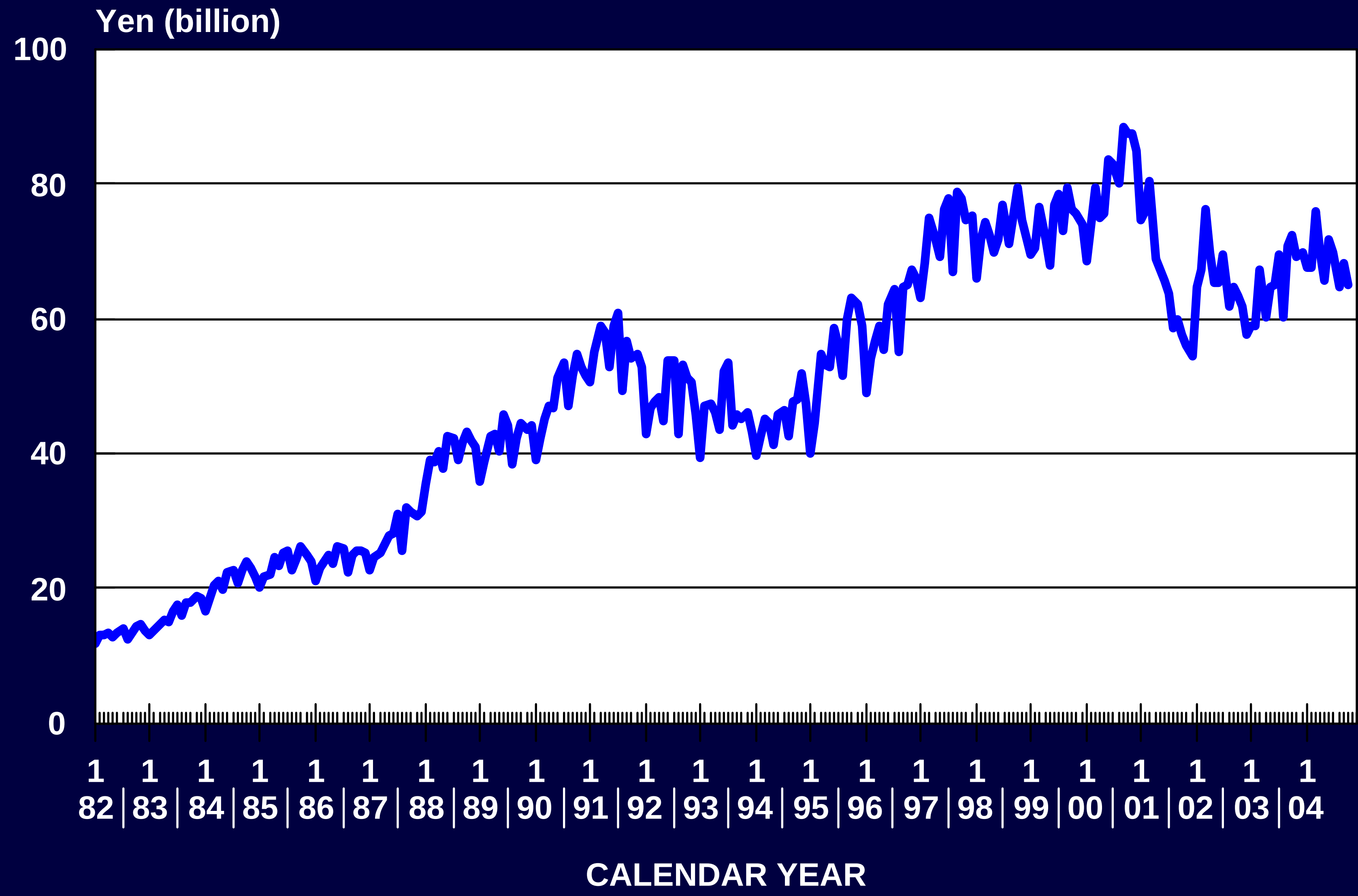
Asian PCB Production

Current $ converted @ 2003 Exchange Rates



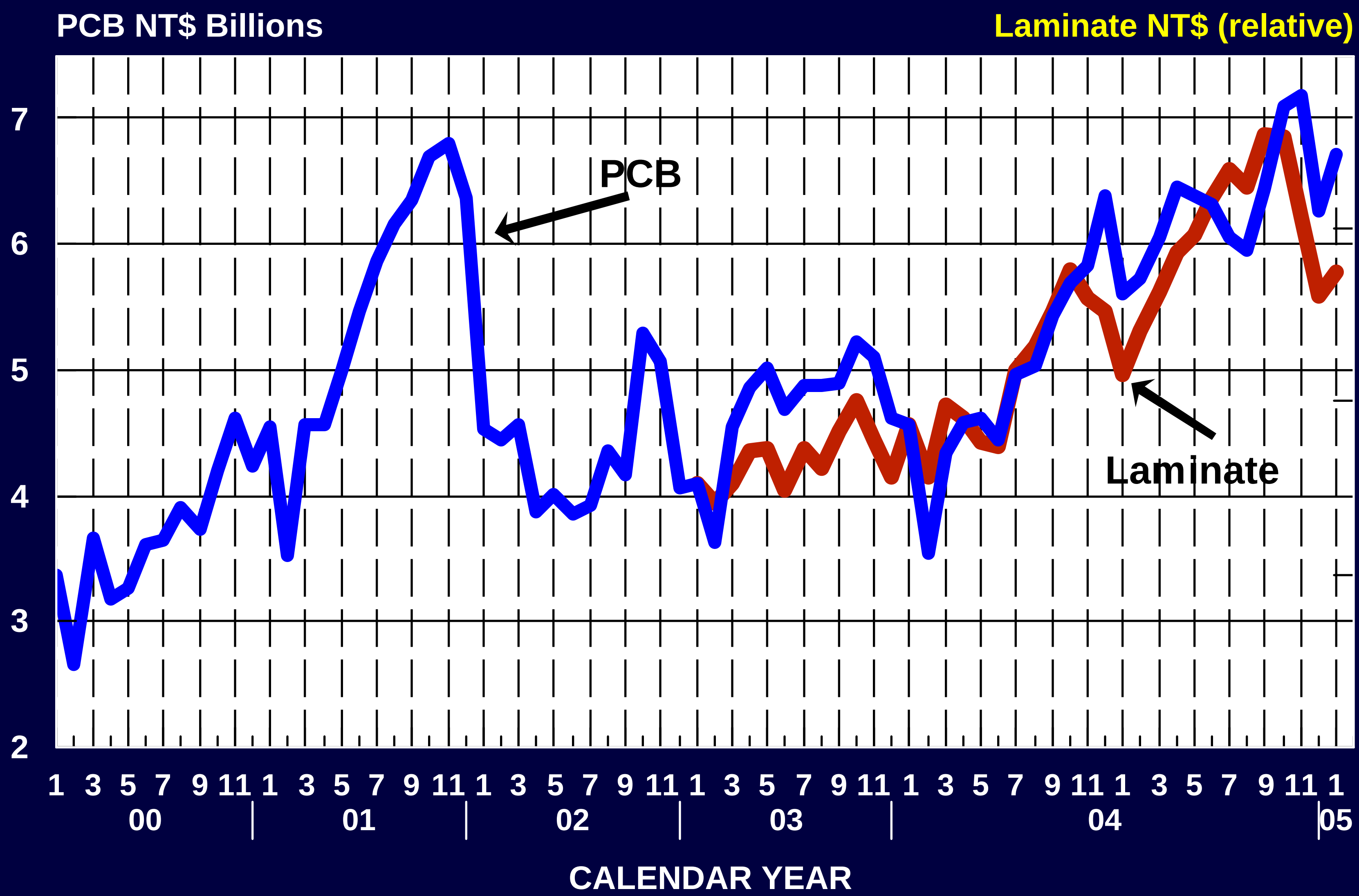
Henderson Ventures PCI Report 12/04

Japan PCB Shipments

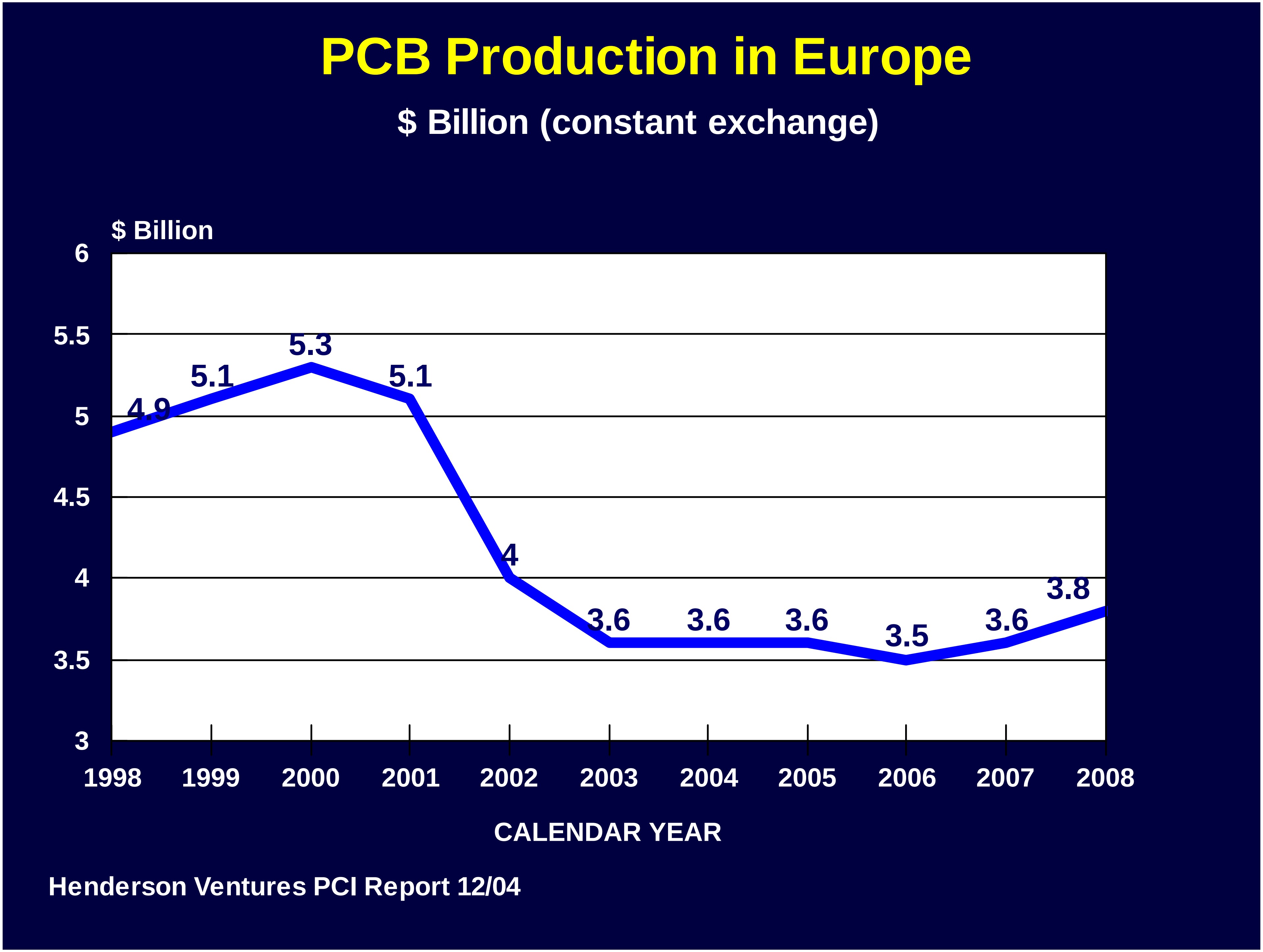


www.jpcanet.or.jp/kikaitoukei/kikai2004.xls

Taiwan Rigid PCB vs Laminate Shipments
Composite of Large Manufacturers



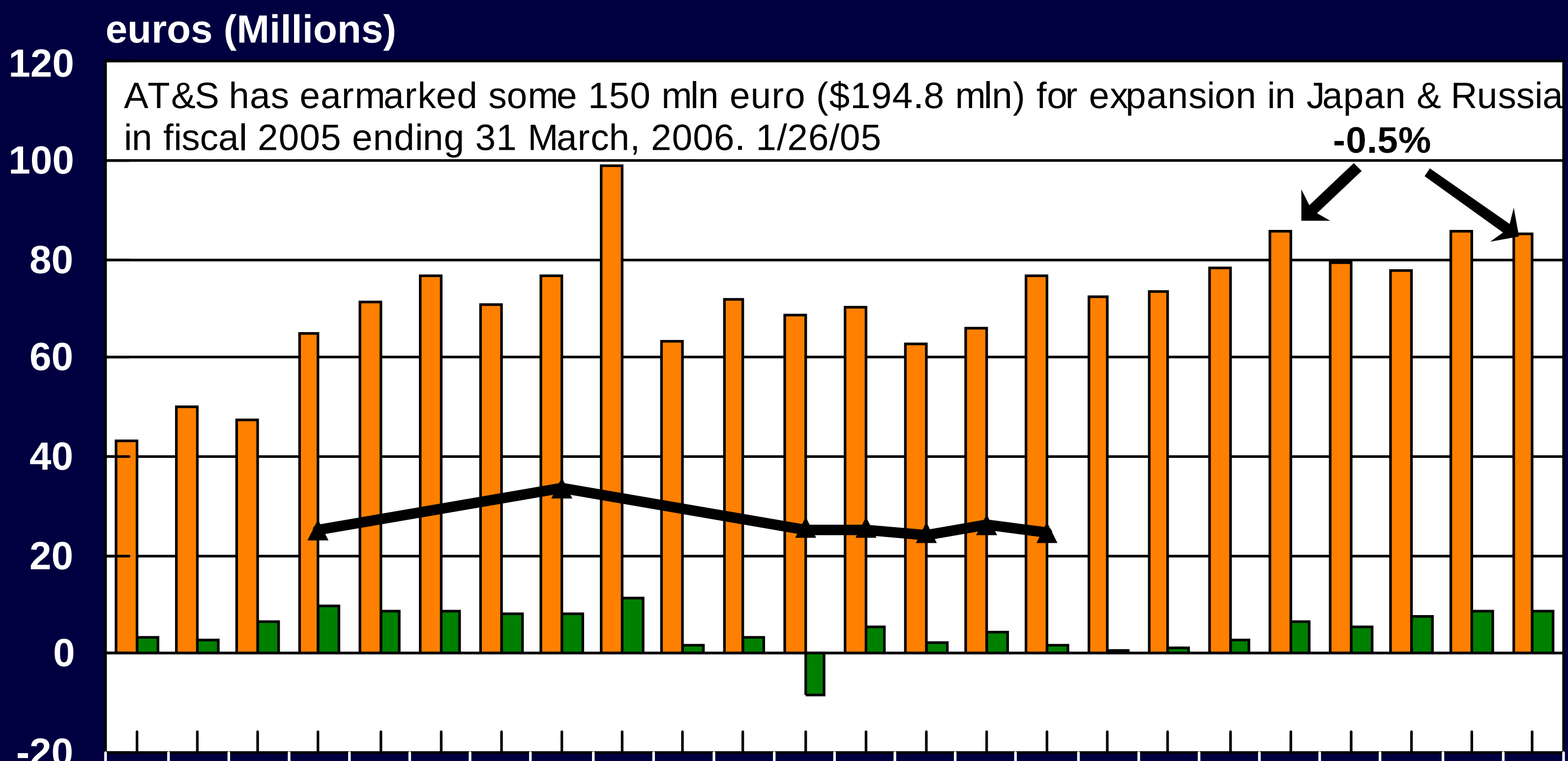
Company Financial Releases


PCB Production in Europe
$ Billion (constant exchange)
$ Billion
6
5.5
5
4.5
4
3.5
3
4.9
5.1
5.3
5.1
4
3.6
3.6
3.6
3.5
3.6
3.8
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
CALENDAR YEAR
Henderson Ventures PCI Report 12/04

AT&S, Austria

Revenue, Income & Inventory

"We have been able to strengthen our position in the market this quarter in regards to both our customers and our products. We cannot change the fact that the dollar cost us turnover. But, the fact that our profit still grew 129% in the first three quarters demonstrates what would be possible with a positive dollar development" 1/20/05



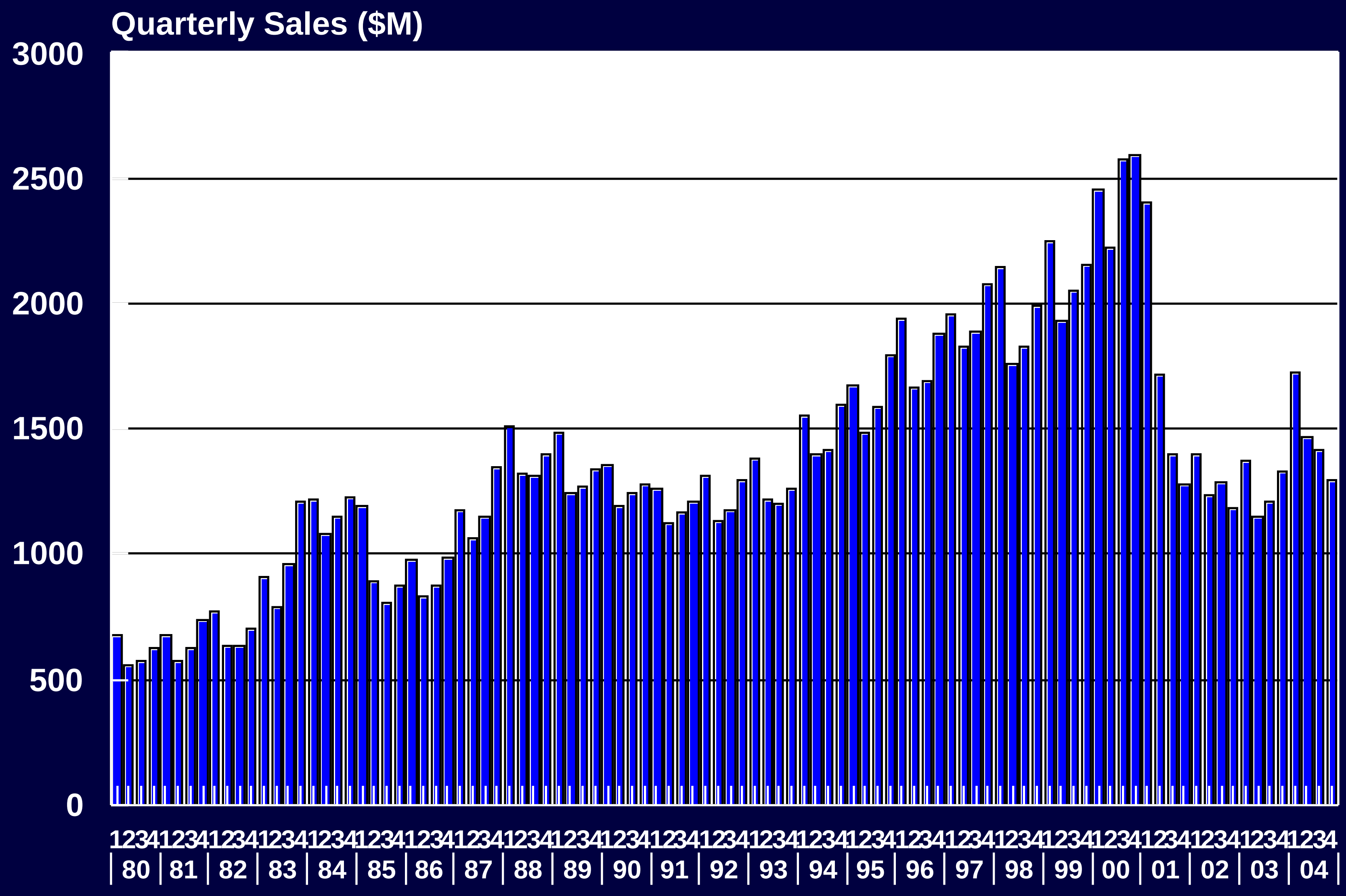
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
	99				00				01				02				03				04			
Revenue	43.4	49.9	47.3	64.8	71.1	76.8	70.7	76.6	98.8	63.5	71.8	68.8	70.4	62.7	66.1	76.4	72.3	73.7	78.5	85.6	79.3	77.9	85.9	85.2
Income	3.2	2.9	6.3	9.5	8.8	8.8	8.1	8.3	11.4	1.5	3.1	-8.4	5.5	2.3	4.5	1.6	0.4	1.3	3	6.5	5.5	7.6	8.5	8.6
Inventory				24.9				33.4				25.2	25.2	24.2	26.1	24.6								

FY ends March

CY

www.ats.net

N. AMERICAN RIGID PCB SHIPMENTS



IPC T/MRC data with Custer interpretation

TOP N AMERICAN PCB MANUFACTURERS

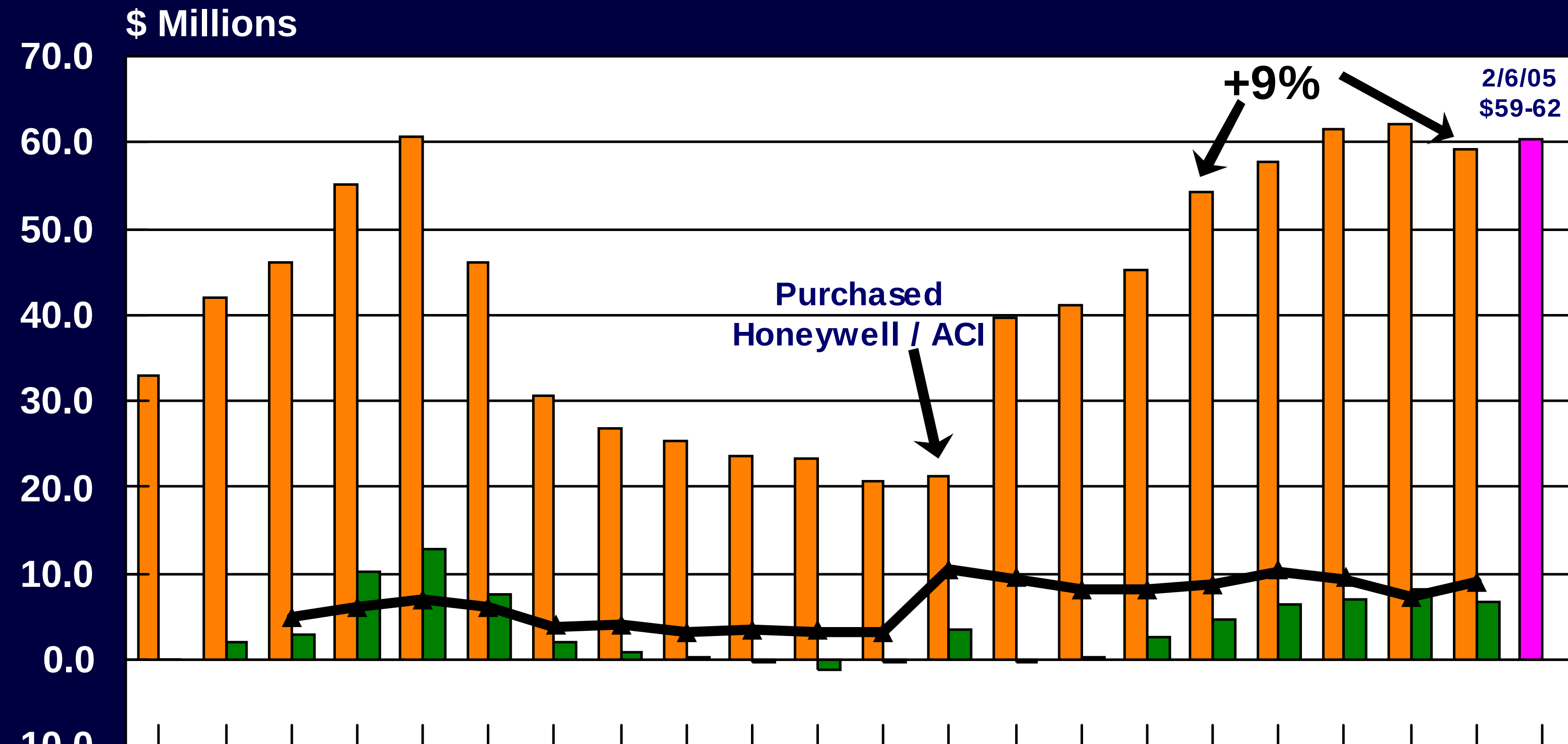
PCB FAB - 2003

	PCB $M
VIASYSTEMS	420
SANMINA-SCI	360
MULTEK	350
TYCO	330
MMM-3M	270
PHOTOCIRCUITS	234
DDi	195
TTM	180
INNOVEX	160
M-FLEX	146
HUTCHINSON	120
MERIX	113
EIT (Endicott Interconnect Tech)	110
PARLEX	82
TERADYNE	68
CORETEC	52
NORTHRUP GRUMMAN	50
UNICIRCUIT	45
AMITRON	33

Sales in blue include significant offshore production

NT Information Systems 9/04, Custer Consulting Group

TTM Technologies
Revenue & Net Income



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	99		00				01				02				03				04			05
Revenue	33.1	42.1	46.1	55.1	60.5	46.0	30.7	26.9	25.4	23.7	23.3	20.6	21.4	39.6	41.0	45.3	54.3	57.7	61.6	62.2	59.2	60.5
Income	0.1	2.1	3.0	10.2	12.7	7.6	2.2	1.0	0.3	-0.3	-1.3	-0.4	3.5	-0.2	0.4	2.5	4.7	6.5	6.9	8.0	6.8	
Inventory			5.0	6.0	6.9	6.1	3.9	4.1	3.1	3.4	3.3	3.1	10.5	9.4	8.1	8.2	8.6	10.4	9.4	7.3	9.0	

CY

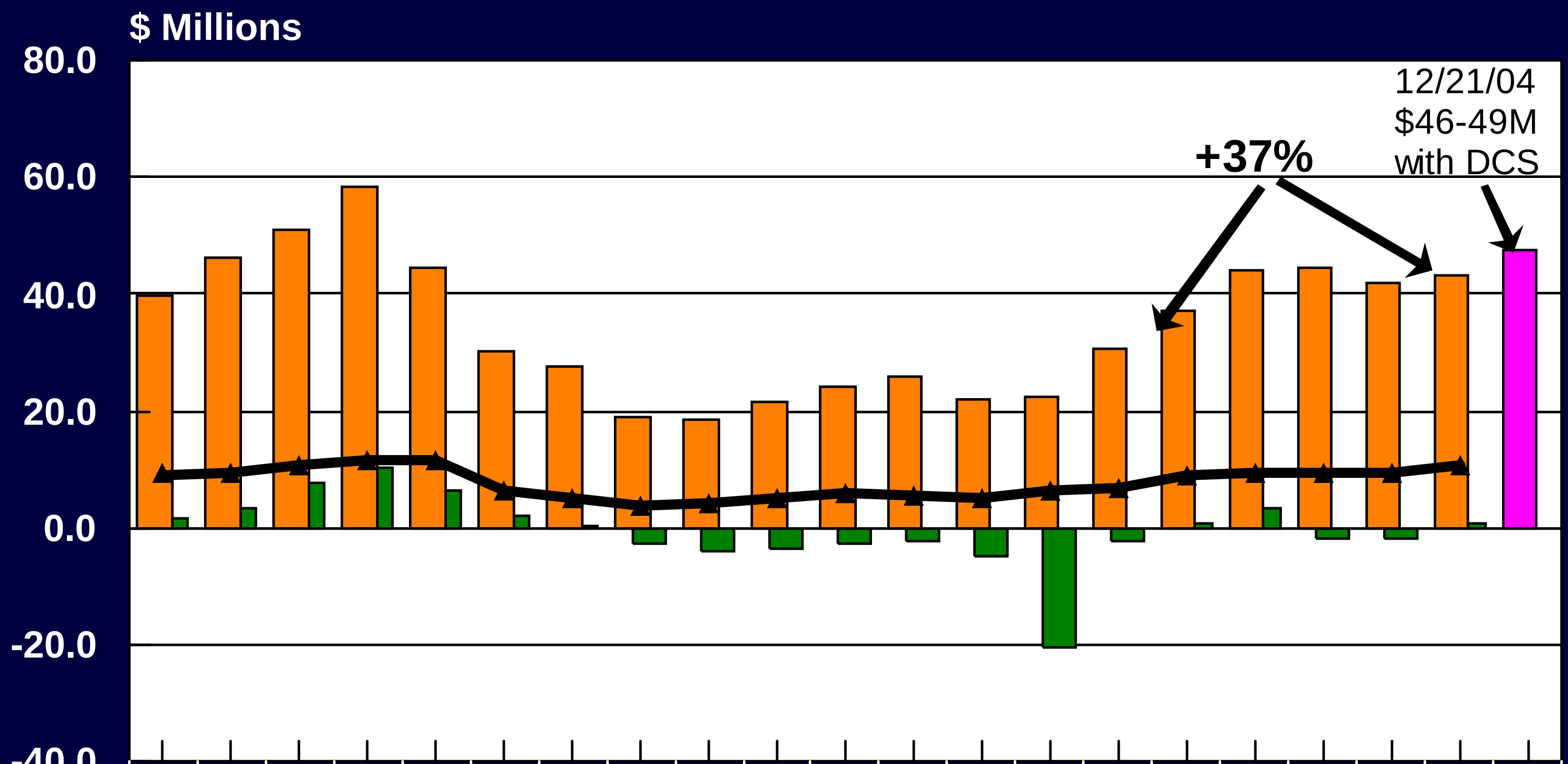
"We are very pleased with our performance in 2004, which was highlighted by strong sales growth, expanded profitability, and the continued success of our time and technology strategy. "We continue to generate strong cash flow and ended the year with cash and short-term investments of $58.5 million and no debt." 2/6/05

FY=CY

Merix

Revenue, Net Income & Inventory

"With the acquisition of Data Circuit Systems, we have clearly accelerated the growth of our quick-turn business."
12/21/04



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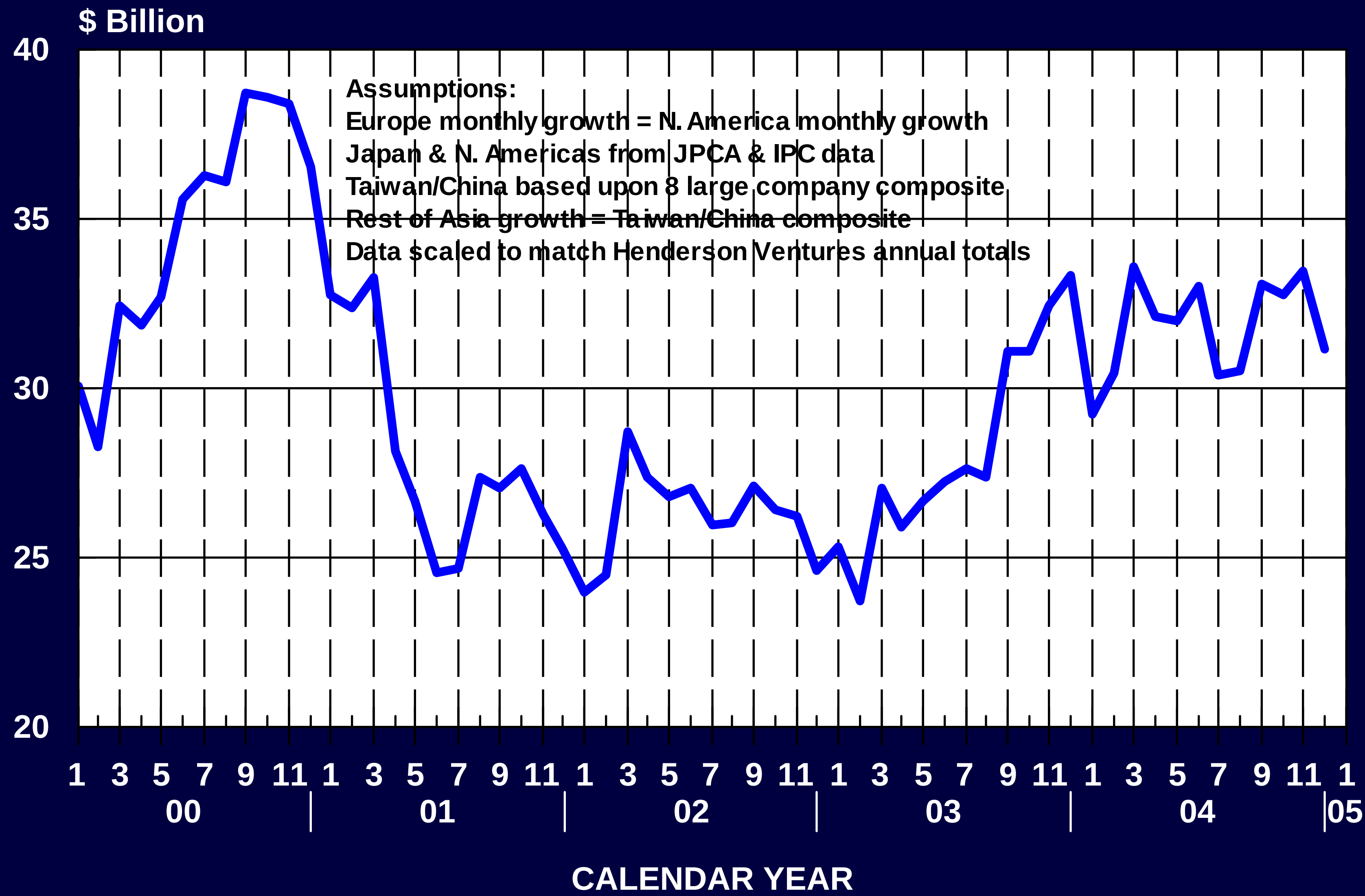
Revenue	39.7	46.2	51.0	58.4	44.4	30.1	27.7	18.8	18.5	21.5	24.1	25.9	22.1	22.5	30.7	37.0	44.1	44.5	42.1	43.2	47.5
Income	1.7	3.6	7.9	10.2	6.4	2.2	0.5	-2.7	-3.8	-3.7	-2.8	-2.1	-4.9	-20.3	-2.2	0.7	3.2	-1.6	-2.0	0.7	
Inventory	9.2	9.4	10.6	11.7	11.4	6.2	4.9	3.6	4.3	5.0	6.1	5.6	5.0	6.2	6.9	9.1	9.4	9.6	9.5	10.6	

FY ends May

World PCB Model

World PCB Shipments

Converted @ Constant 2003 Exchange Rates

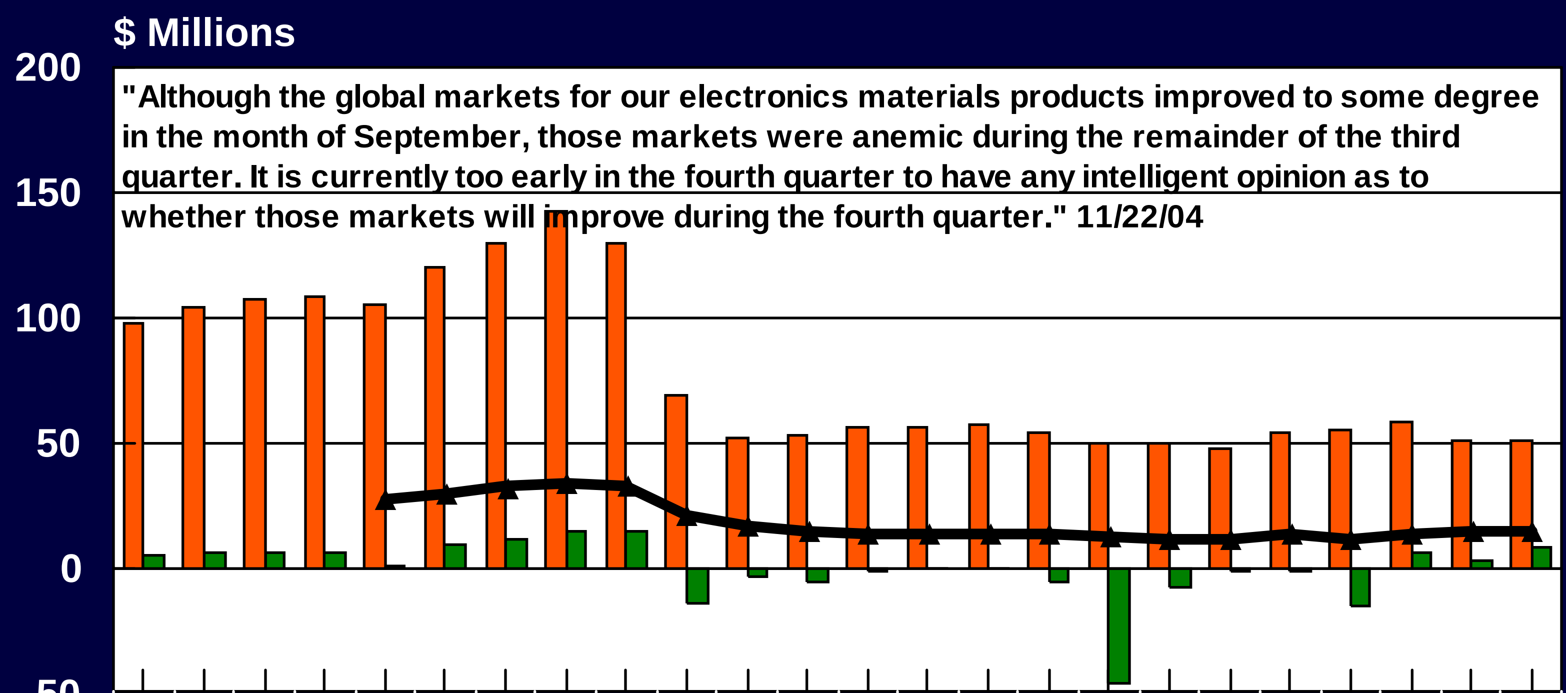


Source: Custer Consulting Group - synthesized from Henderson Ventures annual estimates and N. American, Japanese & Taiwanese/Chinese monthly data

Materials

Park Electrochemical Corp

Revenue, Net Income & Inventory



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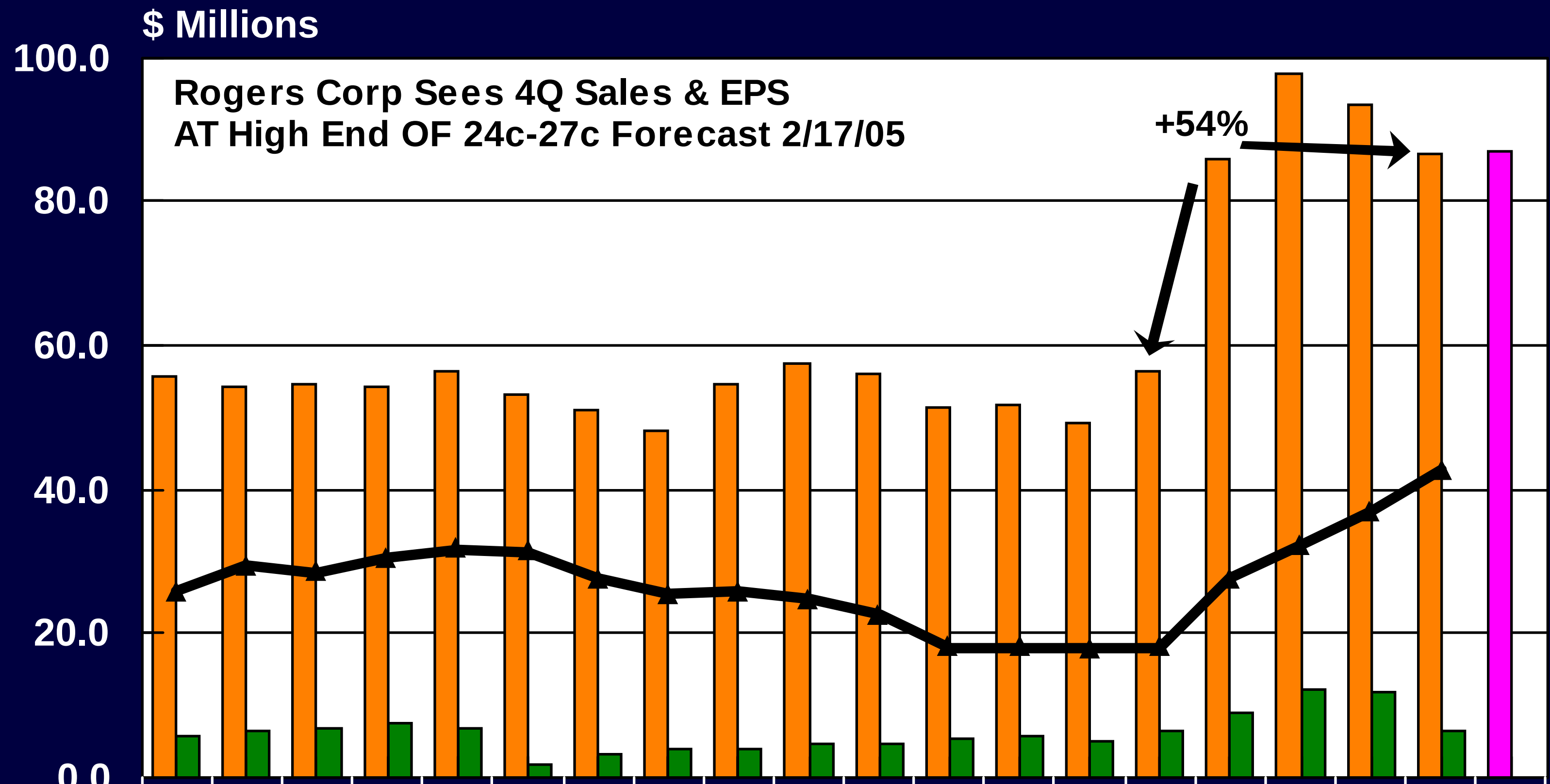
	99				00				01				02				03				04			
Revenue	98	105	108	108	105	120	130	143	130	69	52	53	57	57	57	54	50	50	47	54	55	59	51	50
Income	5	6	6	6	1	9	12	15	14	-15	-4	-6	-1	-1	-1	-5	-46	-8	-1	-2	-15	6	3	8
Inventory					27	29	32	34	32	21	17	14	13	14	13	13	13	11	11	13	12	14	14	14

CY

PKE

Rogers Corp

Revenue, Net Income & Inventory



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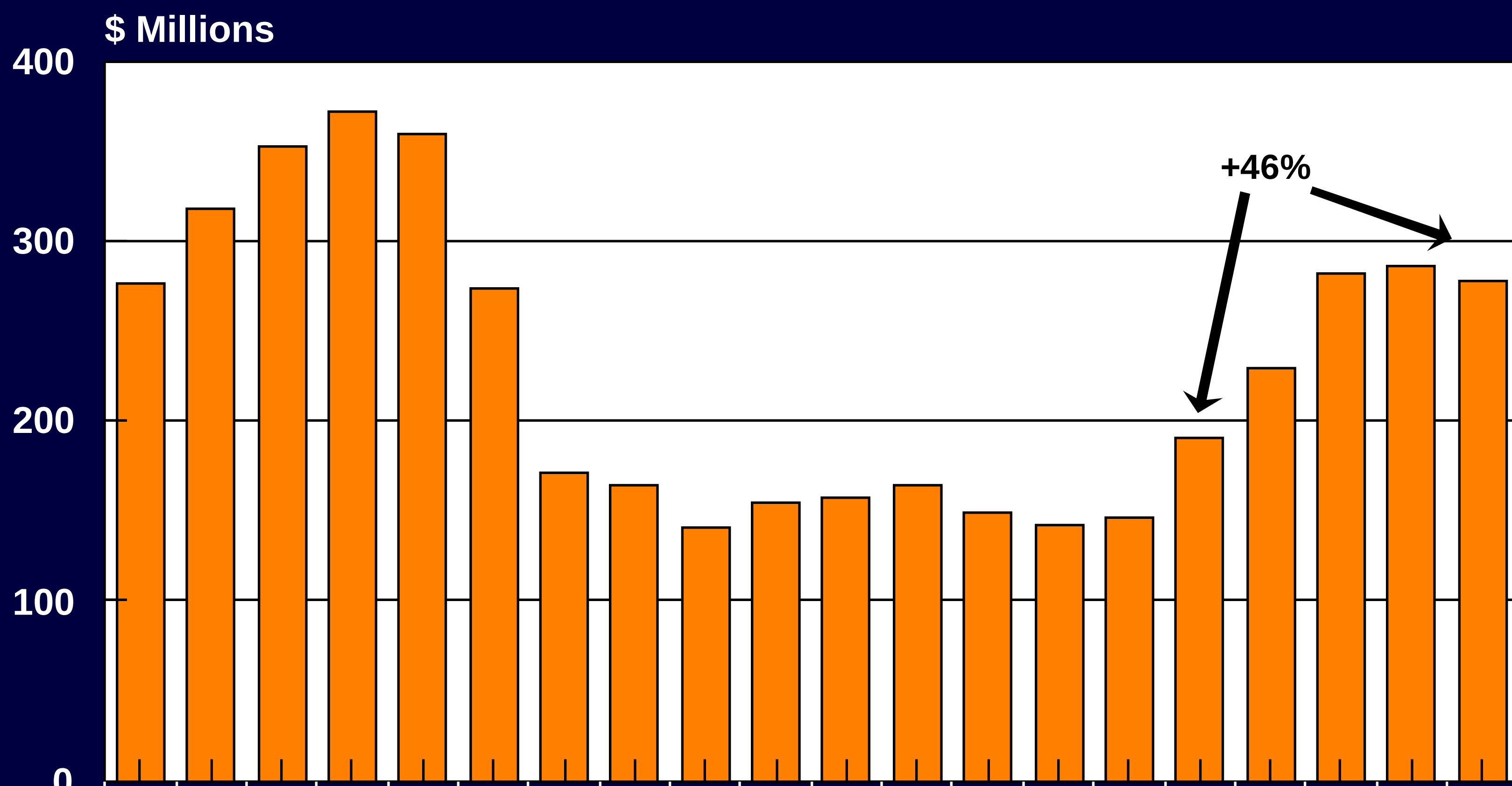
Revenue	55.6	54.1	54.6	54.3	56.4	53.2	51.0	48.1	54.6	57.3	56.0	51.5	51.9	49.2	56.5	85.8	97.7	93.3	86.7	87.0
Income	5.9	6.4	6.9	7.4	6.7	1.9	3.2	3.9	3.9	4.5	4.8	5.4	5.7	5.2	6.3	9.0	12.2	11.8	6.5	
Inventory	25.8	29.3	28.4	30.4	31.6	31.4	27.5	25.4	25.8	24.7	22.5	18.1	18.1	17.9	18.1	27.5	32.2	37.0	42.8	

CY

Process Equipment Related Suppliers

Composite of 6 Companies



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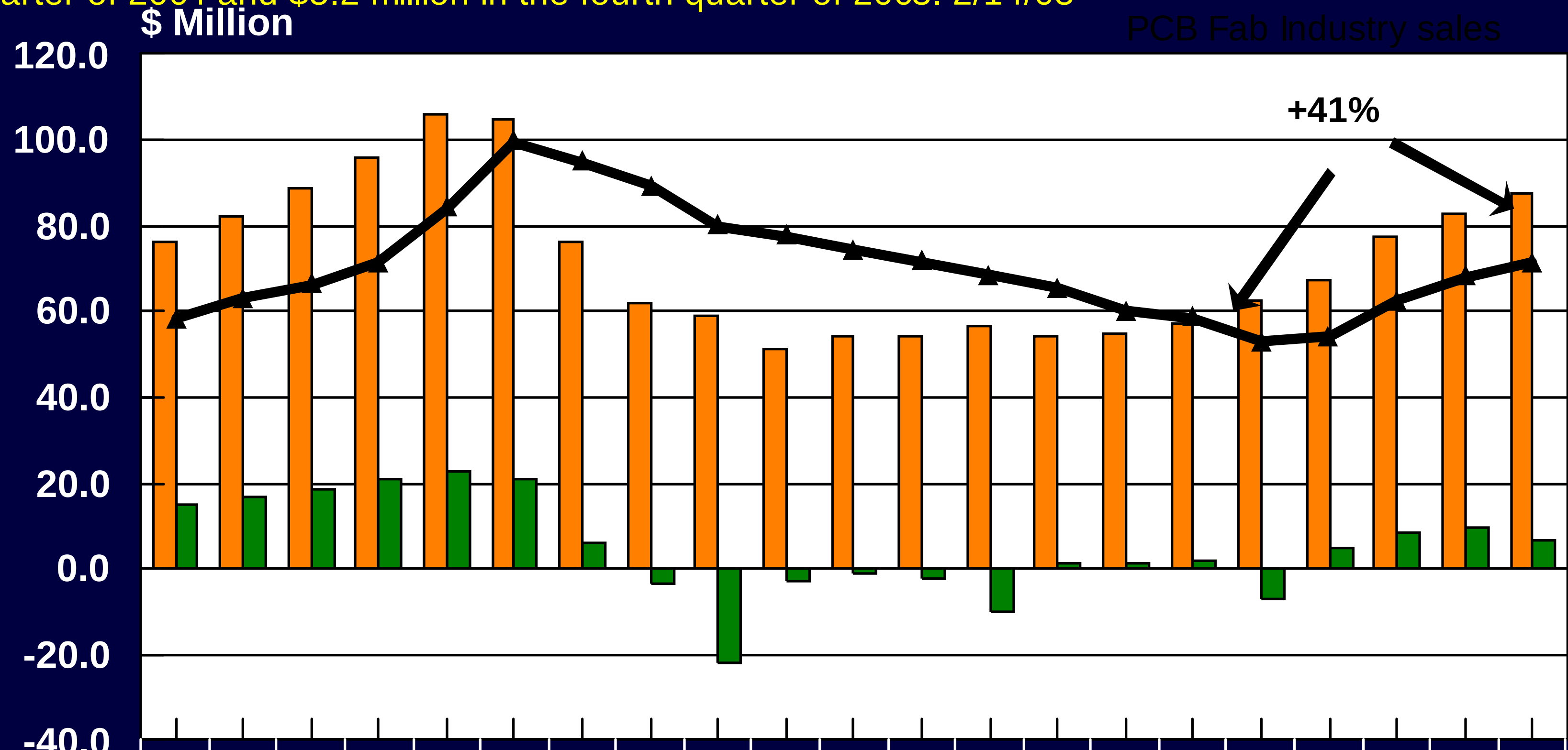
Revenue	277	318	353	372	360	273	171	164	141	155	157	164	149	142	146	190	230	282	286	278

CY

C-Sun, Camtek, ESI, GSI Lumonics, Orbotech, Valor
NT$ converted at constant 2003 exchange

Orbotech
Revenue, Net Income & Inventory

Sales of equipment to the PCB industry relating to bare PCBs in the fourth quarter of 2004 were $32.7 million, compared with $33.0 million in the third quarter of 2004 and $23.7 million in the fourth quarter of 2003. Sales of equipment to the PCB industry relating to assembled PCBs were $8.3 million, compared with $7.4 million in the third quarter of 2004 and $5.2 million in the fourth quarter of 2003. 2/14/05



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	99		00				01				02				03				04		
Revenue	76.2	82.3	88.4	95.7	105.9	104.9	76.5	61.7	58.9	51.1	54.2	54.2	56.9	54.2	54.6	57.3	62.3	67.2	77.5	82.7	87.8
Income	15.2	16.6	18.7	21.0	22.7	21.0	6.1	-3.6	-21.7	-2.7	-1.2	-2.0	-9.8	1.0	1.2	2.0	-7.3	5.1	8.6	9.4	6.5
Inventory	58.2	62.9	66.4	71.3	84.1	99.6	94.8	89.3	80.1	77.7	74.2	71.7	68.4	65.5	60.2	58.5	53.0	54.1	62.4	68.0	71.5

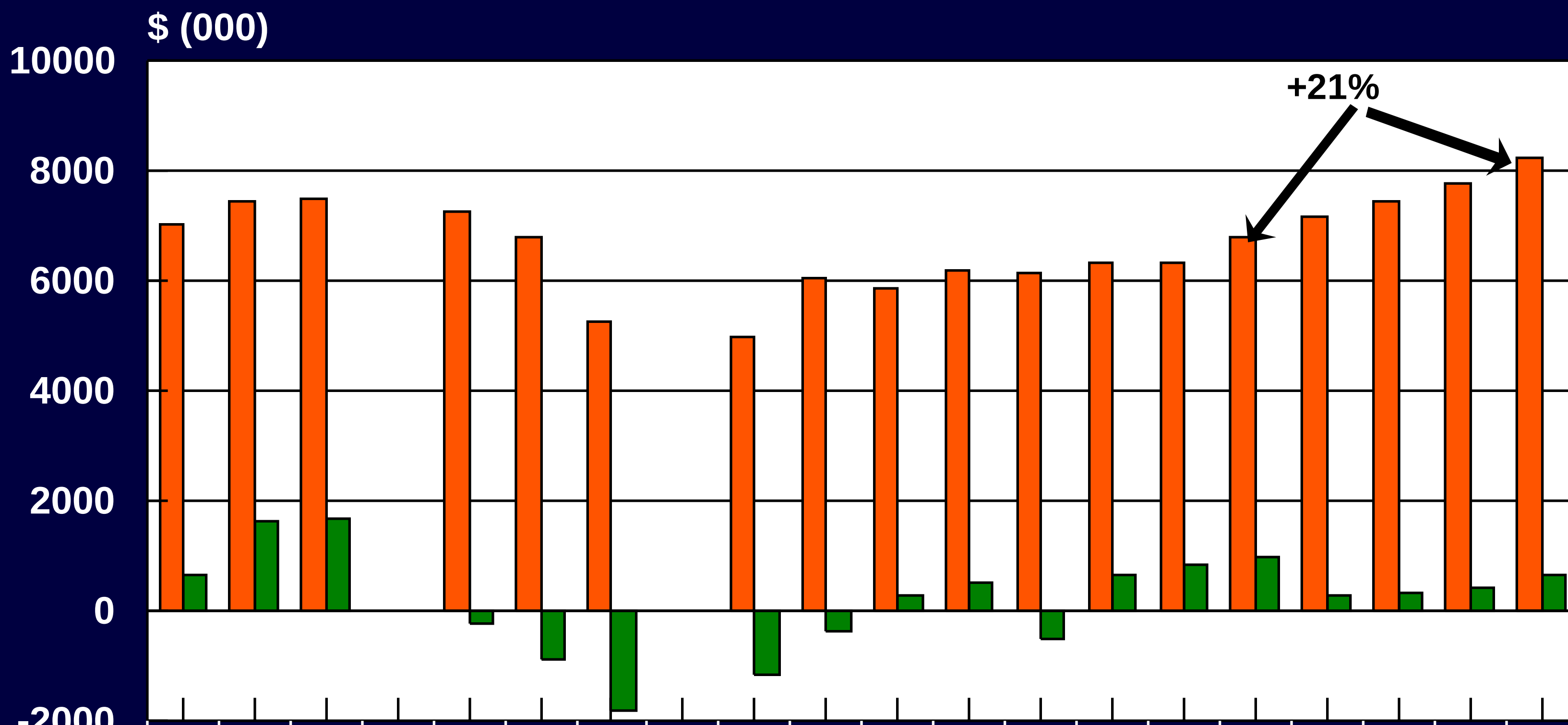
CY

ORBK

Valor Computerized Systems

Revenue & Net Income

"With a growth factor of about 20% in revenues as compared to last year and with the excellent staff on hand I believe in our ability to continue our growth trend. Valor is strong, and we are progressing into 2005 at full throttle". 2/14/05



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Revenue	7048	7464	7485		7279	6797	5252		4962	6033	5859	6184	6143	6314	6351	6807	7153	7452	7801	8255
Income	632	1617	1658		-225	-891	-1813		-1187	-370	270	504	-539	623	854	975	295	301	401	625

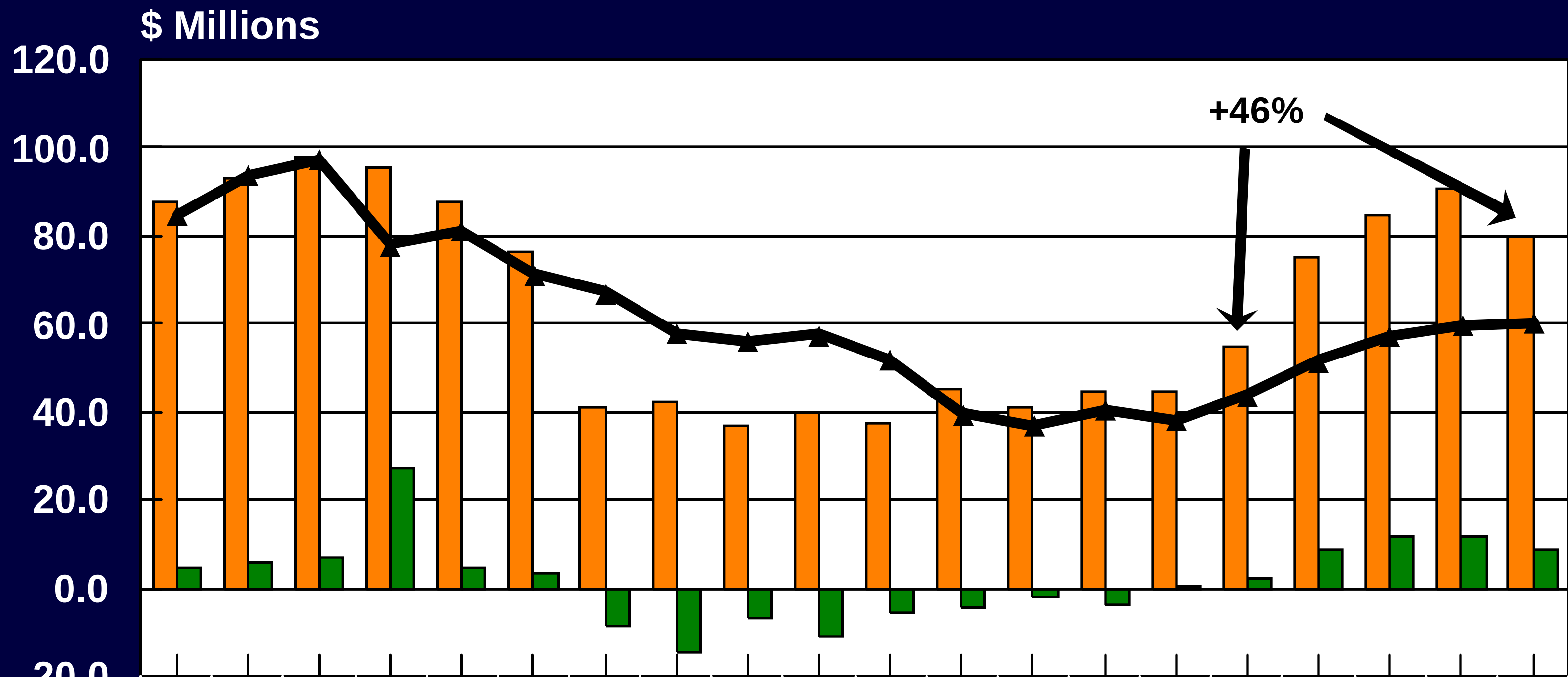
CY

www.valor.com

GSI Lumonics

Revenue, Net Income & Inventory

"We are adopting a cautious outlook for 2005 with focus on cost controls and operational efficiency improvements as we anticipate lower sales in 2005 due to slowdown in the semiconductor, PCB and data storage sectors from the strong expansions this past year." 2/23/05



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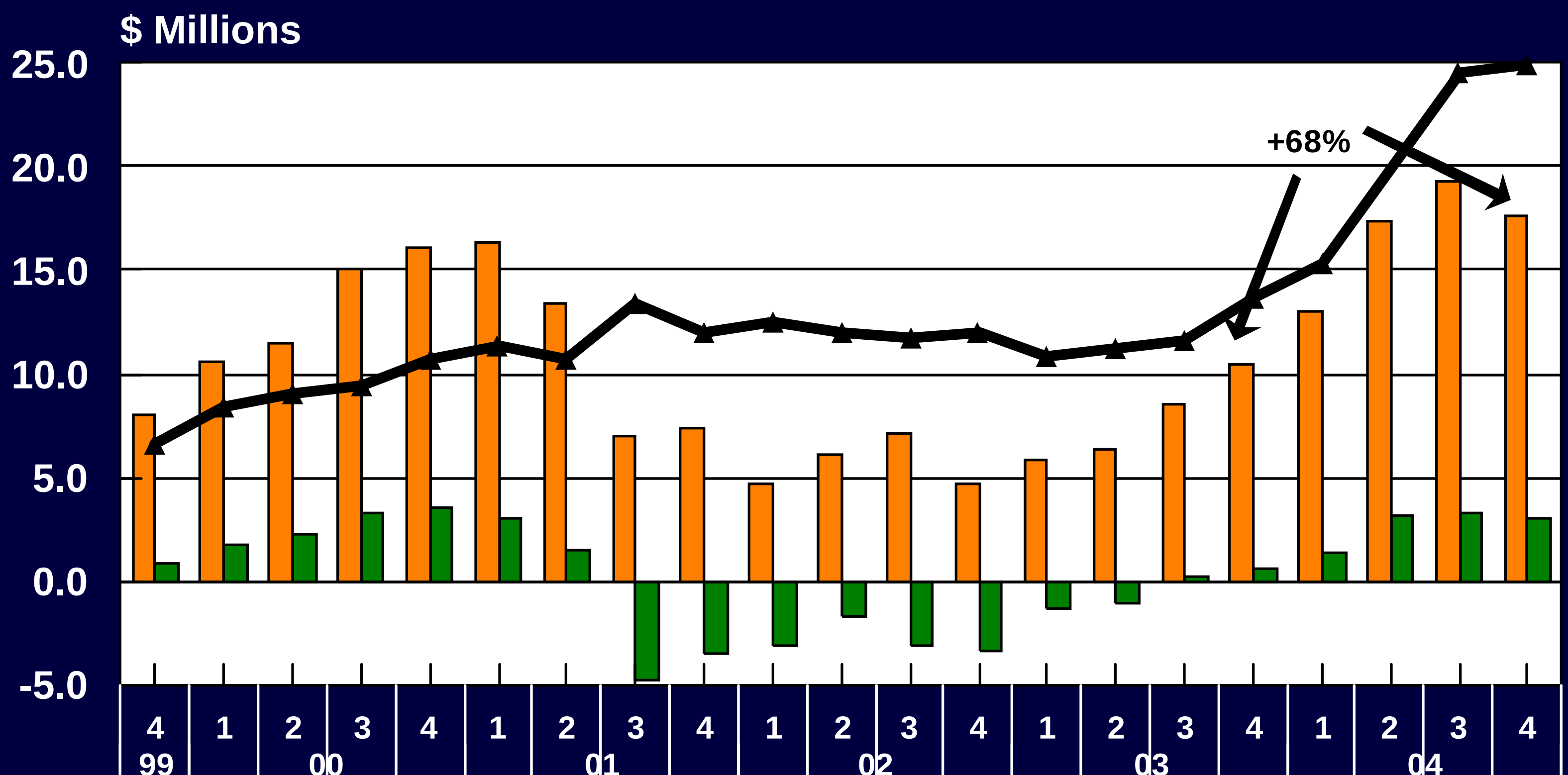
	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Revenue	87.9	92.8	97.6	95.5	87.7	76.5	41.3	42.4	36.9	39.7	37.4	45.1	41.1	44.7	44.9	54.9	74.9	84.5	90.7	80.0
Income	4.8	5.8	7.2	27.6	4.8	3.6	-8.5	-14.6	-6.6	-11.1	-5.4	-4.6	-1.7	-3.6	0.6	2.5	8.9	11.8	12.1	8.6
Inventory	84.9	93.9	97.3	77.9	81.3	71.5	67.1	57.8	56.1	57.7	52.0	39.7	36.9	40.7	38.4	43.9	51.7	57.2	59.9	60.3

CY

Camtek Ltd

Revenue, Net Income & Inventory

"Our outlook for 2005 as a whole remains positive and we have slightly adjusted our working assumptions to expect revenue growth of approximately 10% over 2004. We base this outlook on both analyst forecasts and our expectations of industry growth in the second half of the year, and on our belief in the competitive advantages of our products." 2/23/05



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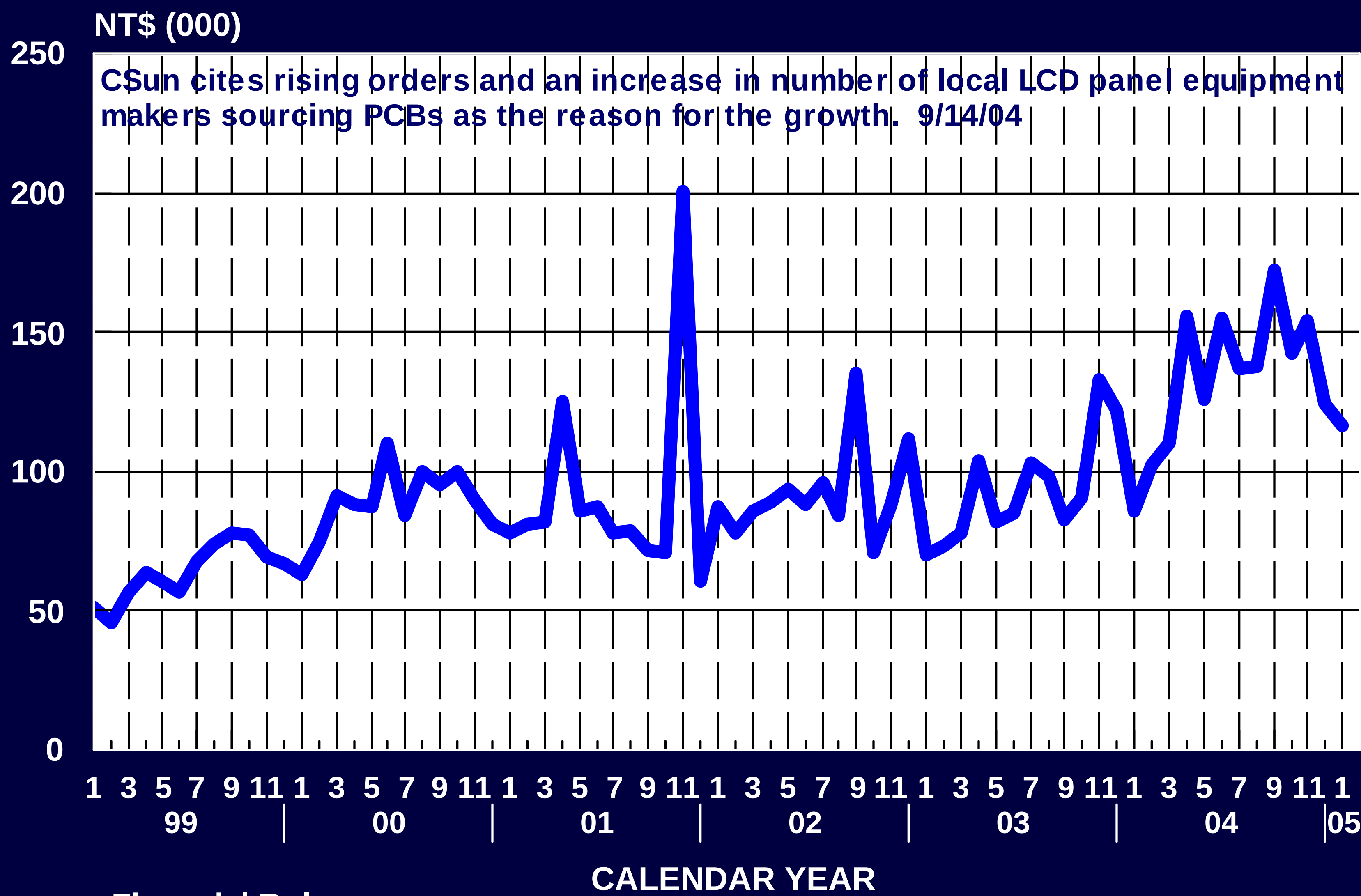
Revenue	8.0	10.5	11.5	15.0	16.1	16.3	13.4	7.0	7.3	4.7	6.1	7.2	4.7	5.8	6.4	8.5	10.4	13.1	17.4	19.3	17.6
Income	0.8	1.7	2.3	3.3	3.6	3.1	1.5	-4.8	-3.5	-3.1	-1.7	-3.1	-3.4	-1.3	-1.0	0.2	0.6	1.3	3.2	3.3	3.0
Inventory	6.6	8.4	9.1	9.4	10.7	11.3	10.7	13.4	12.0	12.5	12.0	11.7	12.0	10.9	11.2	11.6	13.7	15.3		24.5	24.9

CY

CAMT

C Sun Manufacturing, Taiwan



Company Financial Releases

Summary

- Post-2000 "implosion" is behind us.
- Electronic component manufacturing "center of gravity" has shifted to SE Asia (Especially China).
- 2004 began strong domesticly driven by economic recovery & inventory replenishing; leading to capacity fears, over-ordering & inventory building. Demand softened in last 8 months of 2004.
- Niche and military markets drove N America.
- SE Asia captured volume production.

Summary

2005 begins with modest expectations.

2005 will NOT be a replay of 2001
as inventories are now in MUCH BETTER control

Interest rates will slow domestic growth

Managing in a highly cyclical business will remain a challenge

Focusing on higher growth customers & end markets is key

The "sky is not falling" although SE Asia will continue to expand as the largest market.

Timely, Useful Data

PCB

- N. America
- Japan
- Taiwan/China

Semiconductors

- SIA regional shipments
- Chip foundries
- "Back end" SEMI companies

Composite data

- Taiwan PCB, laminate & motherboards
- Global OEM, EMS, ODM; PCB & SEMI equipment

World PCB monthly shipment model

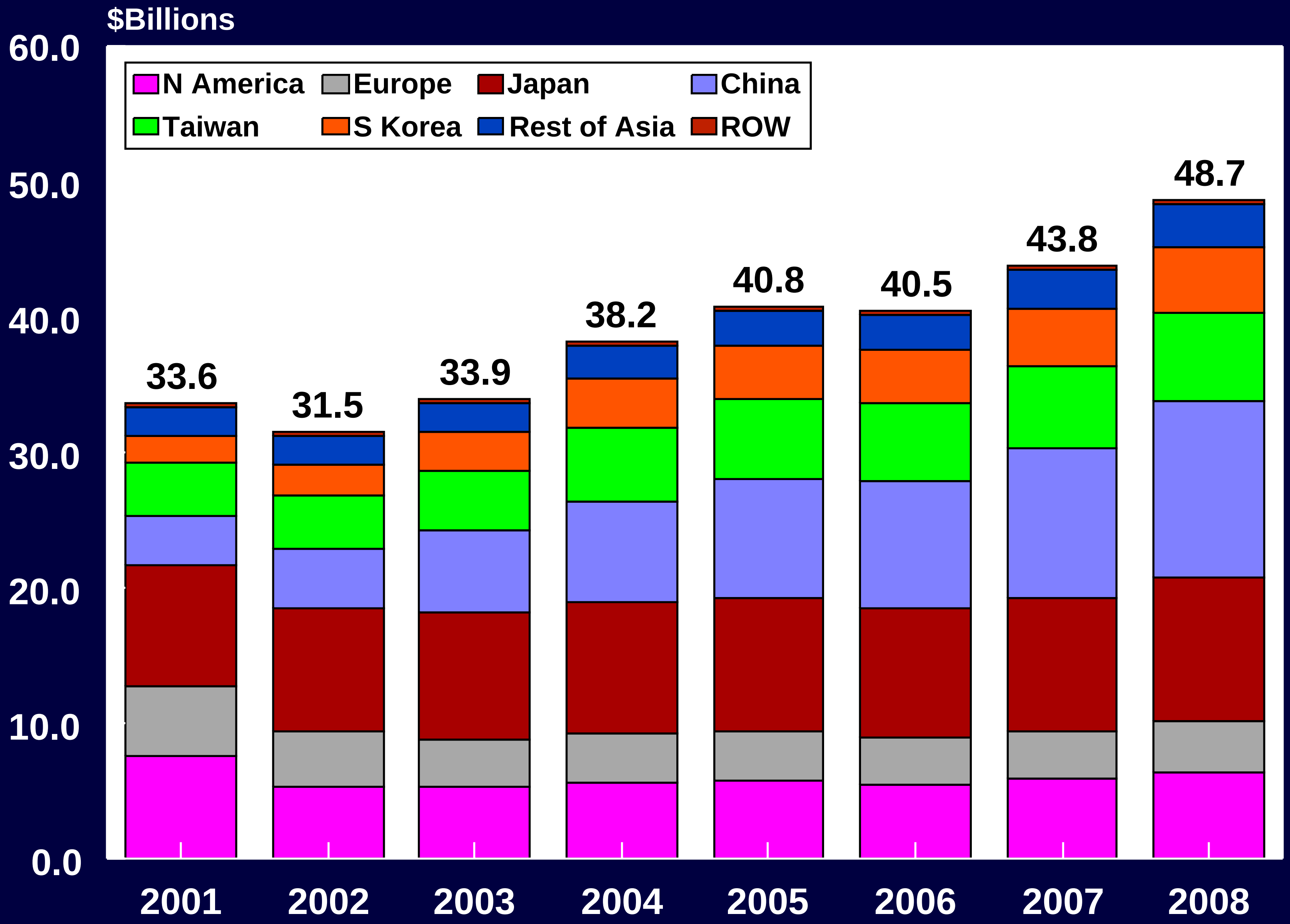
Electronic Equipment Production Growth

Current $ Growth Rates Converted @ Constant Exchange Rates

	2003	2004	2005	2006	2007
World	6.8	10.5	6.8	6.0	8.2
USA	6.0	10.8	5.6	4.4	5.4
W Europe	-1.5	3.2	2.5	3.2	5.5
Japan	6.9	3.7	3.0	3.4	5.7
Four Tigers	5.1	14.7	7.8	5.8	7.3
China	32.6	25.8	17.4	15.6	17.6

Henderson Ventures 2/2005
www.hendersonventures.com

World Rigid & Flex PCB Production



Henderson Ventures PCI Report 12/04 (converted @ constant 2003 exchange)

Global "Electronic Foodchain" Outlook 2005 vs 2004